

**BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA
KHANPUR KALAN (SONIPAT)**



Agenda for 27th Meeting of Academic Council

Date:- 15/03/2024

Time:- 11:30 A.M.

Venue:- Conference Hall, Administrative Block, through blended mode (offline and online) BPS Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), Haryana

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AGENDA FOR THE 27th MEETING OF THE ACADEMIC COUNCIL SCHEDULED TO BE HELD ON 15/03/2024 AT 11:30 A.M. THROUGH BLENDED MODE (OFFLINE AND ONLINE), IN CONFERENCE HALL, ADMINISTRATIVE BLOCK, BPS MAHILA VISHWAVIDYALAYA, KHANPUR KALAN (SONEPAT), HARYANA.

- 1. Confirmation of the Minutes of the 26th meeting of Academic Council held on 14/07/2023.**

To confirm the Minutes of the 26th meeting of the Academic Council held on 14/07/2023 (Annexure-1, page- 1-12).

- 2. Follow up Action Report.**

To note the action report on the decisions taken by the Academic Council in its 26th meeting held on 14/07/2023 (Annexure-2, page-13-15).

- 3. To ratify the action taken by the Vice-Chancellor in approving the Ordinance, Scheme of Examination and Syllabus of M.A. Social Work and Ph.D Social Work from the Academic Session 2023-24 in anticipation of the approval of the Academic Council.**

Statement of the case:-

The PG BOS, Department of Social Work in its meeting held on 14/01/2023 and Faculty of the Social Sciences in its meeting held on 07/07/2023 has approved the Ordinance, scheme of examination and syllabus M. A. Social Work and Ph.D. Social Work (Annexure-3, page-16-110) with effect from 2023-24.

The minutes of PG BOS, Department of Social Work are placed at (Annexure-4, page-111) and the minutes of the Faculty of Social Sciences are placed at (Annexure-5, page-112).

The case duly recommended by the Chairperson Deptt. of Social Work and Dean Academic Affairs was put up to the Vice Chancellor who after due consideration has approved the same in anticipation of the approval of the Academic Council and further desired to refer the same to the Academic Council for ratification.

- 4. To ratify the action taken by the Vice-Chancellor in the case of Ms. Priyanshu, a Student of B.Tech Programme to continue the programme and reconduct of examinations from the Academic Session 2023-24 in anticipation of the approval of Academic Council.**

Statement of case:-

Ms. Priyanshu was admitted in the B.Tech programme during the Academic Session 2016-17. In the year 2019 she informed the Chairperson Deptt. of CSE&IT that her financial condition was very critical as she was not able to take admission in the final year. As her grandmother expired in the year 2019. who was only financial

supporter of her family and due to this, she could not able to continue her studies in the 4th year. Now, she has made a request to the Chairperson Deptt. of CSE&IT, to allow her to continue her studies from this year onwards.

As per ordinance the normal duration of the programme is four years and maximum duration of B.Tech programme offered by the Faculty of Engineering & Technology in six years (n+2). As per provision of Ordinance, she has to complete her degree upto the ending of the Academic session 2021-22 i.e. in June 2022.

In the present case, there is requirement of two more years beyond the total duration of the programme, for which Ordinance needs to be relaxed.

The Vice-Chancellor, keeping in view the future of Ms. Priyanshu has granted her approval to the concerned student to complete her degree in anticipation of approval of Academic Council and desired to refer the same to the Academic Council for ratification.

5. **To ratify the action taken by the Vice-Chancellor to increase 10 (ten) seats in B.A. programme in Regional Center, from the Academic Session 2023-24 in anticipation of the approval of the Academic Council.**

Statement of the Case:-

The Director, Regional Center, Krishan Nagar, (Rewari) has submitted a proposal stating that the eligible admission aspirants for B.A. programme approached to the Regional Centre for taking the admission in B.A. programme & requested to increase 10 seats from current Academic Session i.e. 2023-24.

The Vice-Chancellor, keeping in view the urgency as the admission process was going on at the point of time approved the proposal to increase 10 seats from the Academic Session 2023-24 in anticipation of the approval of the Academic Council exercising her power under Section 11(6) of BPSMV, Act 2006 and further desired to refer the same to the Academic Council for ratification.

6. **To ratify the action taken by the Vice-Chancellor in anticipation of approval of Academic Council to grant permission of six months to submit M. Tech Thesis to Ms. Priya Rani, a student of M. Tech (ECE) Department of Electronics and Communication Engineering.**

Statement of the case:-

Ms. Priya Rani, a student of M.Tech (ECE) in the Department of Electronics and Communication Engineering has submitted a request to grant permission to submit her pending thesis. She took admission on 10/08/2018, but due to some reason, she could not submit her thesis even after completion of stipulated period of four years.

The case has also been recommended by the Chairperson Department of ECE. Further, the comments of Dean Academic Affairs were sought vide which the DAA has also recommended the same.

It is pertinent to mention here that similar case of a student Ms. Manjit Gill was also approved by the Academic Council in its 20th meeting held on 20/06/2018 vide resolution No. 5 (**Annexure-6, page-113**).

The case with recommendations of DAA & HOD concerned was put up to the vice chancellor who after due consideration & looking to the academic growth of the student has allowed to grant extension for 6 months for submission of M.Tech thesis in anticipation of approval of Academic council and further desired to put up the same before Academic Council for ratification.

- 7. To ratify the action taken by the Vice-Chancellor to increase 10 (ten) Seats in LLM, for the Academic Session 2023-24 only, in anticipation of the approval of Academic Council.**

Statement of the case:-

The In-charge Department of Laws has submitted a proposal stating that the eligible admission aspirants for LLM has approached to the department for the admission in LLM programme requested to increase the 10 seats for current Academic Session i.e. 2023-24 only. The proposal has been considered in the Departmental Staff Council in its meeting held on 27th July 2023 vide which it has been recommended to increase 10 Seats (30 sanctioned seats +10 additional) in the LLM course for the Academic Session 2023-24 only. The proposal was also forwarded by the Dean Faculty of Laws.

The Vice-Chancellor, keeping in view the urgency as the admission process was going on at the point of time and on the recommendations of the Dean Academic Affairs has approved the proposal to increase 10 seats, only from the Academic Session 2023-24 in anticipation of the approval of Academic Council exercising her power under section 11 (6) of BPSMV, Act 2006 and further desired to refer the same to the Academic Council for ratification.

- 8. To ratify the action taken by the Vice Chancellor to award the Ph. D. Degrees to the students in the subjects as mentioned against their name in anticipation of the approval of the academic council.**

Statement of the Case:

Following Ph.D. Scholars from various departments had submitted her Ph. D thesis in their departments. For awarding the degree of Doctorate of Philosophy, the provision laid down in BPSMV Ph.D. Ordinance vide clause 13.3 is: -

“The confidential reports submitted by the examiners on the thesis as well as on the viva-voce examination duly signed by the examiner and countersigned by the Chairperson shall be placed before Research Committee consisting of Vice-Chancellor, the Dean of the Faculty and the Head of the Department concerned, within one month of the viva-voce examination.

If the Dean or Head of the Department is not able to participate in the meeting, the Vice-Chancellor will co-opt any other senior member of the Faculty, in his/ her/ their place.

Provisional degree will be awarded after recommendations of the committee and the case will be placed before the Academic Council for approval”

Sr. No.	Research Scholar	Name of the Supervisor(s)	Name of the Department	Registration No.	Title of the Thesis	Date of the URC
1.	Ms. Reenu Kumari D/o Sh. Ramphal	Dr. Bhavna Sharma	Department of Commerce	201404110017524	“Financial Literacy and Retirement Planning: A Case of Salaried Individuals”	24.07.2023
2.	Ms. Sudesh Sheoran D/o S Zile Singh	Prof. Sanket V	Department of Management	201804110030413	“Contribution of Internet of Things (IoT) in eGovernance: Evidences from Government to Citizen Services (G2C) in India.”	02.08.2023
3.	Ms. Jagriti D/o Sh. Jogender Singh	Dr. Rajesh Hooda	Department of Laws	2017041100022803	“Victimization of Saxual Minorities: A Critical Study”	04.08.2023
4.	Ms. Jyoti Singh D/o Sh. Satbir Singh	Dr. Poonam	Department of Education	201604110021501	“Effect of Remedial Instruction Programme on	15.09.2023

					Academic Achievement in Science of Children with Visual Impairment"	
5.	Ms. Sonia Kathuria D/o S Ramsarup Kathuria	Dr. Ravi Bhushan	Department of English	12030407	"Consciousness of Nationalism and Spiritualism: A Comparative Study of Select Essays and Letters of Rabindranath Tagore and Romain Rolland"	11.10.2023
6.	Ms. Pooja Sangwan D/o Sh. Krishan Chander	Dr. Alka Bharti	Department of Laws	201904110040513	"Environment Protection and Sustainable Development: An Indian Perspective"	07.11.2023
7.	Ms. Monika Malik D/o Sh. Kiddar Singh Malik	Dr. Reena Ran	Department of Education	201704110013232	"Adoption of Flipped Classroom Approach for Fostering Student Engagement and Self Efficacy Among Prospective Teachers"	06.12.2023
8.	Ms. Mona D/o Sh. Satpal Madan	Dr. Meenakshi Katyal	Department of Management Studies	201704110022962	"Performance Assessment and Impact of Select Credit Rating Agencies on Indian Stock Market : An Empirical	08.12.2023

					Evidence"	
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On the recommendations of the examiners in viva-voce reports and the approval of the University Research Committee, the Provisional Degrees and Notification has already been issued to the candidate by the Controller of Examinations after due approval of the Vice-Chancellor who after exercising her power under section 11(6) of BPSMV, Act 2006 has approved the same in anticipation of the approval of the Academic Council. The Vice Chancellor has further ordered to place the same before Academic Council for ratification.

9. To ratify the action taken by the Vice-Chancellor for granting approval for Open Elective Courses to be included in the Syllabus and Scheme of M.A. English two year programme for Affiliated Colleges w.e.f. Academic Session 2023-24 in anticipation of approval of Academic Council. (Annexure-7, page-114-115).

Statement of the case:-

A request from the Affiliated Colleges was received vide which they requested that the students of M.A. English programme may be allowed to choose from a list of elective course under CBCS scheme. It is pertinent to mention here that the CBCS scheme is already implemented in the PG Programme offered by the University but in the case of M.A. English it is not implemented. Student of the Department study a mandatory Audit Course in one of the Foreign Languages where as the students of Affiliated Colleges are exempted from opting for Audit Course due to non-availability of the teachers in respective languages.

The matter was considered by the Departmental Staff Council and the PG BOS Department of English and the same has been approves. The agenda has also been approved in the meeting of the Faculty of Arts and Languages. (Annexure-8, Page-116-).

Keeping in view the interest of the students, the Vice-Chancellor after due consideration approved the same in anticipation and has ordered to place the same before the Academic Council for ratification.

10. To consider the Registration of two students in Ph.D. in Deptt. of Economics.

The students mentioned in the below list have successfully completed their Pre-Ph.D. Course Work in Deptt. of Economics. Their case has been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Faculty of Social Sciences. The minutes of the DRC, PGBOS & Faculty are enclosed at **(Annexure-9, Page-117-119)**. As per Ph.D. Ordinance of BPSMV Khanpur Kalan, these cases are to be placed before the Academic Council for approval of the registration. The details of the candidate(s) alongwith their topics and names of the Supervisor(s) is as follows:

Sr. No.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1	Ms. Priyanka D/o Sh. Baljit Attri 2022041100042214	STEM Education and Career Choices-What Matters? A Study of Urban Employed Women in India	Prof. Surender Singh	03.08.2023
2	Ms. Harshika D/o Sh. Narender Singh 2022041100042222	Innovation and Environmental Quality: A Cross Country Analysis with Special Reference to India	Prof. Surender Singh	03.08.2023

The case of the above candidates were put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidates to Ph.D. programme in Deptt. of Economics w.e.f. 03.08.2023 i.e. date of meeting of PGBOS.

11. To consider the Registration of one student namely Ms. Tanu in Ph.D. in Deptt. of Commerce.

The case registration in Ph.D. in respect of Ms. Tanu has been duly approved by the Departmental Research Committee, DSC, Post Graduate Board of Studies and Faculty of Commerce & Management. The minutes of the DRC, DSC, PGBOS & Faculty are enclosed at **Annexure-10, Page-120-122)** As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval. The detail of the candidate(s) alongwith her topic and name of the Supervisor(s) is as follows:

Sr. No.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
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1.	Ms. Tanu 2022041100028117	E-cart Abandonment and Retargeting Strategies for Improving Behavioral Intention: A Study of Online Shoppers in India.	Dr. Ishani Patharia	03.04.2023
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The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of Commerce w.e.f. 03.04.2023 i.e. date of meeting of PGBOS.

12. To consider and approve the proposal for starting Skill Development Training Programmes as per the Guidelines of Haryana State Higher Education Council issued vide Letter No. 3/49-2021 Adv./HSHEC dated 06/03/2023.

Statement of the Case:-

BPS Mahila Polytechnic is working under the Administrative and Academic control of Bhagat Phool Singh Mahila Vishwavidyalaya. Haryana State Higher Education Council vide letter dated 06.03.02023 has issued the instructions for introduction of short terms certificate/diploma course (**Annexure-11, Page-123-124**). Several requests have also been received from the girl students for starting one year diploma of Data Entry Operator and Typing & Shorthand (Hindi). A committee was constituted by the University to see the feasibility of the courses on demand basis. Recommendations of the committee are enclosed (**Annexure-12, Page-125-143**)

On the recommendations of the committee, BPS Mahila Polytechnic has decided to start two skill development programmes in order to develop the skills of unemployed rural and urban youths and proposed the remuneration, minimum qualification and strength of the students etc. as well as syllabus framed by the Haryana State Higher Education Council for the below mentioned diploma courses. These training programmes are selected on need basis which will provide employable/self employable skills to the youths. The purpose of skill development programme is to create skill and knowledge based manpower by empowering them technical knowledge so that they can earn a suitable livelihood. These programmes are selected keeping in view the present market

requirements. These courses are of one year duration keeping in view the local requirements. The following two courses of one year duration are proposed to be started from current session as a pilot project. After assessment of viability of these two courses, other courses can also be introduced on later stage. The details of the two courses are given as under:

Sr. No.	Name of the Course	Duration of the Course
1	Data Entry Operator	One-Year
2	Typing & Short Hand (Hindi)	One-Year

The salient features of the skill development programme are as under:

1. The skill development programmes chosen for training are based on need assessment survey and need based of the local community.
2. The skill programmes offered are flexible and without precondition of age, sex and pre-requisite. The qualification should at-least matriculate.
3. To facilitate self-employment in the service sector, emphasis should be on multi-skill training while for employment in production centre's, training shall be given either on specialized designated skill or multi-trades skill depending on need and requirements.
4. The Infrastructure and skill resources shall be shared with Polytechnic, Engineering College and Incubation Cell. The institution shall develop a proper feedback mechanism to know the post-training status of the trainees specifically regarding their post training employment.

The details regarding remuneration & qualification of staff/trainers, funding norms, income & expenditure, syllabus for training courses is given in the details proposal.

The matter was placed before the Hon'ble Vice Chancellor who after due consideration has ordered to place the same before the Academic Council for consideration and approval.

13. To consider and approve change in the pattern of assessment of CBCS course (open elective) offered by BHM programme by the Department of Hotel Management.

Statement of the case:-

The case was discussed and approved by the Staff Council, the UGBOS and the Faculty meetings. The proceedings of the meetings are enclosed herewith respectively at **(Annexure-13, Page-144-147)** and the detail is as follows:

Existing Assessment 60:20: 20 i.e. 60 marks for external assessment, 20 marks for external practical assessment and 20 marks for internal assessment	Proposed Assessment 80:20: i.e. 80 marks for external assessment and 20 marks for internal assessment
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The Vice-Chancellor after considering the matter has ordered to refer the same to the Academic Council for consideration and approval.

14. To consider the proposal for establishment of Department of Culture & Visual Arts in light of the letter received from Director, Higher Education Haryana, Panchkula vide Memo No. 1821-2023 UNP (4) dated 01/09/2023.

Statement of Case: -

A letter has been received from Director, Higher Education Haryana, Panchkula vide Memo No. 1821-2023 UNP (4) dated 01/09/2023 regarding inclusion of syllabus of Culture, Tourism, Arts and Visual Arts as a regular Course in Various Universities/Colleges of the State Government. **(Annexure-14, Page-148-173)** The case was put up before the Higher Authority through Dean Academic Affairs vide which it has been felt that to comply the instructions received from the State Government a Department of Culture & Visual Arts needs to be established in BPSMV, Khanpur Kalan. To establish any teaching department as per norms, the following teaching post is required: -

- | | | |
|------------------------|---|----|
| 1. Professor | - | 01 |
| 2. Associate Professor | - | 02 |
| 3. Assistant Professor | - | 04 |

The annual financial liability for the above teaching post shall be Rs. 10924128/-

The case was put up to the vice chancellor, who after due consideration has desired that the matter be placed before the Academic Council and Executive Council.

15. To consider and approve the recommendations made by the Faculty of Social Sciences held on 20/11/2023, regarding change of nomenclature of M.A. Social Work to Master of Social Work (MSW) w.e.f. 2023-24.

Statement of the case:-

2. The complaint, for a single question which is with the provision of another option in the same unit of question paper, shall not be entertained.
3. The ration /quantum of grace marks may also be decided and clearly defined in terms of the specific question reported out of syllabus and not on the basis of total marks of the question paper.
4. Some time the question are set by the paper setter interchanging Units within the prescribed Syllabus and the complaint is also received in this regard, No benefit of doubt / relaxation in marks shall be granted in such cases as interchange/shifting in Units is not likely to any overall effect on paper.
5. Regarding re-conduct of Paper, be only decided when the question paper is reported more than 50% out of syllabus.

The above matter was submitted to the Hon'ble Vice-Chancellor who has after consideration ordered to place the item before the Academic Council for discussion and approval.

17. **To consider and approve the rules (proposed amended rules at sr No. 1 of the modification placed before Academic Council dated 20.06.2018 under item no. 16) for University Examination Re-evaluation reforms Note-Marks obtained by the candidate whichever are Higher by State University / Central University in Haryana.**

The meeting of all the Registrars of the State Universities / Central University of Haryana was held under the chairperson-ship of Vice-Chancellor CDLU, Sirsa on the request of Director Higher Education Haryana with reference to memo No. 18/90-2015 UNP(94) dated 08.02.2017 regarding the rules for University Examination Re-evaluation reforms Note -Marks obtained by the candidate whichever are Higher by state University/central University in Haryana. **(Annexure-18, pages-180-182)**

Accordingly, the agenda item was placed before the Academic Council meeting held on 20.06.2018 under the item No. 16 wherein it was resolved that:- **(Annexure-19,pages-183-186)**

"Academic Council considered and Approved the agenda with the modification in the proposed amended rules at Sr. No. 1 that all students can apply for re-evaluation irrespective of the fact that the award (s0 in the paper(s) obtained were lower or higher."

In view of the above provisions the Examination branch is receiving numbers of applications from the students for re-evaluations even those who have scored zero marks. Which needs lot of labour to deal with such application. Since the University is facing shortage of staff and at the same time to maintain parity in the rule at par with other

As per notification of University Grants Commission regarding Specification of Degree, the Faculty of Social Sciences in its meeting held on 20/11/2023, has approved the recommendations made by the PG BOS Department of Social Work held on 16/09/2023, regarding change of nomenclature of M.A. Social Work to Master of Social Work (MSW) w.e.f. 2023-24.

Minutes of the meeting of PG BOS Department of Social Work are placed at **(Annexure-15, Page-174)**.

Minutes of the meeting of Faculty of Social Sciences are placed at **(Annexure-16, Page- 175-176)**.

The case was put up to the Vice-Chancellor who after due consideration has desired that the same be placed before Academic Council for consideration and approval.

16. To consider and approve the modification / clause in examination ordinance w.r.t. issuance of grace marks / re-conduct of Examination on the basis of complaint made by students for examination.

As per the ordinance enforce , there is provision for constitution of complaint committee on the receipt of complaint from student(s) against the question paper (mistakes, partial question or question is out of syllabus Incorrect statement /data etc.). It has been noticed that some time the concerned teacher also encourage the students to raise voice for granting them grace marks or re-conduct of Exam. The constitution of complaint committee includes Head of the concern Department and Subject expert (normally nominated the same teacher , who teach the class/students is nominated as expert by the concerned Head). **(Annexure-17, pages-177-179)**.

The quorum needs to be decided to compensate the academic loss of students in genuine cases. In present circumstance, if there is trend to award grace marks if a question is reflected from one unit /section to another under same paper.

The complaint committee is constituted even if the complaint is made by single student and considered.

The following is proposed for consideration and approval of the Academic Council :-

1. The complaint committee will only be constituted when the complaint is received from more than 50% of students, among those who appeared in the particular examination, otherwise the complaint shall not be entertained and will be out rightly rejected.

universities of the State as already recommended by the above mention meeting and approved by DHE, Haryana. Which is reproduced as under:-

Existing Rules before 20.06.2018	AMENDED RULES (recommended by the committee and approved by the State Govt.
No Condition	Eligibility Criteria for re-evaluation of answer book(s) (I). If the award (s) in the paper(s) is/are less than 20% of maximum marks (theory only), No re-evaluation of answer book(s) will be allowed.

Hence, it is proposed that the above amended rule may be approved in later and spirit as approved by the State govt on the recommendation of all the Registrars of the Haryana State Universities circulated vide Endst No. CDLU/Re-val/17/1834-1842.

The matter was placed before the Vice-Chancellor who has after consideration ordered to place the same before Academic Council for approval.

18. **To Consider and Approve the common subject (Current Issues and Societal Development), and common subject code (CISD-001) with 80+20 marks in all UG courses the Examination be conducted in the third semester for all.**

The above referred subject matter was considered by a committee constituted by the then Vice-Chancellor under the Convenership of DAA and the said committee conducted its two meeting on dated 18.01.2017 and 20.02.2017 wherein, the following was recommended:-

The committee considered all such guidelines /instructions received from State Govt/UGC and resolved that there shall be TWO papers i.e. (i) Environment Studies and (ii) Current Issues & Societal Development. **(Annexure- 20, pages-187)**

The above matter was placed before the Academic Council in its 17th meeting under item no 21 dated 23.03.2017. The Syllabus was also designed for CISD by including the Legal Literacy as part of CISD paper syllabus. **(Annexure-21, pages-188-188D.)**

The problem was earlier faced by Exam branch, as the syllabus and scheme approved by the Academic Council is not been followed by any of University Teaching Department, Institution, IHL, Regional Centre as well as affiliated colleges. Hence, the syllabus and scheme was again circulated on 21.02.2022.

Now, again the same problem is being faced by Examination (secrecy Branch) as University Teaching Department, Institution, IHL, Regional Centre, affiliated colleges followed their own syllabus for CISD even Legal Literacy is being taught as a separate

subject. None of the College/ institute/ UTD is following the uniform syllabus as approved by the Academic Council, dated 23.03.2017.

In view of the above facts, it is proposed that from the next session (May 2024) onwards this paper be conducted with common syllabus as approved by the University Academic Council with one common subject code (CISD-001) and shall be conducted in 3rd Semester for all UG course and there will be no separate examination for Legal Literacy since the same is already included in CISD.

The whole matter was submitted to the Vice-Chancellor who has after consideration ordered to place the same before the Academic Council for approval.

19. To consider & approve the following recommendations made by the Faculty of Sciences in its meeting held on 05/01/2024:

- 1. Eligibility criteria for admission in M.Sc. Food and Nutrition w.e.f Academic Session 2024-25.**
- 2. To revision of Scheme and Syllabi of Pr-Ph.D Food and Nutrition w.e.f Academic Session 2024-25 .**

Statement of the case:-

The Dean Faculty of Sciences has submitted a proposal duly recommended by the PGBOS and Faculty concerned to consider the above agenda items in the Academic Council from the Academic Session i.e. 2024-2024. The scheme & syllabus (**Annexure-22, Page-189-192**) of Pre Ph. D. Food and Nutrition has also been approved by the concerned PGBOS & Faculty of Sciences.

The minutes of PG BOS of department of Basic and Applied Sciences and the minutes of the Faculty of Sciences is placed at (**Annexure-23, page-193-194**).

On the request of the Dean Faculty of Sciences the proposal was put up to the Vice-Chancellor for consideration and she after due consideration has desired that the same be placed before Academic Council for kind consideration and approval.

20. To consider the Registration of two students in Ph.D. in Mathematics, Deptt. of Basic & Applied Sciences.

Statement of the case:-

The students mentioned in the below list have successfully completed their Pre-Ph.D. Course Work in Deptt. of Mathematics. Their case has been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Faculty of Sciences. The minutes of the DRC, PGBOS & Faculty are enclosed at (**Annexure-24, Page- 195-198**) As per Ph.D. Ordinance of BPSMV Khanpur Kalan, these cases are to be placed before the Academic Council for approval of the registration. The details of the candidate(s) alongwith their topics and names of the Supervisor(s) is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Sonia D/o Sh. Wazir Singh 22122201 2014041100005604	Analysis of Transie Problems Generalized Thermoelasticity	Dr. Sunil Kumar	06.12.2023
2.	Ms. Parul D/o Sh. Sheeshpal 22122202 2014041100005627	Investigation of Thermomechanical Disturbances in Coupled Thermoelastic Media	Dr. Sunil Kumar	06.12.2023

The case of the above candidates were put up to the Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidates to Ph.D. programme in Mathematics, Deptt. of Basic & Applied Sciences w.e.f. 06.12.2023 i.e. date of meeting of PGBOS.

21. To consider the Registration of one student in Ph.D. in Deptt. of Fashion Technology.

Statement of case:-

The student mentioned in the below list has successfully completed her Pre-Ph.D. Course Work in Deptt. of Fashion Technology. Her case has been duly

approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Faculty of Engineering & Technology. The minutes of the DRC, PGBOS & Faculty are enclosed at **Annexure-25, Page- 199-202**). As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval of the registration. The details of the candidate alongwith the topic and name of the Supervisor is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Ritika Sharma D/o Sh. Ramesh Kumar Sharma 202104110003 9323	Design, Development and Assessment of Sustainable Denim Fabric	Dr. Harinder Pal, Supervisor Dr. J. N. Chakraborty, Co-Supervisor	18.10.2023

The case of the above candidate was put up to the Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of Fashion Technology w.e.f. 18.10.2023 i.e. date of meeting of PGBOS.

22. To consider the Registration of one student in Ph.D. in Deptt. of CSE/IT.

Statement of the case:-

The student mentioned in the below list has successfully completed her Pre-Ph.D. Course Work in Deptt. of CSE/IT. Her case has been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Faculty of Engineering & Technology. The minutes of the DRC, PGBOS & Faculty are enclosed at (**Annexure-26, Page-203-209**) As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval of the registration. The details of the candidate alongwith the topic and name of the Supervisor is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
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1.	Ms. Rubi D/o Sh. Shab Singh 20220411000 43001	Enhancing Data Security in Cloud Computing using Cryptographic Techniques	Dr. Sunita Rani, Supervisor Dr. Vinod Kumar Saroha, Co-supervisor	09.01.2024
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The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of CSE/IT w.e.f. 09.01.2024 i.e. date of meeting of PGBOS.

23. To consider the case of de-registration of Ph.D. in Deptt. of ECE.

Statement of the case:-

The below mentioned student registered for Ph.D. in Deptt. of Electronics & Communication Engineering neither paid any fee nor presents any progress report. The matter of de-registration of the said student was discussed in the Departmental Research Committee and the PGBOS also approved the case of de-registration. The minutes of the DRC, PGBOS & Faculty are enclosed at (Annexure-27, Page-210-213). As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval of de-registration. The details of the candidate is as follows:

S. No.	Name of Ph.D. Scholar	Regn. No.	Reason
1.	Mrs. Sunita Rani D/o Sh. Dalbir Singh	201704110002 2982	Due to non-submission of fee and progress report

The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council.

24. To ratify the action taken by the Vice Chancellor in approving the recommendations of the committee constituted to resolve the issue of nomenclature of DMCs of all integrated programme, in anticipation of the approval of Academic Council.

Statement of the Case: -

The university is running M.A. English Integrated programme in Department of English. The Chairperson Department of English has submitted a proposal vide which it has been intimated that there is a provision of exit policy in the M.A. integrated programme after 6th semester.

If a student quits the M.A. integrated programme after 6th semester, the examination branch issues the DMC of 6th semester as B.A. English, however rest of the DMC's of five semester (1st to 5th Semester) are issued as M.A. English Integrated programme which creates problems to the students applying for higher studies or jobs. Hence, the department requests to change the nomenclature of all (1st to 6th Semesters) DMCs as B.A. (English) Honors.

The meeting of the committee was held on 26/07/2023 at 11:00 a.m. in the office of Dean Academic Affairs, BPSMV, Khanpur Kalan. The recommendations of the committee are as under: - (Annexure-28, Page-214).

"The committee recommended that the students of M.A. integrated programmes run by the Department of English & Department of Economics may be issued DMCs of first six semesters with the following nomenclature: -

Master of Arts English/Economics (Integrated)

Bachelor of Arts Honors English/Economics

(Semester- I/II/III/IV/V/VI)

7TH Semester onwards, the format shall remain the same as is in practice now.

Master of Arts English/Economics (Integrated)

The recommendation of the committee were placed before the Vice Chancellor, who after due consideration and keeping in view of the urgency of the matter had approved the recommendations of the committee in anticipation of the approval of Academic Council & further desired to refer the case to the Academic Council to ratify the same.

25. To consider and approve the proposal for implementation the one semester internship in the Course curriculum of B.Tech (ECE) 8th Semester of Department of Electronics and communication Engineering.

Statement of the case:-

The Chairperson, Department of Electronics and communication Engineering has submitted a proposal on the request of the students to implement

the one semester internship in the Course curriculum of B.Tech (ECE) 8th Semester and the same is adopted at other reputed Universities like DCRUST, Murthal and Panjab University etc. The case is duly recommended & approved by the UGBOS, Staff Council and Faculty concerned.

The minutes of UG BOS of department of Electronics and communication Engineering is placed at **(Annexure-29, Page-215)** and the minutes of the Faculty of Commerce and Management and Staff council is placed at **(Annexure- 30, Page-217-223)**.

On the request of the Chairperson, the proposal was put up to the Vice-Chancellor. She after due consideration has desired that the same be placed before Academic Council for kind consideration and approval.

- 26. To consider and approve the recommendations made by the Faculty of Engineering and Technology in its meeting held on 18/01/2024 regarding revision the Scheme and Syllabus of B.Tech (CSE) and B.Tech (IT) in the Academic Council from the Academic Session i.e. 2024-2025.**

Statement of the case:-

The Dean Faculty of Engineering and Technology has submitted a proposal duly recommended by the UGBOS and Faculty concerned to consider the Scheme and Syllabus of B.Tech (CSE) and B.Tech (IT) in the Academic Council from the Academic Session i.e. 2024-2025. The scheme & syllabus **(Annexure-31, page-224-616)** of B.Tech (CSE) and B.Tech (IT) has also been approved by the concerned UGBOS & Faculty of Engineering and Technology.

The minutes of UG BOS of Department of Computer Science and Information and Technology and the minutes of the Faculty of Engineering and Technology are placed at **(Annexure-32, Page- 617-618)**.

On the request of the Dean Faculty of Engineering and Technology the proposal was put up to the Vice-Chancellor for consideration and she after due consideration has desired that the same be placed before Academic Council for kind consideration and approval.

- 27. To consider the Registration of the students in Ph.D. in Deptt. of Law.**

The students mentioned in the below list have successfully completed their Pre-Ph.D. Course Work in Deptt. of Law. Their cases have been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Faculty of Law. The minutes of the DRC, PGBOS & Faculty are enclosed at (Annexure-33, page-619-624) As per Ph.D. Ordinance of BPSMV Khanpur Kalan, these cases are to be placed before the Academic Council for approval of the registration. The details of the candidate(s) alongwith their topics and names of the Supervisor(s) is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Akansha Sangwan D/o Sh. Rajbir Singh 202204110004 1996	CYBER CRIME AGAINST WOMEN AND CHILDREN: A COMPARATIVE STUDY OF INDIA, USA AND UK	Dr. Kritika	15.09.2023
2.	Kumari Rashmi D/o Sh. Sudarshan Kumar Kingar 201804110000 5125	CYBER CRIMES IN INDIA: JUDICIAL AND LEGISLATIVE APPROACH	Dr. Seema Dahiya	15.09.2023
3.	Ms. Vanika D/o Sh. Anil Kumar 202204110004 2005	ANTI-DEFECTION LAWS IN INDIA: A CRITICAL STUDY	Dr. Anil Balhera	15.09.2023
4.	Ms. Parul D/o Sh. Satyawan 202204110004 2021	STATUS OF REFUGEES IN STATE OF ASSAM: A SOCIO LEGAL CRITIQUE	Dr. Pawan	15.09.2023
5.	Ms. Manu Kadiyan D/o Sh. Mahinder Singh Kadiyan 202204110004	EMERGING TRENDS IN ALTERNATIVE DISPUTE RESOLUTION MECHANISM: A CRITICAL ANALYSIS	Dr. Rajesh Hooda Dr. Anu Bala	15.09.2023

	2036			
6.	Ms. Sushila Sharma D/o Sh. Roshan Lal Sharma 202204110004 2013	LAW RELATING TO BANKING FRAUDS IN INDIA: AN ANALYTICAL STUDY	Dr. Rajesh Hooda Dr. Anu Bala	15.09.2023
7.	Ms. Nancy Dhillon D/o Sh. Jagdish Singh Dhillon 201504110000 4656	RIGHT TO PRIVACY WITH SPECIAL REFERENCE TO SOCIAL MEDIA: ISSUES AND CHALLENGES	Dr. Parmod Malik	15.09.2023

The case of the above candidates was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidates to Ph.D. programme in Deptt. of Law w.e.f. 15.09.2023 i.e. date of meeting of PGBOS.

28. To consider the Registration of student in Ph.D. in Deptt. of Economics.

The student mentioned in the below list has successfully completed her Pre-Ph.D. Course Work in Deptt. of Economics. Her case has been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Deptt. Staff Council. The minutes of the DRC, PGBOS & DSC are enclosed at (Annexure-34, page-625-629) As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval of the registration. The details of the candidate alongwith the topic and name of the Supervisor is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Hema D/o Sh. Rohtash Singh 20220411000420 83	INSTITUTIONS, PROPERTY RIGHTS AND ECONOMIC DEVELOPMENT: A STUDY OF WOMEN IN HARYANA	Prof. Surender Singh	20.01.2024

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The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of Economics w.e.f. 20.01.2024 i.e. date of meeting of PGBOS.

29. To consider the Registration of student in Ph.D. in Deptt. of Commerce.

The student mentioned in the below list has successfully completed her Pre-Ph.D. Course Work in Deptt. of Commerce. Her case has been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Deptt. Staff Council. The minutes of the DRC, PGBOS & DSC are enclosed at (Annexure-35, page-630-632) As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval of the registration. The details of the candidate alongwith the topic and name of the Supervisor is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Kirti D/o Sh. Parveen Kumar Vasuja 201704110001 2503	Factors Affecting Adopting of Fintech Services in Haryana	Dr. Bhavna Sharma	10.02.2024

The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of Commerce w.e.f. 10.02.2024 i.e. date of meeting of PGBOS.

30. **To consider and approve implementation of Common Ph.D Course Work under Faculty of Engineering and Technology w.e.f. ongoing Academic winter session.**

Statement of the Case:-

In order to bring uniformity of Scheme and Syllabi of Ph.D Course work under Faculty of Engineering and Technology and in line with the common Ph.D Ordinance of BPSMV, a meeting of all Chairpersons under the Chairpersonship of Dean, FET was held on 23rd January 2024. It was resolved that all departments under FET will design scheme and syllabi of Ph.D as offered uniformly with Ph.D Course work of 12 Credits as well as keeping common course on "Research Methodology and Literature Survey and Seminar". It was also resolved to follow course on "Research Publications and Ethics" common as offered across the University. **(Annexure- 36, Page-633-683).**

In view of the above Department of CSE&IT, ECE and FT conducted their own meeting of staff Council and PGBOS. The minutes of the same are attached at **(Annexure-37, Page-684-693)**-. Further, the recommendation of PGBOS was placed before the urgent meeting of FET. The house unanimously resolved the implementation of Ph.D course work scheme with effect from the Academic Session 2023-24 (Even winter session).

On the request of the Dean Faculty of Engineering and Technology the proposal was put up to the Vice-Chancellor for consideration and she after due consideration has desired that the same be placed before Academic Council for kind consideration and approval.

31. **To consider the Registration of twelve students in Ph.D. in Deptt. of Education.**

The students mentioned in the below list have successfully completed their Pre-Ph.D. Course Work in Deptt. of Education. Their cases have been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Deptt. Staff Council. The minutes of the DRC, PGBOS & DSC are enclosed at **(Annexure-38, Page-694-702)** As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic

Council for approval of the registration. The details of the candidate alongwith the topic and name of the Supervisor is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Kusum D/o Sh. Jai Bhagwan 2015041100012756	Effect of Token Economy on Cognitive Dissonance and Learning Autonomy among Secondary School Students	Dr. Suman Dalal	15.01.2024
2.	Ms. Neelam D/o Sh. Ajmer Singh 2017041100013127	Effectiveness of Experiential Learning Programme on the Academic Achievement in Computer Science among Secondary School Students in Haryana	Dr. Yogesh Chander	15.01.2024
3.	Ms. Neelam Rani D/o Sh. Satya Narain 2019041100001546	Effectiveness of Mindfulness based Cognitive Therapy on Impulsive Behaviour, Role Conflict and Social Acceptability of under graduate student.	Dr. Suman Dalal	15.01.2024
4.	Ms. Jyoti D/o Sh. Hawa Singh 2019041100001682	Exploring the Role of Parenting Practices: Internal and External factors with respect to Resilience, Decision Making Ability and Academic Performance among Adolescents	Dr. Poonam Punia	15.01.2024
5.	Ms. Vandana D/o Sh. Mahender 2020041100041127	Study Habits and General Well-Being in Relation to Mobile Phone Addiction Among Undergraduate Students	Dr. Anu Balhara	15.01.2024
6.	Ms. Tapasya Gehlawat D/o Sh. Rambhaj Gehlawat 2020041100041135	Effect of Thinking Maps and Embodied Learning on Critical Thinking and Scholastic Achievement of Nineth Grade Students	Dr. Suman Dalal	15.01.2024
7.	Ms. Reena Devi D/o Sh. Raghbir 2020041100041143	Study of the Educational Thoughts of Dr. Sarvepalli Radha Krishnan and their Relevance in the Present	Dr. Anu Balhara	15.01.2024

		System of Education		
8.	Ms. Seema Rani D/o Sh. Ramesh Kumar 2020041100041166	Mental Health, Study Habits and Career Aspiration of Senior Secondary School Students in relation to their Parental Encouragement	Dr. Monika	15.01.2024
9.	Ms. Ritu Rani D/o Sh. Pratap Singh 2020041100041151	Impact of Language Acquisition through Motor Planning (Lamp) Approach of Language & Communication Development Among Students with Autism Spectrum Disorder	Dr. Varuna Tehlan Dahiya	15.01.2024
10.	Ms. Vimal Sharma D/o Sh. Ghasi Ram Sharma 2020041100041182	Personality Reasoning Ability and Psychological Capital Among Secondary School Students in relation to Helicopter Parenting	Dr. Reena Rani	15.01.2024
11.	Ms. Poonam Devi D/o Sh. Manphool Singh 2020041100041197	Aadhunik samaj me satat vikasi lakshya prapti me vadik shiksha darshan ka mahtav	Dr. Varuna Tehlan Dahiya	15.01.2024
12.	Ms. Sonia Dahiya D/o Sh. Ashok Kumar 2020041100041201	Effect of an Intervention Programme in developing Resilient Behaviour in Children with Attention Deficit Hyperactivity Disorder	Dr. Varuna Tehlan Dahiya	15.01.2024

The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of Education w.e.f. 15.01.2024 i.e. date of meeting of PGBOS.

32. To consider the case of appointment of co-supervisor for Ph.D. in Deptt. of Education.

The below mentioned student is the registered student of Ph.D. in Department of Education. The matter of appointment of Dr. Sushil Kumar, Assistant Professor, Department of Education as Co-supervisor with Dr.

Poonam Punia, Assistant Professor, Supervisor of the student has already been approved by the Departmental Research Committee (DRC), PGBOS and DSC:

S. No.	Name of Ph.D. Scholar	Registration No.
1.	Ms. Nidhi	20105041100010943

The minutes of all the bodies are **(Annexure-38, Page-694-702)**

The Vice-Chancellor has considered the matter and has ordered to refer the case to the Academic Council for consideration and approval.

33. To consider the Registration of student in Ph.D. in Deptt. of Commerce.

The student mentioned in the below list has successfully completed her Pre-Ph.D. Course Work in Deptt. of Commerce. Her case has been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Deptt. Staff Council. The minutes of the DRC, PGBOS & DSC are enclosed at **(Annexure-39, Page-703-708)** As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval of the registration. The details of the candidate alongwith the topic and name of the Supervisor is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Mahak Jain D/o Sh. Ajay Kumar Jain 202204110003 0712	A comparative study of purchase behavior of customers towards traditional watches and smart watches with reference to masstige marketing in Haryana	Dr. Seema Malik	19.02.2024

The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of Commerce w.e.f. 19.02.2024 i.e. date of meeting of PGBOS.

34. To ratify the action taken by the Vice-Chancellor in sending a proposal for establishment of a new Department i.e. Department of Psychology from the session 2024-25 at BPSMV, Khanpur Kalan under the Faculty of Social Sciences .

Statement of the case:-

A meeting was held on 08.02.2024 under the Conveneship of Additional Chief Secretary Higher Education, Chandigarh for creation of teaching and non-teaching posts. During the discussion, the ACS Higher Education has desired that the University should establish the Department of Psychology in the University and further directed to submit the proposal for the same at the earliest. Accordingly, the Dean Faculty of Social Sciences was requested to get the proposal prepared for the same (**Annexure-40, page-709-711**).

The Vice-Chancellor considered the proposal of the Dean, Faculty of Social Sciences and approved in anticipation of the approval of the Academic Council/Executive Council so that a proposal be sent to the Additional Chief Secretary, Department of Higher Education, Chandigarh as well as a copy of the same to the DHE, Haryana (**Annexure-41, page-712-13**) with the request to arrange to convey the sanction of the State Government for creation of Teaching posts along with the permission to establish the Department of Psychology as referred above.

35. To consider the Registration of seven students in Ph.D. in Deptt. of Management Studies.

The students mentioned in the below list have successfully completed their Pre-Ph.D. Course Work in Deptt. of Management Studies. Their case has been duly approved by the Departmental Research Committee, Post-Graduate Board of Studies (PGBOS) and Deptt. Staff Council. The minutes of the DRC, PGBOS & DSC are enclosed at (**Annexure-42, Page-714-718**) As per Ph.D. Ordinance of BPSMV Khanpur Kalan, the case is to be placed before the Academic Council for approval of the registration. The details of the candidate alongwith the topic and name of the Supervisor is as follows:

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
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1.	Ms. Savita D/o Sh. Ram Kumar Sindhu 2022041100043016	Role of Circular Economy and Supply Chain Management towards Sustainability in MSME Sector in Haryana	Dr. Anshu Bhardwaj	10.02.2024
2.	Ms. Sakshi D/o Sh. Jaikaran 2022041100043024	Consumer Adoption, Barriers and Policy Intervention towards Electric Vehicles	Dr. Krishan Kumar	10.02.2024
3.	Ms. Veenu Gupta D/o Sh. Krishan Kumar Goel 2022041100043032	Role of Digital Transformation in Enhancing Environmental Sustainability and Consciousness	Prof. Dr. Sanket Vij	10.02.2024
4.	Ms. Jhanvi Khurana D/o Sh. Harish Kumar Khurana 2022041100043047	Role of Artificial Intelligence Enables Digital Marketing Tools on Consumer Decision Making Process	Prof. Dr. Sanket Vij	10.02.2024
5.	Ms. Uma Devi D/o Sh. Chander Pal 2022041100043055	Role of Digitalization in the Restructuring and Sustainability of MSME Sector	Dr. Krishan Kumar	10.02.2024
6.	Ms. Monika D/o Sh. Jashmer 2022041100043071	Carbon Footprints in Higher Education Institutions in Haryana	Prof. Dr. Shweta Singh	10.02.2024
7.	Ms. Sweety D/o Sh. Wazir Singh 2022041100043086	Role of Environmental, Social, and Governance (ESG) Factors and Firm Performance in Sustainable Development	Dr. Anshu Bhardwaj	10.02.2024

The case of the above candidate was put up to the Hon'ble Vice-Chancellor who after due consideration ordered to place the same before the Academic Council for approval of the Registration of above candidate to Ph.D. programme in Deptt. of Management Studies w.e.f. 10.02.2024 i.e. date of meeting of PGBOS.

36. To consider and approve the revise Scheme of Examination and Syllabus Ordinance of M.Sc. Geography programme with effect from Academic Session 2024-25.

Statement of the case:-

The PG BOS, Department of Geography in its meeting held on 01/02/2024 and Faculty of the Social Sciences in its meeting held on 15/02/2024 has approved the Ordinance, scheme of examination and syllabus M.Sc. Geography programme (**Annexure-43, page-719-806**) with effect from 2024-25.

The minutes of PG BOS of Department of Geography are placed at and the minutes of the Faculty of Social Sciences are placed at (**Annexure-44, page-807-818**).

The case duly forwarded by the Chairperson Deptt. of Geography was put up to the Vice Chancellor for consideration and she after due consideration has ordered that the same be placed before Academic Council for kind consideration and approval.

- 37. To consider and approve the minor revision in B.Tech (ECE) model curriculum as per AICTE revised model curriculum of the department of Electronics and Communication Engineering.**

Statement of the Case:-

Presently, the following courses are being taught in the B.Tech (ECE) in the Department of Electronics and Communication Engineering:

1. Internet of things and Applications (ECEL-357), B.Tech 5th semester
2. Computer Network (ECL-360), B.Tech 6th semester
3. Mobile Programming (ECEL-475-D), B.Tech 7th semester

Now, AICTE model curriculum has been revised and therefore to implement the same, the matter was put up before the UGBOS held on 25/09/2023 and UGBOS recommended the following changes in the B.Tech (ECE) as tabulated below.

Previous course, code and semester	Proposed course, code and semester
Internet of things and Applications (ECEL-357), B.Tech 5 th semester	Internet of Things (ECEL-357), B.Tech 5 th semester
Computer Network (ECL-360), B.Tech 6 th semester	Mobile Communication and Network (ECL-360) B.Tech 6 th semester
Mobile Programming (ECEL-475-D), B.Tech 7 th semester	Advanced Mobile Communication (ECEL-475-D), B.Tech 7 th semester

The scheme and syllabus at (**Annexure-45, page-819-827**).

. Further, the recommendation of UGBOS in this regard was considered and approved by the FET in its meeting held on 10/01/2024. The minutes of the UGBOS and FET is enclosed at (**Annexure-46, page-828-833**).

The case was put up to the Hon'ble Vice-Chancellor wherein, she has considered the same as desired to place the same before Academic Council for consideration.

- 38. To Consider and approve the recommendations of PGBOS and Faculty of law regarding the case of shifting of dissertation paper of LLM from 3rd to 4th Semester w.e.f. the Academic Session 2024-25.**

Statement of Case: -

Department of laws is running two years LLM course since 2021. In that scheme & Syllabus there is a paper of Dissertation provided in 3rd Semester but students are allowed as per ordinance to submit it after one month of final term examination of 4th semester which created inconvenience of delay in declaration of result of LLM.

Therefore shifting of this paper of dissertation is approved by PGBOS & Faculty Law held on 15/9/2023 & 10/1/2024 respectively as under: -

One paper of Dissertation of LLM two Year courses of 3rd semester code 304A & 304B is proposed to be shifted in 4th Semester in place of paper code 404A (Socio-Economic offenses) & 404B (Constitutional, Federalism and Pluralism).

The revised scheme of LLM is applicable w.e.f. the Academic Session 2024-2025. (**Annexure-47, page- 834-838**).

The minutes of the UG BOS and Faculty at (**Annexure-48, page-839-842**).

The recommendation of the committee were placed before the Vice Chancellor, who after due consideration and on the recommendations of COE and DAA has approved that the said changes be applicable w.e.f. 2024-25. She further desired to place the case before the Academic Council for consideration.

- 39. To Discuss and approve the Common Ordinance for 4 Year Under Graduate Programmes: Certificate, Diploma, 3 Year Degree, 4 Year Degree (Honours/Honours with Research) semester system under Learning Outcome Based Curriculum Framework-Choice Based Credit System (LOCF-CBCS) to be implemented from Academic Session 2024-25.**

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who had constituted a Common Curriculum Development Board under the chairmanship of Dean Academic Affairs to prepare the common ordinance and Ability Enhancement Courses (AEC), Skill Enhancement Courses (SEC) and Value Added Courses (VAC) in light of NEP. The Common Ordinance for 4 Year Under Graduate Programmes: Certificate, Diploma, 3 Year Degree, 4 Year Degree (Honours/Honours with Research) has been prepared which is to be implemented from Academic Session 2024-25. The same is also approved in the meeting of all the Deans, Chairpersons under the chairpersonship of the Vice-Chancellor (Annexure - A). The same has been circulated to all the Principals of Affiliated Colleges and their observations has also been incorporated in this ordinance. The same is annexed at (**Annexure-49, page-843-872**).

The case was placed before the Vice Chancellor, who after due consideration has desired that the same be placed before the Academic Council for consideration.

40. **To consider and approve the course content/syllabus related to Value Added Courses, Ability Enhancement Courses and Skill Enhancement Courses.**

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who had constituted a Common Curriculum Development Board under the chairmanship of Dean Academic Affairs to prepare the common ordinance and Ability Enhancement Courses (AEC), Skill Enhancement Courses (SEC) and Value Added Courses (VAC) in light of NEP. The Syllabus of Ability Enhancement Courses (AEC), Skill Enhancement Courses (SEC) and Value Added Courses (VAC) has been prepared which is to be implemented from Academic Session 2024-25. The same is also approved in the meeting of all the Deans, Chairpersons pm under the chairpersonship of the Vice-Chancellor. The same is at (**Annexure-50, page-873-960**).

The case was placed before the Vice Chancellor, who after due consideration has desired that the same be placed before the Academic Council for consideration.

41. **To consider and approve the proposal to introduce Bachelor of Arts (Multidisciplinary) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Arts (Multidisciplinary) Programme was approved by the concerned DSC, UGBOS and Faculty.

The scheme and syllabus of following subjects English, Hindi, Sanskrit, Economics, Geography, Political Science, History, Home Science, Music, and Mathematics were approved as Major, Minor and Multidisciplinary Subjects which are (**Annexure- 51, page- 961-1165**).

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

- 42. To consider and approve the proposal to introduce Bachelor of Physical Science (Multidisciplinary) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Physical Science (Multidisciplinary) Programme was approved by the concerned DSC, UGBoS and Faculty.

The scheme and syllabus of following subjects Physic, Chemistry, Computer Science, Electronics and Mathematics were approved as Major, Minor and Multidisciplinary Subjects which are (**Annexure-52,page-1166-1222**).

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

- 43. To consider and approve the proposal to introduce Bachelor of Computer Science (Multidisciplinary) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Computer Science (Multidisciplinary) Programme was approved by the concerned DSC, UGBoS and Faculty.

The scheme and syllabus of following subjects Physic, Chemistry, Computer Science, Electronics and Mathematics were approved as Major, Minor and Multidisciplinary Subjects which (**Annexure-53, page-1223-1265**).

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

44. **To consider and approve the proposal to introduce Bachelor of Life Science (Multidisciplinary) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Life Science (Multidisciplinary) Programme was approved by the concerned DSC, UGBoS and Faculty.

The scheme and syllabus of following subjects Botany, Zoology, Chemistry, Biochemistry, Biology, and Environment were approved as Major, Minor and Multidisciplinary Subjects which (**Annexure- 54 , page- 1266-1310**).

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

45. To consider and approve the proposal to introduce Bachelor of Home Science (Interdisciplinary) Programme under National Education Policy – 2020.

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Home Science (Interdisciplinary) Programme was approved by the concerned DSC, UGBoS and Faculty. (Annexure- 55, page- 1311-1332).

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

46. To consider and approve the proposal to introduce Bachelor of Arts (Hons./Hons. with Research) in English Programme under National Education Policy – 2020.

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Arts (Hons./Hons. with Research) in English Programme was approved by the concerned DSC, UGBoS and Faculty. (**Annexure- 56 , Page-1333-1436**)

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

47. **To consider and approve the proposal to introduce Bachelor of Arts (Hons.) in Sanskrit Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Arts (Hons.) in Sanskrit Programme was approved by the concerned DSC, UGBoS and Faculty. (**Annexure-57, Page-1437-1464**)

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

48. **To consider and approve the proposal to introduce Bachelor of Physical Education and Sports (Hons.) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Physical Education and Sports (Hons.) Programme was approved by the concerned DSC, UGBoS and Faculty. (**Annexure-58 , Page-1465-1524**)

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

49. **To consider and approve the proposal to introduce Bachelor of Commerce (Hons./Hons. with Research) (Interdisciplinary) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Commerce (Hons./Hons. with Research) Programme was approved by the concerned DSC, UGBoS and Faculty. (**Annexure-59, Page-1525-1552**)

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

50. **To consider and approve the proposal to introduce Bachelor of Business Administration (Hons./Hons. with Research) (Interdisciplinary) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Business Administration (Hons./Hons. with Research) Programme was approved by the concerned DSC, UGBoS and Faculty.(**Annexure-60, Page-1553-1583**)

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

51. **To consider and approve the proposal to introduce Bachelor of Hotel Management (Hons./Hons. with Research) (Interdisciplinary) Programme under National Education Policy – 2020.**

Statement of Case:

A Memo No. DHE-170005/5/2023- Deputy Director-NPE Dated 8th June 2023 was received from Department of Higher Education regarding implementation of key components of NEP 2020 in colleges and universities. The matter was placed before the Vice Chancellor who has desired that all Deans/Chairpersons to update/prepare the scheme and syllabus of all the Undergraduate programmes in accordance with NEP.

Accordingly, the Scheme and Syllabus of Bachelor of Business Hotel Management (Hons./Hons. with Research) Programme was approved by the concerned DSC, UGBoS and Faculty. (**Annexure-61, Page-1582-1605**)

The student is required to opt major, minor, multidisciplinary, Ability Enhancement Courses (AEC), Value Added Courses (VAC) and Skill Enhancement Courses (SEC) in accordance with Concerned Curriculum and Credit Framework (CCFUP) mentioned in the common ordinance of undergraduate programme.

The case was placed before the Vice Chancellor who after due consideration has desired that the same be placed before the Academic Council for consideration.

52. **To consider and approve the recommendations of PG Board of Study of Department History and Archeology and Faculty of Social Sciences regarding to:**

- To discuss and approve the Change in the Nomenclature of course CBOE - 1129 History of Haryana (Earliest time to sultanate).
- To Discuss and Approve the insertion /Addition of clause 7.9 in the ordinance of two year M.A History & Archaeology
- To discuss and approve the updation in the syllabus of course HIS-2201.

Statement of Case:

A proposal has been received from the In-charge Department History and Archeology stating that the DSC, PGBOS & Faculty of Social Sciences has approved the above proposal. The concerned minutes are **(Annexure-62, Page- 1606-1612)**

The case was placed before the Vice Chancellor, who after due consideration has desired that the same be placed before the Academic Council for consideration.

53. **To consider the proposal to increase the intake of B.A. programme from 100 to 180 at Regional Centre, Krishan Nagar, Rewari.**

Statement of the case

At present, B.A. Programme with an intake of 100 is running at Regional Centre, Krishan Nagar, Rewari. Now, a proposal has been received from Director, Regional Centre, Krishan Nagar, Rewari stating that many girl students of surrounding villages are requesting for admission in B.A. Programme. However, the seats are limited to 100, therefore, he is requesting to increase the intake of B.A. Programme from 100 to 180. After increase of the intake, 04 visiting faculty will be required to be engaged in addition to the existing teaching staff.

The case was submitted to the Vice-Chancellor who after due consideration has ordered to place the same before Academic Council for consideration.

54. **To consider and approve the proposal for setting up of the University Media and eContent Development Center (UMECD) in the University to cater to the growing needs and essential qualitative expansion of Indian Higher Education in accordance with the mandate of NEP 2020.**

Statement of case:-

The Dean Academic Affairs has submitted a proposal for setting up of the **University Media and eContent Development Center (UMECD)** in the University in view of National Education Policy 2020 to develop high quality eCourses, eProgrammes along with eContent and making it available anytime

anywhere in a seamless manner to students, teachers and other global viewers through web and other services.

Further, the proposed center will provide the opportunity, training, and support to all the faculty members to develop high quality eContent and Lectures. The eContent once developed, shall be available in the web-based Learning Management System of the University accessible to all stakeholders. The estimated cost of the proposed UMEDC is 270.80 lakhs. The details of the technical budgeted posts required for the smooth functioning of the proposed UMEDC are (Annexure-63, pages-1613-1619)

The Vice-Chancellor considered the above matter and ordered that the proposal submitted by the Dean Academic Affairs be placed before Academic Council for consideration and approval.

55. Any other item.

Atalik
Registrar 11/3/24

SUPPLIMENTRY AGENDA FOR THE 27th MEETING OF THE ACADEMIC COUNCIL SCHEDULED TO BE HELD ON 15/03/2024 AT 12:00 noon THROUGH BLENDED MODE (OFFLINE AND ONLINE), IN CONFERENCE HALL, ADMINISTRATIVE BLOCK, BPS MAHILA VISHWAVIDYALAYA, KHANPUR KALAN (SONEPAT), HARYANA.

55. To consider the cancellation of Registration of Ph.D. in Deptt. of Commerce.

The below mentioned student is the registered student of Ph.D. in Department of Commerce. The matter of cancellation of registration of the student due to the reason mentioned against the name has been approved by the Departmental Research Committee (DRC), PGBOS and Faculty of Commerce & Management for cancellation of Registration of Ph.D. in Commerce:

S. No.	Name of Ph.D. Scholar	Regn. No.	Reason
1.	Ms. Priya	2016041100007072	Due to personal reason

The minutes of all the bodies are at (Annexure-64, pages-1620-1622)

The Vice-Chancellor has considered the matter and has ordered to refer the case to the Academic Council for consideration and approval.

56. To consider and approve the Scheme of Examination and Syllabus of Ph.D Political Science w.e.f. the Academic Session 2023-24.

Statement of the case:-

The PG BOS, Department of Political Science in its meeting held on 23/10/2023 and Faculty of Social Sciences in its meeting held on 20/11/2023 has approved the scheme of examination and syllabus of Ph.D. programme in Political Science (Annexure-65, page-1623-1631) with effect from 2023-24.

The minutes of PG BOS, Department of Political Science and Faculty of Social Sciences are placed at (Annexure-66, page-1632-1635)

The case duly forwarded by the Chairperson Deptt. of Political Science was put up to the Vice Chancellor for consideration and she after due consideration has ordered that the same be placed before Academic Council for kind consideration and approval.

57. To ratify the action taken by the Vice-Chancellor in approving the Ordinance, Scheme of Examination and syllabus of Ph.D Course work (Economics) from the Academic session 2023-24 in anticipation of the approval of the Academic Council.

Statement of the Case:-

The PGBoS, Department of Economics in its meeting held on 20/01/2024 has approved the Scheme of examination and syllabus of Ph.D course work, Economics (Annexure-67, page-1636-1658) with effect from 2023-2024.

The minutes of PGBOS, Department of Economics and the minutes of the Faculty of Social Sciences are placed at (Annexure-68, Page-1659-1664)

The case duly recommended by the Chairperson Deptt. Of Economics was put up to the Vice-Chancellor who after due consideration has approved the same in anticipation of the approval of the Academic Council and further desired to refer the same to the Academic Council for ratification.

58. To consider and approve the ordinance (Syllabus and Scheme of examination) for the following new PG courses to be introduced at MSM Institute of Ayurveda. (Annexure-69, Page-1665-1705)

1. PG Course in Kayachikitsa, (MD Ayurveda in kayachikitsa)
2. PG Course in Dravyaguna Vigyan (MD Ayurveda in Dravyaguna Vigyan)

Statement of the case: -

MSM Institute of Ayurveda is offering BAMS (Bachelor of Ayurvedic Medicine and Surgery) with sixty seats and nurturing Indian system of medicine in the state of Haryana since 1973. Even after successfully completing 50 years, there is no Post graduation course at MSM Institute of Ayurveda. The consultant of MSM Institute of Ayurveda treating nearby patients by giving various modalities of Ayurveda treatments. But due to lack of PG Courses the research oriented activities are lacking. To promote the research work by women Ayurveda scholar, BPSMV took the approval of Executive council in the 35th EC Meeting on dated 05.12.2013 to start PG courses in Kayachikitsa, and Dravyaguna.

Further, the case for granting approval by NCISM was sent after seeking NOC from Director General AYUSH, Haryana. Now the NCISM has done an inspection letter of intent (LOI) on dated 27th and 28th Dec. 2023. (Annexure-70, Page-1706-1708) The inspection for letter of permission (LOP) is expected in this month. The NCISM, New Delhi prescribed the Syllabus and scheme of examination for PG courses, which is implemented uniformly across the India. As per the BPSMV norms the agenda item for preparing ordinance (scheme of examination & Syllabus) of Dravyaguan and Kayachikitsa was put up in Board of Studies and faculty of Ayurvedic medicine. The meeting of BOS and faculty of Ayurvedic medicine were held on 10/02/2024 and 11/02/2024 respectively. The recommendations of BOS and faculty of Ayurvedic medicine are annexed at (Annexure-71,Page-1709-10).

The recommendations of faculty of Ayurveda was placed before the Vice Chancellor, who after due consideration ordered to place the same before the academic council.

59. To consider and approve the annual fee for the following programmes mentioned as under:-

1. M.A. Hindi
2. M.A. Sanskrit
3. M.A. Psychology
4. M.Sc. Environment Science
5. Master of Master Communication
6. M.A. Fine Arts

Statement of Case: -

The proposal for establishment of following departments has been approved by the Academic Council and Executive Council. After approval of the same, a proposal for sanctioning the teaching positions was sent to State Government. In response of the same, an email has been received from DGHE vide which it was requested to submit the files/documents along with the financial implications, workload, student strength, justification, offset additional resources and fee of students regarding below mentioned programmes:-

Department of Hindi
Department of Environment Science
Department of Sanskrit
Department of Psychology
Department of Journalism and Master Communication
Department of Fine Arts

It may please be noted that the fee of following courses is already approved by the Academic Council in its 19th meeting held on 14/09/2017: -

- | | |
|---------------|------------------------|
| 1. M.A. Hindi | Rs. 10,000/- per annum |
| 2. M.Sc EVS | Rs. 20,000/- per annum |

However, a proposal for finalizing the fee of following programmes has been received from Establishment Teaching Branch through Dean Academic Affairs

- | | |
|---------------------------------|----------------------|
| 1. M.A. Hindi | Rs. 5000/- per annum |
| 2. M.A. Sanskrit | Rs. 5000/- per annum |
| 3. M.A. Psychology | Rs. 5000/- per annum |
| 4. M.Sc Environment Science | Rs. 7500/- per annum |
| 5. Master of Mass Communication | Rs. 7500/- per annum |
| 6. M.A. Fine Arts | Rs. 7500/- per annum |

Accordingly, the case was placed before the Vice Chancellor, who after due consideration has desired that the same be placed before the Academic Council for consideration.

60. Any other item with the permission of the Chair.


14/3/24
Registrar

TABLE AGENDA FOR THE 27th MEETING OF THE ACADEMIC COUNCIL SCHEDULED TO BE HELD ON 15/03/2024 AT 12:00 noon THROUGH BLENDED MODE (OFFLINE AND ONLINE), IN CONFERENCE HALL, ADMINISTRATIVE BLOCK, BPS MAHILA VISHWAVIDYALAYA, KHANPUR KALAN (SONEPAT), HARYANA.

60. To consider and approve the change of the Eligibility Criteria of Master of Physical Education & Sports (M.P.E.S.) programme in the Department of Physical Education under the Faculty of Physical Education

Statement of Case:-

Department of Physical Education has faced many problems in admission of M.P.E.S. due to Gender disparity, socioeconomic background, less acknowledgment of athletic achievement of girl students and inclusion of all girl students to higher education to achieve educational goals. Girls particularly those from rural backgrounds, often face greater barriers to education due to cultural, economic, and social factors and have limited access to quality education compared to their urban counterparts. Reducing eligibility marks can help level the playing field by recognizing the additional challenges they may face, such as inadequate infrastructure, lack of resources, and societal expectations. This adjustment ensures that talented individuals from rural areas have equal opportunities to pursue higher education. Sports participation requires dedication, discipline, and time management skills, which are valuable qualities for academic success. By considering sports achievements in eligibility criteria, the institution acknowledges the holistic development of students and encourages participation in extracurricular activities. This approach promotes diversity and recognizes talent beyond academic achievements alone. By adopting inclusive eligibility criteria, institutions foster diversity and enrich the learning environment. Students from diverse backgrounds bring unique perspectives, experiences, and skills to the classroom, enhancing the educational experience for all. Ultimately, the goal of education is to empower individuals to reach their full potential and contribute meaningfully to society. By accommodating the needs of marginalized groups and recognizing their achievements, institutions uphold their commitment to promoting social justice, diversity, and inclusion. Lowering eligibility marks for specific groups encourages the enrollment of underrepresented populations, contributing to a more inclusive campus community for gender, rural background, and sports participation aligns with these broader educational objectives and values.

Considering the circumstances, eligibility criteria of Master of Physical Education & Sports (MPES) Programme is required to be amended/changed w.e.f. the Academic session 2024-25. Hence the matter was placed before the meeting of PGBOS and Faculty of Physical Education held on 17.02.2024 and 20.02.2024 respectively. Recommendation of the PGBOS and Faculty are required to be placed before the Academic Council for its approval (Annexure-72, Page-1711-1713)

Further, the existing and proposed eligibility criteria of Master of Physical Education (M.P.E.S.) programme are as under:

3.2 Eligibility (Existing)	3.2 Eligibility (Purposed)
<p>(a) Bachelor of physical education (B.P. Ed.)/ Bachelor of Physical Education (B.P.E.)/B.P.E.S or equivalent with at least 50% marks</p> <p>OR</p> <p>(b) Bachelor of science (BSc.)in Health and Physical Education with at least 50% percent marks</p> <p>Or</p> <p>(c) The reservation in seats and relaxation</p> <p>(b) Preference will be given to those candidates who are sportsperson or had participated in Inter-University and National level.</p> <p>(c) No student who has crossed the age of 29 years as on 1st July of the relevant year will be allowed admission to M.P.E.S (Master of Physical Education and Sports) 2 years course. However, the vice-chancellor, BPSMV, has the power to relax the upper age limit by one year on the recommendation of the Head/Incharge, of the Department. The upper age limit may be relaxed by 3 years in the case of SC and ST candidates of Haryana.</p> <p>(d) Submission of Physical fitness certificate from Institute of Ayurveda, BPSMV is compulsory before admitting to the course.</p> <p>3.2.1 No candidate who is in employment (whole-time, part-time, or honorary service) shall be eligible to take admission in M.P.E.S. programme without taking leave from her institution/ office etc. from the date of admission to the termination of three year course. She has to submit an affidavit in this regard. If found in violation of this rule</p>	<p>(a) Bachelor of physical education (B.P.Ed.)/ Bachelor of Physical Education (B.P.E.)/ Bachelor of Physical Education and Sports (B.P.E.S.)/Bachelor of Physical Education, Health Education and Sports Science or equivalent Graduation degree with at least 45% marks.</p> <p>or</p> <p>B.A./B.SC./B.Com or equivalent Graduation degree with at least 45% marks. Students must have minimum inter college participation/first / second /third position or Senior state/district championship participation/ first / second /third position minimum qualification for being eligible for admission.</p> <p>OR</p> <p>Bachelor of science (BSc.)in Health and Physical Education with at least 45% percent marks</p> <p>b) Preference will be given to those candidates who are sportsperson or had participated in Inter-University and National level.</p> <p>(c) No student who has crossed the age of 29 years as on 1st July of the relevant year will be allowed admission to M.P.E.S (Master of Physical Education and Sports) 2 years course. However, the vice-chancellor, BPSMV, has the power to relax the upper age limit by one year on the recommendation of the Head/Incharge, of the Department. The upper age limit may be relaxed by 3 years in the case of SC and ST candidates of Haryana.</p> <p>(d) Submission of Physical fitness certificate from Institute of Ayurveda, BPSMV is compulsory before admitting to the course.</p> <p>3.2.1 No candidate who is in employment (whole-time, part-time, or honorary service) shall be eligible to take admission in M.P.E.S. programme without taking leave from her institution/ office etc. from the date of admission to the termination of Two year course. She has to submit an affidavit in this regard. If found in violation of this rule necessary action shall be taken against the</p>

necessary action shall be taken against the candidate.	candidate Note: Reassertion will be followed as per Haryana State Government Rules. Only After qualifying the Physical Efficiency Test (PET) admission to M.P.Ed. /M.P.E.S. course will be processed.
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The Vice Chancellor has considered the matter and ordered to place the same before the Academic Council for its approval.

61. Any other item with the permission of the Chair.

M. Gulik
Registrar 15/3/24

BPS MAHILA VISHWAVIDYALAYA KHANPUR KALAN (SONEPAT)

MINUTES OF THE 26th MEETING OF THE ACADEMIC COUNCIL HELD ON 14/07/2023 AT 11.30 A.M. IN THE CONFERENCE HALL, ADMINISTRATIVE BLOCK, BPS MAHILA VISHWAVIDYALAYA, KHANPUR KALAN (SONEPAT) THROUGH BLENDED MODE.

<u>Members Present:-</u>		
1.	Prof. Sudesh Vice-Chancellor	Chairperson
		Ex-Officio Members
2.	Smt. Veena Rani, Deputy Director O/o DGHE, Panchkula	Attended online
3.	Prof. Sanket Vij, Dean Academic Affairs	Attended offline
4.	Prof. Surender Mor, Dean, Faculty of Social Sciences	---do---
5.	Prof. Ashok Verma, Dean, Faculty of Arts & Languages	---do---
6.	Dr. Suman Dalal, Dean, Faculty of Education Dean Faculty of Physical Education	---do---
7.	Prof. Vijay Nehra, Dean, Faculty of Engineering & Technology, Dean Faculty of Law	---do---
8.	Prof. Neelam Jain, Dean Faculty of Pharmaceutical Sciences	Attended online
9.	Prof. Ipshita Bansal, Dean, Faculty of Commerce & Management, Proctor	Attended offline
10.	Dr. Sunil Sangwan, Dean, Faculty of Sciences	--do--
11.	Prof. Shweta Singh, Dean of Colleges, Dean Students Welfare	--do--
12.	Dr. Ravi Bhushan, Chairperson, Department of English,	Attended online
13.	Dr. Sandeep Dahiya, Controller of Examinations	Attended offline
14.	Dr. Manju Panwar, Chairperson, Department of Social Work	-do-
15.	Dr. Kokila Malik, Chairperson, Deptt. of Geography	-do-
16.	Dr. Priyanka, Chairperson, Department of ECE	-do-
17.	Dr. Sonal, Chairperson, Department of CSE&IT	-do-
		Other Members
18.	Dr. Madhvi Seetha, Associate Professor, Faculty of Ayurvedic Medicine.	Attended online
19.	Dr. Shalini, Asstt. Prof. Faculty of Arts & Languages	Attended offline



- | | | |
|-----|---|-----------------------------------|
| 20. | Dr. Deepali Mathur, Asstt. Prof.,
Faculty of Social Sciences | --do-- |
| 21. | Dr. Kritika, Asstt. Prof.
Faculty of Law | --do-- |
| 22. | Dr. Anuradha, Asstt. Prof.,
Faculty of Ayurvedic Medicine | Attended online |
| 23. | Dr. Meenakshi Katyayal, Asstt. Prof.
Faculty of Commerce & Management | --do-- |
| 24. | Dr. Monika, Asstt. Prof.
Faculty of Education | --do-- |
| 25. | Dr. Manju Saroha, Asstt. Prof.
Faculty of Engg. & Technology | --do-- |
| 26. | Dr. Asha, Asstt. Prof.
Faculty of Sciences | --do-- |
| 27. | Prof. Shalini Singh, Department of Psychology,
M D University, Rohtak. | Attended online |
| 28. | Prof. Manjula Choudhary,
Kurukshetra University, Kurukshetra, | --do-- |
| 29. | Dr. Kamlesh (Retd Professor),
IMSAR, MDU Rohtak, | --do-- |
| 30. | Dr. Sangeeta Sapra, Principal,
Tau Devi Lal, Govt. Clg for Women, Murthal, Sonapat. | --do-- |
| 31. | Dr. Vandana Nasa, Associate Professor, Commerce,
Govt. College for Women, Sonapat. | --do-- |
| 32. | Ms. Ashu, Assistant Professor,
Arya Adarsh Girls Colleges,
Maldauda, Panipat. | --do-- |
| 33. | Dr. Jagbir Singh, Ex Chairman,
Board of School Education, Bhiwani | Outside Expert
Attended online |
| 34. | Prof. Sukhdeep Singh,,
Department of Computer and Engineering,
Deenbandhu Chhotu Ram University,
of Science and Technology, Murthal. | --do-- |
| 35. | Prof. Dr. N Srikumaran Nair,
Head, Department of Medical Biometrics,
Informatics Biostatistics,
Jawaharlal Institute of Postgraduate,
Medical Education and Research, Pondicherry | --do-- |
| 36. | Prof. B.B. Goyal, University Business School,
Punjab University, Sec- 14, Chandigarh. | Attended offline |
| 37. | Dr. Mathachan K.J., In-charge,
Deptt.of Foreign Languages | Special invitee |
| 38. | Dr. Seema Dahiya, In-charge,
Deptt.of Laws | --do-- |
| 39. | Dr. Pankaj Mishra, In-charge,
Deptt.of Hotel Management | --do-- |

40. Mr. Rampal, In-charge, --do-
Deptt.of Political Science
41. Dr. Archna Malik, In-charge, --do-
Department of History & Archaeology
42. Dr. Neelam Malik, Member Secretary
Registrar

THE QUORUM WAS COMPLETE.

At the outset, the Vice-Chancellor welcomed all the members to the 26th meeting of the Academic Council. The Chairperson informed that National Accreditation and Assessment Council (NAAC) Peer Team visited the University from 27th February to 1st March, 2023. The University completed its first cycle of the Accreditation and was accredited with B++ Grade by NAAC. All the members congratulated her for the same.

Further, the Vice-Chancellor introduced the newly appointed members Dr. Veena Rani, Deputy Director, Prof. Ashok Verma, Dean Faculty of Arts and Languages and Prof. Ipshita Bansal, Proctor to the August House. All the members congratulated them on being nominated to the Academic Council of BPSMV, Khanpur Kalan.

After the exchange of pleasantries, the formal agenda items with the permission of the Chairperson were taken up by the Registrar.

1. Confirmation of the Minutes of the 25th meeting of Academic Council held on 17/01/2023.

RESOLVED THAT THE MINUTES OF THE 25th MEETING OF THE ACADEMIC COUNCIL HELD ON 17.1.2023 BE CONFIRMED.

2. Follow up Action Report.

RESOLVED THAT THE FOLLOW UP ACTION TAKEN ON THE DECISIONS OF THE ACADEMIC COUNCIL MEETING HELD ON 17.1.2023 BE NOTED. FURTHER RESOLVED THAT THE OBSERVATIONS ON AGENDA NO 06, 37 AND 40 BE APPROVED AS FOLLOWS:

- No. 06 THE DIRECTOR RESEARCH WILL TAKE UP THE MATTER AT THE EARLIEST AND SUBMIT THE REPORT TO BE PLACED AT THE NEXT MEETING OF THE ACADEMIC COUNCIL.

(Action By:- Director Research)

- No. 37. THE RESOLUTION MAY BE READ "THE PAPER ENVIRONMENTAL STUDIES (EVS 201) MAY BE TAUGHT IN THE 3RD SEMESTER FOR ALL B.TECH. PROGRAMME INCLUDING B.VOC. PROGRAMME. FOR ALL OTHER UNDER GRADUATE PROGRAMMES THE DECISION OF THE ACADEMIC COUNCIL IN ITS MEETING HELD ON 17/01/2023 ALREADY PASSED SHALL BE FOLLOWED IN LETTER AND SPIRIT AND THE COMMON SYLLABI AS PASSED BY THE ACADEMIC COUNCIL IN ITS MEETING HELD ON 20/06/2018 SHALL BE ADOPTED/IMPLEMENTED IN UG/INTEGRATED PROGRAMME.

(Action By: - Academic Branch & COE)

- No. 40 THE RESOLUTION MAY BE READ AS UNDER "RESOLVED THAT ON THE BASIS OF THE UNSATISFACTORY REPORT AND CONDUCT"

(Action By: - Academic Branch and R & S Branch)



3. To note the action taken by the Vice-Chancellor to attach /allot the various subjects with the concerned Faculty or other Faculty in anticipation of approval of the Academic Council.

RESOLVED THAT THE ACTION TAKEN BY THE VICE-CHANCELLOR BE NOTED WITH MINOR CHANGES AT SR. NO. 10 WHICH WILL BE READ AS DEPARTMENT OF CSE AND IT. FURTHER RESOLVED THAT THE SUBJECTS OF PUBLIC ADMINISTRATION AND PSYCHOLOGY WHICH ARE BEING TAUGHT IN AFFILIATED COLLEGES BE ATTACHED WITH THE FACULTY OF SOCIAL SCIENCES.

(Action By: - Academic Branch)

4. To note the action taken by the Vice Chancellor to award the Ph. D. Degrees to the students in the subjects as mentioned against their name in anticipation of the approval of the academic council.

Sr. No.	Research Scholar	Name of the Supervisor(s)	Name of the Department	Registration No.	Title of the Thesis	Date of the URC
1.	Ms. Monika Rathee D/o Sh. Balwan Singh	Dr. Nutan	Food & Nutrition, BPS IHL	13091102	"Assessment of health status of army personnel and its improvement by developing suitable functional foods"	04.02.2023
2.	Ms. Jannat Bamal D/o Sh. Jaivir Singh Bamal	Dr. Sandhya Rohal	Department of Laws	2017041100 022811	"Freedom of Speech and Expression vis-à-vis Contempt of Courts"	27.01.2023
3.	Ms. Anurag Rana D/o Sh. Jagbir	Dr. Anil Balhera	Department of Laws	14051001	"Independence of Judiciary and Judicial Accountability in India: A Critical Study"	27.10.2022
4.	Ms. Deepika Kamboj D/o Sh. Bir Singh	Dr. Rajesh Hooda	Department of Laws	2015041100 021546	"Justice System for Juveniles in India: A Critical Study"	18.01.2023
5.	Ms. Sarika D/o Sh. Krishan Lal	Dr. Vimal Joshi	Department of Laws	2015041100 021554	"Trends of Punishment in India with Special reference of Sexual Offences"	18.01.2023

6.	Ms. Anju Sharma D/o Sh. Ramesh Chand	Dr. Kapil Kumar	Department of Management Studies	2017041100 022977	"Work Engagement and Organizational Effectiveness: A Study of State Universities of Haryana"	15.02.23
7.	Ms. Bhateri Devi D/o Sh. Ram Kumar	Dr. Seema Dahiya	Department of Laws	2015041100 021531	"Child Labour in India: A Socio Legal Study with Special Reference to Panipat District."	27.10.22
8.	Ms. Kanchan Khatreja D/o Sh. Uttam Chand	Dr. Suman Dalal	Department of Education	2016041100 021516	"Relationship of Creativity in Mathematics of Elementary School Students with Anxiety and Parenting Style"	09.03.2023
9.	Ms. Asha D/o Sh. J.S. Balhara	Dr. Sandeep Dahiya	Department of ECE	2018041100 016606	"Performance Analysis of Radio over Fiber (Rof) Communication System For 5G Technology"	15.03.2023
10.	Ms.Meenu D/o Sh. Surajmal	Dr. Neelam Jain	Department of Pharmaceutical Education & Research	14071001	"Synthesis, Characterization and Biological Evaluation of Some Novel Substituted Pyrazoles"	28.04.2023
11.	Ms.Seema Nashier D/o Sh. Raje Ram	Prof. Sanket Vij	Department of Management Studies	2017041100 022946	"Contribution of Socially Backwards in Entrepreneurship: A Study of Dalit Indian Chamber of Commerce and Industry (DICCI)"	03.05.2023

12.	Ms. Deepa D/o Sh. Balbir Singh	Dr. Priya Dhingra	Department of Education	12060805	"Impact of Self Efficacy on Educational Aspiration and Achievement Motivation of Secondary School Students"	01.05.2023
13.	Ms. Seema Rani D/o Sh. Balraj Singh	Dr. Varuna Dahiya	Department of Education	2016041100 021613	"Effectiveness of Constructive Pedagogy of Teaching Mathematics on Learning Outcomes of Children With Hearing Impairment"	01.05.2023
14.	Ms. Jyoti Mor D/o Sh. S.C. Mor	Prof. Shweta Singh	Department of Management Studies	2015041100 002472	"Knowledge Management in Banking Sector in India"	30.05.2023

RESOLVED THAT THE ACTION TAKEN BY THE VICE-CHANCELLOR BE NOTED.

(Action By: - Controller of Examinations)

5. To consider the recommendations of the Committee constituted by the Academic Council vide Resolution no. 35 of its meeting 25th Academic Council held on 17/01/2023 to look in to the matter of registration of following students of Ph. D in Food and Nutrition (IHL):-

Sr. No	PRN/ Roll No (Pre. Ph.D.)	Name of candidate	Name of Supervisor	Research Topic	Date of meeting of PGBOS
1.	2018041100040566 18091001	Aarzoo Tomar D/o Azad Singh Tomar	Dr. Parvinder Kaur	Evaluation of Chlorogenic Acid and Antioxidant Properties of Green Coffee Beans Based Value Added Products.	12.08.2021
2.	2018041100040551 18091002	Anuradha Goswami D/o Bhushan Goswami	Dr. Nutan	Formulation of Instant Probiotic Water Kefir Herbal Mocktail and its Nutritional, Antioxidant Analysis	12.08.2021
3.	2018041100040535 18091003	Mahima Kumari D/o Karan Singh	Dr. Veena, Principal	Nutritional, Phytochemical Assessment of Giloy (Tinospora cordifolia) and its Utilization in Value Added Food Products	12.08.2021

4.	2018041100040543 18091004	Preeti Dabas D/o Raj Singh Dabas	Dr. Parvinder Kaur	Development and Nutritional Analysis of Value Added Products Based on Black Rice	12.08.2021
5.	2018041100040574 18091005	Ramni Purnima Katyal D/o Rajender Katyal	Dr. Veena, Principal	Nutritional Phytochemical Analysis of Underutilized Medicinal Plants and their Utilization in Product Development	12.08.2021

RESOLVED THAT THE RECOMMENDATIONS OF THE COMMITTEE EXCEPT SR. NO. 3 AND 5 BE APPROVED. FURTHER RESOLVED THAT AFTER ADOPTING PROPER PROCEDURE, NEW GUIDE / SUPERVISOR BE PROVIDED TO BOTH STUDENTS IN THE RELEVANT DISCIPLINE. DR. VEENA MAY BE APPOINTED CO-SUPERVISOR THROUGH MUTUAL CONSENT.

(Action By: - R&S Branch)

6. To consider and approve the proposal regarding implementation of syllabi of Cyber Security Course at Under Graduate and Post Graduate Level.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

(Action By: - Academic Branch)

7. To consider the cases of following candidates of various Departments for Registration in Ph.D. in Programme as mentioned against each.

Sr. No.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Neeraj D/o Sh. Meer Singh 2020041100010767	Witness Protection Laws in India: A Critical Study	Dr. Seema Dahiya Dr. Archana Malik (Co-supervisor)	25.03.2023
2.	Ms. Sujata Lather D/o Sh. Suresh 2014041100011922	Legal Framework for Regularization of Contractual Services in India- A Socio Legal Study	Dr. Anil Balhera	25.03.2023
3.	Ms. Vijata Kumari D/o Sh. Amit Rawal 2020041100010713	Law of Admission and Confession in India, USA and UK: A Comparative Study	Dr. Alka Bharti	25.03.2023
4.	Ms. Antima D/o Sh. Joginder Singh 2015041100002986	Wrongful Conviction Under Indian Criminal Justice System: A Socio-Legal Study	Dr. Rajesh Hooda	25.03.2023
5.	Ms. Sneha D/o Sh. Kuldeep Singh 2021041100042082	Digital Forensic Evidence in Cyber Crimes: Mapping Indian Admissibility Regime and Challenges	Dr. Parmod Malik	25.03.2023
6.	Ms. Anju Bala D/o Sh. Hans Raj 2020041100041023	Sedition Law vis-à-vis Freedom of Speech and Expression in the current Indian Scenario: A Critical Study	Dr. Seema Dahiya Dr. Archana Malik (co-supervisor)	25.03.2023

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7.	Ms. Babli D/o Sh. Ishwar Singh 2021041100039362	Higher Education Preparedness with Reference to Industry 5.0: The Indian Experience	Prof. Sanket Vij	21.04.2023
8.	Ms. Bhawana Sharma D/o Sh. Deepak Sharma 2021041100039354	Psychographic Influence of OTT Platforms: An Insight into Indian Viewers Disposition	Dr. Krishan Kumar	21.04.2023
9.	Ms. Neeru D/o Sh. Jasbir 2021041100039563	Consumers Preferences and Decision-Making Choices: A Study of Decoy Effect in FMCG Sector	Dr. Meenakshi Katyal	21.04.2023
10.	Ms. Nishu Chauhan D/o Sh. Sanjeev Chauhan 2021041100039377	Academic Leadership, Organisational Politics and Quality of Work Life in Higher Education: An Empirical Analysis	Prof. Shweta Singh	21.04.2023
11.	Garima Malik D/o Jagdish Malik 201704110000910618 031003	Trauma and Psychic Healing : A study of Twin Bombings in Select Japanese Literature	Prof. Ashok Verma	17.07.2020
12.	Ms. Anju D/o Sh. Narender Singh 2019041100000597	Cinematic Adaptations of Shakespearean Tragedies: A Study of Galiyon Ki Raasleela Ram-Leela, Harider, Omkara and Maqbool	Prof. Amrita	25.04.2023
13.	Ms. Mahima D/o Sh. Amarbir Singh 2019041100000604	Expanding Consciousness: A Study of Select Indian Science Fiction	Prof. Amrita	25.04.2023
14.	Ms. Nisha D/o Sh. Lal Singh 2017041100009242	Structural Analysis of Rajasthani Folktales: A Study of Vijaydan Detha's Timeless Tales From Marwar, New Life Selected Stories and Chouboli And Other Stories Vol. I and Vol. II	Prof. Ravi Bhushan	25.04.2023
15.	Ms. Sukriti Mor D/o Sh. Surender Singh 2014041100002552	Relocating Identity in Transgender Narratives: A Study of Select Indian Texts	Dr. Shalini	25.04.2023
16.	Ms. Vrinda Vats D/o Sh. Suresh Kumar 2014041100002583	Sufi-mystics of Punjab: A Study of Select Works of Bulleh Shah, Waris Shah and Shah Hussein	Prof. Ashok Verma	25.04.2023
17.	Ms. Niti D/o Sh. Rohtas 2015041100013752	Contours of Marginality and Tribal Identity: A Study of Select Literary Texts from the North East	Prof. Ashok Verma	25.04.2023
18.	Pooja Rani D/o Kapoor Singh 2020041100040967/2 0031001	Understanding Existential Dilemma: A Critique of Stephen King's The Stand Albert Camus's The Plague and Mary Shelley's The Last Man	Dr. Geeta Phogat	16.11.2022
19.	Ms. Tamanna D/o Shiv Kumar 2020041100040975/2 0031002	Voicing the Social Imbalance: A Critical Study of the Select Works of Elfriede Jelinek.	Dr. Ravi Bhushan	16.11.2022

20.	Ms. Riya D/o Satish Kumar 2020041100040983/2 0031003	Theatre as a Mode of Liberation: (Re)-viewing the dramaturgy of Augusto Boal's Theatre of the Oppressed.	Dr. Ajeet Singh	16.11.2022
21.	Ms. Shikha Sharma D/o Sanjay Kumar 2020041100040991/2 0031004	Trauma of Exile in Select Kashmiri Memoirs (From Home to House, Our Moon has Blood Clots and A Long Dream of Home)	Dr. Geeta Phogat	16.11.2022
22.	Ms. Renu Chaudhary D/o Arvind Chaudhary 2020041100041007/2 0031005	The idea of Ramrajya' A Comparative Study of M.K. Gandhi's Hind Swaraj, J.L. Nehru's Letters From a Father to His Daughter and B.R. Ambedkar's Riddles in Hinduism	Dr. Ravi Bhushan	16.11.2022

RESOLVED THAT THE ABOVE CASES FOR REGISTRATION BE APPROVED. FURTHER RESOLVED THAT IF THERE IS ANY CORRECTION / TYPOGRAPHICAL MISTAKE, THE SAME BE CORRECTED IN VIEW OF THE MINUTES APPROVED BY THE PGBOS CONCERNED.

(Action By: - R&S Branch)

8. To consider the cancellation of Registration of Ph.D. in Department of Laws.

Sr. No.	Name of Ph.D. Scholar	Registration. No.	Reason
1.	Ms. Vandana	2018041100040396	Due to professional commitment

RESOLVED THAT THE REGISTRATION OF MS. VANDANA BE CANCELLED.

(Action By: - R&S Branch)

9. To consider the case of appointment of co-supervisor for Ph.D. in Deptt. of Law.

Sr. No.	Name of Ph.D. Scholar	Registration No.
1.	Ms. Kavita Devi	2018041100040415

RESOLVED THAT THE ABOVE CASE FOR REGISTRATION BE APPROVED.

(Action By: - R&S Branch)

10. To consider and approve the recommendations of the committee constituted to discuss the proposal submitted by Principal, Polytechnic regarding closure of the Diploma in Architectural Assistantship running under Self Finance Scheme.

RESOLVED THAT THE RECOMMENDATIONS OF THE COMMITTEE BE APPROVED. FURTHER RESOLVED THAT THE PRINCIPAL POLYTECHNIC MAY INITIATE THE PROPOSAL FOR INTRODUCTION OF THE NEW INNOVATIVE COURSES IN THE ACADEMIC INTEREST OF THE RURAL GIRL STUDENTS.

(Action By: - Principal Polytechnic)

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11. To note the action taken by the Vice-Chancellor in approving the proposal to discontinue the B.A. (Hons.) Economics programme from the Academic Session 2023-24.

RESOLVED THAT THE ACTION TAKEN BY THE VICE-CHANCELLOR BE NOTED.

(Action By: - Academic Branch & Chairperson Department of Economics)

12. To consider and approve the panel of outside Experts in the discipline of Library Science regarding appointment of Librarian as per BPSMV Act-2006 under Section 24(2) of the Statute.

RESOLVED THAT THE PANEL OF EXPERTS BE APPROVED AND THE SAME BE SENT TO HON'BLE GOVERNOR & CHANCELLOR OF BPSMV, KHANPUR KALAN FOR APPROVAL.

(Action By: - O/o Vice-Chancellor)

13. To consider and approve the Scheme and syllabi of M.Sc. Mathematics, Pre-Ph.D. course work in Mathematics and Physics w.e.f. Academic Session 2023-24.

RESOLVED THAT THE SCHEME AND SYLLABI OF THE ABOVE PROGRAMMES BE APPROVED.

(Action By: - Academic Branch)

14. To consider the Registration of three (3) students in Ph.D. in Department of Social Work.

Sr. No.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Preeti Dabas D/o Sh. Dilbag Singh 2020041100040871	A Study of Bride Buying (Molki) in Haryana	Dr. Manju Panwar	21.10.2022
2.	Ms. Renu D/o Sh. Ram Mehar 2020041100040863	Scope of School Social Work Practice in Inclusive Education: A Study of government School in Haryana	Dr. Deepali Mathur	21.10.2022
3.	Ms. Kavita D/o Sh. Swaraj 2020041100040855	Importance and Utilisation of Welfare Schemes by Elderly in Rural Areas of Haryana: A Social Work Perspective	Dr. Manju Panwar	21.10.2022

RESOLVED THAT THE ABOVE CASES FOR REGISTRATION BE APPROVED. FURTHER RESOLVED THAT IF THERE IS ANY CORRECTION / TYPOGRAPHICAL MISTAKE, THE SAME BE CORRECTED IN VIEW OF THE MINUTES APPROVED BY THE PGBOS CONCERNED.

(Action By: - R&S Branch)

15. To consider and approve the Proposal regarding Introduction of the following two courses in Learning Resource Centre BPSMV, Khanpur Kalan.

1. IELTS Preparatory Course.
2. English Language proficiency Course

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED. FURTHER RESOLVED THAT THE COMPLETION CERTIFICATE OF BOTH THE COURSES BE ISSUED AFTER SUCCESSFUL COMPLETION OF THE COURSE.

(Action By: - Department of English & Academic Branch)

16. To consider the recommendation made by the Fee Concession Committee held on 21.06.2023 at 03.00 P.M. under the convenership of the Dean Students' Welfare.

RESOLVED THAT THE RECOMMENDATIONS OF THE COMMITTEE AS ABOVE BE APPROVED. FURTHER RESOLVED THAT THE PERCENTAGE OF PHYSICALLY HANDICAPPED BE READ AS 40 % INSTEAD OF 60% AS PER GOVERNMENT NORMS.

(Action By: - Academic Branch and Dean Students Welfare)

17. To consider the Registration of one student namely Ms. Rajni in Ph.D. in Deptt. of CSE/IT.

Sr. No.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Rajni D/o Sh. Jai Bhagwan 2021041100042847	Design of Hybrid Techniques for Information Security using Digital Watermarking and Cryptography	Prof. Ajit Singh	24.04.2023

RESOLVED THAT THE ABOVE CASE FOR REGISTRATION BE APPROVED. FURTHER RESOLVED THAT IF THERE ANY CORRECTION / TYPOGRAPHICAL MISTAKE IS FOUND, THE SAME BE CORRECTED IN VIEW OF THE MINUTES APPROVED BY THE PGBOS/DRC/FACULTY CONCERNED.

(Action By: - R&S Branch)

18. To note the action taken by the Vice-Chancellor in approving the proposal for establishment the following teaching Departments in anticipation of the approval of Academic Council.

1. Department of Mass Communication and Journalism.
2. Department of Fine Arts

RESOLVED THAT THE ACTION TAKEN BY THE VICE-CHANCELLOR BE NOTED.

(Action By: - Academic Branch & Estt. Teaching)



Any other item

19. The Vice Chancellor apprised the house that the result of UG and PG courses for the session 2022-2023 have been declared in a time bound manner within 25 days by the Examinations Branch for which the House appreciated Dr. Sandeep Dahiya, Controller of Examinations and his team. Further, the efforts of Prof. Ipshita Bansal, Dean Faculty of Commerce and Management were also appreciated by the House for the development of curriculum according to NEP-2020 in her Faculty.

The meeting ended with a vote of thanks to the chair.


14/7/23
Registrar

ANNEXURE-II
ACTION TAKEN REPORT

Sr. No.	Agenda	Resolution send for Action Taken Report
1.	Confirmation of the Minutes of the 25 th meeting of Academic Council held on 17/01/2023.	Noted
2.	<p>Follow up Action Report.</p> <p>No. 06 THE DIRECTOR RESEARCH WILL TAKE UP THE MATTER AT THE EARLIEST AND SUBMIT THE REPORT TO BE PLACED AT THE NEXT MEETING OF THE ACADEMIC COUNCIL.</p> <p>No. 37: THE RESOLUTION MAY BE READ "THE PAPER ENVIRONMENTAL STUDIES (EVS 201) MAY BE TAUGHT IN THE 3RD SEMESTER FOR ALL B.TECH. PROGRAMME INCLUDING B.VOC. PROGRAMME. FOR ALL OTHER UNDER GRADUATE PROGRAMMES THE DECISION OF THE ACADEMIC COUNCIL IN ITS MEETING HELD ON 17/01/2023 ALREADY PASSED SHALL BE FOLLOWED IN LETTER AND SPIRIT AND THE COMMON SYLLABI AS PASSED BY THE ACADEMIC COUNCIL IN ITS MEETING HELD ON 20/06/2018 SHALL BE ADOPTED/IMPLEMENTED IN UG/INTEGRATED PROGRAMME.</p> <p>No. 40 THE RESOLUTION MAY BE READ AS UNDER "RESOLVED THAT ON THE BASIS OF THE UNSATISFACTORY REPORT AND CONDUCT"</p>	<p>The letter has been issued to the Director Research vide no. BPSMV/Acad/23/3177 on 19/07/2023.</p> <p>The same has been noted for conduct of Examinations hereafter.</p>
3.	To note the action taken by the Vice-Chancellor to attach /allot the various subjects with the concerned Faculty or other Faculty in anticipation of approval of the Academic Council.	The letter has been to all the Dean's/ Chairperson's/Director's/Principals for Information.
4.	To note the action taken by the Vice Chancellor to award the Ph. D. Degrees to the students in the subjects as mentioned against their name in anticipation of the approval of the academic council.	Provisional Certificate and Ph.D Notification issued.
5.	To consider the recommendations of the Committee constituted by the Academic Council vide Resolution no. 35 of its meeting 25 th Academic Council held on 17/01/2023 to look in to the matter of registration of following students of Ph. D in Food and Nutrition (IHL):-	<p>Registration letter has been issued to the concerned student by the R&S branch on 27/07/2023.</p> <p>Action taken report of two students of Ph. D in Food and Nutrition (IHL) has not been received.</p>
6.	To consider and approve the proposal regarding implementation of syllabi of Cyber	The syllabus has been issued to the Controller of Examinations

	Security Course at Under Graduate and Post Graduate Level.	vide no. BPSMV/Acad/23/3178 on 20/07/2023.
7.	To consider the cases of following candidates of various Departments for Registration in Ph.D. in Programme as mentioned against each.	Registration letter has been to the concerned student by the R&S branch issued on 24/07/2023.
8.	To consider the cancellation of Registration of Ph.D. in Department of Laws.	Registration letter has been issued vide no. BPSMV/R&S/23/290-93 on 24/07/2023 by the R&S branch
9.	To consider the case of appointment of co-supervisor for Ph.D. in Deptt. of Law	Registration letter has been issued vide no. BPSMV/R&S/23/294-99 on 24/07/2023 by the R&S branch
10.	To consider and approve the recommendations of the committee constituted to discuss the proposal submitted by Principal, Polytechnic regarding closure of the Diploma in Architectural Assistantship running under Self Finance Scheme.	The intimation has been sent to the HSBTE Panchkula through email on 04/07/2023
11.	To note the action taken by the Vice-Chancellor in approving the proposal to discontinue the B.A. (Hons.) Economics programme from the Academic Session 2023-24.	The letter has been issued vide No. BPSMV/Acad/23/3311-50 on 25/07/2023.
12.	To consider and approve the panel of outside Experts in the discipline of Library Science regarding appointment of Librarian as per BPSMV Act-2006 under Section 24(2) of the Statute.	Request has been submitted to the Hon'ble Governor-Chancellor for approval vide this office no. BPSMV/VC/23/71 dated 17/07/2023.
13.	To consider and approve the Scheme and syllabi of M.Sc. Mathematics, Pre-Ph.D. course work in Mathematics and Physics w.e.f. Academic Session 2023-24.	The syllabus has been issued to the Controller of Examinations vide no. BPSMV/Acad/23/3178 on 20/07/2023.
14.	To consider the Registration of three (3) students in Ph.D. in Department of Social Work.	Registration letter has been issued to the concerned student by the R&S branch on 26/07/2023.
15.	To consider and approve the Proposal regarding Introduction of the following two courses in Learning Resource Centre BPSMV, Khanpur Kalan.	The letter has been issued vide No. BPSMV/Acad/23/3311-50 on 25/07/2023.
16.	To consider the recommendation made by the Fee Concession Committee held on 21.06.2023 at 03.00 P.M. under the convenership of the Dean Students' Welfare.	The letter has been issued vide No. BPSMV/Acad/23/3311-50 on 25/07/2023.
17.	To consider the Registration of one student namely Ms. Rajni in Ph.D. in Deptt. of CSE/IT.	Registration letter has been issued to the concerned student by the R&S branch on 27/07/2023.
18.	To note the action taken by the Vice-	The letter has been issued to the

	<p>Chancellor in approving the proposal for establishment the following teaching Departments in anticipation of the approval of Academic Council.</p> <ol style="list-style-type: none"> 1. Department of Mass Communication and Journalism. 2. Department of Fine Arts 	<p>Esstt. Teaching branch vide no. BPSMV/Acad/23/3179 on 20/07/2023.</p>
19.	<p>Any other item</p> <p>The Vice Chancellor apprised the house that the result of UG and PG courses for the session 2022-2023 have been declared in a time bound manner within 25 days by the Examinations Branch for which the House appreciated Dr. Sandeep Dahiya, Controller of Examinations and his team. Further, the efforts of Prof. Ipshita Bansal, Dean Faculty of Commerce and Management were also appreciated by the House for the development of curriculum according to NEP-2020 in her Faculty.</p>	

B.P.S. MAHILA VISHWAVIDYALAYA, KHANPUR KALAN, SONEPAT
(A State University Established under the Legislative Act No. 31/2006)
DEPARTMENT OF SOCIAL WORK

ORDINANCE

Master in Social Work

(w.e.f. 2023-24)

1. Definitions:

- 1.1 Programme stands for Master in Social Work (MSW)
- 1.2 Course stands for individual paper.
- 1.3 Credit is the weightage assigned to a paper in terms of contact hours.
- 1.4 Grade stands for a letter grade assigned to a student on the basis of evaluation of a paper on the 10 point scale.
- 1.5 Grade point stands for the numerical equivalent of the letter grade.

2. Duration:

- 2.1 The duration of the programme leading to the Master in Social work shall be of two academic years, comprising of **four semesters** i.e. July to November/December and January to May/June each year. There will be teaching/instruction of 90 days in a semester, comprising 180 days in a year as per the norms of the University Grants Commission (U.G.C.)
- 2.2. The minimum and maximum duration to complete the MSW shall be 2 year (4 semesters) and 4 years respectively. A candidate, who fails to pass MSW examination within a period of four years of her admission to the programme, shall be required to repeat the paper *de novo*.

3. Admission:

- 3.1. **Eligibility:** Bachelor's Degree of a recognized university in any stream with at least 45% marks for general category (42.75% marks for SC/ST/Differently abled candidates).
- 3.2 No candidate who is in employment (whole-time, part-time, or honorary service) shall be eligible to take admission in MSW programme without taking leave from her institution/ office etc., from the date of admission to the termination of her examination including Social Work Practicum requirements. She has to submit an affidavit in this regard. If found in violation of this rule, her admission shall stand cancelled.
- 3.3 **Procedure:** Admission shall be done on the basis of merit/entrance/or as per the university rules.
4. **Fee:** The Programme fee shall be paid by the candidate as prescribed by the University from time to time.

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5. Teaching Methodology

5.1. Theory Classes

The methods of teaching shall include classroom instructions, assignments, seminars, workshops, presentations, social work practicum, group discussions, group conference, individual conference exposure etc. The medium of instruction shall be English/Hindi.

5.2. Field Work Practicum

Field work is an integral part of social work practice, which provides exposure to students to study and observe grass root realities while working with people and understand and learn about various projects implementation, its objectives and interventions of welfare organizations within the communities. For field work activities, the student enrolled in MSW programme will be charged an amount towards field work/study tour at the time of admission. The fee is also reflected under fee bifurcation and the same amount may be utilized to conduct Study Visits/ Study Tours/Field Work/Rural Camps of the students. The Field Work Practicum consists of following opportunities:

- i. **Orientation Programme**- There will be a ten-day orientation programme for the fresh students of social work, which will be organized during the initial 10 days of commencement of 1st semester. The objective of the programme is to introduce the new students about the theoretical framework, professional requirements, values, principle, ethics and scope of social work. Apart from this, the Department will organize field visits (up to three days) for the students within or out of the State in order to provide them exposure to the rural/urban society or practical interventions of welfare organizations with various vulnerable sections and social issues.
- ii. **Concurrent Field Work** - Concurrent field work will be required to be done simultaneously with class-room teaching of theory papers from the very beginning of all the semesters (both odd and even) and shall continue till the commencement of the examinations. Two days in a week will be allotted to the students to perform concurrent field work. The students may be placed in social welfare agencies or open community settings to initiate and participate in the direct service delivery. Students are required to complete 25-30 days of field work in each semester with minimum 180 hours of field work.
- iii. **Rural Camp/Study Tour**- of study tour/rural camp (five to seven days) will be organized for the students to provide them exposure of the cultural, socio-economic and political life and problems of people. The rural camp/study tour will be organized under the guidance of the faculty members. Attendance during the camp is compulsory. There shall be 20 marks for performance, participation, critical analysis of the situations, self-conduct and learning in rural camp/study tour which shall be awarded by camp/tour in-charge and faculty members supervising the students during the visit.
- iv. **Field Visits/Industrial Visits/Organizational Visits** - The department will organize field and industrial visits to various welfare organizations, industrial establishments within and outside Haryana for the students during 1st and 2nd semesters to provide exposure to them about interventions of welfare organizations, service delivery, strategies to tackle the problems, networking with organizations, public relation, people participation, role of social workers, and to learn opportunities for intervention by Social Workers in various fields like

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Industry, Hospital, Special Homes, Courts etc. Field visits will be coordinated by faculty members with compulsory attendance of the all students. There shall be 20 marks for evaluation of the students by the faculty members accompanying them during the visit.

- v. **Block Field Work:** Block placement of the students will be done after the final Examinations of 2nd semester. Students have to start block placement within one week of completion of the theory examinations and they have to submit the report within one week of completion of the block placement. Students can be placed for Block Placement in welfare organizations, industry, hospital setting or any other such organizations, which are working to address different social issues. Every student must be placed under the joint supervision of the agency/organisation and the Department. The departmental supervisor i.e. a faculty member of the Department would continuously monitor the attendance and progress of the students during placement. There will be 30 marks of internal evaluation by the faculty member in the form of viva-voce in the presence of all faculty members. The viva-voce for block placement will be conducted in the month of July-August.

5.3 Field Work Supervision

Field work supervision inputs are made at different levels. There are generally three major methods of supervision as: **Individual Conference, Group Conference and Agency Visits**. Each student should get at least one hour of supervision per week with the respective supervisor on a well-planned basis and without any interruption through individual conferences. These hours of supervision will be essentially calculated in total teaching hours of the supervisor as per the placement of students under him/her.

Individual Conference (IC) is a tutorial approach to field work supervision. It is a medium through which the supervisor provides the individually planned educational experience primarily to help the student find information and facts about social work practice in the field.

Group Conference (GC) Group conference is a vital part of the field work training, as it enables the students to develop some of the basic skills to become an effective social work professional. Group Conference is organized with the intention to increase the knowledge and practical exposure of students through delivering presentations on assignments and learnings done during field work undertaken by them. The Group Conference is held with a group of students (once in every semester) with the presence of respective supervisors and other faculty members. A schedule for group conference shall be announced by the Department.

Agency Visits Each supervisor will visit field work agencies on field work days. The supervisors must get in touch with the field work agencies under their supervision by making regular visits in order to be vigilant on the students' field work tasks and to meet agency supervisor. The goals of such agency visits are to:

- (i) Review the students' assignments and tasks;
- (ii) Provide support to the students;
- (iii) Discuss students' learning experience with agency supervisor;
- (iv) Monitor the quality of field work training;
- (v) Facilitate the integration of theory and practice; and

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- (vi) Know about the performance of the students.

It is the responsibility of the departmental supervisor, in consultation with the agency supervisor, to assess the student's performance and make necessary recommendations to pass or detain the student in fieldwork.

Guidelines for Field Work Practicum

Field Work Practicum is an integral part of Social Work programme and the guidelines for students are as follows:

- a) Every student will do field work as per the syllabus under the constant guidance of the supervisor.
- b) Minimum 25-30 days of field work are compulsory in each semester and students have to submit the report to the concerned supervisor on every Monday or first working day of the coming week.
- c) Students will ensure timely submission of the reports to their supervisors. Late submission and non-submission of reports, under exceptional circumstances may be accepted, for the first time, on the recommendations of the departmental supervisor, latest by the next week. In case of repetition of the late submission or not submission of report, concerned supervisor/department faculty may take decision to fail or not allow such students to appear in viva-voce of field work practicum.
- d) Every student will maintain a field work diary with complete record of all field work in each semester, **IC and GC**. The same should also be got checked regularly and signed from respective supervisor.
- e) No student will remain absent from the field work, without information to /permission of the supervisor or field work coordinator. In case of absence/leave from field work due to any urgency/health issues or any other reason, the student will inform the supervisor or field work coordinator, otherwise, their previous three field works will be cancelled and repetition of the same may lead repercussions like detainment in field work and the student will not be allowed to appear in viva-voce.
- f) The timing of the field work will be 09.00 AM to 03.30 PM. Though, timing may be changed (with the prior written information and permission from concerned supervisor as per the convenience of the students/supervisor, the students have to spend a minimum of six and a half hours during every field work day)
- g) During each semester, every student will present a Group Conference paper on her interventions with community people/in an agency.
- h) Study tour/rural camps, field visits are compulsory for each student and absence from the same, will be considered as fail in study tour.
- i) Minimum 10 Individual Conferences are compulsory for every student in each semester.
- j) Block Placement is compulsory, carrying 30 marks of evaluation. The report should be submitted within a week of the completion of the placement.

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- k) In case of any emergent situation, (administrative, academic or due to some other reasons) faculty of social work can make the necessary changes in the field work practicum in consultation with PGBOS members and the same will be intimated to Academic Branch and Examinations Branch.

6. Credit Weightage

One contact hour per week per paper per semester is equivalent to one credit.

Each paper has a certain number of credits which reflect its weightage. Credits of a paper are evaluated as under:-

- 6.1 **Lecture:** One credit per lecture per week per semester will be adopted.
- 6.2 **Tutorial:** One credit per tutorial hour per week per semester will be adopted.
- 6.3 **Practical/Practicum:** Half Credit per hour per week per semester will be assigned half credit.

7. Examination:

Theory Examination

7.1. At the end of the each semester, there shall be an examination where each candidate shall be examined in the paper studied by them in that semester. Each semester examination shall be designated as first semester examination, second semester examination and third semester examination and so on.

7.2. The examination in each semester will be held according to the syllabi approved by the Board of Studies. The Board of examination shall be appointed for each course and shall be recommended by the Post Graduate Board of Studies (PG BOS).

7.3. The examination shall consist of theory papers and practical examination. Examiners shall be appointed by the Vice chancellor from a panel of examiners submitted by the chairperson of the department duly approved by the PGBOS of the department.

7.4 Practical Examination

7.4.1 For Concurrent Field Work- Viva-voce shall be conducted jointly by the external and internal examiners.

7.4.2 For Block Placement- Viva-voce of the students, who are doing Block placement after 2nd semester, shall be conducted by the internal faculty within one week of the completion of block placement for the students. The weightage will be 30 marks out of total internal marks for field work practicum. Viva-voce will normally be conducted in the month of July-August or any suitable date, fixed by the faculty.

Overall evaluation for the internal examination/evaluation of practical/field work practicum will be done on the basis of bifurcation of marks for various components of field work practicum as follows:

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a) For internal examination/evaluation of practical/field work practicum of 1st Semester.

Sr. No	Field Work Component	Minimum Prescribed Days/numbers	Internal Marks
1	Orientation visit (As a part of ten days Orientation programme)	Up to three days	10
2	Concurrent Field Work (Including 20 marks of Study tour/rural camp /field visit/industrial visit up to seven days)	25 days in each semester	170
3	Individual Conferences	Ten	10
4	Group Conferences	Ten	10
5	Total internal marks for Field Work practicum		200

b) For internal examination/evaluation of practical/field work practicum of 2nd Semester.

Sr. No	Field Work Component	Minimum Prescribed Days/numbers	Internal Marks
1	Concurrent Field Work (Including 20 marks of Study tour/rural camp /field visit/industrial visit up to seven days)	25 days in each semester	100
2	Individual Conferences	Ten	10
3	Group Conferences	Ten	10
4	Block Placement (done after 2 nd semester examination)	4 weeks	30
5	Internal marks		150
6	External Marks		50
7	Total		200

c) For internal examination/evaluation of practical/field work practicum of 3rd Semester.

Sr. No	Field Work Component	Minimum Prescribed Days/numbers	Internal Marks
1	Concurrent Field Work (Including 20 marks of Study tour/rural camp /field visit/industrial visit up to seven days)	25 days in each semester	180
2	Individual Conferences	Ten	10
3	Group Conferences.	Ten	10
4	Total internal marks for Field Work practicum		200

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d) For internal examination/evaluation of practical/field work practicum of 4th Semester.

Sr. No	Field Work Component	Minimum Prescribed Days/numbers	Internal Marks
1	Concurrent Field Work (Including 20 marks of Study tour/rural camp /field visit/industrial visit up to seven days)	25 days in each semester	130
2	Individual Conferences	Ten	10
3	Group Conferences	Ten	10
4	Internal marks		150
5	External Marks		50
6	Total		200

- The marks for evaluation of study tour/rural camp/field visit/industrial will be allotted to the students during the semester, in which the same is conducted or organised. In case of non-conducting of study tour/rural camp/field visit/industrial, the above mentioned marks will be considered as part of concurrent field work.
- External examination of field work practicum will be conducted after completion of concurrent field work days during even semester examinations i.e. 2nd and 4th semesters. The external examiner will be invited for viva-voce as per the guidelines of the Examinations Branch. 50 marks are assigned to external evaluation.

7.5 The examination for all odd semester will normally be held in December/ January and for even semesters in May/ June on such date as provided by the University. The concerned teacher/ course coordinator should ensure that 100% syllabus is covered in each subject before the semester examination.

7.6. Every course is coordinated by a member of the teaching staff of the department which is offering the paper in a given semester. This faculty member is called the course coordinator. She has the full responsibility for conducting the paper, coordinating the work of the other members of the faculty involved in the paper, holding the minor test and assignments. For any difficulty, the student is expected to approach the paper coordinator for advice and clarification. All the responsibilities from teaching to the award of final grade will be of the paper-coordinator.

7.7 Every student has to appear in the minor tests. If a student does not appear in a minor test, she shall be awarded zero marks in the test. The marks obtained in sessional/practical/theory/drawing/general proficiency are to be submitted to the examination branch.

7.8 If a candidate, after attending the classes for the paper of studies in the Department either not appeared or having appeared in any semester examination has failed in one or more papers for that examination, she can appear for such papers at subsequent examinations without attending a fresh paper of studies for that semester such a candidate may, in the meantime, prosecute his/her studies for the next semesters. Supplementary examinations for the last two semesters will be held after

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six months i.e. for odd semester in the month of May and for even semester in the month of December/January.

7.9 For holding the Minor Tests during even and odd semester the schedule of minor exam shall be laid down by teacher(s) concerned in consultation with the Chairperson of the Department as the case may be and shall be made known to the students at the commencement of each semester.

7.10 If any of the department wants to alter the dates due to some reason to the satisfaction of the Chairperson of the Department, the date for conduct of Major Test should not be beyond the 1st week of January so that the results are not delayed.

7.11 For Minor Test, the syllabus for Examination will be what is covered in particular term. The Major Test will be based on the entire syllabus. Every teacher will submit in writing to the Chairperson at the end of term i.e. intervening period between Minor Tests and Major Test, the content of the syllabus covered during the term.

8. Re-appear Examination/Supplementary

8.1 Reappear in Theory Papers

Re-appear/Supplementary examination will be held in even semester for even semester papers and in odd semester for odd semester papers. For 3rd and 4th semester the paper will be held in subsequent semester.

Semester	1	2	3	4
Along with	3	4	Subsequent semester	Subsequent Semester

8.2 Reappear in Practical Course (Field Work Practicum)

- Students have to pass both in internal as well as external examination of field work practical separately with minimum 40% marks in each. If a student fails to complete the prescribed number of field work days or is not able to complete field work diary/ICs/GCs or other field work related assignments and has not obtained passing marks (40%) in internal examination, she will not be allowed to appear for external examination (viva-voce). If a student fails in internal exam of field work practicum, she will be considered as fail in complete field work practicum of the semester and will not be eligible to appear in external examination of the same. In this case, she has to repeat the complete field work practicum for the respective semester.
- If any student fails in internal or external evaluation of the field work practicum, she will not carry on these internal and external marks during further re-appear examinations for the same. During the re-appear in the next academic years/semester exam, these marks will be considered as NIL and she will have to pass both with minimum 40% in each (internal and external).
- The final marks obtained by students in internal as well as external exam at the time of re-appear of the practical/field work paper, will be considered for her final evaluation when she actually qualifies/passes the paper in both internal as well as external with minimum 40 %.

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- No simultaneous field works for two semesters will be allowed in the regular duration of the programme. The re-appear in field work practicum will be done during the subsequent semesters, i.e. after completion of the duration of the programme.
- Generally re-appear/Supplementary examination for practical/field work practicum will be held for odd semesters in November-December and for even semester in April-May.

9. Evaluation & Grading:

9.1 The assessment will be 20% internal and 80% external.

9.1.1 The evaluation of learners shall be a two-tier system depending upon various activities ranging from internal assessment to end semester (Theory and Practical)

examination in equal ratio. More specifically it comprises:

9.1.2 External evaluation (theory 80% and Social work practicum 20%) and;

9.1.3 Internal comprehensive continuous evaluation (Sessional) : 20 %

9.1.4 Social work practicum - External (end term) evaluation shall be done by an external examiner and shall be based on the viva-voce and overall performance of the student in the continuous evaluation.

9.2 The students will have to qualify internal and the external of theory examinations as per the University Rules/norms. (However, students have to qualify social work practicum examinations internal and external separately with 40% in each) Internal examination in every semester shall be evaluated by the internal examiners. Terminal/end semester theory papers- paper may be set and evaluated by the internal/external examiners depending on the situations. **The minimum passed percentage in paper (internal & external) shall be 40% marks.** The student is required to pass internal and end semester external evaluation (external) separately.

9.3 The weightage for internal evaluation shall be:-

Component of Theory Papers (Total Marks 20)

Component	Weightage
9.3.1 Class tests/minor test/Sessional tests	10% i.e. 10 marks out of 100
9.3.2 Assignments/Presentations/Seminars/ Group Discussions/ability enhancement workshop/ extension lecture	5% i.e. 5 marks out of 100
9.3.3 Attendance	5% i.e. 5 marks out of 100.

Less than 60% 0 marks

Up to 65% 1 marks

Up to 70% 2 marks

Up to 75% 3 marks

Up to 80% 4 marks

Above 80% 5 marks

Components of Social Work Practicum (Total Marks 150)

(Internal- Total Marks 200)

9.3.4	Concurrent Field Work and Report Writing	= 65%
9.3.5	Participation in Individual Conferences	= 10%

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9.3.6	Participation in Group Conferences	= 10%
9.3.7	Study tour / Orientation Tour	= 15%
(External- Total Marks 50)		
9.3.8	Viva voce (Overall performance)	= 100%

9.4 In case, the candidate is fail or has failed in the internal examination, the internal examiner may conduct the re-examination as and when feel suitable with prior approval of the head of the department.

9.5 Grading:

The academic performance of a student shall be graded on a scale as prescribed by the Examination Branch of the University. The department concerned shall only prescribe the pass grade.

9.5.1. After finalization of the marks the same shall be displayed on the department notice board for a duration of two days for information of the students. Students who have a specific grievance against the marks awarded to her, may discuss the same with the concerned Paper coordinator who after consideration of the grievances of all the students shall finalize the marks to be awarded for the paper.

9.5.2 Before submission of the finalized award list in a prescribed formation to the concerned administrative office the individual Paper Co-ordinator shall discuss the marks distribution for his/ her Faculty of Study. However, the final decision with regards to marks will vest with the Paper Co-ordinator.

9.5.3 On receipt of the award lists for all papers offered by a given Faculty of Study the concerned administrative office shall put up the consolidated results for that Faculty for discussion and approval from the Departmental Staff Council (All Faculty Members).

9.5.4. The academic performance of a student shall be graded on a ten-point scale. The award of grades based upon marks obtained out of 100 shall be made as follows:

9.6 Grading

The academic performance of a student shall be graded on a scale as prescribed by the university. The award of grades based upon marks obtained out of 100 shall be made as follows:

Grades and Grade Points

Letter Grade	Grade Points
Outstanding (O)	10
Excellent (A+)	09
Very Good (A)	08
Good (B+)	07
Above Average (B)	06
Average (C)	05
Pass (P)	04
Fail (F)	00
Absent (AB)	00

Award of Grades and corresponding grade points should be based on Absolute grades as under :

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Grade Conversion

Letter Grade	Grade Points	Marks
Outstanding (O)	10	85-100
Excellent (A+)	9	75-84
Very Good(A)	8	65-74
Good (B+)	7	55-64
Above Average (B)	6	50-54
Average (C)	5	41-49
Pass (P)	4	04 40
Fail (F)	0	Less than 40
Absent (AB)	0	Absent

10. Division:

The successful candidates shall be classified in three divisions as under:

- (i) Those who obtained 60% or more of the aggregate number of marks in the all subject in all semesters mention total semesters taken together shall be placed in first division.
- (ii) Those who obtain less than 60% but not less than 50% of the aggregate number of marks in all subjects in all semesters taken together shall be placed in the second division.
- (iii) Those who obtain below 50% and not less than 40% of the aggregate number of marks in all subjects in all semesters taken together shall be placed in the third Division.

11. Promotion: A student will be eligible for promotion if

She has passed 50% of total papers of 1st and 2nd semesters taken together.

Explanation: 50% of five papers will be taken as three

12. Attendance:

12.1. No candidate shall be considered to have pursued a regular paper of the study unless she has attended not less than 75% of the lectures in each paper/seminar, case discussion, field trips, tutorials etc. This requirement shall be fulfilled separately for each paper of study. A deficiency up to 10% may be condoned by the Chairperson of the department. In some special cases the Hon'ble Vice-Chancellor may condone a further 15%.

12.2 If a student remain absent from the Department for more than +two weeks without intimating to the Chairperson/ Paper Co-ordinator of the department, her

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name will be struck off from the department rolls with information to the Academic Branch and R & S branch.

12.3 In case the student's name is struck off due to non-payment of fee and is re-admitted later, her attendance shall not be counted for that period.

13 Improvement Case:

The student will be allowed improving her previous performance as per the rules framed by the university from time to time.

14. General Guidelines:

14.1 Where this document is silent about any rule, the University Ordinance from time to time will be applicable.

14.2 Eligibility criteria, fee structure, and academic calendar for the academic year shall be given in the University Prospectus.

14.3 Admission, teaching schedule, preparatory holidays, examination schedule, sports calendar and cultural calendar, winter/summer vacation, shall be followed as specified in academic calendar of University.

14.4 A student is deemed to have completed the requirements for the degree and is eligible for the award of degree if:

14.4.1 She has satisfied all the academic requirements as per the regulations; and

14.4.2 She has paid all fees due from her; and

14.4.3 There is no case of indiscipline pending against her.

14.5 The gap of one/two semesters missed by the student(s), as the case may be, will count towards the total duration of the programme permissible under the regulations.

14.6 All academic problems of the students other than those affecting the university rules and regulations framed from time to time may be looked into by the Dean of Academics Affairs.

14.7 The calendar for the academic year will be framed and declared at the beginning of the session by the university.

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B.P.S. MAHILA VISHWAVIDYALAYA, KHANPUR KALAN, SONEPAT
(A State University Established under the Legislative Act No. 31/2006)
DEPARTMENT OF SOCIAL WORK

SCHEME

Master in Social Work

(w.e.f. 2023-24)

Programme Outcomes

PO1 Interdisciplinary Knowledge: Enhance knowledge and understanding of contributions of the social science disciplines to understand the society, disciplines historical emergence and its contribution in understanding human behaviour.

PO2 Capacity Building: Enhance capacity to visualize and articulate and foresee what one has learned by deliberate experimentation and action using different disciplinary knowledge and framework of social science disciplines.

PO3 Research and Development: Develop research related basic to specific skills and the capability of defining problems, formulation of research design; collect relevant data, develop empirical evidence and interpret the results of such analyses.

PO4 Critical and Analytical Skills: Critically analyse everyday problems faced by the society, evaluate specific policy proposals, Awareness of and ability to use one's professional skills and behavioural competencies that meet the need of the situation.

PO 5 Team Building and Team Work: Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group and or a team in the interests of a common cause and work efficiently as a player.

PO6 General to Specialize : Exposure to multiple opportunities to develop deeper understanding, creativity, originality, analytical and critical skills in dealing with different situations and develop further through discipline specific electives that are leading to employability.

PO7 Appreciate Diversity: Enhance the ability to acquire knowledge within the social sciences and beyond. Develop networking skills, mobilize resources independently, monitor and evaluate programmes. Ability to guide and lead clientele in the community/work setting and develop the ability to work in (caste, ethnicity, gender and marginalization), values and beliefs of multiple cultures in a global perspective, managing diversity, use of an inclusive approach to the extent possible.

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**PROGRAMME SPECIFIC OUTCOMES OF MASTER IN
SOCIAL WORK (MSW)**

The students after acquiring Master Degree in Social Work will be able to:-

PSOs1 - Have in depth knowledge and skills of social work profession and other allied discipline which contribute to social work education.

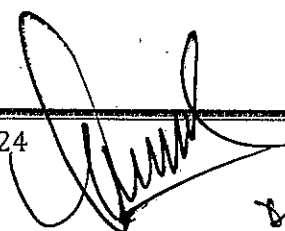
PSOs 2- Capacity building and use of small study at field level to visualize and articulate and foresee the societal issues.

PSOs 3- Critical thinking and Awareness of and ability to use one's professional skills and behavioural competencies.

PSOs4 - Use of creativity, originality, analytical and critical skills in dealing with different situations and develop further through discipline specific electives that are leading to employability.

PSOs 5 - Develop networking skills, mobilize resources independently, monitor and evaluate programmes.

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M.A. Social Work (Two year Course)

SCHEME OF EXAMINATION (w.e.f. 2023-24)

M.A. 1st Year

Semester I (Core Papers)		Marks		Credit (per Week)			
Core Courses							
Code		Internal	External	L	T	P	Total
MSW - 101	Introduction to Social Work	20	80	3	1	0	4
MSW-103	Society and Social Processes	20	80	3	1	0	4
MSW-105	Gender and Development	20	80	3	1	0	4
MSW-107	Social Work with Community and Social Action	20	80	3	1	0	4
MSW-109	Social Work with Groups	20	80	3	1	0	4
Skill Enhancement Course							
MSW - 111	Social Work Practicum (Community/Village Setting)	200 Internal		0	0	16	8

Semester II (Core Papers)		Marks		Credit (per Week)			
Core Courses							
Code		Internal	External	L	T	P	Total
MSW-102	Dissertation -I	100	00	0	2	4	4
MSW-104	Human Growth and Personality Development	20	80	3	1	0	4
MSW-106	Human Rights Social Justice and, Empowerment	20	80	3	1	0	4
MSW-108	Social Work with Individuals	20	80	3	1	0	4
MSW-110	Social Work Research	20	80	3	1	0	4
Skill Enhancement Course							
MSW-112	Social Work Practicum (Community/Village Setting)	150 - Internal 50 - External		0	0	16	8

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M.A. 2nd Year

Semester III		Marks		Credit (per Week)			
Core Courses							
Code		Internal	External	L	T	P	Total
MSW-113	Dissertation -II	60	40	0	2	4	4
MSW-115	Social Work Administration	20	80	3	1	0	4
MSW-117	Social Policy, Sustainable Development and Environmental Protection	20	80	3	1	0	4
Skill Enhancement Course							
MSW-125	Social Work Practicum (Agency and rural community based Setting)	200 – Internal		0	0	16	8

Elective Paper – Students can choose any two from given Discipline Specific Electives (DSE)

Semester III		Marks		Credit (per Week)			
DSE							
		Internal	External	L	T	P	Total
MSW-119	Social Work with Families and Children	20	80	3	1	0	4
MSW-121	Labour Welfare and Labour Legislation	20	80	3	1	0	4
MSW-123	Corporate Social Responsibility and Social Work	20	80	3	1	0	4

Semester IV		Marks		Credit (per Week)			
Core Courses							
Code	Course Name	Internal	External	L	T	P	Total
MSW-114	Counseling Theory and Practice	20	80	3	1	0	4
MSW-116	Social Work with Persons with Disability	20	80	3	1	0	4
MSW-118	Health Care Social Work Practice	20	80	3	1	0	4
Skill Enhancement Course							
MSW-126	Social Work Practicum (Agency and rural community based Setting)	150 – Internal 50- External		0	0	16	8

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Elective Paper – Students can choose any two from given Discipline Specific Electives (DSE)

Semester IV		Marks		Credit (per Week)			
DSE							
Code	Course Name	Internal	External	L	T	P	Total
MSW-120	Human Resource Management and Industrial Relation	20	80	3	1	0	4
MSW-122	Disaster Mitigation and Management	20	80	3	1	0	4
MSW-124	Social Entrepreneurship and Development	20	80	3	1	0	4

Note: Qualifying Conditions 40% of marks in external examination and in aggregates.

Semester III and IV		Marks		Credit (per Week)			
CBCS							
Code	Course Name	Internal	External	L	T	P	Total
CBCS - MSW - I, Sem III	Understanding Social Work Profession	20	80	3	1	0	4
CBCS - MSW - II Sem IV	Areas of Social Work Practice	20	80	3	1	0	4

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Syllabus

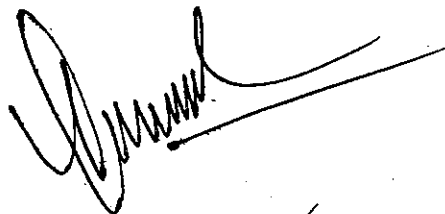
BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA
KHANUR KALAN, SONEPAT, HARYANA



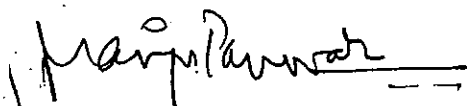
DEPARTMENT OF SOCIAL WORK

SCHEME OF EXAMINATION AND COURSE CURRICULUM
M.A. Social Work
(w.e.f session 2023-24)

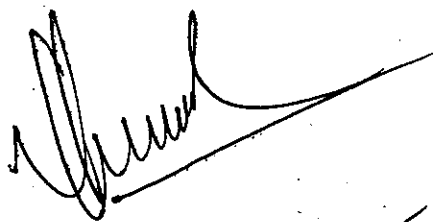
DEPARTMENT OF SOCIAL WORK
B.P.S. MAHILA VISHWAVIDYALAYA
KHANUR KALAN, SONEPAT, HARYANA



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Semester- 1



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M.A. Social Work 1st Semester w.e.f. 2023-24
MSW-101 Introduction to Social Work

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives

1. To understand the evolution of Social Work
2. To understand the growth of profession of social work and challenges before social work.
3. To help students to understand scope and methods to Social Work
4. To understand intervention and institutional status of Social Work

Course Outcomes

Students will know the nature and development of professional social work in India and abroad; learn professional aspect of the social work, values, ethics, know ledge, attitudes, skills and challenges professional social worker working in different settings. The learners will also know the different approaches of social work and national and international level organizations of professional social workers.

Course content

Unit-I Evolution of Social Work and its Diversity

- Concept of Social Work, Charity, Social Service, Social Services, Social Reform, Social Welfare, Social Revolution and Social Development.
- Historical Overview of Social Work
- Basic Assumptions of Social Work
- Values and principles of Social Work.

Unit-II Social Work as a Profession

- Profession- Its Meaning and essentials
- Social Work as a Profession and ethics
- Challenges before Social Work Profession.
- Process of Social Work

Unit III Methods and scope of Social Work

- Methods of Social Work
- Field- practicum in social work; Concept and objectives
- Supervision in Social Work Practicum
- Scope of Social Work and emerging trends of Social Work Practice in India

Unit-IV Approaches and institutional aspect of Social Work

- Functional and Ecological Approach to Social Work
- Contribution of Bhoodan, Antodaya Movements and B.R. Ambedkar
- Role of Social Worker
- International and National Organizations of Professional Social Work- Structure and functions.

Evaluation:

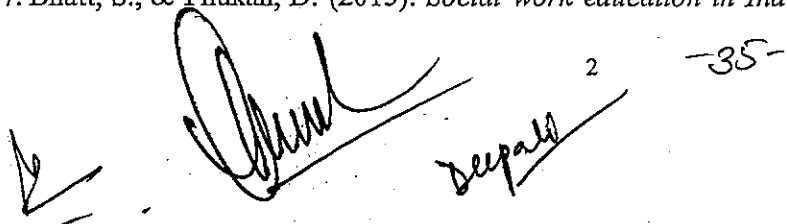
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Readings:

1. Dubois, B. & Miley, K. K. (2002). *Social work: An empowering profession*.
2. Miley, K. K., O'Melia, M., & DuBois, B. L. (1998). *Generalist social work practice: An empowering approach*. Boston: Allyn & Bacon.
3. Clark, C. & Asquith, S. (1985). *Social work and social philosophy*. London: Routledge and Kegan Paul.
4. Payne, M. (2005). *Modern social work theory*. New York: Palgrave/ MacMillan.
5. Dominelli, L. (2004). *Social work: theory and practice for a changing profession*. Cambridge: Polity Press.
6. Parsons, R. J., Jorgensen, J. D. & Hernandez, S. H. (1994). *The integration of social work practice*. California: Brooke/Cole.
7. Desai, M. (2002). *Ideologies and social work: Historical and contemporary analyse*. Jaipur,: Rawat Publications
8. Sajid S. M., & Jain, R. (2018). *Reflections on social work profession*. New De lhi: Bloomsburry
9. Bhatt, S., & Singh, A. P. (2015). *Social work practice: The changing context*.
10. Bhatt, S., & Pathare, S. (2014). *Social work education and practice engagement*. ISBN: 9788175417571(HB), 9788175417953(PB), Shipra Publications, New Delhi,
11. Nair, T. K. (2015). *Social Work Profession in India: An Uncertain Future*. Niruta Publication
12. Brill, N. I. & Levine, J. (2002). *Working with people: The helping process*. Boston: Allyn and Bacon.
13. Trevithick, P. (2000). *Social work skills: A practice handbook*. Philadelphia: Open University Press.
14. Singh, S. & Srivastava, S. P. (2005). *Teaching and Practice of Social Work in India*. Lucknow, New Royal Book Company
15. Mohan, B. (2002). *Social work revisited*. Xillinis: Xillbris Corporation.
16. Bhatt, S., & Pathare, S. (2005). *Social work literature in India*. New De lhi, IGNOU, material for BA and MA students
17. Bhatt, S., & Phukan, D. (2015). *Social work education in India*. New Delhi, AlterNotes Press

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M.A. Social Work 1st Semester w.e.f. 2023-24
MSW-103 Society and Social Process

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives

1. Understand basic Sociological concepts and Social Group formation.
2. Develop skills to analyse and understand Indian Social Structure and Societal Interactions.
3. To learn to apply sociological insights and approaches in Social Work Practice.
4. To Understand the social problem and its interventions

Course Outcomes

The students will have Understanding of basic Sociological concepts; Develop skills to analyze and understand Indian Social Structure and Societal Interactions. To learn to apply sociological insights and approaches in Social Work Practice.

COURSE CONTENTS

Unit I: Individual, Society and Culture.

- Society: concept, types and features.
- Social Institutions: Marriage, Family, Religion, Culture.
- Social Institutions- Traditions, Customs, Values and Norms
- Secularization and new religious consciousness.

Unit II: Social Structure and Social Stratification.

- Social structure: Concept and Elements.
- Social Stratification: Concept of *Varna* system
- Caste and Class: Merits & Demerits.
- Dalit's, advises and minority groups - Situation analysis, changing relationship and dynamics.

Unit III: Social process and Social Change.

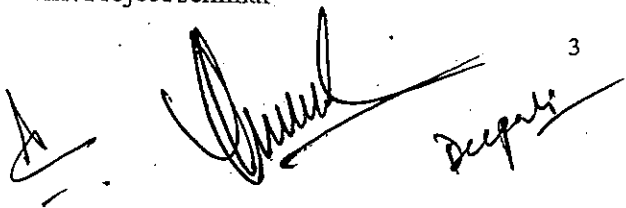
- Social process: Concept and steps in social process
- Socialization: Concept and Theory of C.H. Cooley
- Social change- Concept & Nature, Factors affecting social change
- Overview of theories of social change: evolutionary, structural and modernization

Unit IV: Social Disorganization, Social Problems and Interventions

- Social Disorganization and Social Control
- Concept and Theories of social deviance
- Major Social Problems in India: Unemployment, Violence against Women, Child Rights Violations, Communal Violence.
- Social problems and Social Work Intervention

Evaluation:

Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks


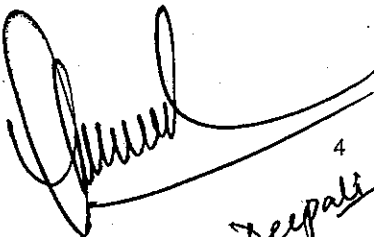
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Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Readings

1. Pandey, Vinita (2016). Indian Society and Culture. Jaipur: Rawat Publications.
2. Shankar Rao, C.N. (2015). Sociology: Principles of Sociology with an Introduction to Social Thoughts. New Delhi: S. Chand & Company.
3. Bilton (2016). Introductory Sociology. 4th edition, Publisher: Palgrave
4. Grusky, David B. (2014). Social Stratification: Class, Race, and Gender in Sociological Perspective (4th edition). Boulder: Westview Press.
5. Ahuja R. (2014). Social Problems in India, 3rd edition. Rawat Publications: Jaipur
6. Chattopadhyay, Aparajita. (2013). Poverty and Social Exclusion in India: Issues and Challenges. Rawat Publications: Jaipur.
7. Nagla, B. K. (2013). Indian sociological thought: Rawat Publication
8. Bhusan Vidya & Sachdev D.R. (2014). An Introduction to Sociology. Allahabad: Kitab Mahal.
9. Ritzer, George (2012). Introduction to Sociology. New Delhi: Sage Publications
10. Grusky, David B. (2011). "Theories of Stratification and Inequality". In Ritzer, George and J. Michael Ryan (eds.). The Concise Encyclopedia of Sociology. Wiley-Blackwell. pp. 622-624. Retrieved 23 June 2014.
11. Shrinivas M.L. (2009) Aadhunik Bharat Mein Samajik Parivartan. Rajkamal Prakashan
12. Rao, S. N. S. (2008). Sociology: Principles of sociology with an introduction to social thoughts; S Chand (2008)
13. Browne, K. (2005): An introduction to Sociology 3rd Edition. Polity Press, pp.
14. Dube, S.C. (2005). Indian Society. New Delhi: National Book Trust.
15. Bose, P.K. (1979): Agrarian Structure, Peasant Society and Social Change: A Study of Selected Regions in West Bengal. PhD Thesis, JNU, New Delhi. [16].



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M.A. Social Work 1st Semester w.e.f. 2023-24
MSW-105 Gender and Development

L T P
3 1 0 (4Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

- Understand gender in cultural context
- Acquire skills to identify systems/ mechanisms/ factors that affect women's development.
- Develop gender perspectives in analyzing social realities.
- Understand the role of social work intervention in gender development

Course Outcome

The learner will understand the concept of gender in cultural context. The learner will be able to apply the skill to identify systems/ mechanisms/ factors that affect women's development and will be able to recognize and develop gender perspectives in analysing social realities.

Course Contents:

Unit-1 Conceptualizing Gender

- Patriarchy, Sex and Gender
- Feminism: Major Feministic thoughts (Socialist, Radical and Socialist Feminism)
- Women's Rights, Movements
- Current Status of Women in India

Unit-2 Gender Development and Empowerment

- Approaches to Women Development
- Types and components of Women Empowerment.
- Women Empowerment: Concept, strategies and Perspectives
- International and National efforts for Women Empowerment

Unit-3 Gender Inequality

- Concept of gender equality, Equity and Inequality
- Problems faced by women (Organized, Unorganized and Self Employed women)
- Problems and issues related to girl Child: Child Marriage, Trafficking, and Sex Selecting Elimination
- Constitutional safeguards and legislation related to women empowerment in India.

Unit 4 Policies and Programmes for Gender Development

- Development programmes related to Health, Education and Employment of Women
- National Commission for Women
- Gender Mainstreaming and Gender Budgetting.
- Policies and Programmes for Gender Development- Women Empowerment Policy 2001 and Prevention of Sexual Harassment at Workplace Act- 2013

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Evaluation:

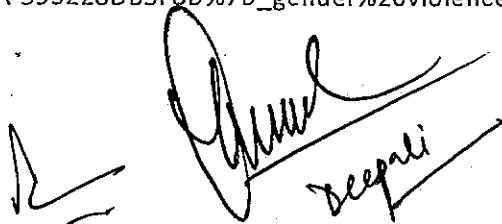
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

References

1. Razavi, Shahrashoub; Miller, Carol (1995). (PDF). United Nations Research Institute Occasional Paper Series. United Nations Research Institute for Social Development. 1: 4. Retrieved 22 November 2013..
2. Reeves, Hazel; Baden, Sally. (PDF). University of Sussex - Institute of Development Studies. Retrieved 18 September 2019.
3. Rai, Shirin M. (2002). "Gender and Development". Gender and the Political Economy of Development. Malden: Polity. pp. 44–83.
4. Beneria, Lourdes; Berik, Gunseli; Floro, Maria S (2016). Gender, Development, and Globalization: Economics as if All People Mattered. New York: Routledge. p. 95.
5. Nyeck, S. N.; Benjamin, Orly (22 December 2015). (PDF). Wagadu. 14: 1–12.
6. Kabeer, Naila (2003). Gender mainstreaming in poverty eradication and the Millennium development goals a handbook for policy-makers and other stakeholders. London: Commonwealth secretariat.
7. Roberts, Adrienne; Soederberg, Susanne (June 2012). Third World Quarterly. 33(5): 949–968.
8. Pande, Rekha (2012). "Globalization, Technology Diffusion and Gender Disparity". www.microworld.org. Retrieved 2018-03-01.
9. Terry, G. 2008. "Why Gender Matters to Climate and Equity." Presentation at the Gender and Climate Change Workshop, Kønsnet (Gender Net), Denmark, November 6.
10. International Union for Conservation of Nature. (2020). Gender and natural resource governance: Addressing inequalities and empowering women for sustainable ecosystem management.
11. Ivanova, M. (2021). Connecting human and planetary health: An interview with Christiana Figueres. Globalizations.
12. Mavisakalyan, A., & Tarverdi, Y. (2019). Gender and climate change: Do female parliamentarians make difference? European Journal of Political Economy, 56, 151–164.
13. Commonwealth Secretariat 2003 commonwealth Secretariat, London. [http://www.thecommonwealth.org/shared_asp_files/uploadedfiles/%7BBC734E4C-36AC-482D-984A-593228DB5F8D%7D_gender%20violence.pdf] February 2010.



M.A. Social Work 1st Semester w.e.f. 2023-24

MSW-107 Social Work with Community and Social Action

L T P
3 1 0 (4Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course objective:

- To gain Knowledge about the primary method of Social Work Practice with Communities.
- To understand the models, skills, and strategies of Social Work Practice with Communities.
- To enhance critical understanding of social action, its principles and models and use of skills, tools and strategies of social advocacy in community setting.
- To develop understanding of different roles of community worker.

Course Outcome

The students will gain Knowledge about the Primary Method of Social Work Practice with Communities and the learn techniques and Approaches of Social Work Practice with Communities. The learners will get information about the resources and need of the community to create a sense of cooperation, coordination and unity among the people for better participation in programmes. The learners will create understanding of the strategies and tactics of social action to initiate movement in the country. They will develop understand the method through which the deprived and the oppressed sections of society can get social justice.

Course Contents:

Unit-I: Conceptual Framework of Community Work

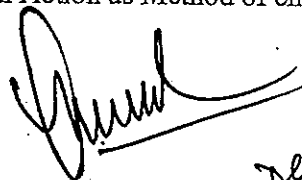
- Community: concept, Definition, Types
- Community Organization- History and Concept
- Principles and Objectives of community organization
- Community Development and Community Work.

Unit-II: Models and Skills of Community organization

- Models of Community organization: Concept and Importance
- People's Participation: Concept and its importance
- Skills in Community Organization,
- Concept of community based organisations and its importance in community organisation.

Unit-III: Social Action & Social Advocacy

- Social Action, Definition, concept, Principles, Models
- Role of social worker in social action
- Social Advocacy : Concept, definition, Skills, Strategies, Use of Media and Public Opinion Building in Advocacy.
- Use of Social Action as Method of change


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Unit-IV Community work in particular setting and Roles of community worker

- Community Organisation as a political process
- Community Organization with Vulnerable Communities – Migrants, Refugees and Transgender
- Guide, enabler, researcher, Analyst, Project Manager, organiser, Activist, Mobiliser, catalyst, Therapist.
- Recording in Community work.

Evaluation:


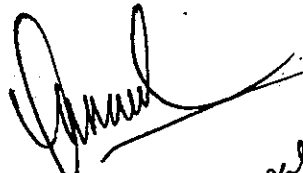
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Reading:

1. David A. Hardcastle and Patricia R. Powers (2004). *Community Practice: Theories and Skills for Social Workers*. New York: Oxford University Press.
2. David James and Mayo (1974). *Community Work*. London: Routledge and Kegan Paul.
3. H.Y. Siddiqui (1984). *Social Work and Social Action*. New Delhi: Harnam Publications.
4. H.Y. Siddiqui (1997). *Working with Communities*. New Delhi: Hira Publication.
5. Jim Ife (2009). *Community Development: Community-Based Alternatives in Age of Globalisation*. Australia: Pearson Publication
6. K. D. Gangrade (1997). *Community Organisation in India*: New Delhi: Popular Prakashan.
7. M. G. Ross (1955). *Community Organisation*. New York: Harper & Sons.
8. Margret Ledwith (2001). Community work as critical pedagogy: re-envisioning Freire and Gramsci. *Community Development Journal*. 36(3): 171-182.
9. Margret Ledwith (2005). *Community Development: A Critical Approach*. Jaipur: Rawat Publications.



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M.A. Social Work 1st Semester w.e.f. 2023-24
MSW-109 Social Work with Groups

L T P
3 1 0 (4Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

- To Develop Understanding of Group as a Method of Social Work Practice
- Develop Awareness about The specific characteristics of Group Work and its Contributions as a Method of Social Work Intervention.
- Gain Knowledge about Group Formation and the Use of a Variety of Group Approaches.
- Identify the Various Situations and Settings where the method could be used in the context of Social Realities of the Country.

Course Outcome

The learners will be able to practice Social Group Work as a method of Social Work. The learner will be able to identify specific characteristics which differentiate social group work from other group work. The learners will be able to identify and use various group work approaches for its effective use in social work practice.

Course Content:

UNIT- I Introduction and History of Group Work

- Understanding of groups – Characteristics and significance of group
- Definition of Social Group Work and its Characteristics.
- Purpose of Social Group Work; Historical evolution of group work with special emphasis of the Indian Context.
- Types of Groups and Principles of group work

UNIT –II Group Processes and Group Dynamics:

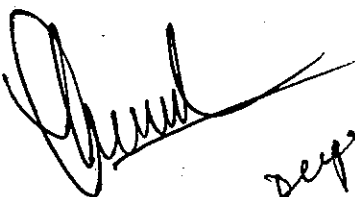
- Basic Group Processes – Sub-group, Group conflict, Group Dynamics and Group decision making
- Leadership in Groups.
- Models of Group Work.
- Stages of Group Development

UNIT- III Programme Planning and Recording

- Concept and Principles of Program planning –
- Skills in program planning
- Recordings in Group work: Importance of recording in social group work
- Recording structure - Types of recording.

UNIT- IV Evaluation and Termination Phase

- Evaluation and Termination Phase
- Importance of continuous evaluation in group work
- Methods of Evaluation
- Application of Group Work in health settings, school settings, family and women and child welfare settings.


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Evaluation:

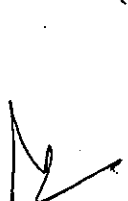
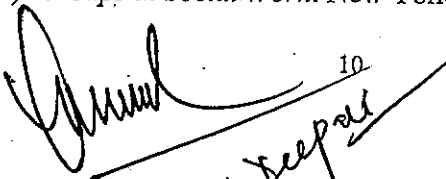
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Reading:

1. Alex Gitterman and Robert O' Byrne (Eds.) (2009). *Encyclopaedia of Social Work with Groups*. New York: Routledge.
2. Garvin, Charles D. et al (eds.) (2008) *Handbook of Social Work With Groups*, Rawat Publications, New Delhi.
3. Abell, M. L., & Galinsky, M. J. (2002). Introducing students to computer-based group work practice. *Journal of Social Work Education*, 38(1), 39-54.
4. Anderson, J., & Carter, R. W. (Eds.). (2003). *Diversity perspectives for social work practice: Constructivism and the constructivist framework*. New York: Pearson Allyn & Bacon.
5. Barsade, S.G. (2002), 'The Ripple Effect: Emotional Contagion and Its Influence on Group Behaviour', *Administrative Science Quarterly*, 47, 644-675.
6. Brandler, S. and Roman, C. (1999), *Group Work: Skills and Strategies for Effective Intervention*, New York: Haworth Press, P-8.
7. David Capuzzi, Douglas R. Gross and Mark D. Stauffer (2010). *Introduction to Group Work*. 4th ed. Jaipur: Rawat.
8. Atherton J S (2003). *Learning and Teaching: Group Cultures* [On-line] UK: Available: http://www.dmu.ac.uk/~jamesa/teaching/group_cultures.htm
9. G. Konopka (1983). *Social Group Work: A Helping Process. 3rd Edition*. Englewood Cliffs, N. J: Prentice Hall International.
10. G. Wilson & G. Raylands (1989). *Social Group Practices*. Massachusetts: Houghton Mifflin.
11. Garvin, CD, Lorraine M. Gutierrez & Maeda J. Galinsky (Ed.) (2004). *Hand Book of Social Work with Groups*. Jaipur: Rawat Publications.
12. H. Northen (1976). *Social Work with Groups*. New York: Columbia University Press.
13. H.Y. Siddiqui (2008). *Group Work: Theories and Practices*. Jaipur: Rawat.
14. Julie Birkenmaier, Marla Berg-Weger & Marty Dewees (2011). *The Practice of Generalist Social Work*. New York: Routledge.
15. Linda Finley (1993). *Group work in Occupational Therapy*. UK: Chapman and Hall.
16. M. Hartford (1971). *Groups in Social Work*. New York: Columbus University Press.

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M.A. Social Work 1st Semester w.e.f. 2023-24
MSW- 111 Social Work Practicum (Community Setting)

L T P
0 0 16 (8 Credit)

Internal Marks : 200
Total Marks : 200

Course Objectives: -

1. To understand the various methods of social work then application in the field.
2. To develop understanding about the problems the community set up and learn to provide them.
3. To develop the various strengths of international community setup.
4. To develop inter-personal skills to implement models C.D. in practice.

Course Outcome

The learner will be able to develop an understanding of the agency and the issues that it addresses. They will know the community needs and problems. The learners will be able to initiate group work/basic nucleus in the community for address in some of these needs and problems and identify individuals/ families that may require exclusive and intensive intervention. The learners will also be able to locate internal/external resources that can be used for addressing community needs. Also they will develop an ability to record and use supervision for professional growth by applying professional ethics and values.

Activities to be done

Understand community and observe the functioning of community-based organisations working in the community.

Understand the problems and prioritise the problems in a community

Identify the areas for Social work intervention

Understand the leadership position in the community and its role in community development

Prepare a community profile.

Documentation of the events.

Develop case studies in community

Practice of Participatory research in community set up

Visit and observe social institutions in community

Attend & observe the Gram Sabha meeting and women in GS Meeting.

Organise Nukkadnatak on various social issues.

Evaluation

Internal Assessment

200 marks

Orientation Visit

10 marks

Individual conference

10 marks

Group conference

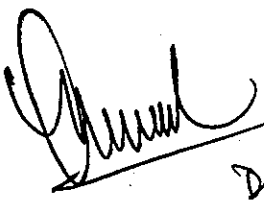
10 marks

Internal Viva voce of Concurrent Field work

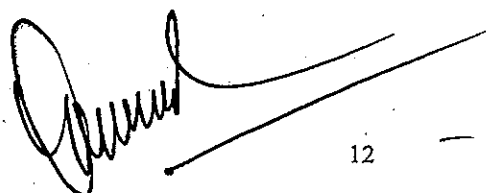
170 marks

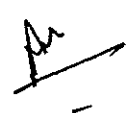
Suggested Reading

1. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
2. Choudhary, Paul. (1983). Introduction to Social Work. New Delhi: Atma Ram & Sons.
3. Dasguta, S. (1967). Towards a Philosophy of Social Work in India. New Delhi: Popular Book Services.


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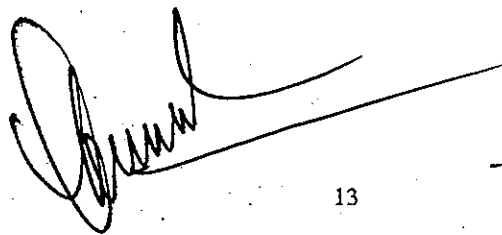
4. Dinitto, Diana, M. (2008). Social Work Issues and Opportunities in a Challenging Profession (3rd edition). Chicago: Lyceum Books
5. Baird, B. (2002) The Internship Practicum, and Field Placement Handbook; A Guide for the Helping Professions, (3rd ed.). Upper Saddle River, NJ. Prentice Hall.
6. Garthwait, C. (2005). The Social Work Practicum; A Guide for Students. (3rd ed.). Boston, MA. Pearson Education, Inc.
7. Weger- Berg, M. (2000). The Practicum Companion for Social Work. Needham Height, MA: Allyn & Bacon.
8. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
9. Hepworth, Dean H (2010). Direct Social Work Practice-Theory and Skills (8th edition). New York: Brooks/Cole.
10. Zastrow H.C. (2003) The Practice of Social Work, Canada Thomson Learning Academic Centre
11. Zastrow, H. C. (2003): The Practice of Social Work, Canada: Thomson Learning Academic Resource Center
12. Upadhyay, R.K., (2010) Social Case Work: A Therapeutic Approach, New Delhi, Rawat Publications
13. Sheldon, B., & Macdonald, G. M. (2009). A textbook of social work. Routledge. 19. George & Sumaraj, L. (2016). Adolescent counseling. Jaypee Brothers Medical Publishers.
14. Mishra, P. D., & Mishra, B. (2010). Social group work: theory and practice. New Royal Book Co.
15. Rao, N. S., & Sahajpal, P. (2013). Counselling and guidance. McGraw Hill Education.
16. Nāraṅga, V. (2013). Issues in learning theories and pedagogical practices. New Delhi: Orient Blackswan.
17. Ahuja, R. (2012). Social problems in India. Jaipur: Rawat Publications.
18. Gautam, P. R., & Singh, R. S. (2011). Social work methods, practices and perspectives. New Delhi: Anmol Publications.
19. Bamford, Terry (2015) A contemporary history of social work: learning from the past Policy Press
20. Srivastava, U. (2012). Social work: ethics and value. Arise Publishers & Distributors.
21. Fernandez, Alex (2017). Social Work and Human Rights. Pacific Books International.







Semester -2

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M.A. Social Work 2nd Semester w.e.f. 2023-24
MSW-102 Dissertation-I

L T P
0 2 4 (4 Credit)

Internal Marks : 100
Total Marks : 100

Course Objectives: To help learner to practice Social Work Research by thinking, developing and implementing a small sample study on Social Work areas and prepare a report. The learner will be able to conduct a small study to understand the whole process of Research.

Course outcome: The learner will be able to produce empirical study based on primary research.

Course content

Unit-I Identification of Research Problem

- Area of Interest
- Assessment of Needs , assets, strengths, context, issues and challenges
- Research Areas
- Key information interviews
- Observations and Participation

Unit-II Review of Literature

- Review of Articles
- Review of Books
- Review of Government Survey and reports
- Review of Case studies
- Review of news paper

Unit-III Research Methodology

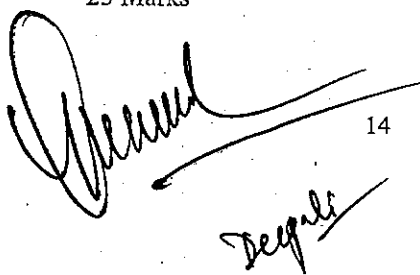
- Universe
- Sampling-Sampling size for pre testing
- Sampling techniques
- Tools of Data Collection-Interview schedule, observation, Focused Group Discussion and Questionnaire
- Participatory Research Tool
- Data collection and Data Analysis

Unit-IV: Report writing

- Data Collection
- Interpretation of data
- Preparation of pre testing Report and submission
- Data entry by using of Computer(Excel and Word)

Internal Assessment

Research Area and review: 25 Marks
Research Methodology: 25 Marks
Report Writing: 25 Marks
Viva voce: 25 Marks


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M.A. Social Work 2nd Semester w.e.f. 2023-24
MSW-104 Human Growth and Personality Development

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

1. To understand the Human Growth and different Development Stages of Human Beings from childhood to old age.
2. To develop an insight into the theories of Personality and Role of Environment and Heredity on Personality Development of Human Beings.
3. To learn to apply concepts and theories of Psychology in Social Work Practice.
4. To understand the application of social psychology in social work practice.

Course Outcome: Learners will be able to understand the concept of Human Growth and different Development Stages of Human Beings from childhood to old age. Will develop an understanding about concepts and theories of Personality and Behaviour and Role of Environment and Heredity on Personality Development of Human Beings. Learner will be able to apply concepts and theories of Psychology in Social Work Practice. Learners will be able to understand the psycho-social aspects of human beings and be able to explore the role of Social Work practice in this area.

Course content

UNIT-I: Human Growth and Development Stage

- Human Growth And Development: concept, Determinants of Human Development Heredity and Environment.
- Third Gender –Concept and issues
- Development stages – Problems and Tasks: Prenatal, Post Natal, Infancy, Childhood, Adolescent, Adulthood And Old age
- Understanding of human life span:-Indian concept of human life span (Barhmcharya, Grihastha, Vanprastha and Sanyas).
- Role of Social Work Practice during each stages of Development.

UNIT-II: Personality Development and Behaviour

- Theories of Personality Development: Psychodynamic theories (Freud's psychoanalytical theory, Erikson's Psychosocial Theory,)
- Humanistic theory: (Maslow's self- actualization theory);
- Cognitive Development Theory (Jean Piaget's)
- Behavior: Concept of Normal and Abnormal behavior types, causes and manifestations of Abnormal Behavior.

UNIT –III: Basic Psychological Processes in Social Work Practice

- Concept and theories: Cognition, Learning (B. F S Skinner, Pavlov).
- Type of Intelligence- I Q, E Q, and S Q;
- Socio-Cultural Factors affecting Development of Human beings.
- Concept of Motivation, Frustration, Conflict, Stress, Altruisms.

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UNIT-IV Social Psychology in Social Work Practice

- Social Perception, Attitude: Development, Forms/ Manifestations with specific reference to socially marginalized groups.
- Prejudices, Discrimination: Development, Forms/ Manifestations with specific reference to socially marginalized groups.
- Theories of Collective Behavior: Crowd, Riots; Propaganda And Public Opinions
- Role of Social Worker in Changing and Influencing Social Behavior.

Evaluation:

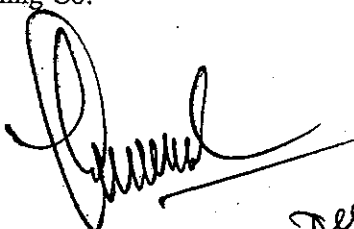
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

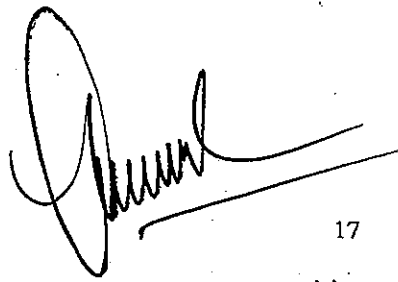
- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Reading List:

1. Srivastava D.N., Srivastava V.N. (2020) Adhunik Vikasatmak Manovigyan (Modern Developmental Psychology Lifespan Development) 2nd Edition. Shri Vinod Pustak Mandir Agra.
2. Specht, J. (2017). Personality development across the lifespan. 1st Edition. London: Academic Press
3. Daniel, W. Barrett. (2016). Social psychology-core concepts and emerging trends. London: Sage39 | P a g e
4. Nicolson, P., & Bayne, R. (2014). Psychology for social work. Theory and practice. London: Palgrave
5. Sahejpal Prem, Bahera Pushpita 2012. Social Psychology. Tata McGraw Hill, New Delhi
6. . Margarete, Parrish.,2012, Social Work Perspectives on Human Behaviour ,Rawat Publications, Jaipur
7. Newman & Newman (2011): Development through Life: A Psychosocial Approach. Cengage Learning, Inc
8. Ryan, R. M. (2012). Oxford handbook of human motivation. New York: Oxford
9. Khalkdina, M. (2011). Human development in the indian context: A socio cultural focus. Vol. II. New Delhi: Sage Publications
10. Zastrow, Kirst, Ashman (2009): Understanding Human Behaviour & the Social Environment: Wadsworth Publishing Co.


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11. Khalakdina, M. (2008). Human development in the Indian context: a socio-cultural focus. Vol. I Sage Publications: New Delhi
12. Ashford, Lecroy & Jose (2005): Human behaviour in Social Environment. Wadsworth Publishing Co, Inc
13. Rider, Elizabeth (2008) : Life Span Human Development, 6th Edition: Cengage Learning
14. Morgan, C.T. 2003. King R.A; Welsz J.R. & Schopler, J. Introduction to Psychology (7th Edition) Tata Mc Graw Hill Publication Company Limited, New Delhi



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M.A. Social Work 2nd Semester w.e.f. 2023-24
MSW-106 Human Rights, Empowerment and Social Justice

L T P
3 1 0 (4Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

1. Understand international documents for Human Rights and their implementation.
2. Understand the concept of Human Rights and Indian Constitutional safeguards.
3. Understand the concept of Human Rights and empowerment.
4. Develop Knowledge about Social Justice and institutionalized legal mechanism for a just and inclusive social order.

Course Outcome: Acquire a critical understanding of institutional mechanisms and systems for attainment of protection of human rights at international level. The learner will be able to apply human rights framework for understanding issues and understand the empowering processes for the marginalized sections of the society. They will develop Knowledge about Social Justice and legal safeguards in India to control social injustice with the marginalized sections of the society.

Unit-I International Treaties and Conventions

- The Universal Declaration of Human Rights
- International Covenant on Economic, Social and Cultural Rights
- Convention for Rights of Children (CRC)
- Global Convention on Human Trafficking

Unit-II Human Right and Constitutional Guarantees India

- Human Rights-concept, characteristics and types
- Historical overview of Human Rights
- Constitutional Rights
- Human Rights violation: Indian scenario

Unit-III Empowerment, Human Rights and Social Work

- Empowerment: Concept, features and forms
- Code of ethics of social work and protection of human rights
- Social work practice with victims of human rights violations
- Human rights activism and civil society initiatives in India

Unit-IV Social justice and Instruments for Social Justice

- Social Justice- Concept, Characteristics
- Manifestation of social injustice- Exclusion, Oppression And Marginalization
- Affirmative action for women, SCs, STs and Minorities.
- Public Interest Litigation and Lok Adalat

Evaluation:

Internal Assessment

Attendance

Quiz/Test


Assignment//Project/seminar

20 marks

05 marks

05 marks

10 marks



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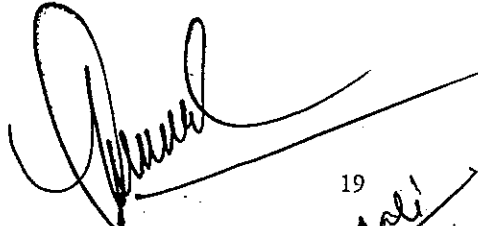
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Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Readings

1. Krishna, P. S. (2017). *Social exclusion and justice in India*. Taylor & Francis
2. Jodhka, S. S. (2015). *Caste in contemporary India*. New Delhi: Routledge.
3. Kummitha, R. (2015). Social exclusion: The European concept for Indian social reality, social change: *Sage Journal*, 45(1) 1-23
4. Singh, A. K. (2014). *Human rights and social justice*. VL Media Solutions, India
5. Sandel, M. J. (2010). *Justice: What's the right thing to do?* Farrar, Straus and Giroux; Reprint edition
6. Clayton, M., & Williams, A. (eds.) (2004). *Social justice*. Oxford: Blackwell Publishers
7. CDHR (2004). *The right to development: A primer, centre for development of human rights*. New Delhi: Sage Publications.
8. Janusz, S. (2003). *New dimensions and challenges for human rights*(ed). Manual on Human Rights (UNESCO publishing). Rawat Publication.
9. Reichert, E. (2003). *Social work and human rights: A foundation for policy and practice*. New York: Columbia University press
10. Baxi, U. (2002). *The future of human rights*. New Delhi: Oxford University press.
11. Ife, J. (2001). *Human rights and social work: Towards rights-based practice*. UK: Cambridge University Press
12. Chandra, A. (2000). *Human rights activism and role of NGO's*. Delhi: Rajat Publications.
13. Bakshi, P. M. (1999). *The constitution of India*. Delhi: Universal law Publishing Co. Pvt. Ltd
14. Nirmal, C. J. (1999). *Human rights in India – Historical, social and political perspectives*. Delhi: Oxford University Press.
15. Singh, A. K. (2014). *Human rights and social justice*. VL Media Solutions, India
16. David, G. (2013). *Confronting injustice and oppression: concepts and strategies for social workers* (Foundations of Social Work Knowledge Series)
17. Lorenzetti, L. (2013). Developing a cohesive emancipatory social work identity: Risking an act of love. *Critical Social Work*, 14,2.


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M.A. Social Work 2nd Semester w.e.f. 2023-24
MSW-108 Social Work With Individuals

L T P
3 1 0 (4Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives

1. To Understand Social Casework as a Method of Social Work.
2. To Develop Capacity to Understand and accept the uniqueness Individuals.
3. To Understand the Process involved in Social Work in Individualized Situations.
4. To Develop Skills of Working with Individuals.

Course Outcome:

The learners will develop complete understanding of social case work as a method of social work. The learners will gain understanding and complete acceptance of various situations with individuals for more effective intervention. The learners will identify and understand each stage of the process of helping the individuals. The learners will develop specific skills like interviewing, relationship building, motivational skills etc through practice in the field.

Course content

Unit-I Social Casework

- Basic Casework Concepts: Social Role, Social Functioning, Need, Adjustment, Adaptation, Person-in- Environment
- Social Case Work: Brief Historical Development & Objectives.
- Philosophical Assumptions Underlying Casework Practice.
- Social Case Work in Indian Society Relevance, Scope, & Influence of culture

Unit-II Social Casework Process

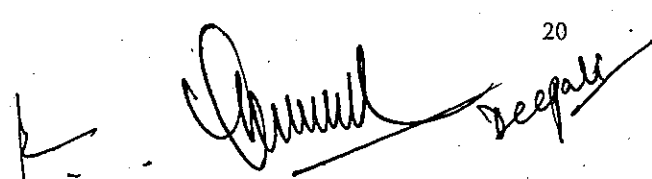
- Social Case Worker- Client - Relationship Principles.
- Components of Casework: person, Problem, place and process
- Process of Casework (Intake To Follow-Up)
- Fields of Social Case Work Practice (Children And Adolescents, Marginalized Families, Women And Adults, People With Mental Health Problems, School Setting)

Unit-III Therapeutic approaches to Social Case Work

- Problem Solving Therapy; Psychoanalytic Therapy
- Behavior Modification Approach;
- Cognitive Behavioral Therapy & Rational Emotive Therapy.
- Similarities and differences between Social Case Work, Counseling and Psychotherapy.

Unit-IV Case Management

- Phases in Casework Relationship-Dependence, Transference and Counter-Transference,
- Interpersonal Skills In Casework – Interviewing, Observation, Listening, Speaking and Expression of Attitude and Body Language,
- Case Work Tools – Home Visiting, Supervision, Use of Authority;
- Recording- Importance and Types, Analysis and Interpretation.



Evaluation:

Internal Assessment

Attendance

20 marks

Quiz/Test

05 marks

Assignment//Project/seminar

05 marks

10 marks

Instruction for the paper setter

• Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)

• Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Reading List:

1. Beistek, F.P. 1957 The Casework Relationship. Chicago: Loyola University Press.
2. Mathew, G. 1992 An Introduction to Social Casework. Bombay: Tata Institute of Social Sciences.
3. Pearlman, H.H. 1957 Social Casework: A Problem Solving Process. Chicago: The University of Chicago Press.(Reprint from Rawat Publications, Jaipur)
4. Wilson, S. J. 1980 Recording: Guidelines for Social Workers. New York: The Free Press.
5. Hamilton, G. 1954 Theory and Practice of Social Casework (Second edition revised). New York: Columbia University Press. (Reprint from Rawat Publications, Jaipur)
6. Robert, R.W. & Nee, R.H. (ed.) 1970 Theories of Social Casework. Chicago: The University of Chicago Press.
7. Pippins, J.A.1980 Developing Casework Skills. California: Sage Publications.
8. Timms, N. 1964 Social Casework: Principles and Practice. London: Routledge and Kegan Paul.
9. Hollis, F. 1964 Casework: A Psychosocial Therapy. New York: McGraw Hills.
10. Upadhyay, R.K. , Social Case Work, Rawat Publications, Jaipur.
11. Upadhyay, R . K . (2003). Social casework: A therapeutic approach. New Delhi, India: Rawat Publications
12. Siddiqui, H. Y . (2015). Social work & human relations. New Delhi, India: Rawat Publications


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M.A. Social Work 2nd Semester w.e.f. 2023-24
MSW-110 Social Work Research

L T P
3 1 0 (4Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

1. To develop understanding about the systematic and scientific approach of social work research.
2. To understand the qualitative and quantitative research studies.
3. To learn the documentation of collected data and skills in research writing.
4. To practice social work research in the communities by conducting a small study on any social issues.

Course Outcome:

The learners will develop understanding of the term social work research and related concepts. They will be capacitated to make the best use of social work knowledge in order to solve the problems in social work practice. The learners will be able to use research by developing and implementing a small sample study on Social Work areas and prepare a report.

Course content

Unit-1 Introduction to Research Process

- Scientific Method, Meaning of Research, Objectives of Research
- Types of Research and research Paradigms, Significance of Research
- Research Methods v/s Methodology, Research Process
- Defining the Research Problem: Concept and need, Identification of Research problem, defining Research problem.
- Criteria of Good Research, Steps in review of literature.


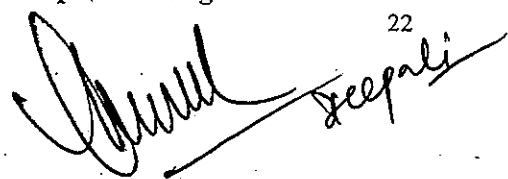
Unit-2 Types of Research, Hypothesis and Research Design

- Historical, Descriptive and Experimental, Case Studies. Qualitative and Quantitative Research- Applied and Action Research, Longitudinal and cross-sectional research.
- Research Design- Meaning, Need, Features of Good Design, Observational, Exploratory, Descriptive, Explanatory and Experimental Research.
- Hypothesis-different types, Research Hypothesis, Characteristics of good Hypothesis. Research question and formulation of hypotheses, Basis for hypotheses.

Unit-3 Sampling, Data Collection and Management

- Sampling: Probability and Non Probability sampling- types and criteria for selection, Developing sampling Frames.
- Tools for Data Collection: Collections of Primary Data, Collection of Data through questionnaire and Schedules, Observation methods, Interview Methods, Case Study, Focus Group Discussion
- Collection of Secondary Data,
- Selection of appropriate method for data collection, Techniques of developing research tools, Data Processing and Data Analysis in Quantitative and Qualitative Research

Unit-4 Statistics and Report writing

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-55-

- Measures of central Tendency (Mean, medium, Mode), Measures of dispersion (range, mean deviation, standard deviation)
- Graphical representation of Data. Correlations: Rank Difference Method Pearson's Product Moments Correlation Significance of correlation. Concept of Variance.
- Other methods of Correlation (Concept and application only) Sampling Distribution, Null Hypothesis- Alternative Hypothesis. Testing the Significance of difference between means(z and 't' test)
- Steps of writing a research report, Format of Research Report, referencing and Bibliography, referencing styles, Plagiarism.

Evaluation:

Internal Assessment

Attendance

20 marks

Quiz/Test

05 marks

Assignment//Project/seminar

05 marks

10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Reference Books:

1. Whilty, Frederick, The Elements of Research
2. Goode and Hatt, Methods in Social Research
3. Young P.V., Social Survey and Social Research
4. Kalton & Moser, Survey Method in Social Investigation
5. Lundeberg, Social Research
6. Creswell, J. W. (2006). Qualitative inquiry and research design: Choosing among five traditions (2nd ed.). Thousand Oaks, CA: Sage Publications.
7. Dash, P.R. (2011) Research Methodology with SPSS, (1st ed.) Vrinda Publications (P) Ltd., New Delhi.
8. Dudewicz, E. J. and Mishra, S. N: Modern Mathematical Statistics. John Wiley. New York (International Student Edition). Ferguson T. S. Mathematical Statistics. Academic Press.
9. Goon, A.M., Gupta, M.K. and Dasgupta, B: An Outline of Statistical Theory, Vol II., the World Press.
10. Rubin, A., Babbie, E., & Lee, P.A. (2008). Research methods for social work: Custom edition prepared exclusively for San Jose State University. Belmont, CA: Wadsworth/Thomson Learning.
11. Aneshensel, C. S. (2002). Theory-Based Data Analysis for the Social Sciences. Thousand Oaks, Arrow, K. J. (1951). Social Choice and Individual Values. Wiley, New York.

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M.A. Social Work 2nd Semester w.e.f. 2023-24

MSW-112 Social Work Practicum (Community/Village Setting)

L T P
0 0 16 (8 Credit)

External Marks : 50
Internal Marks : 150
Total Marks : 200

Nature of Placement

The students continue their field placement in the same organization where they were placed in the first semester/

Field Work Objectives

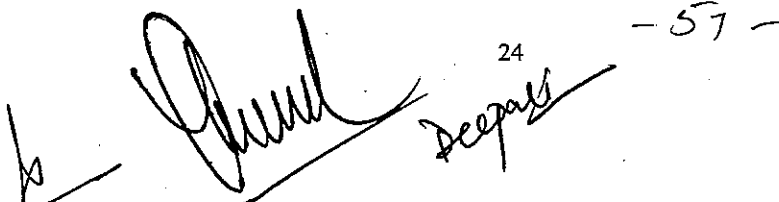
1. Developing an in-depth understanding of community dynamics and the impact that it has on the lives of people
2. Strengthening the basic nucleus/groups for addressing the identified concerns the community
3. Learning to mobilize the identified internal and external resources for the benefit of the community
4. Learning to practice individualized interventions with the identified families/individuals/groups with special reference to urban/rural community set up
5. Strengthening the ability to consciously translate theoretical inputs in to the practice realm
6. Developing the ability to undertake analytical recording
7. Moving towards the professional development of self
8. Attempting to draw out plans for making the interventions sustainable

Course Outcome

The learner will be able to develop an understanding of the agency and the issues that it addresses. They will know the community's needs and problems. The learners will be able to initiate group work and community organization and will be able to take it toward a logical end for the best interest of the community. The learners will also be able to locate internal/external resources and put them to optimum use while addressing community needs. Also, they will develop an ability to record and use supervision for professional growth by applying professional ethics, principles, theories, and values.

Tasks for Fieldwork

1. Engaging in continuous discussions with the community at large, the formal/ informal leaders and the functionaries of the various systems that are linked to the community.
2. Understand the person, problem, family, circumstances diagnosis treatment, rehabilitation and referral and follow up as needed.
3. Mobilization of resources to meet the basic needs and requirement of the communities.
4. Identifying needs and problems in the community
5. Facilitating the core group/basic nucleus to work towards the implementation of the plan of action that is evolved.
6. Facilitating the core group to identify ways and means by which their interventions could be sustained after the withdrawal of the student trainee.

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7. Finding pit target groups requiring professional interventions and enabling them to evolve a plan for increasing their capacity to enhance their present level of social functioning
8. Identifying and networking with other agencies that could be utilized by the individual's units being worked with
9. Assisting the agency in its ongoing interventions
10. Relating theory with practice
11. Bringing out issues, concerns or dilemmas encountered during field work through a planned paper presentation in the scheduled group conference
12. Organize program according to the needs of the Community like: -Different skills training program for community people: Designing target intervention program on different community issues; Organize program to celebrate days of national and International importance i.e., International Women's Day, Republic Day, Independence Day, AIDS Day, Youth Day, Social Work Day, Environment Day and Other national and International Days.

Components of field work:

- Concurrent field work twice a week
- Individual conferences
- Weekly report submission
- Group conference
- Viva voce

Evaluation:

Internal Assessment	150 marks
Individual conference	10 marks
Group conference	10 marks
Study Tour/Field Visit	20 marks
Internal Viva voce of Concurrent Field work	80 marks
Block Placement	30 marks

External Assessment

External Viva voce of Concurrent Field work 50 Marks

(Total Marks- Internal -150+External -50=200 Marks)

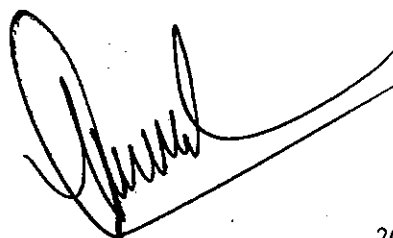
• Suggested Reading

1. Dinitto, Diana, M. (2008). Social Work Issues and Opportunities in a Challenging Profession (3rd edition). Chicago: Lyceum Books
2. Baird, B. (2002) The Internship Practicum, and Field Placement Handbook; A Guide for the Helping Professions, (3rd ed.). Upper Saddle River, NJ. Prentice Hall.
3. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
4. Choudhary, Paul. (1983). Introduction to Social Work. New Delhi: Atma Ram & Sons.

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5. Dasguta, S. (1967). Towards a Philosophy of Social Work in India. New Delhi: Popular Book Services.
6. Garthwait, C. (2005). The Social Work Practicum; A Guide for Students. (3rd ed.). Boston, MA. Pearson Education, Inc.
7. Weger- Berg, M. (2000). The Practicum Companion for Social Work. Needham Height, MA: Allyn & Bacon.
8. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
9. Hepworth, Dean H (2010). Direct Social Work Practice-Theory and Skills (8th edition). New York: Brooks/Cole.
10. Zastrow H.C. (2003) The Practice of Social Work, Canada Thomson Learning Academic Centre
11. Zastrow, H. C. (2003): The Practice of Social Work, Canada: Thomson Learning Academic Resource Center
12. Kumar, S. (2008). Methods for community participation: A complete guide for practitioners. Warwickshire England: Practical Action.
13. Raju, M. L. (2012). Community organization and social action: Social work methods and practices. New Delhi: Regal Publications.
14. Singh, K. K., & Singh, R. S. (2011). Social work and community development. Jaipur: ABD.
15. Pasad.L.M. (2000). Principles and Practice of Management. New Delhi: Sultan Chand & Sons.
16. Ralph Brody. (2005). Effectively Managing Human Service Organizations (Third Edition). New Delhi: Sage Publications
17. Rao, V. (1987). Social Welfare Administration. Bombay: Tata Institute of Social Sciences.
18. Sachdeva D R. (2007) Social Welfare Administration in India. Allahabad, KitabMahal
19. Guha, R. (2012). Social welfare administration. New Delhi: Centrum Press. 21. Kumar, S. (2017). Social work and social welfare. Jaipur: ABD.
20. Kumari, M. (2012). Women and family welfare. New Delhi: Random Publications.
21. Manjramkar, M. A. (2016). Family and child welfare. Delhi, India: R.P. Book Distributors.

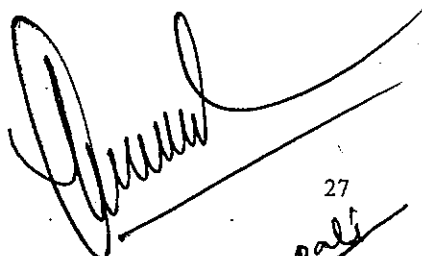


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Semester - 3


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M.A. Social Work 3rd Semester w.e.f. 2023-24
MSW-113 Dissertation-II

L T P
0 2 4 (4 Credit)

Internal Marks : 60
External Marks : 40
Total Marks : 100

Course Objective: This paper is designed to acquaint student with the writing of dissertation with application of various social work research designs while conducting research course. The students will be able to write dissertation in a scientific way with enhanced knowledge.

Course outcome: The learner will be able to conduct a large sample study with the help of innovative research methodology and submit it in the form of a thesis.

Note: The students of M. A. Social Work 3rd Semester are required to submit three copies of dissertation (hard-binding) by 30 November of the academic year, with a late fee of 500/-rupee by 30th December of the academic year and with a fine of Rs. 1000 till 31st January the academic year. Further there will be an on-the spot viva-voce of 100 marks jointly by one external examiner appointed by the university/examination branch from the panel provided by department and one faculty member nominated by the Chairperson of the department.

Note: The dissertation will be submitted on prescribed format and will contain 60-80 pages including references and annexure etc.

Course content

Unit-I Proposal Refinement and Validation (Based on Pre-Test Report in the 2nd semester)

- Proposal Writing and Refinement
- Preparation for Research/ Action Research

Unit-II Enactment, Design, and implementation, Analysis and Evaluation

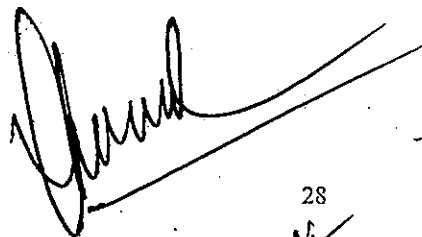
- Enactment of Research Proposal
- Implementation of research study
- Collection of data

Unit-III Dissertation Writing Process

- Introduction
- Literature Review
- Research Methodology and Design (Chapterization)
- Analysis and Interpretation
- Summary

Unit-IV: Dissemination

- Dissemination of Research
- Presentation through Colloquium



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M.A. Social Work 3rd Semester w.e.f. 2023-24
MSW-115 Social Work Administration

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives

1. Acquire knowledge about the basic principles and processes of administration within the framework of social work philosophy and practice.
2. Acquaint self with the variety of social and welfare services and agencies available for meeting the requirements of the needy and vulnerable sections.
3. To acquire knowledge about the concepts of Non- Government Organizations and Voluntary Organizations.
4. Acquire competence in the administration of social welfare and public private collaboration for welfare.

Course Outcome:

The learner will acquire knowledge about the basic principles and processes of administration and acquaint self with the variety of social and welfare services and agencies available for meeting the requirements of the needy and vulnerable sections. The learner will have full understanding of concepts of Non-Government Organizations and Voluntary Organizations. Acquire competence in the administration of social welfare and public private collaboration for welfare.

Course content

Unit-I Social Welfare Administration



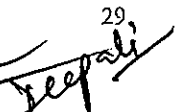
- Concept and significance of Social Welfare Administration
- Distinction between Public, Business, Social Welfare Administration.
- Administrative Structure at Central, State and Local Levels
- Principles of Social Welfare Administration

Unit-II Government Organizations and Voluntary Organizations

- Government Organization in Social Welfare; CSWB : Structure and Role
- Non-Government Organization: Meaning, structure, Functions
- Civil Society: Concept, functions
- Issues and Challenges faced by Voluntary Organizations in India

Unit-III Registration of Organizations & Elements of Administration

- The Societies Registration Act
- Indian Trust Act
- Elements of Administration: Planning, Organizing, Staffing, Directing, Coordination, Reporting, Budgeting & Accounting and Fund raising.
- Monitoring and Evaluation




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- Requisites for Effective and Efficient Welfare Administration

Unit-IV Community Participation in Welfare Administration

- Community and Stakeholders Participation
- Accountability and Transparency
- Social Audit
- Public Private Partnership to promote Social welfare
- Requisites for Effective and Efficient Welfare Administration

Evaluation:

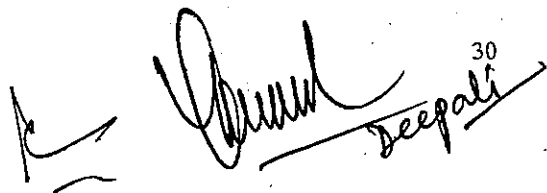
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

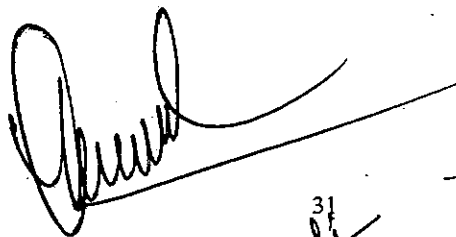
- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Readings:

1. Hill, M. (2003): Understanding Social Policy 7th Edition. Oxford: Blackwell Publishers.
2. Devi, Rameshwari and Parkash Ravi (1998), "Social Work and Social Welfare Administration, Methods and Practices", Vol. I, Mangal Deep Publications, Jaipur.
3. Spicker, P. (2008) *Social Policy: Themes and Approaches*, revised 2nd edn, Bristol, Policy Press.
4. Lohmann, Roger, and Nancy Lohmann. 2002. *Social administration*. New York: Columbia Univ. Press
5. Sivakumar. D (2004), Women participation in e governance – Need for extensive filed work, (Published online <http://www.witindia.org>)
6. Martin, Davies (2000), The Blackwell Encyclopaedia of Social Work, Blackwell Publishers, Oxford, U.K.
7. T. Krishnan, Nair (1983), Social Welfare Manpower, A study in Tamilnadu, Concept Publishing company, New Delhi
8. Dr. D. Paul, Chowdhry (1979), Social Welfare Administration, Atma Ram & Sons, Delhi.
9. Dr. D. Paul, Chowdhry (1981), A Handbook of social welfare, Atma Ram & Sons Delhi.

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10. Publication division, Govt. of India (1987), Encyclopaedia of Social work in India (4 Volumes), New Delhi.
11. Sivakumar. D (1992), Progress and Problems of Social development, With special Reference to Kerala, Aiswarya Sarala mandiram, Mythanam, Varkala, Kerala State (unpublished Ph.D Thesis in Social work).
12. Drake, R.F. (2001): The Principles of Social Policy. New York: Palgrave.
13. Rameshwari Devi 2001 Social welfare Administration, Jaipur, Mangal deep publication, Jaipur.
14. Pandey S.K. 2007 Social welfare Administration, New Delhi, Mahaveer and sons.
15. Choudry D.Paul; 2000 Social Welfare Administration, Lucknow, Atmaram and sons.
16. Batattacharia sanjay 2006 Social work administration and Development, New Delhi, Rawat. Choudry.
17. D. Paul 1991: Voluntary social welfare in India, New Delhi, sterling.
18. Gangarde, Y.D. 1978 Social Legislation in India Vol I andII, New Delhi, concept.
19. Goel .S.L& Jain R.K: 1998 Social Welfare Administration (Vols I&II).
20. Sachdeva: D.R. 1978 Social Welfare Administration in India, Allahabad, Kitab Mahal.



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M.A. Social Work 3rd Semester w.e.f. 2023-24
MSW-117 Social Policy, Sustainable Development and Environmental Protection

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives

1. Gain knowledge of policy analysis and the policy formulation process.
2. Acquire skills in critical analysis of social policies and development plans.
3. Gain understanding of Development, Sustainable development and Environmental Protection.

Course outcome:

The learners will develop good knowledge of policy analysis and the policy formulation process. They will be able to critically analyse social policies and development plans and develop an understanding of social policy in the perspective of national goals as stated in the Constitution, particularly with reference to Fundamental Rights and the Directive Principles of State Policy. The learner will realize the impacts of Climate change and role of social worker in protecting the environment and how to work effectively with communities.

Course Content

UNIT I Introduction to social policy

- Concept of social policy
- Relationship between social policy and social development
- Models of social policy and application in India Setting

UNIT II Social policy and planning and Implementation


- Policy formulation determination and steps
- Social planning: concept and scopes.
- Challenges in implementation in social policy

UNIT III Introduction to Sustainable Development and Environment

- Concept of Development: Concept and Indicators to development.
- Scope and importance of Sustainable Development
- Sustainable Development Goals
- Strategies of SDG and its programme critique
- Introduction to Environment and Environmental Degradation- Causes and Consequences
- Role of state and civil society in Sustainable Development.

UNIT-IV Conservation, Natural Resource Management, Environment Movement and Role of Social Workers

- Problems of Global warming
- Conservation of ecosystems and species in India.
- Natural Resource Management Practice – Agriculture, Pastoralism and Fishing


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- Environment Protection Movements - Chipko Movement, Narmada Bachao Movement, Save Silent Valley Movement
- Role of Social Workers in Development and Environment Protection

Evaluation:

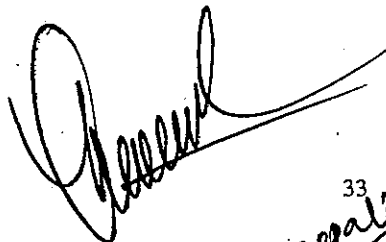
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Reading List:

1. Das , R.C., Barul , J.K. Sahu , N.C. & Mishra ,M.K. 1998 The Environment divide: the Dilemma of Developing Countries. New Delhi: Indus Publishing co.
2. Reid, D.E. 1995 Sustainable Development: An Introductory Guide. London: Earthscan Publications.
3. Sundaram K.V. Jha, M.M & Mrityunjay , M.(ed.)2004 Natural resources management and livelihood security: survival strategies & sustainable policies. New Delhi: Concept publishing co.
4. Sheth , P. 1997 Environmentalism: Politics, Ecology and Development. Jaipur: Rawat Publications.
5. Jana, M.M. 1991 Environmental Degradation and Developmental Strategies in India. New Delhi: Ashish Publications.
6. D. Taylor (Ed.1996). *Critical Social Policy: A Reader*. London: Sage.
7. K.K. Jacob (Ed.) (1989). *Social Policy in India*. Udaipur: Himanshu Publication
8. Lewis Gail, Gerwartz Sharon and Clark John (2000). *Rethinking Social Policy*. London: Sage.
9. Singh, R. R. (Ed.) 1995 Whither Social Development? New Delhi: ASSWI.
10. Singh, Y. 1972 Modernization of Indian Tradition, Delhi: Thomas Press.
11. Sustainable Development Goals, UNDP
ile:///C:/Users/91882/Downloads/SDGs_Booklet_Web_En.pdf



M.A. Social Work 3rd Semester w.e.f. 2023-24
MSW-119 Social Work with Families and Children

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:-

1. To help students develop a perspective of understanding family as a changing social institution and analyzing its needs and problems.
2. To help students understand the changing structure and function of family and changing distribution of power and roles.
3. To help students understand various perspectives to understand family as a system and family development.
4. To introduce various theoretical perspectives and models to work with family.

Course Outcome:

The learners will be able to identify the needs and problems of contemporary families. The learners will be able to identify the power distribution within the families while designing interventions. The learners will be able to do the assessment keeping in mind the issues and challenges from different relevant perspectives. The learner will be able to practice family social work in relevant settings with the help of skills acquired in skill lab and fieldwork.

Course content:

Unit –I Family- Features and Forms

- Family: functions and family alternative patterns
- Indian Families: Types and Features
- Impact of social change on the family- interfamilial forces and extra -familial events
- Family Disorganization and Family Violence

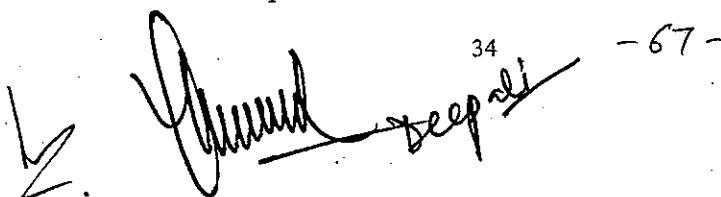
Unit-II Family Development

- Approaches to understand family – ecological and developmental perspective
- Concept of family system – Social role, family homeostasis, family triangulation, family rules.
- Family life cycle- Differential growth needs, developmental tasks, and communication.
- Family life enrichment programme to strengthen family and its contribution.

Unit-III Child Development: Perspectives

- Child development and Child Rights: concept, philosophy and historical context
- State of children in India: Demographic profile, Education, Health, Nutrition and Protection
- Programmes for children under different circumstance: Adoption, Foster Care, Guardianship.
- Child Abuse: Forms, sexual assault on children, incest, child rape, consequences and Prevention;
- Children in need of care and protection and Children in conflict with law.

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Unit-IV Family and Child Social Work Practice

- Family Assessment - application of theories: social exchange, social role and conflict; use of family genogram.
- Family as a client system: skills and techniques in working with families
- Family counselling and Family therapy
- Children in vulnerable situation; Specific skills of dealing with children with abuse and Social work interventions in child development

Evaluation:

Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

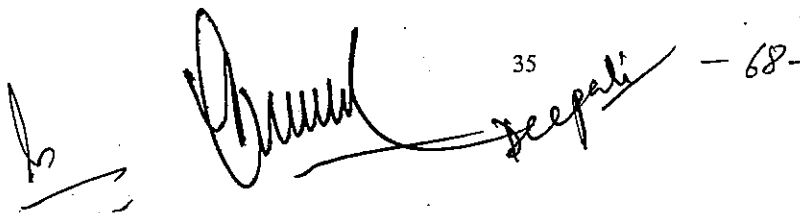
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Reading List:

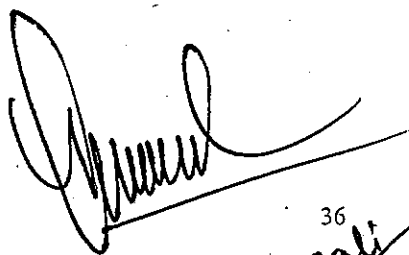
1. Barbara Hanna Wasik, Donna 2002 Home visiting: Procedures for helping families, New Delhi: Sage Publications
2. Carol H. Meyer 2006 Fatal families: The dynamics of Intra familial Homicide, New Delhi: Sage Publication
3. Carlfred B. Broderick 1998 Understanding family process: Basics of family system theory
4. Chethow-Yanoov, B 1997 Social Work Approach to conflict relations : Making fights obsolete, New York: The Haworth Press
5. Dass ,*etal.* (2020) Social Work Education Indigenous Perspectives, Routledge Publication, India
6. Chethow-Yanoov, B 1997 Social Work Practice: A system approach, New York: The Haworth Press
7. Coontz, S. H. 2007 Population Theories and economic interpretation , London, Routledge and Kenan Paul
8. Desai, K.G. 2011, Ageing in India, Bombay: TISS series 52.
9. Shah ,A.M 2011 The family in India : Critical essays, Bombay: Orient Longman
10. Broadzinsky, D. M.Smith,D.W.: Children's adjustment to adoption and Development , 199 clinical issues, New Delhi, Sage Publication.
11. Choudhury D. Paul 2003 Manual of child welfare. Delhi: Atma Ram and sons.
12. Choudhury D. Paul 2007 Child welfare and Development, New Delhi: Atma Ram & Sons
13. Donnison, D.V.2003 The Neglected Child and the social services ,Manchester United Press

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14. Pantea, M.C. Holosko M.J. et al (2013) Social Work Practice with Individuals and Families. Evidence Informed Assessments and Interventions. New Jersey: Wiley in *Research on Social Work Practice in Research on Social Work Practice* 23(6): 720-722.
15. M. J. Holosko, C.N. Dulmus, & K.M. Sowers (Eds.) *Social Work Practice with Individuals and Families: Evidence-Informed Assessments and Interventions* New Jersey: John Wiley & Sons, 2013. 314 pp.
16. ISBN 978-1-118-17697-9.
17. Relationship Counselling for Children, Young People and Families Kathryn Geldard, David Geldard Published: December 2008
18. Butler Ian etal. Social Work with Children and Families (2004) Jessica Kingley Publishers, London .



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M.A. Social Work 3rd Semester w.e.f. 2023-24
MSW-121 Labour Welfare and Labour Legislations

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objective:

1. To study Labour welfare, Labour markets and its characteristics.
2. To understand concept of wage and present condition of services available for Labour
3. To study the Labour legislations and their execution in India
4. To understand the laws and methods of wage fixation and social security.

Course Outcome:

The students will develop good understanding of Labour welfare, Labour markets and its characteristics; concept of wage and present condition of services available for Labour. They will know Labour legislations and their execution in India by in-depth study of the laws and methods of wage fixation and social security.

Unit- 1 Labour Welfare

- Labour- Concept, types, characteristics of Labour in India
- Concept of Labour Welfare
- Principle and Theories
- Constitutional Provisions regarding Labour

Unit- II Labour Legislations I

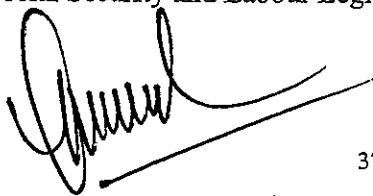

- Introduction Need and scope of Labour legislation
- Concept of Wage and its types
- Minimum Wages Act, 1948
- Brief overview about Outsourcing Policy in Haryana

Unit -III Labour Legislations II

- Labour Commission in India; Structure and Role
- The Factories Act 1948
- Trade Union Act 1926
- Industrial Disputes Act 1947

Unit- IV Social Security

- E.S.I. Act, 1948
- Employees Provident and Misc. (amendment) Act 2018
- The Unorganized Workers' Social Security Act, 2008
- Importance of Social Security and Labour Legislation in Social Work

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Evaluation:

Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Referencess

1. Mallick, P. L. (2002). *Industrial law*. Lucknow: Eastern Book Company
2. Monappa, A., Nambudiri, R., & Selvaraj, P. (2012). *Industrial relations and labour laws*. New Delhi: Tata Mc Graw
3. B. P. Sahu, Human Resources Development for Industrial Workers– 2004. Mittal Publication New Delhi.
4. Human Resource Development by Dr.Nagaraju Battu ,A.P.H.Publication, New Delhi 2007.
5. Misra, L. (2000), *Child Labour in India*, Oxford University Press, New Delhi.
6. Sharma Usha, (2006), *Female Labour in India*, Mittal Publication New Delhi.
7. K.Ashwathapa, (2002) *HRM & Personnel Management*, Tata McGraw Hill, New Dehli.
8. Pattanayak B. (2006), *Human Resources Management*, Prentice Hall Of India.
9. Mathis, R. L., Jackson, J. H., Valentine, S. R., & Maglich, P. A. (2016). *Human resource management*, (15th ed.). Boston, USA: Cengage Learning
10. Silvera, D. M. (1990). *Human resource management: The Indian experience*. New Delhi:New India Publications.
11. Pareek, U., & Rao, T. V. (2003). *Designing and managing H R systems* (3rd ed). NewDelhi: Oxford & IBH Publishing.
12. Pareek, U. (2016). *Understanding organisational behavior*. New Delhi: OUP.
13. Verma, A. , Kochan, A. T., & L ansbury, R. D. (1995). *Employment relations in thegrowing Asian economics*. London: Routledge
14. Ramnarayan, S., & Rao, T. V. (2011). *Organization development: Accelerating learningand transformation*. New Delhi: Sage Publications
15. Roychowdhury, A. (2018). *Labour law reforms in India: All in the name of Jobs*. NewYork:

M.A. Social Work 3rd Semester w.e.f. 2023-24
MSW-123 Corporate Social Responsibilities and Social Work

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

- To provides an overview of corporate social responsibility, its evolution, various models, metrics and stakeholders.
- To build the knowledge of the students about key issues in communicating CSR to the communities.
- Gives an over view about the legal, moral, social dimensions of CSR in India
- To give overview to the students about the career prospectus and scope of the CSR.

Course Outcome: The learner will gain a clear understanding of their role in the field of CSR and also will be able to develop career incorporates, industries, and in CRS foundations.

UNIT-I Concept of CSR

- CSR Introduction- Concept, definition
- Evolution of CSR and Components of CSR
- Approaches to CSR, Issues and Theories of CSR
- The evolving role of stakeholders, Organization, Government, Society

UNIT-II Legislative and Theoretical Framework of CSR

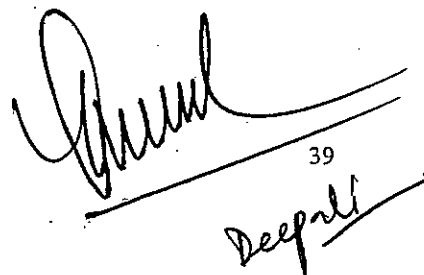
- CSR Act 2013, Legal frame work in India
- Principles and Guidelines of CSR
- Moral and economic arguments for CSR
- CSR and Sustainability Development

UNIT-III Scope of CSR

- Implementation of CSR Activities
- Planning and Implementing CSR activities
- Methods of CSR, Scope and benefit of CSR
- Social Work and CSR

UNIT-IV Practice of CSR

- Career Opportunities in CSR
- Corporate Governance and Institutional Building in CSR
- Institutional mechanisms of CSR, Medias, Other Institutions
- CSR and Community engagement
- Best Practices in CSR, Recent trends in CSR


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Evaluation:

Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

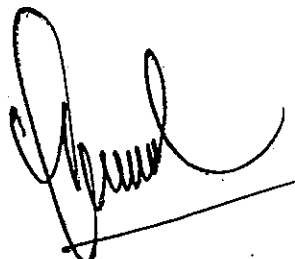
Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Readings:

1. Corporate Social responsibility in India, Sanjay.K. Agarwal, SAGE Publications, New Delhi.
2. Coupland, C. (2005). Corporate social responsibility as argument on the web. Journal of Business Ethics, 62, 355-366. 2. Communicating CSR through social media (2008, September 23).
3. Social Responsibility Link, International Association of Business Communicators, <http://srlink.x.iabc.com/>.
4. CREM-report nr. 03.650 (2004). Corporate Social Responsibility in India, Policy and Practice of Dutch companies, Amsterdam, the Netherlands, Issue, February.
5. CSR as a multiorganizational system Case Study: IBM The Corporate Service Corps HBR #409106 CSR Models: Stages of Corporate Citizenship
6. Mirvis, P., & Googins, B. Stages of corporate citizenship: A developmental framework. Center for Corporate Citizenship at Boston College. Zadek, S. (December 2004).
7. Grau, S., Gupta, S., & Pirsch, J. (2007). The Path to Corporate Social Responsibility. Harvard Business Review. A framework for understanding corporate social responsibility programs as a continuum: An exploratory study. Journal of Business Ethics, 70, 125-140.
8. Handbook on Corporate Social Responsibility in India, Confederation of Indian Industry, 2013 New Delhi.
9. Madhumita Chatterji, Corporate Social Responsibility, Oxford university Press, 2011, New Delhi.
10. Mishra R k, Sarkar Shulagan, Singh Punam, Strategic Corporate Responsibility Towards a Sustainable development, Academic reference Series, Bloomsbury Publishing India, New Delhi.
11. Weber, M. (2008). The business case for corporate social responsibility: A company level measurement approach for CSR. European Management Journal, 26, 247- 261. 10. Willaim.B.Werther, Jr. David Chandler, Strategic Corporate Social responsibility, Stakeholders in a Global Environment, SAGE Publications, New Delhi.

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M.A. Social Work 3rd Semester w.e.f. 2023-24

MSW-125 Social Work Practicum (Agency Setting – Semester 3)

L T P

0 0 16 (8 Credit)

Internal Marks : 200

Total Marks : 200

Course Objectives

- To introduce students to such entities as Government, corporate, Non – Government, and community-based organizations to know their programs, policies, and their implementation.
- To help students understand the complexity, deprivations, disadvantages, and pathological patterns of behavior of individuals, families, groups and communities.
- To help students develop skills in critical analysis, use of integrated approach in problem-solving, leadership in interdisciplinary team.
- To help student identify and develop social worker's roles, professional attitude and awareness of self.

Outcome: The learners will be helped to understand different social entities to practice professional social work and they will be able to develop work plans and project on their own and administer development programs.

Course Content

Unit-I Entry to the Entity/Setting

- To understand the organization's/entity's history.
- To understand its vision, mission, and objectives.
- Preparing the complete profile of organization.
- To understand of the administrative and operational procedure of projects, programs and target groups.

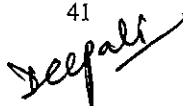
Unit-II Enactment of knowledge base , principles and competencies of social worker

To mobilize resources to meet basic needs of agency set up for welfare and development work.

- To enhance the functioning of change agent system to initiate new services and participate in the planning and policy making process of the organization/entity.
- To conduct some specific task with the organization:
 - i. Conducting session with the target group.
 - ii. Conducting capacity building programme.
 - iii. Working on documentation of events.
 - iv. To work as a member of research team.
 - v. Planning an intervention with the designed outcome.



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Unit-III Demonstration of core competencies at different levels of practice.

- To work with individual, group, and community with demonstration of skills required in each situation.
- To initiate agency based small studies for assessment of problem/need/delivery of services.
- To initiate projects/program in the agency and give leadership to others in implementation.
- To supervise staff, outreach workers and volunteers of the agency.

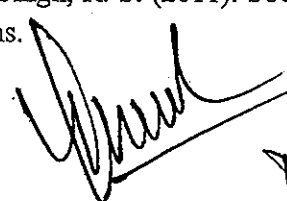
Unit-IV Termination of practice

- To plan and initiate the process of closure of intervention with different entities.
- To demonstrate skills in closure
- To understand review of the entire process from entry to termination.
- To present report of community engagement with outcome.

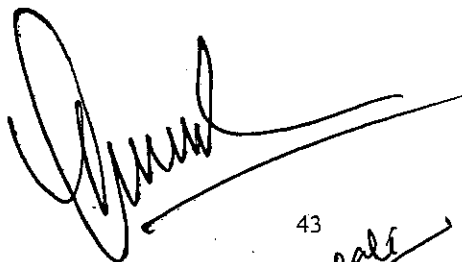
Internal Assessment	200 marks
• Individual Conference	10 marks
• Group conference	10 marks
• Internal Viva voce of Concurrent Field work	180 marks

Suggested Reading

1. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
2. Choudhary, Paul. (1983). Introduction to Social Work. New Delhi: Atma Ram & Sons.
3. Dasguta, S. (1967). Towards a Philosophy of Social Work in India. New Delhi: Popular Book Services.
4. Dinitto, Diana, M. (2008). Social Work Issues and Opportunities in a Challenging Profession (3rd edition). Chicago: Lyceum Books
5. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
6. Hepworth, Dean H (2010). Direct Social Work Practice-Theory and Skills (8th edition). New York: Brooks/Cole.
7. Upadhyay, R.K., (2010) Social Case Work: A Therapeutic Approach, New Delhi, Rawat Publications
8. Sheldon, B., & Macdonald, G. M. (2009). A textbook of social work. Routledge. 19. George & Sumaraj, L. (2016). Adolescent counseling. Jaypee Brothers Medical Publishers.
9. Mishra, P. D., & Mishra, B. (2010). Social group work: theory and practice. New Royal Book Co.
10. Rao, N. S., & Sahajpal, P. (2013). Counselling and guidance. McGraw Hill Education.
11. Nāraṅga, V. (2013). Issues in learning theories and pedagogical practices. New Delhi: Orient Blackswan.
12. Ferguson, I., & Woodward, R. (2011). Radical social work in practice: Making a difference. Bristol: Policy Press.
13. Ahuja, R. (2012). Social problems in India. Jaipur: Rawat Publications.
14. Gautam, P. R., & Singh, R. S. (2011). Social work methods, practices and perspectives. New Delhi: Anmol Publications.


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15. Kumar, S. (2008). Methods for community participation: A complete guide for practitioners. Warwickshire England: Practical Action.
16. Leon-Guerrero, A. (2011). Social Problems: Community, Policy, and Social Action. Los Angeles: Sage.
17. Rai, D. P., Duggal, A., & Singh, Y. K. (2007). Community development: Indian universities/training institutes & management colleges. New Delhi: Shree & Distributors.
18. Raju, M. L. (2012). Community organization and social action: Social work methods and practices. New Delhi: Regal Publications.



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Semester 4

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M.A. Social Work 4th Semester w.e.f. 2023-24
MSW-114 Counseling theory and Practice

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

1. The learner should acquire conceptual knowledge of the counselling
2. To develop attitudes and understand the process and skills required for counselling
3. The learner should learn counselling as profession and professional attributes for the counsellor
4. Realize prevention as the best strategy to deal with the problem and to learn different prevention strategies.
5. Understand different counselling approaches to practice in various problem solving situations.

Course outcome:

The learner will learn counselling as profession and professional attributes for the counsellor. The learner will be able to understand the process of stages and skills required for counselling. The learner will apply the different counselling approaches to practice in various problem solving situations. The learner will apply the best strategy to deal with the problem and to learn different prevention strategies.

Unit I Understanding Counselling

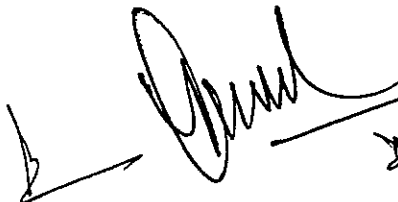
- Counseling- Concept and Type
- Goals and Types of counselling
- Values and ethical principles of counsellor
- Scope of Counseling in different fields of social work(HIV/AIDS, Family Counselling, Pre- Marital Counselling, Educational Counselling)

Unit I Stages and skills of counselling

- Steps in Counselling Process
- Process of Pre and Post – test Counselling in HIV/AIDS.
- Skills and techniques required during different stages of counselling
- Counsellor as a professional and Characteristics of good Counsellor
- Indigenous techniques; yoga and meditation
- Grief and trauma counseling

Unit III Attributes of Counsellor

- Counsellor as a professional
- Attributes of a good Counsellor
- Values and ethical principle of counsellor
- Relationship between Counsellor and Counsellee.


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Unit IV Theoretical framework of Counselling

- Approaches and theories of counseling- psychoanalytical
- Client –centered Approach
- Rational- emotive Therapy
- Behavioral Approach

Evaluation:

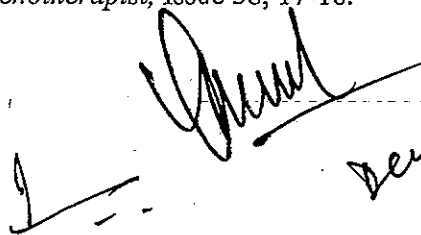
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

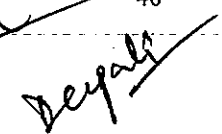
Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

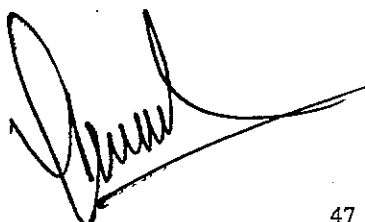

References

1. Corey, G., 2016. *Theory and Practice of Counseling and Psychotherapy*. 10th ed. Boston, MA: Cengage Learning US.
2. Ellis, A., 2005. Discussion of Christine A. Padesky and Aaron T. Beck, "Science and Philosophy: Comparison of Cognitive Therapy and Rational Emotive Behavior Therapy." *Journal of Cognitive Psychotherapy*, 19(2), pp.181-185..
3. Konstantinou, G., 2014. The relationship of counselling psychology training with CBT: Implications for research and practice. *Counselling Psychology Review*, 29(3), pp.43-54.
4. McMains, S., Newman, M., Segal, Z. and DeRubeis, R., 2015. Cognitive behavioral therapy: Current status and future research directions. *Psychotherapy Research*, 25(3), pp.321-329.
5. Miller, L., 2006. *Counselling skills for social work*. 1st ed. London: Sage Publications.
6. Dallos, R. and Draper, R. (2010). *An Introduction to Family Therapy: Systemic Theory and Practice*, 3rd Edition. Maidenhead, Berks: Open University Press.
7. Deurzen, E., van (2012). *Existential Psychotherapy and Counselling in Practice*, 3rd Edition, London: Sage.
8. Fonagy, P. and Bateman, A. (2006). Mechanism of change in mentalization-based treatment of borderline personality disorder, *Journal of Clinical Psychology*, 62, 411-430.
9. Horvath, A. and Bedi, R.P. (2002). The alliance. In J.C. Norcross (Ed.), *Psychotherapy Relationships that Work*. New York: Oxford University Press. (pp.37-69)
10. Joyce, P. and Sills, C. (2014). *Skills in Gestalt counselling and Psychotherapy*, 3rd Edition. London: Sage.
11. McGown, L. (2013). Reaching into the relational unconscious: Integrating spontaneous mental imagery into clinical practice, *The British Journal of Psychotherapy Integration*, 10(2), 21-32.
12. Orbach, S. (interviewed by S.Serning) (2014). Psychoanalytic perspectives on anger, *The Psychotherapist*, Issue 58, 17-18.

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13. Paul, S. and Charura, D. (2015). *An Introduction to the Therapeutic Relationship in Counselling and Psychotherapy*. Los Angeles: Sage.
14. Wampold, Bruce E. (2019). *The Basics of Psychotherapy: An Introduction to Theory and Practice (2nd ed.)*. ISBN 9781433830198.
15. Rao, K. Ramakrishna (2011). *Cognitive anomalies, consciousness, and Yoga*. Centre for Studies in Civilizations. ISBN 9788191014228. OCLC 703547641 Reviewed in multiple journals[†]
16. Forfylyow A. L. (2011). Integrating yoga with psychotherapy: a complementary treatment for anxiety and depression. *Can. J. Couns. Psychother.* 45, 132–150.
17. Rao K. R., Paranjpe A. C. (2008). Yoga psychology: theory and application, in *Handbook of Indian Psychology*, eds Rao K. R., Paranjpe A. C., Dalal A. K. (Delhi: Cambridge University Press;), 186–216. 10.1017/UPO9788175968448.011
18. Boehm K., Ostermann T., Milazzo S., Büssing A. (2012). Effects of yoga interventions on fatigue: a meta-analysis. *Evid. Based Complement. Alternat. Med.* 2012:124703. 10.1155/2012/124703
19. Barlow D. H., Nock M. K., Hersen M. (2009). *Single Case Experimental Designs: Strategies for Studying Behavior Change, 3rd Edn.* Boston, MA: Pearson.
20. Eberth J., Sedlmeier P. (2012). The effects of mindfulness meditation: a meta-analysis. *Mindfulness* 3, 174–189. 10.1007/s12671-012-0101-x



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M.A. Social Work 4th Semester w.e.f. 2023-24
MSW -116 Social work with Persons with Disability

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

1. Understand issues & concerns related to persons with disability & their caregivers.
2. Critically appraise theoretical & conceptual perspective with regard to disability.
3. Appraise the existing national and international laws in the context disability rights.
4. Facilitate the integration & synthesis of theoretical concepts & social work tasks.

Course Outcomes:

The students will be able to understand issues & concerns related to persons with disability & their caregivers. Critically appraise theoretical & conceptual perspective with regard to disability. They will have complete understanding of the integration & synthesis of theoretical concepts & social work tasks.

Unit-1 Disability: Overview

- Definitions: Impairment, Disability & Handicap
- Models of Disability; Incident & Prevalence of Disability.
- National & International Perspectives.
- Disability Classification, cause, needs and problems.

Unit-2 Persons with Disability and Society

- Societal Attitude towards Persons With Disability (PWD) ; Stigma and Discrimination,
- Oppression & Social Exclusion – Case Studies
- Psychosocial Factors & Coping with Disability.
- Human Rights Violations& Protection of Rights.

Unit-3 Services and Programmes.

- Important legislations related to Disability (RCI Act, RPWD Act and National Trust Act.)
- International Law – UNCRPD and its implementation in India- Critical Analysis
- Existing Schemes and Programmes for PWD; Role of Government and NGOs.
- Prevention of Disabilities (Primary, Secondary & Tertiary Level), Rehabilitation Services for the PWD (Educational, Vocational, Economic & Social).

Unit-4 Interventions and Rehabilitation of Persons with Disability

- Mainstreaming- Philosophy and Strategies.
- Community Based Rehabilitation – Philosophy and Approaches
- Disability counseling: Components, approaches ; Institutional and non-institutional and community settings
- Networking and advocacy-approaches, strategies and processes

Evaluation:

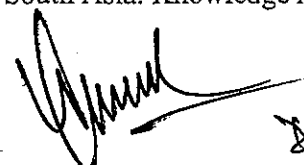
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Reading List

1. Albrecht, G.L., Seelman, K.D., & Bury, M. (eds.), Handbook of Disability Studies. California: Sage Publications, 2001.
2. Beaulaurier, R. L., & Taylor, S. H. (2000). Challenges and inconsistencies in providing effective advocacy for disabled people in today's health services environment: An exploratory descriptive study. SCI Psychosocial Process, 13 (3).
3. Beaulaurier, Richard L. & Taylor, Samuel H.(2001). Social Work Practice with People with Disabilities in the Era of Disability Rights, Social Work in Health Care, Vol. 32(4), The Haworth Press, Inc.
4. Rothman, J.C, Social Work Practice Across Disability. Boston: Allyn& Bacon, 2003.
5. Banerjee, G, Legal Rights of Person with Disability, New Delhi: RCI.2001
6. G. Karna, Disability Studies in India: Retrospect and Prospects, New Delhi: Gyan Publishing House, 2001
7. G. Karna, United Nations and the Rights of Disabled Persons: A Study In Indian Perspective. New Delhi, 1999
8. Batra, S. (ed.)2004; Rehabilitation of the Disabled: Involvement of Social Work Professionals, New Delhi: RCI.
9. Swain, J., French, S. &Thomas, C.C.2004; Disabling Barrier, Enabling Environments. New Delhi: Sage Publications.
10. Tilstone, C., Florian, L., & Beveridge, S. (eds); 1998; Promoting Inclusive Practice. London: Routledge
11. Hegarty, S., & Alur, M.2002; Education and Children with Special Needs from Segregation to Inclusion. New Delhi: Sage Publications.
12. Venkatesan, S. 2005; Children with Developmental Disabilities: A Training Guide for Parents, Teachers and Caregivers. New Delhi: Sage Publications.
13. Anita Ghai Re-thinking Disability in India, Routledge, New Delhi (2015)
14. (Dis)Embodied Form: Issues of Disabled Women (2003),
15. Disability In South Asia: Knowledge And Experience , 2018

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M.A. Social Work 4th Semester w.e.f. 2023-24
MSW-118 Health Care Social Work Practice

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives

1. To help students to understand basic concept of health and disease.
2. To develop understanding of health care system, services and programmes.
3. To understand the basis of mental health and national and international classification and regulations regarding Mental Health
4. To help Students develop understanding of practice of Social work and psychotherapy interventions in health promotion

Course Outcomes

The students will have good knowledge of concepts related to health and disease. They will develop good understanding of health care system, services and programmes. The Students will develop understanding of practice of Social work and psychotherapy interventions in health promotion.

Course content

Unit-I Health: Meaning, Component and Determinants

- Concept of health; characteristics
- Factors effecting health.
- Disease: Concept and Causes
- Nutrition, Balanced Diet and Nutrition Deficiency Conditions

Unit-II Health care Services and Programme.


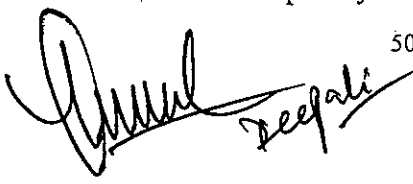
- Communicable and Non-Communicable disease(HIV/AIDS,T.B. and Cancer symptoms , prevention and treatment)
- Health Services and Programmes in India (HIV/AIDS,T.B. and Cancer)
- Functions of Primary Health Care
- Role of National Institute of Health and Family Welfare in Health Promotion

Unit-III Mental Health Problems

- Mental Health– Concept, myths and characteristics.
- The Mental Health Care Act- 2017
- Epidemiology, etiology, types and clinical manifestations of Mental Disorders
- WHO Classification of Mental Disorders (ICD-10)

Unit-IV: Psychosocial Interventions

- Family Interventions: Psycho-educational and supportive interventions
- Therapeutic community
- Psychiatric rehabilitation
- Role of Social worker as a multidisciplinary healthcare team member

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Evaluation:

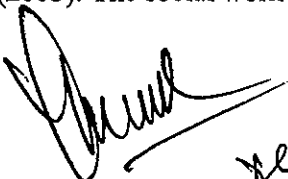
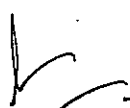
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Reading:

1. Rosenberg, J., & Rosenberg, S. (Eds.) (2018). Community mental health: Challenges for the 21st century. New York: Rutledge
2. Park.K. (2017). Preventive Social Medicine; 24th Edition. Banarsidas Bhanot Publishers, Jabalpur, MP
3. Manian, S. (2017). HIV/AIDS in India: Voices from the margins. Routledge Research in Asia Series
4. Barker, R. L. (2014). The Social Work Dictionary (6th ed.). Washington, DC: NASW Press.
5. Butcher, J. N., Hooley, J. M., & Mineka, S. M. (2017). Abnormal psychology and modern life. New Delhi: Pearson Education
6. Steen, M., & Thomas, M. (2016). Mental health across lifespan. New York: Rutledge
7. Singh, A.K. (2016). Modern Abnormal Psychology. Motilal Banarsidass Publishers Pvt. Ltd., New Delhi, India.
8. Rowan, D. (2013). Social work with HIV and AIDS: A case-based guide. Lyceum Books
9. Taylor, L.E. (2010). Mental health in social work: A casebook on diagnosis and Strengths-based assessment. Boston: Pearson
10. Bentall, R. (2003). Madness Explained. London, Penguin Books.
11. Charland, L. (2004). Moral treatment and the personality disorders. In The Philosophy of Psychiatry: A Companion (ed. J. Radden). Oxford, Oxford University Press.
12. Gibelman, M. (2005). What Social Workers Do (2nd Ed). Washington, DC. NASW Press.
13. Gilbert, J. (Ed.). (2003). Principles and recommended standards for cultural competence education of health care professionals. Los Angeles: California Endowment.
14. Barker, R. L. (2003). The social work dictionary (4th ed.). Washington, DC: NASW Press



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M.A. Social Work 4th Semester w.e.f. 2023-24
MSW-120 Human Resource Management and Industrial Relations

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

1. To understand the concept of human resource management and human resource Development
2. To gain knowledge on social work orientation on corporate culture, particularly as it relates to social issues in the workplace.
3. To understand the Organizational Behavior and its impact on organization
4. To understand the importance of Human relations and industrial Relation.

Course outcome:

The learners will understand the concept of human resource management and human resource Development and gain knowledge on social work orientation on corporate culture, particularly as it relates to social issues in the workplace. They will develop understanding of Organizational Behaviour and its impact on organization and understand the role of social workers in industries.

Course content

Unit I Human Resource Management

- Human Resource Management: Concept and scope
- Objectives, Structure and Functions of HRM
- Line and Staff relations
- Difference between HRM and HRD.

Unit II Recent trends in Human Resource Management

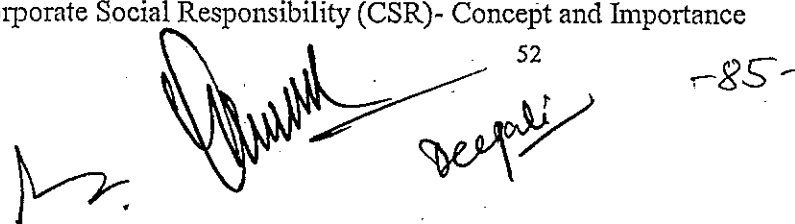
- Changing nature of the Indian workplace
- Workplace violence: meaning and forms
- Definition & meaning of industrial psychology
- Significance & aims of industrial psychology

Unit III Organizational Behavior

- Job Analysis; concept and its basic considerations
- Manpower Planning- Concept & Process
- Performance Appraisal - Concept and Methods
- Organizational Behavior

Unit IV Industrial Relations

- Industrial Relations; Concept and significance
- Worker's participation in Management
- Collective Bargaining; Concept & Characteristics
- Corporate Social Responsibility (CSR)- Concept and Importance

The bottom of the page features several handwritten signatures and marks. On the left, there is a signature that appears to be 'A. S.'. In the center, there is a large, stylized signature that looks like 'Deepak'. To the right of this signature, the number '52' is written. Further to the right, there is another signature that looks like 'Deepak' and the number '85' with a horizontal line through it.

Evaluation:

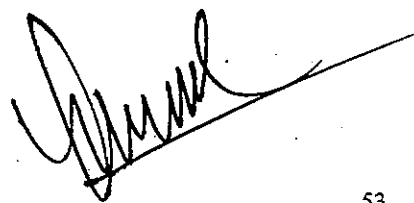
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

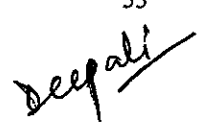
References

1. Robbins, S.P. 2002 Organizational Behaviour (10th ed). New Delhi: Prentice Hall of India.
2. Mathis, R. L., & Jackson, J.H. 1997 Human Resource Management. U.K: Prentice Hall International.
3. Mamoria, C.B. 2008 Human Resource Management, Bombay: Himalaya Publishing House.
4. Subba Rao, P. 1996 Essentials of Human Resource Management and Industrial Relations, Himalaya Publishing House.
5. Saini, D.S. & Khan, S.S. 2000 Human Resource Management Perfective for the New Era. New Delhi: Response Books.
6. Malik, P.L. 2000 Industrial Law Vol. I & II. Lucknow: Eastern Book Company.
7. Dr. G V Goswami, Labour Industrial Laws, 8th Edn. – 2004, Central Law Agency, Allahabad, Part VIK M
8. Pillai, Labour and Industrial Law, 10th Edn- 2005, Allahabad Law Agency, Allahabad, Chapter's 4-6 Prof. S
9. N Dhyani, Trade Unions and the Right to Strike, University Book House, Jaipur, 1989
10. S N Mishra, Labour and Industrial Laws, 25th Edn. - 2009, Central Law Publications, Allahabad,



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M.A. Social Work 4th Semester w.e.f. 2023-24
MSW-122 Disaster Mitigation and Management

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objective

- Develop an understanding of disasters, disaster mitigation and disaster management
- Acquire a critical perspective of the policy framework, institutional structures and programmes for disaster management in India
- Understand the process and techniques of empowering communities in disaster preparedness and mitigation
- Learn the nature and scope of psychosocial care in disaster management

Outcome: The learners will gain an adequate understanding of disasters, disaster mitigation and the role of social work in disaster mitigation and management.

Unit 1 Concepts and Basics of Disaster Management

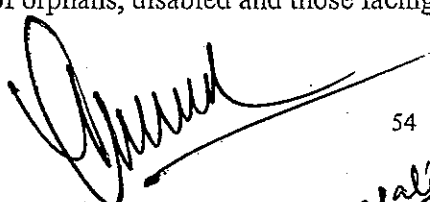


- Disaster-related concepts and definitions: Hazard, Risk, Vulnerability, and Disaster; different forms of Natural and Manmade Disasters
- Vulnerability: Factors enhancing vulnerability to natural and man-made disasters; regional vulnerability; vulnerable groups and communities.
- Hazard, Risk, and vulnerability assessment with special emphasis on participatory tools and techniques.
- Social Theories of Disasters

Unit 2 Disaster Management Initiatives

- Disaster Management Policy
- The Disaster Management Act, 2005
- Disaster Management Policy and programmes in India; National Disaster Management Framework. National Guidelines on Psychosocial support and mental health services in disasters.
- Stakeholder participation in disaster management

Unit 3 Psychosocial Care of Survivors

- Mental health consequences of disaster: grief reactions, post-traumatic stress disorders
- Principles and techniques of psychosocial care in post disaster situations
- Specific psychosocial needs of vulnerable groups like children, women, older persons and persons with disability
- Social care of orphans, disabled and those facing destitution

Unit 4 Post Disaster Interventions

- Coordinating search and rescue; relief mobilization and management; evacuation and camp management
- Contingency planning and crisis management
- Rapid health assessment and emergency health management
- Restoration and rehabilitation interventions, livelihood security and social justice concerns in disaster recovery and reconstruction

Evaluation:

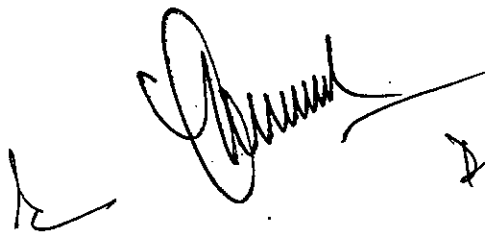
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

References

1. Sahni, P., Dhameja, A., & Medury, U. 2001 Disaster Mitigation: Experiences and Reflections. New Delhi: Prentice Hall of India Pvt. Ltd. 2.
2. Singh, S.K., Kundu, S., & Singh, S. 1998 Disaster Management. New Delhi: Mittal Publications.
3. Sinha, P.C. (ed.) 1998 Encyclopedia of Disaster Management. New Delhi: Anmol Publications Pvt. Ltd.
4. Newburn, T. 1993 Disaster and After: Social Work in the Aftermath of Disaster. Bristol, PA: Jessica Kingsley Publishers.
5. Ehrenreich, J.H. 2001 Coping With Disaster: A Guidebook to Psychosocial Intervention. Old Westbury, NY: Center for Psychology and Society.
6. Raphael, B., Wilson, J.P. (eds.) 2000 Psychological Debriefing: Theory, Practice and Evidence. Cambridge: Cambridge University Press.
7. Zubenko, W.N., & Capozzoli, J. (eds.) 2002 Children and Disasters: A Practical Guide to Healing and Recovery. Oxford University Press.
8. Singh, R.B. (ed.) 1996 Disasters, Environment and Development (Proceedings of International Geographical Union Seminar. New Delhi: AA Balkema/ Rotterdam/Brookefield.
9. CAPART 1995 Proceedings of CAPART Workshop on Strengthening of Community Participation in Disaster Reduction. New Delhi. 96


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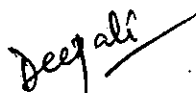
- 88 -

10. Carter, W.N. 1992 Disaster Management: A Disaster Manager's Handbook. Manila: Asian Development Bank.
11. Sharma, V.K. (ed.) 1994 Disaster Management. New Delhi: National Centre for Disaster Management.
12. Engelbert, P., & Sawinsky, D. (eds). 2001 Dangerous Planet: The Science of Natural Disasters (Vol. I to III). Detroit: Gale Group, VXL.
13. Eade, D., & Williams, S. 1995 The Oxfam Handbook of Development and Relief (Vols. I and II). U.K: OXFAM Publication
14. Gupta, M.C., Sharma, V. K., Gupta, L.C., & Tamini, B.K. 2001 Manual on Natural Disaster Management in India. New Delhi: National Centre for Disaster Management.
15. Regional Development Dialogue 2003 Disaster Management for Sustainable Development: Focus on Community Initiatives. Regional Development Dialogue, Vol. 24, No.1.



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M.A. Social Work 4th Semester w.e.f. 2023-24
MSW-124 Social Entrepreneurship and Development

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Course Objectives:

1. The students will be exposed to basic concepts, theories, and the relevance of social entrepreneurship.
2. The course will help students to understand social entrepreneurship practice in India.
3. The students will be helped to learn various perspectives and intervention methods of development and skills for managing the entrepreneurship organization.
4. To help the learner to understand entrepreneurship culture in India.

Course Outcome: Learners will have a good understanding of the concept of social entrepreneurship and its status in India. They will have a good idea to initiate their own social enterprise through learning from various perspectives and intervention methods.

Unit-I: Introduction

- Entrepreneurship: Meaning, concepts
- Social entrepreneurship: Background, characteristics and context
- Social Entrepreneurship: Definition, drives and challenges,

Unit-II : Social Entrepreneur

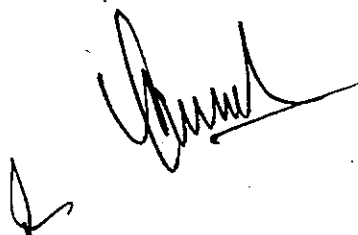
- Social change theories and dilemmas in Social Entrepreneurship
- Social Entrepreneur and their personality traits
- Social Capital Building by a Social Entrepreneur.


Unit-III: Management of Social Entrepreneurship and Development

- The Business Model of Social Entrepreneurship
- Grass-root entrepreneurship; Micro financing, Grameen Bank, Self Help groups and NGOs as social entrepreneurship venture
- Social Impact Assessment
- Social Marketing
- Strategic ventures design and Resource Management

Unit-IV: Entrepreneurship Culture in India

- Entrepreneurial Leadership and Motivation
- Social entrepreneurship in India; retrospect and prospect
- Legal Framework for Social Ventures
- Case Studies of Social Entrepreneurs



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Evaluation:

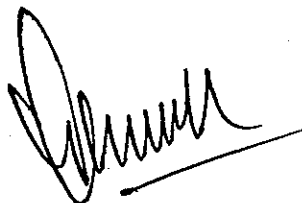
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

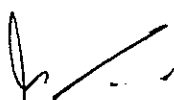
References:

1. Alex Nicholls, 2006, Social entrepreneurship: New Models of Sustainable Social Change, Oxford University Press, New York.
2. Bornstein David, 2007, How to change the world: social entrepreneurs and the power of new ideas, Oxford University Press, New York
3. Bornstein David, Davis Susan, (2012), Social Entrepreneurship, What everyone Needs to Know, Oxford University Press, New York.
4. Charantimath Poomima M, 2009, Entrepreneurship development Small business Enterprises. Dorling Kindersley, Delhi
5. Christine K. Volkmann, Kim Oliver Tokarski, Kati Ernst (2012), Social Entrepreneurship and Social Business, Spinger Gabler, Germany
6. Frederik Teufel, 2008. Social Entrepreneurship: Understanding a Phenomenon and Its Nexus with Current changes in philosophy, GRIN verlag, Germany
7. Mair. J, Robinson. J, Hockerts. K, 2006, Social entrepreneurship, Palgrave Macmillan
8. Paul Charles Light, 2008. The search for social entrepreneurship, The Brookings Institution, Washington DC
9. Praszkiar R, Nowak A (2012), Social Entrepreneurship, Theory and Practice, Cambridge University Press, New York.
10. Rafael Ziegler, 2009. An introduction to social entrepreneurship: voices, preconditions, contexts, Edward Elgar Publishing Limited, UK
11. Roy Rajeev, 2008. Entrepreneurship, Oxford University Press, New Delhi



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M.A. Social Work 4th Semester w.e.f. 2023-24
MSW-126
Social Work Practicum (Agency Setting – Semester 4)

L T P
0 0 16 (8 Credit)

External Marks : 50
Internal Marks : 150
Total Marks : 200

Course Objectives:

- To introduce students to such entities as Government, corporate, Non – Government, and community-based organizations to know their programs, policies, and their implementation.
- To help students understand the complexity, deprivations, disadvantages, and pathological patterns of behavior of individuals, families, groups and communities.
- To help students develop skills in critical analysis, use of integrated approach in problem-solving, leadership in interdisciplinary team.
- To help student identify and develop social worker's roles, professional attitude and awareness of self.

Outcome: The learners will be helped to understand different social entities to practice professional social work and they will be able to develop work plans and project on their own and administer development programs.

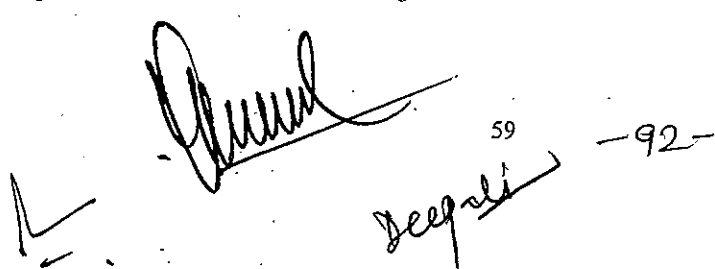
Course Content

Unit-I Entry to the Entity/Setting

- To understand the organization's/entity's history.
- To understand its vision, mission, and objectives.
- Preparing the complete profile of organization.
- To understand of the administrative and operational procedure of projects, programs and target groups.

Unit-II Enactment of knowledge base , principles and competencies of social worker

- To mobilize resources to meet basic needs of agency set up for welfare and development work.
- To enhance the functioning of change agent system to initiate new services and participate in the planning and policy making process of the organization/entity.
- To conduct some specific task with the organization:
 - vi. Conducting session with the target group.
 - vii. Conducting capacity building programme.
 - viii. Working on documentation of events.
 - ix. To work as a member of research team.
 - x. Planning an intervention with the designed outcome.


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Unit-III Demonstration of core competencies at different levels of practice.

- To work with individual, group, and community with demonstration of skills required in each situation.
- To initiate agency based small studies for assessment of problem/need/delivery of services.
- To initiate projects/program in the agency and give leadership to others in implementation.
- To supervise staff, outreach workers and volunteers of the agency.

Unit-IV Termination of practice



- To plan and initiate the process of closure of intervention with different entities.
- To demonstrate skills in closure
- To understand review of the entire process from entry to termination.
- To present report of community engagement with outcome.

Evaluation:

- | | |
|---|-----------|
| • Internal Assessment | 150 marks |
| • Individual conference | 10 marks |
| • Group conference | 10 marks |
| • Internal Viva voce of Concurrent Field work | 130 marks |
| • External Assessment | |
| • External Viva voce of Concurrent Field work | 50 Marks |
| • (Total Marks- Internal -150+External -50=200 Marks) | |

Suggested Readings:

1. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
2. Choudhary, Paul. (1983). Introduction to Social Work. New Delhi: Atma Ram & Sons.
3. Dasguta, S. (1967). Towards a Philosophy of Social Work in India. New Delhi: Popular Book Services.
4. Dinitto, Diana, M. (2008). Social Work Issues and Opportunities in a Challenging Profession (3rd edition). Chicago: Lyceum Book.
5. Bhattacharya S. (2003). Social Work: An Integrated Approach, Deep and Deep publisher
6. Mishra, P. D., & Mishra, B. (2010). Social group work: theory and practice. New Royal Book Co.
7. Rao, N. S., & Sahajpal, P. (2013). Counselling and guidance. McGraw Hill Education.
8. Nāraṅga, V. (2013). Issues in learning theories and pedagogical practices. New Delhi: Orient Blackswan.
9. Ahuja, R. (2012). Social problems in India. Jaipur: Rawat Publications.
10. Gautam, P. R., & Singh, R. S. (2011). Social work methods, practices and perspectives. New Delhi: Anmol Publications.

11. Kumar, S. (2008). Methods for community participation: A complete guide for practitioners. Warwickshire England: Practical Action.
12. Leon-Guerrero, A. (2011). Social Problems: Community, Policy, and Social Action. Los Angeles: Sage.
13. Rai, D. P., Duggal, A., & Singh, Y. K. (2007). Community development: Indian universities/training institutes & management colleges. New Delhi: Shree & Distributors.
14. Raju, M. L. (2012). Community organization and social action: Social work methods and practices. New Delhi: Regal Publications.
15. Sen, A., & Drèze, J. (2011). The Amartya Sen and Jean Drèze omnibus: Comprising poverty and famines, hunger and public action, India: Economic development and social opportunity. New Delhi: Oxford University Press.
16. Singh, K. K., & Singh, R. S. (2011). Social work and community development. Jaipur: ABD.
17. Pasad.L.M. (2000). Principles and Practice of Management. New Delhi: Sultan Chand & Sons.



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Block Fieldwork/Summer Placement (Agency Setting)

Credit: 6

Objectives:

- To provide on-the-job training to the social work students in order to develop enhanced practice skills and integrate learning
- Develop understanding of reality situations through involvement in day-to-day work and explore areas of social work intervention and understand application of theories learnt in the programme into practice.
- To develop the professional self and appreciation on the organizational efforts and identify the gaps in the programme.
- To develop the sense of professional commitment and conviction to work with a diverse population.
- The learner is expected to practice professional ethics, values, commitment and passion to work for causes.

- The learner is expected to work under the supervision of professionally trained social workers in the organization for block placement.

Outcome: The learner will be able to take on – job training in social development organizations/ research institutes and NGOs to become fully developed social work professionals.

Expected Tasks to be accomplished by the learner

- Active participation in day-to-day activities of the organization in order to understand the organization.
- Critical understanding the organizational culture, roles in different positions, organizational communication, structure and adaptation to its environment by demonstrating commitment.
- Preparation of organizational profile/Organogram
- Exploring the areas/fields and finding out the possibilities of social work intervention
- To explore scope of social work practice within the agency/organization settings
- Participating in organizational meetings/ review meetings etc.
- Learning the professional values and ethics and imbibing and practicing them in the day to day activities
- Getting practical exposure to the work culture and developing the employee-employer relationship



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Course Code CBCS-MSW-I
Understanding to Social Work Profession

L T P
3 1 0 (4 Credit)

External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours

Objectives:

- Understand the historical background of Social Work Profession in India & abroad
- Understand the basic concepts relevant to Social Work practice
- Understand the professional social work and its various aspect
- Understand the basic values and principles of Social Work Profession

Course outcome: The students will have good understanding of the status of social work profession in India and world and will be able to differentiate between various concepts.

Unit I Understanding Social Work and related concepts

- Social Work Definition and historical overview
- Basic concepts related to Social Work: Social Service, Social Welfare,
- Social reform, Social Revolution, Social Security
- Social Justice, Human Rights, Social Legislations

Unit II Fundamentals of Social Work

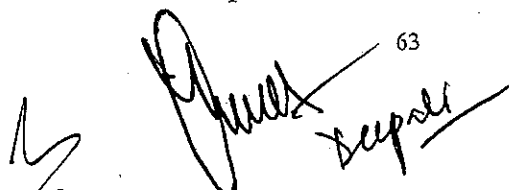
- Assumptions of Social work
- Objectives of Social work
- Functions of Social work
- Scope of Social Work

Unit III Theoretical Basis and Methods of Social Work

- Basic values of social work
- Principles of social work
- Process of Social Work
- Methods of Social Work

Unit IV Social Work Profession

- Professional aspects of Social Work
- Attributes of Social Work Profession
- Ethics of Social Work
- Challenges before Social Work profession

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Evaluation:

Internal Assessment

20 marks

Attendance

05 marks

Quiz/Test


05 marks

Assignment//Project/seminar

10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)



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**Course Code CBCS-MSW-II
Areas of Social Work Practice**

**L T P
3 1 0 (4 Credit)**

**External Marks : 80
Internal Marks : 20
Total Marks : 100
Time : 3 hours**

Objectives:

- Create awareness about Social Work Practice with Family and Child
- Familiarize with fields of Social Work in different setting
- Acquire skills for working in different areas of Social Work with vulnerable sections
- To understand the intervention of social work in community development

Course outcome: The students will have good understanding of the areas of practice of social work profession.

Unit I Family and Child Welfare

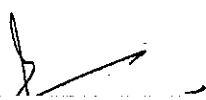
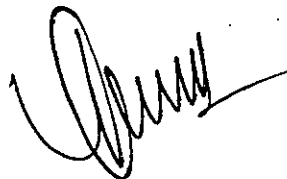
- Family- Concept, types and functions
- Family & Child Welfare: Foster Care, Adoption Services
- Family Counseling
- Child Guidance

Unit II Social Work Practice in Health care, Industry and School Setting

- Role of Medical and Psychiatric Social Worker
- Role of School Social Worker
- Industrial Social Work
- Social Worker Practice in correctional setting

Unit III Social Work Practice with Vulnerable Sections

- Social work interventions with adolescent and youth
- Social work interventions with Woman and Child
- Social work Practice with Elderly
- Social work interventions with Marginalized Sections



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Unit IV Community Development

- Conceptual understanding of Rural and Urban Community
- Rural Development; Concept and determinants
- Urban Development; Concept and Scope
- Social Work Intervention and rural and urban community development

Evaluation:

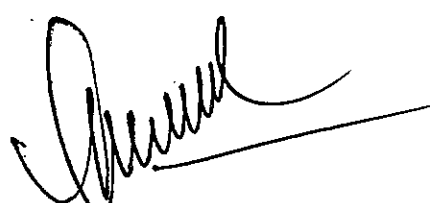
Internal Assessment	20 marks
Attendance	05 marks
Quiz/Test	05 marks
Assignment//Project/seminar	10 marks

Instruction for the paper setter

- Each theory paper shall be of 80 marks and shall comprise of 9 questions. Question No. one will be compulsory consisting of 8 short answer type questions spreading over the whole syllabus, to be answered in 30-35 words and carrying 2 marks each. (8X2=16)
- Two questions will be prepared from all four units. Each question will carry 16 marks. The student shall have to attempt one question from each unit. (4X16=64)

Suggested Readings

1. Ahuja, Ram 1996 Youth and Crime, Jaipur, Rawat Publications
2. Ahuja, Ram 2006 Criminology: New Delhi, Rawat Publications
3. Hegarty S 2002 Children with Special Needs, New Delhi, Sage Publications.
4. Sodhi, J. S. 1999 Poverty Alleviation of Rural Development, New Delhi: Criterion Publications.
5. Bajpai, P. K. (Ed.) 1998 Social Work Perspectives on Health, Jaipur, Rawat Publications.
6. Clark, D. W. 2011 Preventive and Community Medicine,
7. Danda, Amita. 2000. Legal order and Mental Disorder, Sage Publications.
8. Chowdhary, D. P 1981. Role of Voluntary Action in Social Welfare Development, New Delhi, Sidhartha Publications.
9. Sahni, P. and Sharma, K. K. 2007 Industrial Social Work, New Delhi: Deep and Deep Publications.
10. Mamoria, C. B. 2006 Dynamics of Industrial Relations, Mumbai, Mamoria S. Himalaya Publishing House.



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Scheme of Pre Ph.D Social Work

Paper Code	Nomenclature	Marks		Credit (Per Week)		Total Credit
		External	Internal	Lecture	Tutorial	
MSW-4101	Research Methodology	80	20	4	--	4
MSW-4102	Contemporary Concerns in Social Work	80	20	4	--	4
MSW-4103	Critical Review Assessment and Application of Statistical Measures	80	20	4	--	4
CPERPE-2203	Research and Publication Ethics	40	10	2	--	2
Total Marks		280	70	350		14

PhD Program Outcomes

1. To acquire deep knowledge of Literature and comprehensive understanding of techniques and methods adapted to their own research
2. Discover interpret and communicate new knowledge through original research of publishable quality which satisfies a review.
3. Apply significant ranges of advanced and specialised skills and enable to act autonomously in the planning and implementation of research.
4. Practice a proactive self critical and self reflective approach based on research and develop professional relationships with others where appropriate
5. Present original research outcome which extends the forefront of a discipline or relevant area of professional practice.
6. Critically and creatively evaluate current issues Research and advanced scholarships in the discipline.
7. Manage complex ethical and professional issues and make informed judgement on ethical code and practices.
8. Work collaboratively with all stakeholders to create and develop and exchange research knowledge to influence the benefit of society and the economy.

PhD- Program Specific Outcomes

PSO1 (Knowledge Outcomes): The graduates of the Ph.D. in Social Work programme should be able to demonstrate acquisition of knowledge in the following areas which are review the theories of science, knowledge and social research and their linkage with social work research; develop highly specialised knowledge, linking social work ideologies, theory,

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research, policy and practice on the chosen social work topic. master the established research methods and techniques applicable to social work.

PSO2 (Attitudes and Ethical Outcomes): The graduates of Ph.D. in Social Work programme should be able to demonstrate the ethical practices which are to consider research as an integral part of practice. Study social policies and practice so that they positively improve the social realities of the socially excluded groups; make a comparative analysis of different practice approaches; use participatory research approach and plurality of methods for understanding social issues; follow ethical practices in all aspects of research and development, including avoiding practices such as fabrication, falsification or misrepresentation of data or committing plagiarism, and not adhering to intellectual property rights.

PSO3 (Skill Outcomes) The graduates of the Ph.D. in social work programme should be able to demonstrate the acquisition of highly specialized cognitive and technical skills required for performing and accomplishing complex tasks related to research and development that make original contribution to knowledge, professional practice, and innovations. Further cognitive and technical skills required for conceptualizing, designing, and implementing fundamental and/or applied research at the forefront of social work to generate original knowledge. Skills of situational assessment, monitoring, and evaluation of policies, programmes, and interventions, according to the stage of practice.

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COURSE CURRICULUM

Course Code MSW-4101

Research Methodology

Credits:-4
External : 80

Max marks : 100
Internal : 20

Objectives:

- Understand the nature, scope and significance of research in social work practice.
- Understand the nature and application of alternative research paradigm in social work program.
- Develop competence in conceptualizing, designing and implementing Research using Quantitative and Qualitative Research.
- Develop understanding the conceptual foundations and methodology tools of quantitative and qualitative social research and their applications to social work.

Course Outcome: The learner will develop an understanding of the nature, scope and significance of research in social work practice and application of alternative research paradigm in social work program.

COURSE CONTENTS:

Unit I:

- Research: Meaning, Nature and its Significance
- Steps in Research Process
- Ethics in Research
- Types of Research: Quantitative and Qualitative, Action Research.

Unit:

- Research Design: Types of Research Designs (Exploratory, Descriptive, Experimental, and Quasi Experimental Designs).
- Sampling Design: Universe and Sample, rationale, importance, characteristics and types of Sampling, General considerations in the determination of Sample Size, Sampling error and Non-Sampling error, limitations of sampling.
- Hypothesis: Meaning and Formulation of Hypothesis, Sources, Types, attributes of a good Hypothesis. Sources, Methods and Tools of Data Collection
- Data Processing, Data Analysis
- Writing Research Report: Important Considerations.

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Unit:

- Basic tenets of Qualitative Research
- Introduction to theoretical perspectives of qualitative research.
- Similarities and differences between Qualitative and Quantitative Research Paradigms
- Principles and Designing Data Collection Strategies, Issue of Combining Data Collection Methods- Mixed Method and Triangulation

Unit:

- Case study, Focus Group Discussion, Observation and PRA Technique
- Computer application in research(Basics of computer, MS Word, MS Excel, Power point, Internet and other web research.
- Writing up Research Report

Suggested Readings:

1. Ackoff, Russell L., *The Design of Social Research*, Chicago: University of Chicago Press, 1961.
2. Alston, M. Bocolos, W. (Indian Edition 2003). *Research for Social Worker: An Introduction to Methods*. Jaipur: Rawat Publications
3. An excellent introduction to mixed methodology Research is Tashakkori, A. & Teddlie, C.(2000), *Mixed Methodology* (Sage).
4. Barzun, Jacques, and Graff, Henry, F., *The Modern Researcher*, rev. ed., New York: Harcourt, Brace & World, Inc., 1970.
5. Berdie, Douglas R., and Anderson, John F., *Questionnaires: Design and Use*, Metuchen N.J.: The Scarecrow Press, Inc., 1974.
6. Black, James A & Champion, Dean J. (1976) *Methods and Issues in Social Research*. Bombay Delhi: Sage.
7. Denzin NK, Lincoln YS (eds.). *Handbook of Qualitative Research*. London: Sage Publications, 2000.
8. Denzin, N. K., Lincoln, Y.S. (Ed). (1994). *Handbook of Qualitative Research*. Sage Publications, New Delhi
9. Gaum, Carl G., Graves, Harold F., and Hoffman, Lyne, S.S., *Report Writing*, 3rd ed., New York: Prentice-Hall, 1950.
10. Ghosh, B.N., *Scientific Methods and Social Research*, New Delhi: Sterling Publishers Pvt. Ltd., 1982.
11. Gillham, Bill. (2001). *Case Study Research Methods*. London, New York: Continuum
12. Goode, W.J., Hatt, P.K (1981). *Methods in Social Research*, Singapore: Mc Graw Hill
13. Gopal, M.H., *Research Reporting in Social Sciences*, Dharwar: Karnatak University, 1965.
14. Kish, Leslie., *Survey Sampling*, New York: John Wiley & Sons, Inc., 1965.

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15. Kothari, C. R. (2004 2nd Edition reprint) *Research Methodology: Methods & Techniques*
16. Kothari, C.R., *Quantitative Techniques*, 2nd ed., New Delhi: Vikas Publishing House Pvt. Ltd., 1984.
17. Kumar, Ranjit. (2005). *Research Methodology*, New Delhi: Pearson Education
18. Lastrucci, Carles L., *The Scientific Approach: Basic Principles of the Scientific Method*, Cambridge, Mass.: Schenkman Publishing Co., Inc., 1967.
19. London, New Delhi: Sage.
20. Nkwi P, Nyamongo I, Ryan G. *Field Research into Social Issues: Methodological Guidelines*.

Evaluation:

• Internal Assessment	20 marks
Attendance	05 marks
Test	05 marks
Assignment//Project	10 marks
• External Assessment	80 marks

Instruction for the Paper Setter:

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 80 marks.

- I. The question Paper shall have Four Units corresponding to the four units of the syllabus.
- II. Three questions shall be on each unit. The students shall have to attempt two questions from each unit.
- III. The paper setter may set short-note type questions as well, Subject to each question be set of 20 marks.

20×4= 80

marks

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COURSE CURRICULUM
Pre-Ph.D (Social Work)
Course Code MSW-4102
Contemporary Concerns in Social Work

Credits: 4
Time : 3 hours
marks : 100

Max

External : 80
Internal : 20

OBJECTIVES:

- To understand the concept of Social Work Profession and its growth
- Develop understanding the theories of Social Work and role of social worker in different models
- To understand domains in social work education in India
- Develop knowledge the concept, Definition, Objectives, Functions and Methods of Social Work

Course Outcome: The learner will develop complete understanding the theories of Social Work and role of social worker in different models

Unit -I SOCIAL WORK PROFESSION

- Evolution of social work Profession
- Concept, Philosophy assumptions and Principles of Social Work and their application.
- Definition, relevance and scope of Integrated Approach to Social work Practice, skills and Techniques.
- Social Work as a Profession-Philosophy, values, principles and code of ethics of professional social work-Knowledge and Skills base of social work-Tenets of the social work profession.
- Social Work Education-Concept, Training, Supervision, Problems and Challenges.

Unit-2 THEORIES

- Theories of Social Work-Ecological Systems Theory, Psychodynamic Theory
- Social Learning Theory, Behaviour Modification, Anti-oppressive social work, Strengths perspective
- Radical social work, Task centred approach and Gandhian Theory.

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- System Approach to Social Work Practice: Role of social work in the Remedial, Preventive and Development Models.

Unit-3

SOCIAL WORK PRACTICE: DOMAINS

- Introduction to methods of social work and levels of practice-Micro, mezzo and macro levels-Fields of Social Work:
- Community Development, Medical and Psychiatric Social Work, Social Work in the Workplace, Social Work with Family and Children, School Social Work, Correctional Social Work, Youth Development, Disaster Management, Corporate Social Responsibility, Conflict and Peace, Working with Marginalizes Groups.

Unit-4

PRACTICAL EXERCISE

- Preparing Research Proposal
- Preparation of Annotated Bibliography in the area of your research.
- Documentation Skills
- Do's & Don'ts of Research
- Seminar Presentation

Suggested Readings:

1. Adams, R. (2003). *Social Work and Empowerment*, New York: Plagrove Macmillan,
2. Alston, M. and Mckinnon, J. (2003). *Social Work- Fields of Practice*, Australia: Oxford U P,
3. Alston, M. Bocoles, W. (Indian Edition 2003). *Research for social Worker: An Introduction to Methods*. Jaipur: Rawat Publications
4. Anand, C. L (1982). *Equality, Justice and Reserve Discrimination*, Popular Book Service, New Delhi.
5. Balgopal, P. R. and Vassil, T. V. (1983). *Group in Social Work- An ecological perspective*, New York: Macmillan Publishing Co. Inc.
6. Black, James A & Champion, Dean J. (1976) *Methods and Issues in Social Research*. Bombay
7. Bose, Ashish *India's Urbanization 1901-2001 (II Ed.)* New Delhi, Tata Mc Graw.
8. Dak, Tm (1989). *Rural Industrialization: Challenges and Perspectives*, New Delhi, Northern Book Centre.
9. Dasgupta, Sugata. (1980). Social Movements, *Encyclopedia of Social Work in India*, New Delih: Press Division, G02
10. Datta, Abhijit. (2000). *Municipal and Urban India*, New Delhi, IIPA
11. Dayal, Rekha (1987). *Resource Book on Women's Development*, New Delhi: SIDA.
12. Denzin, N. K., Lincoln, Y.S. (Ed). (1994). *Handbook of Qualitative Research*. Sage Publications, New Delhi.
13. Dominelli, L. D. (2004). *Social Work: Theory and Practice for a Changing Profession*, Cambridge, Policy Press,
14. *Encyclopedia of Social Work*, Vol. 1,2,3. National Association of Social Workers, Washington D.C: NASW, 1996
15. Gangrade, K. D. (1997). *Community organization in India*, New Delhi: Popular Prakashan.
16. Giriappa, S. (2000). *Rural Energy Crisis*, New Delhi, Himalaya Publishing House,
17. Goode, W.J., Hatt, P.K (1981). *Methods In Social Research*. Singapore: Mc Graw Hill

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18. H. Kumar and J. Verghese (2005). *Women's Empowerment: Issues, Challenges and Strategies*. New Delhi: Regency Publication.
19. J. Hamner and D. Statham (1999). *Women and Social Work*, London: Macmillan Press Ltd.
20. Joshi, S. C. (2004). *Hand Book of Social Work*. New Delhi: Akansha

Evaluation:

• Internal Assessment	20 marks
Attendance	05 marks
Test	05 marks
Assignment//Project	10 marks
• External Assessment	80 marks

Instruction for the Paper Setter:

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 80 marks.

- IV. The question Paper shall have Four Units corresponding to the four units of the syllabus.
- V. Three questions shall be on each unit. The students shall have to attempt two questions from each unit.
- VI. The paper setter may set short-note type questions as well, Subject to each question be set of 20 marks.

20×4= 80

marks

Pragya Kumar

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COURSE CURRICULUM

Pre-Ph.D (Social Work)

Course Code MSW-4103

Critical Review Assessment and Application of Statistical Measures

Time : 3 hours

External : 80

Credits : 4

Max marks : 100

Internal : 20

OBJECTIVES:

- To understand the application of theory in understanding research problems
- Develop knowledge the review of the relevant literature and create appropriate conceptual frame work
- Develop understanding the definition of Plagiarism and the use of Plagiarism checker in the research
- To understand the statistics package of social sciences in research

Course Outcome: The learner will develop knowledge related to the review of the relevant literature and create appropriate conceptual frameworks and will have good knowledge on Plagiarism checker in the research, ethics and software packages for the analysis on qualitative and quantitative data.

Unit-I Understanding Research Problems

- Basic Concepts: Theory Building/Synthesis, Knowledge
- Application of Theory in understanding the Research Problems
- Developing Chapterization Plan

Unit: II Review of Literature

- Purpose and Role of Review in Research
- Comparing and Contrasting Research findings
- Building Arguments and Organizing Research
- Managing information and Keeping records
- Inculcating Skills in doing Literature review
- Do's and don'ts of Reviewing Literature and Citing References

Unit: III Plagiarism and Research

- Plagiarism: Definition, Consequences, forms.
- The mechanics of writing and taking effective notes
- Citing sources and citing styles

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- Paraphrasing
- Writing bibliography and use of foot notes
- Use of plagiarism checker for your Research

Unit: IV Practical Exercise

- Preparing a Research Proposal, Use of References, Styles, Preparation and Presentation of a Dissertation, Managing Information and Keeping records. Do's & Don'ts for Report writing, Indicators of good Research.
- SPSS : Statistical package of social sciences (latest version)

Suggested Readings:

1. Argyrous, G. (2000) *Statistics for Social and Health Research: with a guide to SPSS* (London: Sage)
2. Becker, H. S. (2007). *Writing for Social Scientists* Chicago: University Chicago Press
3. Bell, J. (2010). *Doing your Research project* Buckingham, UK: Oxford University Press.
4. Berry, R. 2004: *The Research Project: How to Write It*. London and New York: Routledge.
5. Burton, S. & Steane, P. (2004). *Surviving your thesis* London: Routledge.
6. Clare, J., & Hamilton, H. (2003). *Writing Research: Transforming data into text* Edinburgh, Scotland: Churchill Livingstone.
7. Coakes, S.J., and Steed, L.G. (2001) *SPSS: Analysis without anguish: version 10.0 for Windows* (Brisbane: Wiley)
8. Craswell, G. (2012). *Writing for academic success* London: Sage Publications.
9. Gash, S. 1999: *Effective Literature Searching for Students (second edition)*. Aldershot: Gower.
10. Gibaldi, J. 2004: *MLA Handbook for Writers of Research Papers (sixth edition)*. New York: The Modern Language Association of America.
11. Hart, C. (1998). *Doing a literature review: Releasing the Social Science imagination* London: Sage.
12. Manalo, E., & Trafford, J. (2004). *Thinking to thesis: a guide to graduate success at all levels* Auckland, New Zealand: Pearson Longman.
13. Pagano, R. R. (1998) *Understanding Statistics in the Behavioral Sciences* (5th ed). Stamford, CT: Wadsworth
14. Pallant, J. (2001) *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows (Version 10)* (Allen and Unwin)
15. Rawlings, J. O., Pantula, S. G., and Dickey, A. D. (1998) *Applied Regression Analysis*. New York: Springer.

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16. SPSS Inc. (2001d) SPSS Base 11.0 for Windows User's Guide: Englewood Cliffs, NJ:Prentice Hall.
17. Swales, J. M., & Feak, C. (2000). *English in today's Rseearch world: A writing guide*. Ann Arbor: University of Michigan Press.
18. Swales, J. M., & Feak, C. (2004). *Academic writing for graduate students: Essential tasks and skills(2nd ed.)*. Ann Arbor: University of Michigan Press.
19. Tabachnick, B.G., and Fidell, L.S. (2001) *Using Multivariate Statistics*, 4th edition (Boston: Allyn and Bacon)
20. Watson, G. 1987: *Writing a Thesis: a Guide to Long Essays and Dissertations*. London: Longman.

Evaluation:

• Internal Assessment	20 marks
Attendance	05 marks
Test	05 marks
Assignment//Project	10 marks
External Assessment	80 marks

Instruction for the Paper Setter:

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 80 makes.

- VII. The question Paper shall have Four Units corresponding to the four units of the syllabus.
- VIII. Three questions shall be on each unit. The students shall have to attempt two questions from each unit.
- IX. The paper setter may set short-note type questions as well, Subject to each question be set of 20 marks.

20×4= 80

marks

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Department of Social Work
 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonapat, Haryana-131305
 Contact No. 01263-283017

Ref. no. MSW/23/414
 Dated...16.1.2023

Minutes of the Staff Council Meeting of Department of Social Work, BPSMV

The Department of Social Work, organized post graduate board of studies meeting in the office of Department of Social Work, BPSMV on 14 January, 2023. Following members were present:

1. Dr. Manju Panwar, Associate Prof. MSW (Chairperson)
2. Dr. D.P. Singh, Professor, Department of Social Work,
Punjab University, Patiala (External member)
3. Dr. Deepali Mathur Assit. Prof. MSW (Member)
4. Dr. Gian Chand, Assit. Prof. MSW (Member)

Following agendas were discussed:

1. Revised Ordinance, scheme and syllabus of M. A. Social Work with programme outcome, course specific outcomes and course outcomes was discussed and passed by the PGBOS.
2. Syllabus of Pre- PhD coursework with programme outcomes, course specific outcomes and course outcomes was discussed and passed by the PGBOS.
3. CBCS papers with course outcome were passed by the PGBOS.

The meeting ended with thanks by the chair.

Manju Panwar
 (Manju Panwar)
 (Chairperson) 14/1/2023

Deepali Mathur
 (Deepali Mathur)
 (Member) 14/1/23

Gian Chand
 (Gian Chand)
 (Member)

D.P. Singh
 (D.P. Singh) 14/01/23
 External member

Faculty of Social Sciences

Minutes of the Meeting of Faculty of Social Sciences

A meeting of Faculty of Social Sciences was held in the Office of Dean, Faculty of Social Sciences on July 07, 2023 at 10.00am to consider and approve the syllabi of Pre-PhD course work and M.A Social Work as recommended by the PGBOS in Social Work in its meeting held on 14th January 2023.

The following members were present in the meeting:

Prof. Surender Mor	Dean, Faculty of Social Sciences	(Chairperson)
Dr Kokila	Chairperson, Dept. of Geography	(Member)
Dr Manju Panwar	Chairperson, Dept. of Social Work	(Member)
Dr. Anju Rani	Department of Economics	(Member)
Dr Deepali Mathur	Dept. of Social Work	(Member)

The faculty of Social Sciences discussed the aforesaid agenda at length and approved the followings:

Agenda 1. The Faculty approved the Ordinance, Scheme & syllabi of Pre-PhD course work in Social work with minor modifications and inclusion of paper on Research and Publication Ethics (RPE) as per university guidelines. Further, the credit for each paper should be aligned with the university guidelines, i.e. 4 hours per week (for 100 marks paper). The syllabus will be implemented w.e.f. session 2023-24.

Agenda 2. The Faculty of Social Sciences approved the Ordinance, Scheme & syllabi of M.A. Social Work (I-IV Semester) with minor modifications. Further, the credit for each paper should be aligned with the university guidelines, i.e. 4 hours per week (for 100 marks paper). The syllabus will be implemented w.e.f. session 2023-24.

The meeting ended with a vote of thanks to the Chair

Anju Rani
07/07/2023
(Anju Rani)

Manju Panwar
7/7/2023
(Manju Panwar)

Deepali Mathur
7/7/23
(Deepali Mathur)

Deepali Mathur
(Deepali Mathur)

Kokila Malik
7/7/2023
(Kokila Malik)

Surender Mor
7/7/23
(Surender Mor)

BPS MAHILA VISHWAVIDYALAYA KHANPUR KALAN

Extract of Resolution No. 5 of the 20th meeting of Academic Council held on 20/06/2018.

Resolution

5. **To consider the request of Ms. Manjit Gill, a student of M.Tech (ICT) Department of Electronics and Communication Engineering to grant permission to complete pending dissertation work.**

The House considered and resolved that the request of the concerned student duly recommended by the Head of the Department be acceded to. However, the House also observed that in future specific reason be mentioned owing to which the concerned student could not submit her dissertation in a stipulated period. An undertaking be also obtained from the student that she has not done any job/course during this period.

Scheme of Examination for the 1st Semester:

Sr. No.	Course Code	Course Name	Credits L+(T+P)	Maximum Marks		
				Internal	External	Total
1	DOE 2101	Language and Linguistics	06 (05+01)	20	80	100
2	DOE 2103	British English Literature 1340-1625	06 (05+01)	20	80	100
3	DOE 2105	British English Literature 1625-1700	06 (05+01)	20	80	100
4	DOE 2107	Western Literary Theory and Criticism	06 (05+01)	20	80	100
5	FFA/FRA/FGA-100	Audit Course	03	20	80	100
Total Contact Hours/Credits			27 (23+4)	80	320	400

Scheme of Examination for the 2nd Semester:

Sr. No.	Course Code	Course Name	Credits L+(T+P)	Maximum Marks		
				Internal	External	Total
1	DOE 2102	Language Acquisition and Teaching Methods	06 (05+01)	20	80	100
2	DOE 2104	British Literature 1700-1790	06 (05+01)	20	80	100
3	DOE 2106	British Literature 1798-1830	06 (05+01)	20	80	100
4	DOE 2108	Indian Poetics	06 (05+01)	20	80	100
Total Contact Hours/Credits			24 (20+4)	80	320	400



Chairperson
Department of English
Bharatpur Singh Deo Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Scheme of Examination for the 3rd Semester:

Sr. No.	Course Code	Course Name	Credits L+(T+P)	Maximum Marks		
				Internal	External	Total
1	DOE 2201	Applied Linguistics	06 (05+01)	20	80	100
2	DOE 2203	British Literature 1837-1901	06 (05+01)	20	80	100
3	DOE 2205	British Literature 1901-1945 (Part 1)	06 (05+01)	20	80	100
4	DOE 2207	Contemporary Literary Theory	06 (05+01)	20	80	100
5	Open Elective		04 (03+01)	20	80	100
Total Contact Hours/Credits			28 (23+5)	100	400	500

Scheme of Examination for the 4th Semester:

Sr. No.	Course Code	Course Name	Credits L+(T+P)	Maximum Marks		
				Internal	External	Total
1	DOE 2202	Cultural Studies	06 (05+01)	20	80	100
2	DOE 2204	British Literature 1901-1945 (Part II)	06 (05+01)	20	80	100
3	-----	Optional Course I	06 (05+01)	20	80	100
4	-----	Optional Course II	06 (05+01)	20	80	100
5	Open Elective		04 (03+01)	20	80	100
Total Contact Hours/Credits			28 (23+5)	100	400	500

Open Elective :

Students can chose one course from the list of elective courses provided by the university.

G Phangal

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

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BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA
(A State University established under Sections 2(f) and 12 (b) of the UGC Act, 1956)
Khanpur Kalan, Sonipat, Haryana-131305

Faculty of Arts & Languages

Date: 17.10.2023

Minutes of the Meeting

A meeting of the Faculty of Arts and Languages was convened on 17.10.2023 at 2:00 pm in the Office of the Dean, Faculty of Arts and Languages, Room no. 114, Teaching Block-I, BPS Mahila Vishwavidyalaya Khanpur Kalan, Sonipat. The following members were present:

- | | |
|--|-----------------------------|
| 1. Prof. Ravi Bhushan, Dean, Faculty of Arts & Languages | Convenor |
| 2. Dr. Geeta Phogat, HoD, Dept. of English | Member |
| 3. Dr. K.J. Mathachan, HoD, Dept. of Foreign Languages. | Member |
| 4. Dr. Sudipta Sil, Asso. Prof. Dept. of Foreign Languages. | Member |
| 5. Ms. Babita, Dept. of English. | Member |
| 6. Dr. Sandeep Khandhwai, Principal, Govt. College Women, Madlauda, Panipat / Nominee. | Member |
| 7. Dr. Sangeeta Sapra, Principal, Tau Devi Lal, Govt. College, Murthal, Sonipat. | Member
(attended online) |
| 8. Registrar/ Nominee | Member Secretary |

Proceedings: At the outset, the convener welcomed the members. The following agenda was discussed:

Agenda: Approval for Open Elective Courses to be included in the Syllabus and Scheme of M.A. English Two Year Programme.

A proposal from Chairperson, Department of English has been received to include Open Elective Courses in the Syllabus and Scheme of M.A. English 2 Year Programme in consonance with other PG Programmes run by the University. It is pertinent to mention here that upto now, there has been a provision for Audit course in Russian/ French/ German for M.A. 2 Year Students.

The agenda has been duly approved by the DSC and the PGBoS of the Department Concerned.

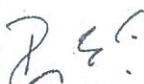
Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.


Action: Office of the Dean, Faculty of Arts and Languages.

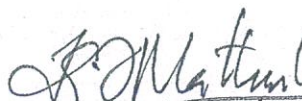
The Convenor also shared with the house the implementation of NEP 2020 in the University and the Common Curriculum Framework for undergraduate Programmes.


The members assured to extend all support to the initiative.

The meeting ended with a vote of thanks from the Convener.


Dr. Ravi Bhushan
(Convenor)


Dr. Geeta Phogat
(Member)


Dr. K.J. Mathachan
(Member)


Dr. Sudipta Sil
(Member)


Ms. Babita
(Member)


Dr. Sangeeta Sapra
(Member)

Mr. Kuldeep, Asstt. Prof. of English
(Nominee of Dr. Sandeep Khandhwai)
(Member)


Registrar/Nominee
(Member Secretary)

B.P.S. Mahila Vishwavidyalaya Khanpur Kalan, Sonipat
DEPARTMENT OF ECONOMICS

Minutes of the Meeting of Department Research Committee (DRC) in Economics

A meeting of Department Research Committee in Economics was held on 1st August 2023 at 11.00 am in the Department to discuss the following agenda item:

Agenda item:

1. To consider and approve the research synopsis of the PhD students admitted in session 2020-21 as recommended by the Department Staff Committee in its meeting (No. SC-53) dated 22th July 2023;
2. To Consider and approved the half-yearly progress of research scholars;
3. Any other item with the permission of the Chair.

The following were present in the meeting:

Prof. Surender Mor

Prof. Lakhwinder Gill

Dr. Anju Rani

Chairperson

External Member

Member


The Committee discussed the aforesaid agenda at length and approved the following:

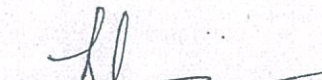
Item 1: The research synopsis of the two PhD students admitted in session 2021-22 has been approved with minor modifications as detailed below:

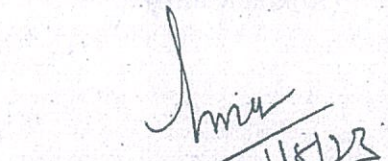
Sr. No.	Name	Title of the topic	Supervisor
1	Priyanka	STEM Education and Career Choices-What Matters? A Study of Urban Employed Women in India	Prof. Surender Singh
2	Harshika	Innovation and Environmental Quality: A Cross Country Analysis with Special Reference to India	Prof. Surender Singh

Item 2: The half yearly progress reports submitted by the students are not in the proper format. Therefore, the reports returned back to scholars for resubmission. The progress reports will be considered in the next meeting.

The meeting ended with the thanks to the chair.


(Dr. Anju Rani)


(Prof. Lakhwinder Gill)


(Prof. Surender Mor) 1/8/23

Faculty of Social Sciences

Minutes of the Meeting of Faculty of Social Sciences

A meeting of Faculty of Social Sciences was held in the Office of Dean, Faculty of Social Sciences on August 03, 2023 at 2.30pm to consider and approve the research synopsis of the PhD students admitted in session 2021-22 as recommended by the PGBOS in Economics in its meeting held on August 03, 2023.


The following members were present in the meeting:

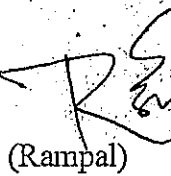
Prof. Surender Mor	Dean, Faculty of Social Sciences	(Chairperson)
Dr. Veena Garg	Principal, IHL, BPSMV	(Member)
Dr Kokila	Chairperson, Dept. of Geography	(Member)
Dr. Anju Rani	Department of Economics	(Member)
Dr Rampal	Incharge, Dept. of Political Science	(Member)
Dr. Archana Malik	Incharge, Dept. of History & Archaeology	(Member)

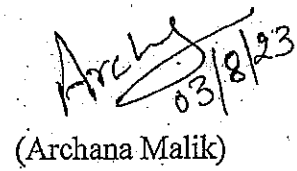
Sh. Vikas Kundu, Assistant, Academic branch attend the meeting on the behalf of nominee of Registrar.

The faculty of Social Sciences discussed the aforesaid agenda at length and approved the research synopsis of the PhD students admitted in session 2021-22 as recommended by the PGBOS in Economics in its meeting held on August 03, 2023.

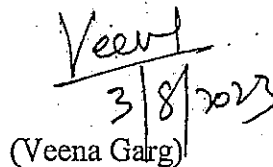
The meeting ended with a vote of thanks to the Chair

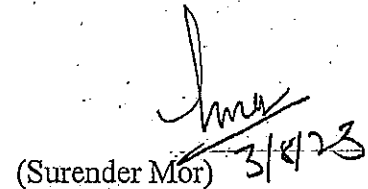

(Anju Rani) 03/08/2023


(Rampal) 3/8/23


(Archana Malik) 03/8/23


(Kokila Malik) 3/8/2023


(Veena Garg) 3/8/2023


(Surender Mor) 3/8/23

B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan, Sonipat

Department of Economics

Meeting of Post Graduate Board of Studies in Economics

A meeting of PGBOS in Economics was held on 3rd August 2023 at 11.00am to discuss the following agenda items:

1. To consider and approve the research synopsis of the Ph.D. students admitted in session 2021-22 as recommended by the Departmental Research Committee in its meeting held on 1st August 2023.
2. To consider and approve the panel of examiners for B. A. (Hons) Economics, M.A Economics, Pre-Ph.D. and Pre-Ph.D. entrance tests for session 2023-2024.
3. Any other item with the permission of the Chair

The following members were present in the meeting:

Prof. Surender Mor	Dept. of Economics, BPSMV	(Chairperson)
Prof. Inderjeet Singh	Punjabi University, Patiala	(Member)
Prof. Dinesh Kumar	Chaudhary Charan Singh University, Meerut	(Member)
Dr Kiran Devi	Dept. of Economics, BPSMV	(Member)
Dr. Anju Rani	Dept. of Economics, BPSMV	(Member)

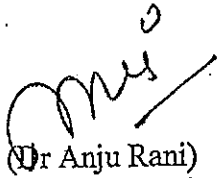
Item 1: The research synopsis of the two Ph.D. students admitted in session 2021-22 has been approved with minor modifications as detailed below:

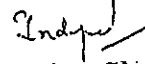
Sr. No.	Name	Title of the topic	Supervisor
1	Priyanka	STEM Education and Career Choices-What Matters? A Study of Urban Employed Women in India	Prof. Surender Singh
2	Harshika	Innovation and Environmental Quality: A Cross Country Analysis with Special Reference to India	Prof. Surender Singh

Item 2: The board approved the Panel of examiners for B. A. (Hons) Economics, M.A Economics, Pre-Ph.D. and Pre-Ph.D. entrance tests for session 2023-2024.


In any item, the PG Board approved the syllabi for Ph.D. entrance test w.e.f. 2023-2024 sessions.

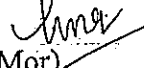
The meeting ended with the thanks to the chair.


(Dr Anju Rani)


(Prof. Inderjeet Singh)


(Prof. Dinesh Kumar)


(Dr Kiran Devi)


(Prof. Surender Mor)

Date: 21/08/2023

Minutes of the Meeting

Proceedings of the meeting of Faculty of Commerce and Management (FCM) was held on 21/08/2023 at 11:05 a.m. in the room no. 315. Department of Commerce, B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan.

The following members attended the meeting:-

- 1) Prof. Ipshta Bansal : Dean FCM
- 2) Dr. Krishan Boora : Chairperson, DMS
- 3) Dr. Bhavna Sharma : Chairperson, DOC
- 4) Dr. Pankaj Misra : Incharge, DHM
- 5) Dr. Anshu Bhardwaj : Member
- 6) Dr. Seema Malik : Member

The following decisions were taken:-

Agenda No. 1- The Committee members discussed and approved the title and synopsis for registration in Ph.D. (Commerce) Programme in respect of Ms. Tanu that was duly approved by the DRC committee meeting (20/07/2023) and PGBoS committee meeting (20/07/2023). In this regard, all the committee members of Faculty of Commerce and Management approved the same and it may be forwarded to Academic Branch for further necessary action for the registration of the above-mentioned research scholar.

Agenda No. 2:- The Committee members discussed the matter of cancellation of the admission of Ms. Priya, Ph.D. Scholar in Department of Commerce. All the committee members of Faculty of Commerce and Management discussed and approved the same as duly approved earlier during the meeting of DRC held on 09/05/2023 and the meeting of PGBoS held on 20/07/2023. The same may be sent to Academic Branch further necessary action.

Agenda No. 03:- The Commit. ee members discussed the matter of change in the pattern of Scheme of CBCS paper offered by Department of Hotel Management. In this regard, All the committee members of Faculty of Commerce and Management discussed and approved the same as duly approved by the Departmental Staff committee.

Agenda No. 4:- The Committee members discussed the matter of space allocation issue between Department of Commerce and Department of Management. All the committee members of Faculty of Commerce and Management discussed and it was resolved that, this agenda items has to be reverted to all the Department of Commerce and Management to propose concrete points with respect to sharing of resources as well as transfer resources/rooms between departments.

Meeting ended with vote of thanks to the chair.

Seema Malik
21/08/2023

Anshu
21/08/2023
Dr. Anshu Bhardwaj

Dr. Krishan Boora
21/8/23

Pankaj
21/8/23
Dr. Pankaj Misra
Ipshta
21/8/23
Prof. Ipshta Bansal

Bhavna
(Dr. Bhavna Sharma)
Chairperson, Department of Commerce

DEPARTMENT OF COMMERCE

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur, Katra
(Sonapat) Haryana-131305

Date: 29/11/2022

Minutes of Meeting

Research

Proceedings of the meeting of Departmental Staff Committee (DRC) held on 29/11/2022 at 11:30 am

in the room of Chairperson, Committee.

The following members of Departmental Research Committee were present:

- | | |
|------------------------|-------------------------|
| 1) Dr. Bhavna Sharma | Chairperson |
| 2) Prof. Usha Arora | Outside External Expert |
| 3) Prof. Ritu Lehal | Outside External Expert |
| 4) Dr. Ishani Patharia | Member |

Following issues were discussed in the Meeting:

I. Monitoring the progress reports of Research Scholars

With reference to the point no. 9 of Ph.D. ordinance, monitoring progress reports of three research scholars were discussed:

- (i) **Ms. Anshu:** On the basis of recommendations of the supervisor regarding dissatisfactory progress and reply of the research scholars on the show cause notice issued by the department, the committee took a very serious note of non-serious attitude of the candidate towards the research work. However, the committee is of the opinion that, three months may be given to her as a last chance as requested by the candidate. In case of further dissatisfactory work, no request from the candidate regarding this will be considered.
- (ii) **Ms. Reena:** On the basis of recommendation of the supervisor, the candidate is allowed to continue her research work.
- (iii) **Ms. Priya:** On the basis of recommendation of the respective supervisor, the committee is of the opinion that candidate may be allowed to continue her research work. However, the committee is further of the opinion that a warning must be issued to the scholar to complete her research work well in time as prescribed in the Ph. D. ordinance of BPSMV.

2. Allocation of supervisor to Ms. Tanu:

As per the Ph. D. ordinance point 3.5, the allocation of supervisor to Ms. Tanu was discussed in the DRC and it was resolved that Dr. Ishani Patharia is appointed as her supervisor.

3. The meeting ended with vote of thanks.

Prof. Usha Arora

Prof. Ritu Lehal

Dr. Ishani Patharia

Dr. Bhavna Sharma

**DEPARTMENT OF COMMERCE
BRABATI PLOOL BHOJBIHARILAL VISHWAKSIPYALAYA**

Date: 03/04/2023

Minutes of the Meeting of the Departmental Level PLOOL

Presented at the meeting of the PLOOL, Department of Commerce (DPCOM) of the Department of Commerce, B.P. Vishwavidyalaya, Bhubaneswar, Odisha, India, on 03/04/2023. The meeting was held in a hybrid mode (Physical/Present and Online/Zoom) and the following members were present:

The following members were present in the meeting:

- | | |
|-------------------------------|--|
| (i) Dr. Ishani Patharia | Chairperson, Department of Commerce |
| (ii) Dr. Anand Prasad | Member |
| (iii) Prof. Dr. Luxmi Malodia | Outside Expert |
| (iv) Prof. Dr. Harna Singh | Outside Expert |
| (v) Prof. Dr. Harna Singh | Dean, Faculty of Commerce (B.P. Vishwavidyalaya) |

The following resolutions were passed:

Item No. 1: It was decided by the External Expert and Dean of Faculty of Commerce that conducting a PLOOL meeting only for a single agenda is not a good practice. In future, meeting may be called online if such cases to save the university resources/expenditure with the prior approval of members.

Item No. 2: The PLOOL considered the synopsis entitled "E-cart abandonment and re-targeting strategies for improving behavioural intention: A study of online shoppers in India" presented by Ms. Tanu, Ph. D. research scholar attached to Dr. Ishani Patharia. It was resolved to approve the topic for registration for the degree of Doctor of Philosophy in Commerce after incorporating the following changes in the synopsis:

- 1) Adding a research objective to find the effect of demographic variables on e-cart abandonment and online shoppers' behavioural intention.
- 2) Adding tentative hypotheses and tentative conceptual model in the synopsis.
- 3) Defining the sample collection area to the national capital region, India.

Further, the synopsis will also be circulated via email to members from affiliated colleges as per constitution for approval.

The meeting ended with a vote of thanks.

Ishani Patharia
03/04/2023
Dr. Ishani Patharia
Member (Supervisor)

Bhavani Sharma
03/04/2023
Dr. Bhavani Sharma
Member (Chairperson)

Satish Kumar
Satish Kumar

Harna Singh
03/04/2023
Prof. (Dr.) Harna Singh
Dean, FGM (Special Invitee)
Outside expert

Luxmi Malodia
03/04/2023
Prof. (Dr.) Luxmi Malodia
DSC
Outside expert

Harna Singh
Prof. (Dr.) Harna Singh

Harna Singh



ANNEXURE-11
Annexure-I
75
Azadi Ka
Amrit Mahotsav

HARYANA STATE HIGHER EDUCATION COUNCIL

No.:- 3/49-2021 Adv./HSHEC

Dated:- 06.03.2023

To

The Vice Chancellor
State Funded University
Haryana

Sub.:- Introduction of Short Term Certificate/Diploma Courses

Respected Vice Chancellor
Namaste

Greetings from Haryana State higher Education Council

As you are already aware, Haryana Govt. is committed to implement NEP-2020 in letter and spirit to achieve most of the targets by 2025. The policy has also envisioned to allow HEIs to conduct Short Term Certificate Courses in various skills including soft skills.

Haryana State Higher Education Council therefore had constituted a committee to make recommendations in regard to introducing Short Term Certificate/Diploma Courses in colleges which are employment/self employment oriented keeping in view the spirit of NEP-2020.

The committee comprised of the following:-

1. Dr. Desh Bandhu, Principal (Retd.) S.D. College Ambala Cantt.
2. Dr. Sushma Arya, Principal (Retd.) DAV College Yamunanagar
3. Dr. Archana Mishra, Principal, Govt. PG College Panchkula
4. Dr. Rishi Pal, Principal (Retd.) Govt. College, Kaithal
5. Dr. Chander Shekhar, Principal, Dyal Singh College Karnal

The report was submitted to the State Govt. where under the following was proposed for consideration:-

1. Department of Higher Education may share this report with Govt., Govt. aided colleges, and Universities for their consideration
2. The Institutions/Universities be encouraged to introduce these courses along with regular stream. For this the Institutions may work out details, implementation plan and share with the HSHEC and Department. No formal approval should be mandatory in such courses.
3. The Institutions should be given the freedom to shortlist existing faculty who will impart instructions over and above their defined workload with

additional remuneration to be worked out at Institutional level, if not possible, then contract faculty for a fixed duration or modular approach and decide the mode of payment as per coverage of course content

4. The Institutions would be given the freedom to decide course fee with concessions to deserving students who are not in a position to pay
5. The entire income be kept in a separate account and the surplus be utilized for strengthening the facilities in the concerned courses
6. Preparation should start from the current academic session and the courses be introduced with all readiness from next academic session

As per orders of State Govt. the report was shared with DGHE & TE and the Department of Higher Education vide memo no. DHE-010009/104-2022 Co (1) dated 07.12.2022 has forwarded it to you for necessary action.

It is hoped that your Institution might have initiated the action accordingly.

It is requested that in case the process has commenced, the Council may kindly be kept informed.

This is also being shared with the Principals of Govt. as well as Govt. Aided Colleges.

Regards

K.K. Agnihotri
K.K. Agnihotri
Advisor, HSHEC

Endst. No.:- Even

Dated:- 06.03.2023

A copy for information with reference to memo no. DHE-010009/104-2022 Co (1) dated 07.12.2022 is forwarded to Director higher Education, Haryana.

K.K. Agnihotri
K.K. Agnihotri
Advisor, HSHEC

BHAGAT PHOOL SINGH MAHILA VISHWAVIDYA
Khanpur Kalan, Sonapat, Haryana (India) Pin- 1313
(Established by the State Legislature Act 31 of 2006)
('B++' Grade, NAAC Accredited)

Minutes of meeting held on dated 14/07/2023.

In connection with the start of skill development training programme in BPS Mahila Polytechnic Khanpur Kalan.

Meeting was held to start skill development programme in polytechnic on dated 14/07/2023 in the office of Principal BPS Mahila Polytechnic at 10:00 AM.

Following officials were present in above said meeting.

1. Principal Polytechnic – Convenor
2. Mr. Kuldeep Singh A/R nominee of Finance officer
3. ~~Dr.~~ Anshu Bhardwaj Nodal officer centre for incubation
4. Ms. Babita Malik HOD LIS
5. Sh. R S Kadian Lect. DPharmacy
6. Mr. Satyajit Jr. Consultant CDTP Scheme

Following points were discussed in details.

1. Ms. Kiran Jindal Principal polytechnic explain the visibility and need of the project. Polytechnic is running different technical trades. In addition to technical courses, polytechnic is also running CDTP scheme which is funded by MSDE department through NITTTR Sec-26, Chandigarh and some trainers are being appointed under this scheme. It is proposed by principal polytechnic that these faculty members can be engaged for training in this scheme by paying extra remuneration.

2. ~~Dr.~~ Anshu Bhardwaj suggest that she will provide the model documents and the DPR's and guideline with incubation centre will help to finalise the brief plan to start this scheme.

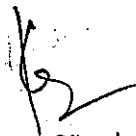
3. It is unanimously proposed that Mr. Satyajit Junior consultant in CDTP scheme having experience of 9 years in the above said scheme. Hence it is proposed that he may be assigned the duties of overall in charge of the scheme.

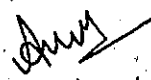
4. Smt. Babita Malik suggest that duties to finalise the scheme (detailed proposed) and detailed draft for the scheme can be finalised under the guideline of ~~Mr.~~ Anshu Bhardwaj in charge incubation centre and Sh. R S Kadian Mr. Satyajit will assist them:

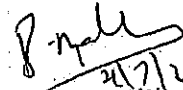
5. Sh. Kuldeep Singh (nominee of FO) suggested to download the complete scheme from the website to finalise the tentative ~~balance sheet~~ ^{budget}, Man power required, qualification of trainers and mode of hiring man powers, duration of the course, its certification etc, He also suggest that Mr. Satyajit and Sh. R S Kadian Shall go through the scheme proposed by Haryana state Higher Education Council in detail.

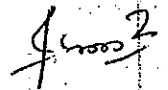
The meeting ended with all of thanks.

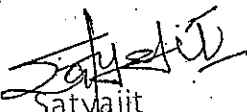
15/07/23
Principal
Convenor


Kuldeep Singh
Nominee of FO


Anshu Bhardwaj
Incubation centre


Babita Malik
HOD LIS


R S Kadian
Lecture D P


Satyajit
CDTP

Bhagat Phool Singh Mahila Vishwavidyalaya

BPS Mahila Polytechnic Khanpur Kalan,
Sonepat, Haryana (India) Pin- 131305


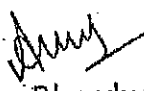
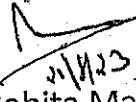
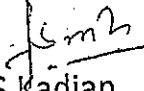
Minutes of meeting held on dated 11.08.2023 in connection with introduction of skill development training programme .

Meeting was held on dated 11.08.2023 at 11.00 AM in the Principal office to discuss and finalise the proposal to start the skill development training in BPS Mahila Polytechnic Khanpur kalan.

Following official were present in the meeting.

1. Mrs . kiran Jindal Principal / Convenor
2. Sh. Ravi Dutt F/O Member
3. Dr. Anshu Bhardwaj Nodal officer incubation Centre (Special invitee)
4. Mrs . Babita Malik HOD LIS Member
5. Sh. RS Kadian Lect. D Pharmacy Member

1. The proposal was discussed in the meeting and Sh. RS Kadian Suggest to start two trades as pilot project Data entry operator (computer) & Short hand typing (Hindi) as the trainers in above said two trades are available in CDTP . Their services can be utilised in this Scheme and Mr. Satyajit who is working as Jr. consultant in CDTP can be assigned the duty of Consultant / Coordinator in this Scheme and over all Incharge of the scheme.
2. The detailed proposal along with the curriculum of two trades were placed in meeting and all members of the committee have unanimously recommended the proposal and it was decided to put up the proposal to the higher authority for approval .

5-11/8/23 Principal	 Ravi dutt	 Anshu Bhardwaj	 Babita Malik	 RS Kadian
Convenor	F/O.	Incubation centre	HOD LIS	Lecture D PH

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**BPS MAHILA VISHWAVIDYALAYA,
KHANPUR KALAN
BPS MAHILA POLYTECHNIC**

**Skill Development Training Programme Under
University Administration (SDTP)**

Detailed proposal report to start Skill Development Training Programme as per the guideline of Haryana state Higher Education Council. (Ref. letter No. 3/49-2021 Adv. / HSHEC dated 06/03/2023).

Need: - In order to develop unemployed rural and urban youth for self & wage employment, The training programmes are selected on need basis and that will provide employable/ self employable skills. The purpose of skill development is to create skilled and knowledge based manpower by empowering technically so that they can earn a suitable livelihood. The training programme are selected, keeping in view the market requirement. These courses are one year duration keeping in view the local requirements.

Following two courses are selected of one year duration with effect from current session as a pilot project and after assessment of viability of the project other courses can also be introduce on later stage.

Name of Course	Duration of the Course
1. Data Entry Operator	One Year
2. Typing & Short Hand (Hindi)	One Year

Salient feature of skill development programme:-

- I. The skill development programmes chosen for training are based on need assessment survey and felt need of the locality.
- II. The skill programs offered are flexible and without precondition of age, sex and prerequisite qualification should atleast matriculate.
- III. To facilitate self-employment in the service sector, emphasis shall be on multi-skill training while for employment in production centre's, training shall be given either on specialized designated skill or multi-trades skills depending on needs and requirements.
- IV. Infrastructure and skill resources shall be shared with polytechnic, Engineering collage and Incubation cell. The institution shall develop a proper feedback mechanism to know the post-training status of the trainees specificall with regard to their getting self/wage employment.

Kindel
21/8/23

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Remuneration for Staff :-

SR.NO	Post	No.	Amount (Rs.)
1.	Principal (Chief-Coordinator)	01	1000/-
2.	Supervisor / Coordinator	01	25000/-
3.	Trainers	02	15000/-
4.	Helper	01	1000/-

(Remuneration for staff will be met out to the income receive/receipt from the trainees)

Minimum Qualification Supervisor/ Coordinator and trainers :-

The minimum educational qualifications for the post of Supervisor/ Coordinator are as follows:

First class Diploma in any branch of Engineering or Technology from State Board of Technical Education of any State Government, with 5 years experience in Skill development project related work.

Trainers:

Person should possess the competency/skill required for imparting training programs in the concerned field and should be ITI pass or undergone training programme from some recognized institution under State/Central or other equivalent training programme in related area of imparting training.

Opening of Account: - The entire income shall be kept in a separate account. Account shall be opened in PNB Khanpur Kalan. Principal Polytechnic shall be authorized to maintain the account and account shall be available.

It is also proposed to start the two trades as pilot project during the current session.

15/01/23
21/01/23

B. Malik

Bo

J. M. B.

Expenses

Remuneration for Chief Coordinator/Jr. Consultant/Trainer
Trainers already working in CDTP Present in Scheme

1. Remuneration for Chief Coordinator Rs. 1000/- PM
2. Remuneration for Jr. Consultant present in scheme coordinator Rs. 25000/- PM
3. Data Entry Operator-Trainer (1) Rs. 15000/- PM
4. Stenography-Hindi -Trainer (1) Rs. 15000/- PM
5. Helper (1) Rs. 1000/- PM

Proposed Remuneration for staff	Designation	Salary
1. 1000 x12	Chief Coordinator	= Rs. 12000/- PA
2. 25000X12	Consultant/coordinator	= Rs. 300000/- PA
3. 15000x12	Trainer (1)	= Rs. 180000/- PA
4. 15000x12	Trainer (1)	= Rs. 180000/- PA
5. 1000x12	Helper (1)	= Rs. 12000/- PA
Stationary and office expenses		= Rs. 50000/- PA
Raw material equipments and recurring		= Rs. 50000/- PA
Total amount for the academic session 2023-2024		= 784000/- PA

15.10.23
21/8/23

J. Man

- 131 -
Dr

Person 2

Proposed statement showing income & expenditure during the academic session 2023-2024 (Session period 1 September to 30 August 2024) is as under:-

Income	Expenditure
Student to be trained one year	Salary
in 2 Trades (Proposed)	1. Chief Coordinator 1000x12 = 12000/-
30x2 Batch x 2 Trades = 120	2. Coordinator 25000x12 = 300000/-
Student fee. 900/- per month	3. Trainer 15000x2x12 = 360000/-
Student Fee. 10800/- per Year	4. Helper 1000x12 = 12000/-
Total Income from fees -	5. Stationary and office expenses = 50000/-
1296000/-	6. Raw material & Expenses (recurring) = 50000 /-
	Surplus = 512000/-
Rs. = 1296000/-	Rs. = 1296000/-

Note :- There will be 30 students in each batch no course will be started unless otherwise at list 25 students get enrolled.

minimum trainee in one batch will be 30 students in each trade and the surplus to be utilized for strengthening the facilities in concerned courses.

15/12/23

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Syllabus for Diploma course in Data Entry Operator of One year duration

Course Name	Duration of the Course	Maximum Marks				Duration of Exam
		Theory	Lab Based Practical	Typing Practical	Total	
Data Entry Operator	One Year (450 hours)					3 Hours
		50	50	50	150	
Unit size (No of Student)	Entry Qualification					
30	Passed 10 th class					

Minimum – minimum strength of trainees for which the training program will be started should be 25 for batch of 30 students .

Structure of the Course:

Paper1: Practical Examination (Lab Based Practical)

Paper2: Theory Examination

Paper3 Typing Practical

Scheme of Examination : There will be a practical Examination of 50 Marks and Theory Examination of 50 Marks & Typing practical 50 Marks.

Table of Specification

Fundamentals of Computer

Unit – I Introduction to Computer

- History of development of computers
- Computer system concepts
- Characteristics
- Capabilities and limitations
- Generations of computers.

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- Basic components of a computer system – Control Unit, ALU, I/ O Devices, memory – RAM, ROM, EPROM, PROM, Flash Memory and other types of memory.

Unit – II Storage Devices

- Storage fundamentals – Primary Vs Secondary
- Data Storage and Retrieval methods – Sequential, Direct and Index Sequential.
- Various Storage Devices – Magnetic Tape, Magnetic Disks, Cartridge Tape, Data Drives, Hard Disk Drives, Floppy (Winchester Disk), Disks, Optical Disks, CD, VCD, CD-R, CD-RW, Zip Drive, DVD, SVCD.

Unit – III Computer Software

- Types of Software – System software, Application software, Utility Software, Demoware, Shareware, Freeware, Firmware, Free Software.
- Operating Systems – Functions, Types – Batch Processing, Single User, Multi User, Multiprogramming, Multi-Tasking.
- Programming languages – Machine, Assembly, High Level, 4 GL.
- Data representation in computers.
- Number System of computers – Binary, Octal, Hexa Decimal – Representation & their conversion.
- Coding System – ASCII, BCD, and EBCDIC etc.
- Computer Viruses

Computer organization

UNIT-I Basic Functional units of Computers

Functional units, basic Operational concepts; Bus structures. Software, Performance, Multiprocessors, Multicomputer. Data Representation: Signed number representation, fixed and floating point Representations. Computer Arithmetic: Addition and subtraction, multiplication Algorithms, Division Algorithms. Error detection and correction codes.

2/18/23

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UNIT- II Register Transfer Language and Micro Operations

RTL- Registers, Register transfers, Bus and memory transfers. Micro operations: Arithmetic, Logic, and Shift micro operations, Arithmetic logic shift unit. Basic Computer Organization and Design: Computer Registers, Computer instructions, Instruction cycle. Instruction codes, Timing and Control, Types of Instructions: Memory Reference Instructions, Input – Output and Interrupt.

UNIT- III Central Processing Unit organization

General Register Organization, Stack organization, Instruction formats, Addressing modes, Data Transfer and Manipulation, Program Control, CISC and RISC processors Control unit design: Design approaches, Control memory, Address sequencing, micro program example, design of CU. Micro Programmed Control.

UNIT- IV Memory Organization

Semiconductor Memory Technologies, Memory hierarchy, Interleaving, Main Memory- RAM and ROM chips, Address map, Associative memory-Hardware organization. Match logic. Cache memory-size vs. block size, Mapping functions-Associate, Direct, Set Associative mapping. Replacement algorithms, write policies. Auxiliary memory Magnetic tapes etc B.Tech (CSE) R-20 Malla Reddy College of Engineering and Technology (MRCET)

UNIT -V Input –Output Organization

Peripheral devices, Input-output subsystems, I/O device interface, I/O Processor, I/O transfers–Program controlled, Interrupt driven, and DMA, interrupts and exceptions. I/O device interfaces – SCII, USB Pipelining and Vector Processing: Basic concepts, Instruction level Parallelism Throughput and Speedup, Pipeline hazards.

Operating System and fundamentals

Unit – I Disk Operating System (DOS)

- Introduction, History & Versions of DOS DOS basics
- Physical structure of disk, drive name, FAT, file & directory structure and naming rules, booting process, DOS system files. Basic DOS Commands
- Internal – DIR, MD, CD, RD, Copy, DEL, REN, VOL, DATE, TIME, CLS, PATH, TYPE etc.

35-101
21/8/23

B. N. Reddy

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Jan 28

- External – CHKDSK, PRINT, DISKCOPY, DOSKEY, MOVE, LABEL, FORMAT, SORT, FDISK, BACKUP, EDIT, MODE, ATTRIB, HELP, SYS etc
- Executable V/s Non executable files in DOS Unit –II Windows
- Windows concepts, features, windows structure, desktop, taskbar, start menu, my computer, Recycle Bin.
- Windows Accessories – Calculator, Notepad, Paint, WordPad, Character map.
- Windows Explorer – Creating folders and other Explorer facilities.
- Entertainment – CD Player, DVD Player, Media Player, Sound Recorder, Volume Control. Unit – III Linux
- Introduction, History & Versions of Linux Linux basics
- Physical structure of disk, drive name, FAT, file & directory structure and naming rules, booting process, Linux system files. Basic Linux Commands
- Internal – LS, Make Directory, CD, CP,MB, DEL, REN, DATE, TIME, CLEAR, etc.
- Executable V/s Non executable files in Linux Unit –IV Microsoft Office (MS Word, Excel, Power Point) Word Processing: MS Word
- Introduction to Word Processing
- Introduction to MS Word: features, Creating, Saving and Opening documents in Word, Interface, Toolbars, Ruler, Menus, Keyboard Shortcut.
- Editing a Document – Moving, Scrolling in a document, Opening Multi document windows, Editing Text – Selecting, Inserting, deleting, moving text.
- Previewing documents, Printing documents – Print a document from the standard toolbar, Print a document from the menu, shrinking a document to fit a page, Reduce the number of pages by one.
- Formatting Documents: Paragraph formats, Aligning Text and Paragraph, Borders and Shading, Headers and Footers, Multiple Columns. Worksheet: MS Excel
- Worksheet basics

Kindel
21/8/23

Dr. Meel

-136
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Asm 2

- Creating worksheet, entering data into worksheet, heading information, data, text, dates, Cell formatting values, saving & protecting worksheet.
- Opening and moving around in an existing worksheet
- Toolbars and Menus, keyboard shortcuts 5
- Working with single and multiple workbook – coping, renaming, moving, adding and deleting, coping entries and moving between workbooks
- Working with formulas & cell referencing. - Autosum - Coping formulas - Absolute & Relative addressing • Working with ranges – creating, editing and selecting ranges, sorting.
- Formatting of worksheet – Auto format, changing – alignment, character styles, column width, date format, borders & colours, currency signs.
- Previewing & Printing worksheet – Page setting, Print titles, Adjusting margins, Page break, headers and footers.
- Graphs and charts – using wizards, various charts type, formatting grid lines & legends, previewing & printing charts. Presentation Graphics: MS Power Point
- Features and various versions
- Creating presentation using Slide master and template in various colour scheme
- Working with different views and menus of power point
- Working with slides – Make new slide, move, copy, delete, duplicate, lay outing of slide, zoom in or out of a slide.
- Editing and formatting text: Alignment, editing, inserting, deleting, selecting, formatting of text, find and replace text.
- Bullets, footer, paragraph formatting, spell checking.
- Printing presentation – Print slides, notes, handouts and outlines.
- Inserting Objects – Drawing and inserting objects using Clip Art's pictures and charts.
- Custom Animation – slide transition effects and other animation effect

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Sam B

Syllabus for Typing and shorthand (Hindi) of One year duration

Course Name	Duration the Course	Hours	Maximum Marks				Duration of Exam
			Shorthand Theory	Shorthand Practical	Typing Practical	Total	
Typing and shorthand Hindi	One Year	450					3 Hours
			50	50	50	150	3 Hours
Unit size (No of Student)	Entry Qualification						
30	Passed 10Th class						

Introduction: Stenography is job oriented course. It is known as Dual Art. It is unique combination of Shorthand and Typewriting. In other words Shorthand plays a predominant role in for establish a career. Steno is a kind of coded language which helps an individual to write long length translation into a small word or in the small length. Basically, the word steno can be described as the process writing in shorthand. Steno is only where spoken word have been documented as such Stenographer records the spoken words of the individual into in a coded language with the speed of other individual spoken speed in the coded language and after that decode into original language i.e. Hindi or English.

Objective: This course is very much in demand for its practical utility in the professional world. So the syllabus has been designed to equip the students to impart sufficient knowledge. Training is given to develop their Steno typing skills and to obtain computer typing skills which enable them after getting training in this field, will not face difficulty in getting suitable jobs.

Programme Outcome:

There is a high demand for the stenographer in every department and every field irrespective of being public sector or private sector. Stenographer are primarily employed by the courts and by those in the legal profession because court official and

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lawyers need an exact transcript to use during the trials and also can get the job in banks, Excise, High Court Para Military, Ministry of Home-Affairs, Indian Railways, Parliament Lok Sabha and Rajya Sabha. He / She can join any organization as a Stenographer, as a personal assistant, and also can be join as a reporter in any newspaper or magazine industry. Newspaper reporters can much more be benefited from the skill of stenography. They can write down their reports in shorthand on the spot of any incident or happening and latter can translate on computer from the shorthand notes their report in fully.

Structure of the Course:

Paper1: Practical Examination (Shorthand)

Paper2: Theory Examination (Shorthand)

Paper3 Typing Practical

Scheme of Examination : There will be a practical Examination of 50 Marks and Theory Examination of 50 Marks & Typing practical 50 Marks.

K. S. D. S.
21/8/23

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A. S.

A. S. 2

- अध्याय-20 विद्वान् (विद्वान्) का प्रयोग
- अध्याय-21 विद्वान् (विद्वान्) का प्रयोग
- अध्याय-22 समास रखाक्षरों में अक्षर
- अध्याय-23 उभयसंग एव प्रत्यय
- अध्याय-24 गति बदलने की विधि
- अध्याय-25 सख्यां, मत्वा, माप, तोल एवं अर्थ
- अध्याय-26 शब्द द्विवचन की प्रयोगिक अर्थ
- अध्याय-27 आक्षेप रखाक्षर
- अध्याय-28 सामान्य प्रयोग विभाग शब्द गृहीत (तथा) दिने
- अध्याय-29 व्यावहारिक आशुलिपि अभ्यास
- अध्याय-30 गति अभ्यास

संज्ञानिक अभ्यासों की कुंजी

5.12.23
21/8/23

A. N. S.

A. N. S.

A. N. S.

विषय-सूची

- प्रशिक्षार्थियों के लिए निर्देश.....
- अध्याय- 1 व्यंजन (Consonant) रेखाएं.....
- अध्याय- 2 व्यंजन रेखाओं का मेल (Joining).....
- अध्याय- 3 स्वर (Vowels) संकेत.....
- अध्याय- 4 दो व्यंजनों के बीच स्वर.....
- अध्याय- 5 अनुरवार, बहुवचन तथा य व का प्रयोग.....
- अध्याय- 6 शब्द चिह्न एवं विराम चिह्न.....
- अध्याय- 7 वैकल्पिक रेखाक्षर.....
- अध्याय- 8 दिवध्वनिक और त्रिध्वनिक स्वर.....
- अध्याय- 9 स वृत्त (Circle) तथा "सं" का प्रयोग.....
- अध्याय- 10 प्रारंभिक तथा अंतिम बड़ा वृत्त.....
- अध्याय- 11 सार्वनाग तथा विभक्तियों का मेल.....
- अध्याय- 12 वाक्यांश (Phraseography).....
- अध्याय- 13 व्यंजन "ह" के अन्य प्रयोग तथा अर्ध वृत्त - "व".....
- अध्याय- 14 स्त-स्तर लूप.....
- अध्याय- 15 प्रारंभिक हुक र तथा ल.....
- अध्याय- 16 अंतिम हुक न, य, व, फ तथा अंतिम बड़ा हुक शन.....
- अध्याय- 17 हुक और वृत्त का मेल.....
- अध्याय- 18 यागिक व्यंजन (Compound Consonant).....
- अध्याय- 19 आधा (Halving) करने का नियम.....

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21/8/23

R. Mal

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R. Mal

- अध्याय-20 दूगुणा (Doubling) करन का नियम
- अध्याय-21 विद्, "कम-काम", "कन-कान" "तथा" स्वयं वृत्त
- अध्याय-22 समान रेखाक्षरों में भेद
- अध्याय-23 उपसर्ग एवं प्रत्यय
- अध्याय-24 गति बढ़ाने की विधि
- अध्याय-25 संख्या, मुद्रा, माप, तौल एवं अन्य संकेत
- अध्याय-26 शब्द चिहनों की सामेकित सूची
- अध्याय-27 संक्षिप्त रेखाक्षर
- अध्याय-28 सामान्य पदनाम, विभाग, शहर, महीने तथा दिन
- अध्याय-29 व्यावहारिक आशुलिपि अभ्यास
- अध्याय-30 गति अभ्यास
- सांद्वांतिक अभ्यासों की कुंजी

Page 2

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21/8/23

P. Mal

A

Syllabus of Hindi Typing Course Objectives

- To get a basic understanding of the common techniques of the typing and the new job opportunities in private and public sector.
- Enables the students a good standard of literacy, numeracy and IT skills.
- Be familiar with the theoretical foundations of the Hindi Typing.
- Students who have successfully completed the course should be able to type in Hindi independently in their personal and professional life.

Module 1

An introduction to information technology and communication.

Basic training in Hindi Typing: Home Row Keys practice, Practice of Shift + Home row letters, Practice upper row letters, Practice Shift + upper row letters.

Module 2

Practice of Bottom Row letters, Practice of Shift + Bottom Row letters. Practice of number row letters, Practice of Shift + number row letters. Practice all exercise and remember the key and corresponding character.

Module 3

Practice of special letters of Hindi font Kurti Dev 010. Practice of Paragraph, Application/Letter writing. Project Work

Outcomes of Hindi Typing Course

To enable the students to use Hindi language correctly and effectively, they have to be able to type Hindi personally and professionally. This course helps the students who seeking jobs like Hindi Officer, Hindi Data entry Operator, Translator, Hindi Correspondent, Editor, Journalist etc

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21/8/23

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DEPARTMENT OF COMMERCE
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan

Minutes of the Meeting

Date: 21/08/2023

Proceedings of the meeting of Faculty of Commerce and Management (FCM) was held on 21/08/2023 at 11.05 a.m. in the room no. 315, Department of Commerce, B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan.

The following members attended the meeting:-

- | | |
|-------------------------|-------------------|
| 1) Prof. Ipshita Bansal | Dean FCM |
| 2) Dr. Krishan Boora | Chairperson, DMIS |
| 3) Dr. Bhavna Sharma | Chairperson, DCC |
| 4) Dr. Pankaj Misra | Incharge, DHM |
| 5) Dr. Anshu Bhardwaj | Member |
| 6) Dr. Seema Malik | Member |

The following decisions were taken:-

Agenda No. 1:- The Committee members discussed and approved the title and synopsis for registration in Ph.D. (Commerce) Programme in respect of Ms. Janya that was duly approved by the DRC committee meeting (dated 29/05/2023) and PGBoS committee meeting (dated 20/07/2023). In this regard, all the committee members of Faculty of Commerce and Management approved the same and it may be forwarded to Academic Branch for further necessary action for the registration of the above-mentioned research scholar.

Agenda No 2:- The Committee members discussed the matter of cancellation of the admission of Ms. Priya, Ph.D. Scholar in Department of Commerce. All the committee members of Faculty of Commerce and Management discussed and approved the same as duly approved earlier during the meeting of DRC held on 29/05/2023 and the meeting of PGBoS held on 20/07/2023. The same may be sent to Academic Branch for further necessary action.

Agenda No. 03.- The Committee members discussed the matter of change in the pattern of Scheme of CBCS paper offered by Department of Hotel Management. In this regard, All the committee members of Faculty of Commerce and Management discussed and approved the same as duly approved by the Departmental Staff Committee.

Agenda No. 4- The Committee members discussed the matter of space allocation issue between Department of Commerce and Department of Management. All the committee members of Faculty of Commerce and Management discussed and it was resolved that, this agenda items has to be reverted to all the Department of Commerce and Management to propose concrete points with respect to sharing of resources as well as transfer of resources rooms between departments.

The meeting ended with vote of thanks to the chair

Dr. Seema Malik
Dr. Bhavna Sharma

Dr. Anshu Bhardwaj

Dr. Krishan Boora

Dr. Pankaj Misra
Prof. Ipshita Bansal



Office hospitality <officehospitality@gmail.com>

Sub: To consider and approve change in the pattern of scheme of CBCS paper offered by the department of hotel management.

4 messages

Office hospitality <officehospitality@gmail.com>

Sat, Aug 19, 2023 at 12:29 PM

To: Manjula Chaudhary <manjulachaudhary@gmail.com>, ranfateh@gmail.com, Dean FCM <deanfcm2020@gmail.com>, ibansalindia@gmail.com, pankaj misra <pankajchefbpsmv@gmail.com>

Cc: "dohm@bpswomenuniversity.ac.in" <dohm@bpswomenuniversity.ac.in>, Office hospitality <officehospitality@gmail.com>

Respected Sir/ Madam

Namastey

Agenda: To consider and approve change in the pattern of scheme of CBCS paper offered by the department of hotel management.

In the year 2017-18 the scheme of CBCS paper offered by the department of Hotel Management i.e., The Great Indian Cuisine for the students of other departments of the university. The paper was bifurcated into 03 parts in the proportion of 20:20:60 (20 for internal, 20 for external and 60 for theory examination) and approved by the Academic Council also.

Since, the entire university is following the scheme of 20: 80: (20 for internal and 80 for external) and as the software of the exam branch has been developed accordingly. As, this paper has three components which are problems for uploading the marks and declaration by the examination branch.

Hence, in order to resolve the matter, the council hereby proposes to change the scheme of the above cited paper as per the university scheme i.e. 80:20 (External: Internal) despite 60:20:20.

The copy of the constitution of UGBoS and the proceeding of the staff council is enclosed herewith (PFA).

All the members of the UGBoS are humbly requested to approve the agenda through circulation.

2 attachments

 UGBoS.pdf
693K Proceeding of the meeting_19.08.2023.pdf
507K

Manjula Chaudhary <manjulachaudhary@gmail.com>

Sat, Aug 19, 2023 at 6:29 PM

To: Office hospitality <officehospitality@gmail.com>

Approved pl

On Sat, 19 Aug, 2023, 12:29 Office hospitality, <officehospitality@gmail.com> wrote:
Respected Sir/ Madam

Namastey

- 145 -

35 AM

Gmail - Sub: To consider and approve change in the pattern of scheme of CBCS paper offered by the department of hotel man

office hospitality <officehospitality@gmail.com>

Manjula Chaudhary <manjulachaudhary@gmail.com>, ranfateh@gmail.com, ibansalindia@gmail.com, pankaj misra
n@chef, smv@gmail.com>, dohm@bpswomenuniversity.ac.in

Approved as proposed.

Regards,

Dean FCM

On Sat, Aug 19, 2023, 12:29 PM Office hospitality <officehospitality@gmail.com> wrote:

Respected Sir/ Madam

Namastey

Agenda: To consider and approve change in the pattern of scheme of CBCS paper offered by the department of hotel management.

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Hence, in order to resolve the matter, the council hereby proposes to change the scheme of the above cited paper as per the university scheme i.e. 80:20 (External: Internal) despite 60:20:20.

The copy of the constitution of UGBoS and the proceeding of the staff council is enclosed herewith (PFA).

All the members of the UGBoS are humbly requested to approve the agenda through circulation.

- RSC -

PROCEEDINGS OF THE STAFF COUNCIL TO CONSIDER AND APPROVE
CHANGE IN THE PATTERN OF SCHEME OF CBCS PAPER OFFERED BY
THE DEPARTMENT OF HOTEL MANAGEMENT.

The followings members were present.

- | | |
|--------------------|-----------|
| • Dr. Pankaj Misra | In charge |
| • Dr. Jagbir Dalal | Member |
| • Dr. Amit Malik | Member |
| • Dr. Dinesh Kumar | Member |
| • Mr. Pawan Kumar | Member |

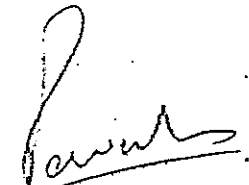
Agenda: To consider and approve change in the pattern of scheme of CBCS paper offered by the department of hotel management.

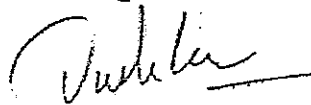
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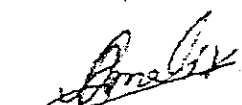
Since, in the entire university is following the scheme of 20: 80: (20 for internal and 80 for external) and as the software of exam branch has been developed accordingly. As this paper is having three components which are problems for uploading the marks and declaration by the examination branch.

Hence, in order to resolve to matter, the council hereby proposes to change the scheme of the above cited paper as per the university scheme i.e. 80:20 (External: Internal) despite of 60:20:20.

The meeting ended with vote of thanks.


Mr. Pawan Kumar


Dr. Dinesh Kumar


Dr. Amit Malik


Dr. Jagbir Dalal


Dr. Pankaj Misra
18/8/22

-147-

From

Director Higher Education,
Haryana, Panchkula.

To

The Registrars,

1. Kurukshetra University Kurukshetra
2. Maharshi Dayanand University, Rohtak
3. Chaudhary Devi Lal University, Sirsa
4. Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan (Sonapat)
5. Indira Gandhi University, Meerpur (Rewari)
6. Chaudhary Ranbir Singh University, Jind
7. Chaudhary Bansi Lal University, Bhiwani
8. Dr. B.R. Ambedkar National Law University, Sonapat.
9. Gurugram University, Gurugram.
10. Maharshi Valmiki Sanskrit University, Mundri, Kaithal.

Memo No. 18/21-2023 UNP (4)

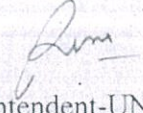
Dated, Panchkula, the 01-09-2023.

Subject:- Regarding inclusion of syllabus of Culture, Tourism, Arts, Visual Arts as a regular Course in Various Universities/Colleges of the State Government.

Kindly refer to the subject cited above.

I have been directed to forward a copy of D.O. letter no. 564 dated 24.07.2023, received from Dr. Amit K. Agrawal, IAS, Additional Principal Secretary to Chief Minister and Project Director, Chief Minister's Good Governance Associate Programme, Haryana, which is self explanatory, with the requested to provide the Action Taken Report with regard to inclusion of subject cited courses in the Universities latest by tomorrow positively.

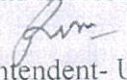
DA:- As above.


Superintendent-UNP
for Director Higher Education,
Haryana, Panchkula.

Endst. No. Even

Dated, Panchkula, the 01-09-2023

A copy of the above is forwarded to the Deputy Director Coordination Branch (HQ) w.r.t. their U.O. no. 9/157-2023 Co (3) dated 09.08.2023 for information and necessary action.


Superintendent- UNP
for Director Higher Education,
Haryana, Panchkula.

Standard Terms and conditions of foreign service or on deputation:

1. **Period of deputation:** Shri/Smt. _____ (designation) is being/has been transferred on deputation from _____ to _____ unless he/she is recalled earlier.
2. **Joining time, joining time pay and transfer travelling allowance:** He/She shall be entitled to avail joining time, pay for the period of joining time and transfer travelling allowance both ways on joining the post on deputation and on reversion there from to the parent organization as per the rules of the parent organization. The liability will be borne by the borrowing organization.
3. **Pay and dearness allowance:** During the period of deputation he/she may elect to draw
-
 - a) either the pay in the pay structure of deputation post and dearness allowance as per provision in the rules of borrowing organization; or
 - b) pay in the pay structure of the post in his/her parent organization and dearness allowance thereon.
4. **Compensatory allowances:** All compensatory allowances (excluding dearness allowance) shall be regulated as per provision in the rules of parent Organization or borrowing Organization which are more beneficial for him/her.
5. **Medical facilities:** He/She shall be entitled to the medical facilities as per provision in the rules of the parent organization. If he/she desires, he may opt to avail the medical facilities of the borrowing Organization in lieu thereof.
6. **Facility of rent free accommodation and/or free conveyance:** No rent free accommodation, free conveyance or any conveyance allowance be provided at the expenses of parent Department unless such benefit are normally attached as a condition of service to the post to which he/she is deputed in the borrowing Organization.
7. **Allotment of residential accommodation:** He/She shall be entitled to avail the facility of allotment of residential accommodation, if any, for the period of foreign service according to the rules of the borrowing Organization.
8. **Retention/fresh allotment of Government accommodation:** The employee on deputation will be entitled to residential accommodation according to the rules of the borrowing organization
9. **Leave Travel Concession:** He/She will be entitled to avail leave travel concession as per provision in the respective rules of the parent organization as amended from time to time subject to prior sanction of the same by the parent organization. The liability of LTC will be borne by the lending organization or borrowing Organization where the Government employee-
 - (i) is/was in service at the time of actually availing LTC of home town or anywhere in India; or
 - (ii) remained in service for a period more than two years during the period of respective block, in case one month salary in lieu of LTC is availed by him.

Dy No 863/U-4
28/7/21

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02/07/2023

D.O. No. 564

Dr. AMIT K. AGRAWAL, IAS



Additional Principal Secretary to
Chief Minister and Project Director,
Chief Minister's Good Governance
Associates Programme, Haryana.
Director General, Art & Cultural Affairs
Dated 24-07-2023

DDUNP
Pms

Uph
27/7 2021

Subject:- Regarding inclusion of syllabus of Culture, Tourism, Arts, Visual Arts as a regular course in various universities/colleges of the State Government.

Not concern to

Dear Rajiv,

U-4

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U-1
28/7

U-1
28/7

U-1
28/7

This is to bring to your notice that a decision was approved by Hon'ble Chief Minister, Haryana to include Culture, Tourism, Arts, Visual Arts as a regular course in various universities/colleges of the State Government on 24.01.2021.

2. As a follow up to the above decisions, the department has written many reminders dated 19.09.22, 10.10.22, 28.10.22, 22.11.22, 29.03.23, 18.04.23, 26.04.23 and D.O. letter dated 22.12.2022.

You are therefore, requested to update us on the action taken regarding the same. The suggested syllabus for the above courses is enclosed with this D.O. letter for your reference.

Yours sincerely,

(Dr. Amit K. Agrawal)

S. Chandan (O.L.)
Sh. Rajiv Rattan, IAS
Director,
Higher Education, Haryana

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Syllabus for Bachelor of Performing Arts- Theatre (BPA)

Programme Details

The three year degree programme of B.P.A. Theatre focuses on history, methods and applications in dramatic arts. This programme combines theory and practice while engaging in many aspects of theatrical process.

Eligibility Criteria (Qualifying Exam)

Pass in 10+2 or equivalent.

Admission Criteria

Merit in qualifying examination.

Related Programmes

B.P.A. (Theatre) Duration: 3 Yrs. (6 Semesters)

Curriculum

Check on a course name below for viewing the course description and course outcomes.

1st Year

2nd Year

3rd Year

Admission Term

Admission term is the first/second semester of an academic session/year.

Dr. A. K. S.

Head

Semester-I

Sr. No.	Subject	Definition
1.	ACTING-I	<p>Provide understanding of different styles of acting and enhancement of the creativity regarding theatre performance. Involves primary training of actor's body and emotions for the stage expressions. Primary work on voice and speech also is a part of the course which makes it complete.</p> <p><i>Course Outcomes: Through this course students should be able to</i></p> <ul style="list-style-type: none"> • identify the basic elements of acting • analyze the acting process and methods of acting • apply the correct process and method of acting according to the character • express the different kinds of acting process.
2.	COMPUTER SKILLS	<p>Course Outcomes: The basic features of Microsoft Office, Windows, MS-Word and MS-PowerPoint. The course is designed to develop familiarity with Microsoft Word, MS-Excel, Access, Power Point email and Internet basics.</p> <p><i>Course Outcomes: Through this course students should be able to</i></p> <ul style="list-style-type: none"> • analyze how multiple users can work on the same document • understand how to access and share the document from anywhere • understand how to create different events using google calendar • explore the basics for creation of google docs, google sheets, google forms and google slide

BODY MOVEMENT AND DANCE-I

This course trains student with body movement in general and dance as the movement of the body in a rhythmic way, usually to music and within a given space, for the purpose of expressing an idea or emotion, releasing energy, or simply taking delight in the movement itself.

Course Outcomes: Through this course students should be able to

- develop the rhythm in the body
 - understand balance and control for movement and dance
 - understand the importance of warm up in performance art
 - identify warm up exercise for personal use
- Develops ability to maintain conversations in English, talk about oneself and interests and ask questions of others.

COMMUNICATION SKILLS-I

Course Outcomes: Through this course students should be able to

- develop and grasp basics of grammar and vocabulary
- employ language skills effectively in everyday situations
- determine appropriate usage of sounds and pronunciation
- discover effective ways to enhance formal writing process

FUNDAMENTALS OF STAGE CRAFT

This course offers knowledge about stage craft and design i.e. set, costume, property and make-up design so as to enable students to discuss and apply the fundamentals and principles of stage craft.

Course Outcomes: Through this course students should be able to

- identify figures in nature

Teacher's Signature

HISTORY OF WORLD THEATRE

- Introduce colour theory
- Classify form in art
- Analyze the visual art in theatre
- Apply the aesthetic sense in play productions

This course offers knowledge about the history of major theatrical movements and eras in world theatre so as to enable students to discuss and analyse various theatrical genres and movements of the world.

Course Outcomes Through this course students should be able to

- Identify the origin of theatre
- Memorize Greek and Roman traditions in theatre
- Discuss various USMS in post-modern theatre
- Develop the understanding of evolution of theatre after dark age
- Analyze the differences between classical and neo-classical drama
- Express the elements of contemporary drama in India

Semester-2

ACTING-II

This course Develops the acting techniques of students for stage performances. It introduces students to some of the fundamental skills and tools required for developing the acting process. They build self awareness, develop their imagination and concentration and demonstrate the ability to be honest and committed in their acting.

BODY MOVEMENT AND DANCE-II

Course Outcomes: Through this course students should be able to

- develop a personal approach to acting, utilization of variety of recognized techniques
- develop characterization from any given script
- appraise quality and clarity of the voice and speech
- apply the nine emotions in the performance.

This course trains student with body movement in general and dance as the movement of the body in a rhythmic way, usually to music and within a given space for the purpose of expressing an idea or emotion, releasing energy, or simply taking delight in the movement itself.

Course Outcomes: Through this course students should be able to

- analyze different dance forms
- develop stamina and fitness for performance
- apply body movement and rhythm in various performance

Develops understanding and appreciation of the English language by expanding vocabulary.

Course Outcomes: Through this course students should be able to

- develop and assimilate basics of grammar and vocabulary
- employ language skills effectively in everyday situations
- determine suitable usage of sounds and pronunciation
- devise effective and befitting ways to enhance formal writing prowess.

COMMUNICATION SKILLS-

II

English for All

FIELD PROJECT-I

Gain experience through working with music industry or theatre on technicalities of music and theatre.

Course Outcomes: Through this course students should be able to

- not as a team member while working on individual projects
- develop their sense of professionalism through coherent working
- associate with people from different backgrounds constructively
- collaborate with interdisciplinary peers to enhance their knowledge
- represent the sense of responsibility for the work assigned to the students
- apply the skills learnt during the process.

INTRODUCTION TO INDIAN THEATRE

Provide knowledge of Indian theatre and its origin. Ancient Indian performance techniques and methods, study of nava Rasi, division of hero and heroines, progression of action and dramatics which enriches contemporary theatre and its practitioners.

Course Outcomes: Through this course students should be able to

- observe the dramatic text and characteristics of natyashastra
- analyze the theoretical aspects of natyashastra
- evaluate the dynamic work of sanskrit playwrights
- apply techniques of natyashastra in play production

STAGE CRAFT AND DESIGN-

Provides practical training to the students on Set designing and making, Costumes designing, types of Makeup and its usage in the theatre and film, Lighting and Sound Designing for theatre and television.

Course Outcomes: Through this course students should be able to

- apply the fundamentals of design in theatre

- analyze the use of design in different kind of art forms
- identify the elements and principle of design

BP4 2nd Year

SEMESTER-3

ACTING-III

Development of acting techniques for stage performances. Through various scene exercises and full script analysis, students learn how to build authentic characters and work towards developing a longer scene to present in front of their peers.

Course Outcomes: Through this course students should be able to

- identify the basic elements of method acting.
- analyze the different process and methods of acting.
- apply the correct process and method of acting according to the character.
- express the different kinds of acting process through play productions
- express views and thoughts through different acting styles.

This course trains student with body movement in general and dance as the movement of the body in a rhythmic way, usually to music and within a given space, for the purpose of expressing an idea or emotion, releasing energy, or simply taking delight in the movement itself.

Course Outcomes: Through this course students should be able to

- identify the importance of body movement in theatre

Paula Dept. B.A. English

3. ENVIRONMENTAL STUDIES

- develop stamina and fitness for performance
 - make use of expression in their performance
 - express the different kinds of body moves in the performance
- Provide basic introduction of environment and its various components and impart knowledge about theatre, various policies and methods to protect environment.

Course Outcomes: Through this course students should be able to

- observe the current environmental issues and associated problems.
- devise new approaches to reduce various types of environmental pollution.
- Illustrate the basic knowledge of environment and its various components.
- identify the environmental issues and practices

Student can choose from a range of design language courses as per their interest, to have an upper edge and enhance their CV.

4. LANGUAGE ELECTIVE I

5. PERFORMANCE TRADITIONS OF INDIA

This course offers the knowledge about various performance traditions of India so as to give students an overview about the vibrant cultural heritage of India.

Course Outcomes: Through this course students should be able to

- identify the technical terminology of different performance traditions of India
- discuss and recognize various performance traditions of India
- examine the unique theoretical elements in different forms of performance traditions of India
- evaluate the contribution of different performance traditions in the continuity of theatrical practice in India
- associate puppetry with different folk forms of India
- understand the importance of martial art in Indian theatre

6. STAGE CRAFT AND DESIGN-II

Provides practical learning to the students on Set designing and making, costume designing, Types of Make-Up and its usage in the theatre and film, Lighting and Sound Designing for theatre and television.

Course Outcomes Through this course students should be able to

- identify various theatre design aspects and its application into performances
- memorize different theatre architecture
- sketch ground plans of Set and Lighting design
- develop the concept of design from the script
- dramatize a design Scenario

SEMESTER-4

ACTING-IV

Advance training of different styles of acting and introduction of method acting and also intense training on how these methods and system of acting could be used for different play production from the perspective of the Actor.

Course Outcomes Through this course students should be able to

- demonstrate technical and artistic proficiency in acting, voice, speech and movement.
- prepare detailed script analysis, focusing on a deep understanding of character objectives, obstacles and tactics and effectively communicate that understanding in performance.
- act with different contemporary directors with different approaches.

Toula G. Obasogie

CONTEMPORARY INDIAN THEATRE

This course offers the overview of the modern Indian theatrical practices going on across India so as to enable students to apply these devices to their own theatrical practices.

Course Outcomes: Through this course students should be able to

- understand the various theatre form and way of its social implication in different parts of India
- analyze the technique and concepts of drama sequence popular in various Indian States
- reproduce the living scenario of drama form with contemporary aspect global demand
- discover the various aspect of contemporary Indian theatre

This course provides Practical understanding of the complete process of direction. The principles and practice of directing live theatre with emphasis on casting, concertus, blocking, pacing, rehearsal techniques and image development.

DIRECTION-I

Course Outcomes: Through this course students should be able to

- adapt improvisation into rehearsal process
 - identify the technical problems of directoral approaches
 - develop a personal approach to research for performance script
- Gain experience through working with music industry or theatre on technicalities of music and theatre.

FIELD PROJECT-II

Course Outcomes: Through this course students should be able to

- act as a team member while working on individual projects
- develop their sense of professionalism through coherent working
- associate with people from different backgrounds constructively
- collaborate with interdisciplinary peers to enhance their knowledge
- represent the source of responsibility for the work assigned to the students
- apply the skills learnt during the process

LANGUAGE ELECTIVE 2

STAGE CRAFT AND DESIGN III

Student can choose Indian or Foreign language courses as per their interest to have an upper edge and enhance their CV.

Provides practical training to the students on Set designing and making, Costumes designing, types of Make-Up and its usage in the theatre and Film, Lighting and Sound Designing for theatre and television.

Course Outcomes: Through this course students should be able to

- Identify and use the tools, materials and equipment used in scenic production including costume, painting and handling.
- discuss the scenic design process
- Produce scaled ground plans, sectional drawings and construction drawings pertinent to a specified script and a particular stage type

BPA 3rd Year
SEMESTER-5

ACTING V

Advances training in different styles of acting and Introduction to method acting. Through improvisation, acting exercises, research, and rehearsal techniques, students prepare and present a production for evaluation at the end of the course.

Course Outcomes: Through this course students should be able to

- express different schools of acting
- develop the character in given circumstances with different acting methods
- apply correct process of acting according to the character

Faculty: Mrs. S. S. Sharma

BASIC CONCEPTS OF FILM MAKING

- associate with different trends directors with different approaches
- associate with different theatre directors with different approaches
- develop the knowledge about physical theatre

The subject gives focus on the understanding of visual grammar by observing the narrative of the various filmmakers through out the world. the craft of various filmmakers can give the students different taste of styles.

Course Outcomes: Through this course students should be able to

- understand role and responsibilities of a director in script development
- develop the knowledge of motion picture production
- demonstrate the importance of lighting film making
- apply the visual grammar of film making in their own film projects
- analyze the thumb rules of film making
- classify various types of editing

DIRECTION THEORY AND CONVENTIONS

The course offers knowledge about various direction fundamentals, theories and conventions of the world theatre so as to enable students to apply the same during their productions.

Course Outcomes: Through this course students should be able to

- identify the basic of directions
- evaluate the different director's language
- memorize the steps of play building
- analyze the different styles of rights and eminent directors

DIRECTION-II

Introduces training on the complete process of direction including the technical and management elements. This course examines and applies the fundamentals of play direction, play selection, casting, blocking, movement, interpretation, and production organization with practical exercises in directing scenes and one-act plays.

Course Outcomes: Through this course students should be able to

- identify the elements of direction
- analyze the production process
- classify different steps of play making
- understand the particular style of plays designing
- develop plays with different schools of directions

Gain experience through working with music industry or theatre on technicalities of music and theatre. Emphasis on self-protection techniques, evading techniques, and escaping techniques.

Course Outcomes: Through this course students should be able to

- demonstrate workout and techniques in correct alignment and in proper manner in different situations
- analyze the terminology of matches and self defence
- advertise and aware the society to learn self defence
- apply techniques to improve speed, agility, endurance and coordination of players

**FIELD PROJECT-III
MINI-D MARTIAL ARTS**

Tanku Kyu. Oka. Brown

SEMESTER 6

ACTING THEORY

This course offers the knowledge about selected Acting terminology and theories so as to enable students to understand and use various theories while doing practical in Acting.

Course Outcomes: Through this course students should be able to

- identify the basic element of method acting
- recite the knowledge of different acting school
- analyze the different approaches of acting
- apply different acting approach in a production

DIRECTION AND DESIGN

This course offers knowledge about various direction fundamentals, theories and conventions of the world theatres so as to enable students to apply the same during their productions.

Course Outcomes: Through this course students should be able to

- identify the basic elements of design in the play production
- evaluate the effects of costumes as per the characterization in the play production
- express all the theatrical elements in one production
- analyze the combination of direction and design in the production
- identify the basic elements of direction of the play

FIELD PROJECT-IV

Gain experience through working with music industry, configure on technicalities of music and theatre.

Course Outcomes: Through this course students should be able to

- Identify the need of the society and industry and finding the appropriate solution
 - focus to develop special skills and abilities like interpersonal skills, communication skills, team work, attitude and values
 - analyze the output of project and compare it with the required one
 - research of various gaps in the field of performing arts to meet today's need
- Trains students for the test through developing systematic, analytical and deductive skills for a job. Intends to develop candidate's abilities to perform specific tasks and meet to a range of different situations.

GENERAL APTITUDE

THEATRE PRODUCTION

Includes Experiential learning of the process of theatre play production which starts from the very beginning of researching the scripts, characterisation, casting, actor's handling, blocking, rehearsals, run-through and then final show. This gives the students a complete knowledge about execution of theory into product.

Course Outcomes: Through this course students should be able to

- apply the knowledge in their theatrical production
- identify and describe the 6 component of dramatic film plot, character, theme, direction, rhythm and spectacle
- develop appropriate research on the play time period and articulate how it applies to the production process

Dr. A. S. Manoj

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6. WORKSHOP ON CAMERA ACTING

This course offers the students an exposure to perform in front of camera. Along with enriching student's knowledge about acting styles. This course provides hands on exposure in camera acting.

Course Outcome: Through this course students should be able to

- identify the basic elements of Camera.
- apply the different process and method of acting according to the character
- analyze the different techniques of camera acting
- discover and express the different kinds of acting process through camera

Syllabus for Masters of Performing Arts- Theatre (MPA)

programme Details

Two-year degree programme of M.P.A. Theatre focuses on history, methods and applications in dramatic arts. This programme combines theory and practice while engaging in many aspects of theoretical process.

MPA 1 YEAR SEMESTER-I

Defined

<p>Subject</p> <p>Theory Paper--1</p> <p>Note:</p> <p>History of Theatre</p>	<p>Duration of the Examination for the theory paper shall be three hours. The theory paper shall be of 80 Marks and shall comprise of four questions. The candidates shall be required to attempt all questions. All questions carry equal marks.</p> <p>Unit 1:</p> <p>1. An analysis of Greek Theatre, its origin, history and aesthetic principles and structure.</p> <p>Unit 2:</p> <p>1. The Eleven aspects of Dramatic Performance in accordance with Bharatacharya's Natyashastra</p> <p>Unit 3:</p> <p>1. Defining Folk Traditions with special reference to Jatra, Naqqal and Tamasha.</p> <p>2. The Concept of Indian Theatre by C. Brynzki.</p> <p>3. Abhinaya Darpan by Nandikeshvar.</p> <p>4. Natyashastra by Bharat Muni translated in Punjabi by G.N. Rajguru.</p> <p>5. Special aspects of Natya Shastra by Dr P. S. R. Appa Rao, in Telugu translated by H. V. Sharma Published by the National School of Drama 2001.</p> <p>6. Folk Theatre by Balwant Gargi.</p> <p>7. Performance traditions in India by Dr. Suresh Awasthi.</p> <p>8. The Essential Theatre by Oscar G. Brockel.</p>
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Books Prescribed:

M. V. S. S. S. S. S.

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<p>Theory Paper-2 Note:</p>	<p>Duration of the Examination for the theory paper shall be three hours. The theory paper shall be of 20 Marks and shall comprise of four questions. The candidates shall be required to attempt all questions. All questions carry equal marks.</p>
<p>Acting</p>	<p>Unit 1: 1. The Principles of acting according to Stanislavski method acting. 2. Principles of Psycho-technique according to Stanislavski. 3. The role of the Sub-conscious in reaching the truth of the Character according to Stanislavski.</p> <p>Unit 2: 1. Meyerhold and the theory of Bio-mechanics. 2. Meyerhold and the theatre of Avant-Garde.</p> <p>Unit 3: The Rasa Theory 1. An Actor prepares by Stanislavski Published by Manjun 2. Building a Character by Stanislavski Published by Methuen Drama. First Published in 1963. Reprinted in 2004. 3. Natyasastra by Manuocham Ghosh 4. Natyasastra by Bharata Muni translated in Punjabi by G.N. Rajguru. 5. To the Actor: on the technique of acting by Michael Chekov. Published by Routledge reprinted 2003 (third times) 2004, 2005. 6. Styles of Theatre Acting by Dr. Sunila Dhir.</p>
<p>Books Prescribed:</p>	<p>1. Martial Arts 2. Gatka/Thang-ta. 3. Yoga 4. Acting Methodologies. 5. Bharatanatyam (with Samyukta and Asamyukta Hastas) 1. Elements of Design 2. Stage Geography</p>
<p>Practical Paper-3 Acting</p>	
<p>Practical Paper-4 Stage Craft</p>	

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- 3. Model making according to a given scale (Set for a realistic play with full text study)
- 4. Project Book

SEMESTER-2

Theory Paper-5
 Note:

Duration of the Examination for the theory paper shall be three hours. The theory paper shall be of 80 Marks and shall comprise of four questions. The candidates shall be required to attempt all questions. All questions carry equal marks.

Dramatic Literature

Unit 1:
 1. Oedipus Rex by Sophocles- Analyze the play according to Greek Theatre and as a play of destiny.

Unit 2:
 2. Abhinava -Shakuntalam by Kalidas. Analyze its structure and concepts and its thematic content according to the Natyashashtra.

Books Prescribed:

- 3. The use of tradition in modern playwriting with reference to Girish Karnad's Nagamandala
- 1. Oedipus Rex by Sophocles.
- 2. Abhinava -Shakuntalam by Kalidas.
- 3. Nagamandala by Girish Karnad

Theory Paper-5
 Note:

Duration of the Examination for the theory paper shall be three hours. The theory paper shall be of 80 Marks and shall comprise of four questions. The candidates shall be required to attempt all questions. All questions carry equal marks.

Theatre Architecture

Unit 1:
 Theatre architecture as defined in Natyashashtra.

Unit 2:
 Theatre architecture

1. Greek

(Handwritten signature)

<p>Books Prescribed:</p>	<p>2. Globe Unit 3: Proscenium and New Trends in Theatre spaces. 1. Development of Theatre by A. Nicoll. 2. Theatrical Design and Production by J. Michael Gillette published by Mayfield publisher company California. 3. The Essential Theatre by Oscar G. Brockel</p>
<p>Practical Paper-7 Directorial Processes</p>	<p>1. Scene Work 2. Creating Atmospheres. 3. Use of Objects. 4. Interpretation of Character. 5. Group Dynamics.</p>
<p>Practical Paper-7 Viva Voce</p>	<p>1. Participation in the Departmental/Institutional Production. 2. Growth as a theatre artist 3. Behavioral Graph 4. Team Spirit 5. Vision for future work.</p>
<p>MPA 2 YEAR</p> <p>SEMESTER-3</p>	
<p>Theory Paper-9 Note:</p>	<p>Duration of the Examination for the theory paper shall be three hours. The theory paper shall be of 80 Marks and shall comprise of four questions. The candidates shall be required to attempt all questions. All questions carry equal marks</p>
<p>History of Theatre.</p>	<p>Unit 1: History and Practice of Modern Punjabi Theatre from Noreh Richard to present times. Unit 2:</p>

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Books Prescribed:

Development of Modern India Drama from 19th Century with special reference to Bengali and Marathi Theatre.

Unit 3:

1. The history and economic context of Parsi Theatre.

2. IPTA as a theatre of protest.

1. Parsi Theatre – Its Origin and Development by Somnath Gupta and Hansen Kathryn.

2. The Concept of Indian Theatre by C. Brynzki.

3. The Oxford Companion to Indian Theatre.

4. Rang Manch by Balwant Gargi.

5. Playwrights at the Centre: Marathi Theatre from 1843 to Present. Sneha Gokhale.

Duration of the Examination for the theory paper shall be three hours.

The theory paper shall be of 80 Marks and shall comprise of four questions. The candidates shall

be required to attempt all questions. All questions carry equal marks.

Theory Paper-10

Note:

Acting

1. Bertold Brecht and Epic Theatre.

2. Theory of Alienation.

Unit 2:

1. Artaud - Theory of Cruelty.

2. Grotowski Towards a Poor Theatre.

Unit 3:

Peter Brook – Empty Space.

1. Brecht on Brecht by J. Willmet.

2. Antonin Artaud. Theatre and its Double. Grove Press, INC. 1958- 1977, 1981, 1985, 1989.

3. Towards a Poor Theatre by J. Grotowski. Published by Meliuen reprinted in 1979, 1978, 1980.

and 1981. Peter Brook. Empty Space. Published by Penguin Books reprinted in 1990, 1994.

1995, 1999, 2003, 2005 and 2007.

Books Prescribed:

Artaud Ep. Theatre

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<p>Practical Paper-11 Acting</p>	<ol style="list-style-type: none">1. Improvisations.2. Role Playing3. Scene-Work4. Working with Objects5. Body Language6. Voice/speech and movement.
<p>Practical Paper-12 Stage Craft</p>	<ol style="list-style-type: none">1. Costume plates2. Stage lighting equipments, principles, general lighting plot3. Stage make-up.4. Making of props in paper, Machie and Other materials.
<p style="text-align: center;">SEMESTER-4</p>	
<p>Theory Paper-13 Notes</p>	<p>Duration of the Examination for the theory paper shall be three hours. The theory paper shall be of 80 Marks and shall comprise of four questions. The candidates shall be required to attempt all questions. All questions carry equal marks.</p>
<p>Dramatic Literature</p>	<p>Unit 1: Balwant Gargi, "Kanak di Ball" - Analysis with reference to Balwant Gargi as a harbinger of modernity in Punjabi Theatre.</p> <p>Unit 2: "A Doll's House" by Ibsen as a well made Play</p> <p>Unit 3: Vijay Tendulkar's "Khamosh Adalat Jari Hai" as a turning point in Modern Indian Play writing.</p>
<p>Books Prescribed:</p> <ol style="list-style-type: none">1. "Kanak di Ball" by Balwant Gargi.2. "A Doll's House" by Ibsen.3. "Khamosh Adalat Jari Hai" by Vijay Tendulkar	

Duration of the Examination for the theory paper shall be three hours. The theory paper shall be of 80 Marks and shall comprise of four questions. The candidates shall be required to attempt all questions. All questions carry equal marks.

Unit 1:
Broad understanding of performing spaces for Indian folk Theatre.

Unit 2:
Objectives and concepts of lighting relationship, Script and lighting, Lighting and Costumes, Lighting and Set design.

Unit 3:

1. Introduction to stage design.

2. Type of stage design.

3. Materials used.

4. Costumes for stage design.

5. Stage lighting for S.N. Design.

6. Folk Theatre of India by Dr. B.S. Ghosh.

1. Production set and stage design: 10. Directorial processes used on stage as well as back stage.

2. Presentation to the stage for various performances seen by the students during their assessment observation of various theatre festivals. (A file should be submitted by each student).

1. Participation in the Departmental/Institutional Production.

2. Growth as a theatre artist.

3. Behavioral Graph

4. Team Spirit

5. Vision for future work

Form 100. University

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Department of Social Work

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan, Sonapat, Haryana (India)- 131305

Accredited with 'B++' grade by NAAC

A State University established by an Act of Haryana Legislature & recognized by U.G.C. under Section 2(f) and 12(B) of the U.G.C. Act 1956

Minutes of the PGBOS Meeting of Department of Social Work, BPSMV

The Department of Social Work, organized PGBOS meeting of Department of Social Work, BPSMV on 16th September 2023. Following members were present:

- 1. Dr. Manju Panwar, Head. MSW (Convener)
- 2. Dr. Deepali Mathur Assit. Prof. MSW (Member)
- 3. Dr. Gian Chand, Assit. Prof. MSW (Member)
- 4. Prof. Vanita Dhingra, Professor and Chairperson, Department of Social Work KUK (Member, as Outside Expert)

Following agendas were discussed:

Agenda 1: To approve the list of external examiners identified for all semester courses for newly implemented M.A. Social Work curriculum.

Action Taken: Considered and approved.

Agenda 2: To discuss and seek guidance to start B. A. Hon Social Work with research.

Action Taken: Discussed about the NEP 2020 policy and its implementation at department by starting B.A Social Work integrated progrmme.

Any other items:

Following items were discussed and resolved

I: Discussed about field work budget.

Action Taken: The Department should propose field work budget and supportive field work budget for effective field work supervision.

II: Discussed about establishing functional skill labs.

Action Taken: It was suggested the resources may be mobilized through alumni association.

III: Discussed about identification of best practices of the Department of Social Work.

Action Taken: Suggestion were on establishing skill lab, and activities of community engagement and collaboration may be highlighted.

IV: Discussed about slow learners and advance learners in the Department.

Action Taken: To frame policy for slow learners and advance learners.

V. Discussed to change in the nomenclature from MA in Social Work to Master of Social Work.

Action taken: It was resolved that the the nomenclature of M.A. in Social Work will be Master of Social Work (MSW) w.e.f. 2023-24.

VI. Discussed to reduce the intake in M.A. in Social Work from 40 to 30.

Justification: There are insufficient numeber of quality field work agencies. Since its a professional programme, so social work practicum quality has to be improved.

Action Taken: It was resolved that the intake in M.A. in Social Work will be reduced from 40 to 30.

The meeting ended with thanks by the chair.

Manju Panwar
(Manju Panwar)
(Convener)

Deepali Mathur
(Deepali Mathur)
(Member)

Gian Chand
(Gian Chand)
(Member)

Vanita Dhingra
(Vanita Dhingra)
(Member)

Decision: The faculty discussed and recommended that the stated documents/ items be revised in line with the University's common ordinance for Ph.D and be resubmitted.

Agenda 4: To approve the revised Scheme, Syllabus, Ordinance of M.A. History & Archaeology programme offered by the Department of History and Archaeology

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of History & Archeology presented the Scheme, Syllabus, Ordinance of M.A. History & Archaeology programme for discussion and approval.

Decision: Discussed and approved

Agenda 5: To introduce Ph.D. programme in the Department of History & Archeology

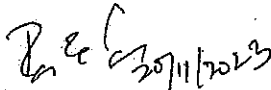
Statement: The Chairperson, Department of History & Archaeology presented the proposal to introduce Ph.D. program in the department from the next academic session i.e. 2024-2025.

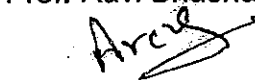
Decision: The faculty discussed and approved the proposal in principle and asked the department to prepare accordingly.

The Dean, Faculty of Social Sciences asked the concerned Departments of Faculty of Social Sciences to submit the 1st draft of scheme and tentative structure of 04 Years U.G. Honours programme (with research in the UTDs already running PhD programme) as early as possible but not later on 30.11.2023.

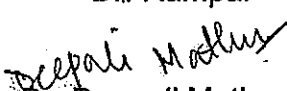
The meeting concluded with the vote of thanks proposed by the Dean, FSS.

Signatures of the Members:


Prof. Ravi Bhushan


Dr. Archana


Dr. Rampal


Dr. Deepali Mathur


Dr. Manju Panwar


Dr. Anju

Faculty of Social Sciences
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat,
Haryana

The minutes of the meeting of the Faculty of Social Sciences (FSS) held on 20.11.2023 at 12:00 PM in the office of the Dean, FSS

Members Present

1. Prof. Ravi Bhushan, Dean, FSS
2. Dr. Manju Panwar, Chairperson, Department of Social Work
3. Dr. Archana, Chairperson, Department of History & Archaeology
4. Dr. Rampal, Chairperson, Department of Political Science & Officiating Chairperson, Department of Geography
5. Dr. Deepali Mathur, Assistant Professor, Department of Social Work
6. Dr. Anju, Assistant Professor, Department of Economics

Proceedings

Agenda 1: To change the nomenclature of M.A. Social Work programme to Master of Social Work (MSW) w.e.f. 2023-24

Statement: Consequent upon UGC's notification and recommendation of the PGBOS, the Chairperson, Department of Social Work presented the proposal to change the nomenclature of M. A. Social Work programme to Master of Social Work (MSW).

Decision: Considering the wider acceptability of the proposed nomenclature the faculty discussed and approved the proposed change of the nomenclature.

Agenda 2: To introduce Bachelors of Social Work (Hons.) with Research programme (B.S.W.) in the Department of Social Work

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of Social Work presented the proposal to Bachelors of Social Work (Hons.) with Research programme (B.S.W.) in the department in accordance with the recommendation of NEP-2020.

Decision: Discussed and approved

Agenda 3: Approval of the Scheme, Syllabus, Ordinance and Panel of Examiner & Paper Setters for Pre-Ph.D Course Work in the Department of Political Science

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of Political Science presented the Scheme, Syllabus, Ordinance and Panel of Examiner & Paper Setters for Pre-Ph.D Course Work.

Manju Panwar

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Deepali Mathur

Deepali Mathur

ORDINANCE: PAPER-SETTING AND EVALUATION

1. Each Department shall convene a meeting of the Board of Studies in the second week of August every year.

1.1. Each Board of Studies shall recommend, a panel of examiners to be appointment as Paper-Setters & Examiners for various University Examinations for all odd and even semesters. The panel of examiners be sent to the examination branch by third week of August every year.

Provided that the Vice-Chancellor may extend the date in special circumstances.

1.2 For the theory courses, each Board of Studies will recommend a panel of at least 6 paper-setters (which may include at most 2 from the University) along with complete address, Contact Number (as far as possible) and E-mail ID. Care shall be taken that not more than 50% papers are set internally.

1.3 Practical and viva-voce examination will be conducted by a team of 2 examiners (one internal and the other external). If the examiners are unable to agree and there is difference in the award, the average of the two shall be taken as the final award.

Provided that in case where the external examiner, does not come for unforeseen circumstances, the Chairperson of the Department may arrange an alternate examiner from internal or external with intimation to the Controller of Examinations.

2. In these provisions-

(i) An External Examiner shall be one who is not teaching in the concerned teaching department of the Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonipat or in any institution/research organization. He/She shall necessarily be a regular teacher/scientist from in the subject in another University/Department.

(ii) An Internal Examiner shall be from Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonipat one who is teaching or has taught within the preceding two years, candidates for the particular examination and the subjects for which she is appointed in that Department.

3. Notwithstanding anything contained in any other Ordinance for the time being in force the Vice-Chancellor in consultation with the Chairperson of the Board of Studies concerned, shall have the power to debar permanently or for a specified period any Paper-Setters/Examiner in any faculty for any examination, if his/her work was found unsatisfactory as to standard of making or who was found to have committed irregularities or caused inordinate delay in the submission of

If a person has already been appointed and incurs any of the above disqualifications, her appointment shall be cancelled.

Persons knowing Hindi shall be given preference for examinations for which Hindi is permitted as a medium of examination.

As far as possible no person shall be appointed to set more than three question-papers for examinations during a semester some specific reasons.

This shall not include-

- (a) setting of question-papers for a Practical Examination;
- (b) Exams. of Thesis/Dissertations.
- (c) Professional examinations.

9. Where a Dissertation paper is examined by two Examiners, and the Examiners fails to agree and the difference is not more than 10% of the maximum marks, the average of the two shall be taken as final award. If the unresolved difference between the external and the Internal Examiners is more than 10% of the maximum marks, appointment of a third Examiner shall be made by the Vice-Chancellor, ordinarily on the recommendation of the Chairperson of the Department concerned, whose award shall be treated as final.

10. The Controller of Examinations shall issue instructions to the Paper-Setters/Examiners with regard to due provision for secrecy and any other matter incidental thereto.

11. The Paper-Setters shall send the question-papers to the Controller of Examinations in sealed covers before a date to be notified on their appointment letters.

The appointment of a Paper-Setter shall be deemed to be cancelled, if he fails to send the question-paper by the date fixed in this behalf, provided that the Controller of Examinations may, for sufficient causes, extend the period.

12. Examiners shall send in the marked answer books alongwith awards to the Deputy/Assistant Registrar (Secrecy) in accordance with the instructions issued in this behalf by the date prescribed for the purpose.

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9. Evaluation & Grading:

- 9.1 The assessment will be 50% internal and 50% external.
 9.2 The students have to qualify internal as well as external test separately.
 9.3 The minimum marks required to pass the examination shall be 40% in internal and external separately.
 9.4 The weight age for internal evaluation is as given below:-

Component	Weightage
1. Two mid term tests	60%
2 Seminar/Project/Practical/Presentation	35%
3. Attendance	5%

9.5 Ad-hoc Grace

If there is any discrepancy/ out of syllabus/ printing error/untoward incident during the examination, the matter will be referred to a standing committee of:

- (i) Controller of Examination
- (ii) HOD of the concerned department
- (iii) One faculty member concerning the subject.

The Committee may recommend reconduct of the paper or uniform grace marks to all but that should not exceed 10% marks of the particular paper.

9.6 Moderation of Marks:

(a) Internal Examinations:- If there are more than one teacher associated in any internal assessment, one of the member be made coordinator by the concerned HOD and he/she along with the others can moderate the marks to maintain uniformity so that no student get undue advantage or disadvantage. It can be done by fixing criteria beforehand.

(b) External Examinations:- If there is unusual variation (Very high or very low) in the awards, the COE may refer the matter to a Moderation Committee consisting of:

- (i) Controller of Examination
- (ii) HOD of the concerned department
- (iii) One faculty member concerning the subject.

As per recommendation of the Committee the result may be revised.

AGENDA ITEM FOR ACADEMIC COUNCIL

To consider the Rules regarding University Examination Re-evaluation Reform Note-Marks Obtained by the candidate whichever are higher by State University/Central University in Haryana.

All the state universities have framed their rules of re-evaluation. In this connection a letter was received through Vice-Chancellor office from The Director Higher Education, Haryana, Shiksha Sadan, Sector-05, Panchkula vide memo no. 18/90-2015 UNP(4) dated 08.02.2017 (Annexure-14, page-160). In this letter all the Registrars were asked to consider and to present their report regarding University Examination Re-evaluation Reform Note Marks obtained by the candidate whichever are higher by State University/Central University in Haryana. In this context, a meeting was called on 01.03.2017 at 11:00 A.M. under the chairmanship of the Vice-Chancellor, CDLU, Sirsa to frame the rules of re-evaluation. The minutes of the meeting were sent to DHE, Haryana by CDLU, Sirsa, but DHE, Haryana directed the Vice-Chancellor, DCLU, Sirsa to revisit the clause (2). Further another meeting of all the members was held on 20.09.2017 at 11:30 AM (Annexure-17, page-166-168). The minutes of the meeting was sent to DHE, Haryana vide Endst. No. CDLU/Re-val./17/1834-1842 dated also sent to the Registrars of all State University/Central University in Haryana for information and further necessary action.

EXISTING RULES	AMENDED RULES
<p>(No Condition)</p> <p>A candidate may apply for re-evaluation on the prescribed form, along with the original DMC's & requisite fee, within 15 days of the declaration of the result or dispatch of the DMC to the Department whichever, is later.</p> <p>When Increase/Decrease in upto 15% of the maximum marks of the paper concerned. Average of the Original Examiner & Re-evaluator to be given.</p> <p>When increase/decrease in more than 15% of the maximum marks of the paper concerned. Answer book to be sent to the second re-evaluator and average of two highest scores out of the original examiner and both the original examiner and both the re-evaluators, to be given.</p>	<p>1. Eligibility criteria for re-evaluation of answer books(s):</p> <p>(i) If the award(s) in the paper(s) is/are less than 20% of maximum marks (theory only), no re-evaluation of answer books will be allowed.</p> <p>(ii) Eligible candidate may apply for re-evaluation of answer book(s) to the Controller of Examinations of respective Universities on the prescribed application form along with requisite fee, as prescribed by the University, within 30 days from the declaration of the result of the particular examination, in particular the date on which the result uploaded on respective University website, without the Detailed Marks Card/Certificate in original.</p> <p>2. If the increase or decrease of marks between re-evaluated score and the original score in a paper does not exceed 20% of the maximum marks of that paper, the average of the two scores will be taken as final award. However, if the increase of marks in more than 20% the answer book will be referred to 2nd re-evaluator and</p>

The final result of re-evaluation favorable or not will be binding upon the candidate and subject to above provision it will supersede, suo moto, the original score/result.

the average of the best scores will be taken as final award.

- (i) The controller of Examinations of KUK and MDU pointed out that due to larger strength of students in their respective Universities, the implementation of Previous Result Stands (PRS) in case of decrease of marks could not be feasible. Therefore, after a deliberation at length, it was decided that in case of decrease of marks and the student gets marks below the level of passing marks in that paper, the character of the result will not be changed i.e. the student will be given minimum pass marks as per the ordinance of the concerned university.
- (ii) The committee will be constituted by all the universities for evaluation/re-evaluation cases where variation in re-evaluation marks is more than 30% of the maximum marks of the paper. The constitution of the committee will be as under:-
 - (a) Dean of the concerned Faculty.
 - (b) Head/Chairperson of the concerned Department
 - (c) Controller of Examination
 - (d) One subject expert (to be nominated by the chairperson/HOD). The committee will recommend action against the examiner to the Vice-Chancellor of the concerned university.

3. The Controller of Examinations will ordinarily declare the results of re-evaluation within two months of the last date fixed for receipt of applications for re-evaluation. If a candidate fails or earns compartment/re-appear in a paper(s) and has applied for re-evaluation but his/her result of re-evaluation is not declare before the next examination and he/she appear in the next examination in the paper(s) in which he/she has failed, the

	<p>better of two scores "Re-appear Score or Re-evaluation score, would be taken into account.</p> <p>4. Further, in order to avoid confusion between rechecking and re-evaluation of answer books among the stake holder, it is decided that instructions for rechecking and re-evaluation of answer books involves marks awarded to various answer have been correctly added and if all the answers have been assessed/evaluated. However, re-evaluation of answer book(s) by the eligible examiner after first evaluation of the answer books.</p>
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In addition to, others rules of re-evaluation i.e. fee, identification of answer books etc. will be applicable as per ordinance of BPSMV, Volume-II (Part-A) 2013 Chapter-10.

Hence the item

BPS MAHILA VISHWAVIDYALAYA KHANPUR KALAN

Extract of Resolution No. 13,14,15,16 & 17 of the 20th meeting of Academic Council held on 20/06/2018.

Resolution

13. To consider and approve the recommendation made by the Committee to review the Ph.D. Ordinance of BPSMV.

Resolved to defer the agenda item with the observations that the draft Ph.D ordinance be examined again by the following committee:

1. 4. Dean Academic Affairs
2. 5. All Deans
3. 6. Two outside experts to be nominated by the Vice-Chancellor.

Resolved further that the Vice-Chancellor is authorized to constitute a committee to frame the research policy for BPSMV, Khanpur Kalan.

14. To consider the Internal and External examiners for evaluation of Ph. D Thesis.

The House decided to defer the agenda.

15. To consider the Rules regarding Submission of University Examination Form Fee.

The House considered and resolved to approve the first part of the agenda and decided to keep the second part regarding conducting of special practical examination in abeyance. It was also decided that till then, the existing rules be followed.

16. To consider the Rules regarding University Examination Re-evaluation Reform Note-Marks obtained by the candidate whichever are higher by State University/Central University in Haryana.

The Academic Council considered and approved the agenda with the modification in the proposed amended rules at sr. no. 1 that all students can apply for re-evaluation irrespective of the fact that the award(s) in the paper(s) obtained were lower or higher.

17. To consider the action taken by the Vice-Chancellor in awarding Ph.D. Degree to the following Research Scholars in the subjects mentioned against each in anticipation of the approval of Academic Council.

RE-EVALUATION RULES

GENERAL

These rules may be known as the BPS Mahila Vishwavidyalaya Khanpur Kalan Sonipat Re-Evaluation Rules. It supersedes all rules applicable hereinbefore. These rules will be applicable w.e.f. the examination held in May, 2012 and onwards.

SCOPE

2.1 Re-evaluation will be permitted only for the theory examinations conducted by this university.

2.2 No re-evaluation is allowed for examination in practical/Viva-Voce/Training Report/Project Report/Certificate Courses etc. or any other paper wherein there is a joint evaluation by two examiners.

Application Form

3.1(i) A candidate may apply for re-evaluation on the prescribed form, along with the original DMC & the requisite fee, within 15 days of the declaration of the result or the dispatch of the Detail Marks Card (DMC) to the Department whichever, is later.

ii) The Controller of Examinations in exceptional cases, may permit, a candidate who submits the re-evaluation form within three working days after stipulated period. No re-evaluation form will be accepted thereafter under any circumstances.

3.2 The re-evaluation form will be free of cost and shall be available in the Examinations Branch/University

3.3 Re-evaluations form along with the requisite fee be directly submitted to the examination branch.

3.4 Application form once submitted may be withdrawn on written request in respect of one or all papers applied for re-evaluation provided that the answer-books have not been sent to the evaluator. No fee refund, however, will be permissible under such a situation.

FEE (Deposit & Refund)

4.1A) The re-evaluation fee as prescribed per answer book.

i) For PG and professional courses

Rs. 500/- per paper.

ii) For UG Courses other than professional

Rs. 500/- per paper.

B) It should be deposited with the University Cashier.

4.2 Refund of fee will be admissible only in the following cases:-

- (i) 50% of the fee paid in case the application form is rejected/ in admissible being time bared under clause 3.
- ii) 100% when re-evaluation is not possible due to some administrative technical reason.
- iii) 100% in case the candidate withdraws her application for re-evaluation due to the reason that her result has been revised due to rechecking of marks but before the re-evaluation.

5. Identification of Answer Book

5.1 On a written request a candidate may be permitted to see her re-evaluated answer book for identification purpose only.

5.2 Such request should be submitted, along with a fee of Rs. 50/- a prescribed per answer book within 07 days of the communication of re-evaluated result.

Award of Re-Evaluation Marks/Score:

6. Re-evaluated

Result

6.1 When Increase/Decrease is upto 15% of the Maximum Marks of the paper concerned.	Average of the Original Examiner & Re-Evaluator to be given.
6.2 When Increase/Decrease is more than 15% of the Maximum Marks of the paper concerned.	Answer Book to be sent to the second Re-Evaluator and Average of two highest scores out of the original Examiner and both the re-evaluators, to be given.

6.3 The final result of re-evaluation favourable or not will be binding upon the candidate and subject to above provisions it will supersede, suo moto, the original score/result.

7. Re-Appear Exams/ Supplementary Exam

7.1 In case the re-evaluation result has not been declared and the next supplementary/re-appear examinations are to be held, candidates should apply for such re-appear examination without waiting for the re-evaluation result.

7.2 On a written request her re-appear examination result will be kept pending till finalization of her re-evaluation result and she will be given the benefit of the best score out of the re-appear/supplementary exam and the re-evaluated score.

7.3 In case of re-appear/fail candidates if the answer books is lost/spoiled/ damaged or not available for re-evaluation, she may be given a chance to appear in that paper in the next re-appear examination without paying any examination fee.

OR

The candidate may be given the option for refund of the re-evaluation fee in full.

8. Remuneration to the Re-evaluator(s)

The re-evaluator will be paid a remuneration as prescribed per answer book, subject to a minimum as prescribed per subject paper.

9. General Instructions

9.1 Ignorance of the titles/codes of any paper shall not be accepted as a plea for wrong entry in the application form.

9.2 Incomplete application forms, ~~forms rejected on fee shall be rejected and no fee refund is~~ permissible under such situation.

9.3 In case of any clarification/ambiguity the power to interpret the rules vests with the Vice-Chancellor and in case of any dispute the decision of the Vice-Chancellor will be final and binding.

9.4 The candidates should plan their future programme of taking examinations/admissions in accordance with their original result already communicated by the university till it is actually superseded by the re-evaluation result. The university does not take any responsibility of any consequences arising out of the delay in completion of the process of re-evaluation and declaration of re-evaluated result. The university shall also not be responsible if the re-evaluation result of any candidate is delayed or some mistake/discrepancy is found in the original evaluation/re-evaluation of the answer-book.

9.5 All disputes are subject to the jurisdiction at Sonipat.

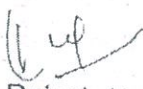
PROCEEDINGS OF THE MEETING HELD ON 27.10.2021 AT 11.30 Hrs.
IN THE OFFICE OF THE DEAN ACADEMIC AFFAIRS TO MAKE THE
UNIFORMITY OF THE SYLLABI OF EVS, CISD AND LEGAL LITERACY
IN ALL COURSES RUN UNDER THIS UNIVERSITY

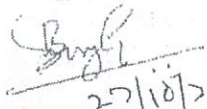
The following were present:

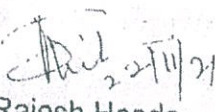
- | | | |
|----|-------------------------------------|----------|
| 1. | Prof. Ajit Singh, D.A.A. | Convener |
| 2. | Dr. Ravi Bhusan, C.O.E. | Member |
| 3. | Dr. Rajesh Hooda, Incharge, Laws | Member |
| 4. | Dr. Bhupinder, Asstt. Prof., B.A.S. | Member |
| 5. | Sh. Rajesh Narwal, A.R., Academic | Member |


The examination branch brought to the notice of the Committee that various types of syllabi are being taught by the different departments of the University for the Subjects of Environmental Science (EVS), Current Issues Societal Development (CISD) and Legal literacy, which creates huge confusion during the examinations. Further, in this regard, it is stated that Academic Council has approved the syllabus for the subject of CISD in its 17th meeting held on 23.03.2017 vide resolution number 21 and for the subject of EVS in its 20th meeting held on dated 20.06.2018 vide resolution number 12.

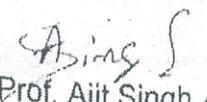
After detailed deliberation the committee recommends that aforesaid approved syllabi of CISD and EVS subject be followed by all the concerned Departments/Affiliated Colleges/Institutions of the University so that uniformity could be maintained in teaching and examination of the said courses.


Sh. Rajesh Narwal


27/10/2021
Dr. Bhupinder


27/10/21
Dr. Rajesh Hooda


27/10/2021
Dr. Ravi Bhusan


27/10/21
Prof. Ajit Singh

Minutes of the meeting of the committee constituted by the Vice-Chancellor to examine the instructions/guidelines received from UGC/State Govt. from time to time and further recommendations regarding inclusion of a new subject/paper/chapter at UG level in all courses, being run by the University, held on 20/02/2017 at 1.00 p.m. in the office of Dean Academic Affairs, BPSMV, Khanpur Kalan.

The following were present:-

- | | |
|---------------------------------|-------------|
| 1. Prof. Shweta Singh | Chairperson |
| Dean Academic Affairs | |
| 2. Prof. Sanket Vij | Member |
| Chairperson, Deptt. of Commerce | |

The committee considered the syllabus submitted by Dr. Bhupinder Singh, Assistant Professor in Environmental Studies and recommended that the same be referred to the Academic Council for approval and implementation from the Academic Session 2017-18 in all the three years of UG courses being run by the University as per directions of the State Govt./UGC.

Further, the committee also considered the contents of syllabus submitted by the Dr. Anshu Bhardwaj, Asstt. Professor in Management and Dr. Manju Panwar, Assistant Professor in Social Work on Urban Planning and Gender Sensitization respectively, for inclusion in the common paper "Current Issues and Societal Development"

After analyzing all the contents the following syllabi for the common paper "Current Issues and Societal Development" is proposed by the committee for implementation in all the UG courses from the Academic Session 2017-18, for further approval of the Academic Council

Current Issues and Societal Development
Course Code: CISD
(for all UG courses being run by the University)

Maximum Marks: 100
Time: 03 Hours

External Marks:80
Internal Marks:20

Unit-1

Legal Literacy

- Law relating to Hindu Marriage, Dowry, Sexual Harassment of Women, Consumer Protection Act-2000.

Shweta
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- Fundamental Rights of Citizens; Rights in relation to police, Right to Information, Lokayukt, Right of Children to Free and Compulsory Education Act- 2009.
- Property Rights, Human Rights, Right to Maintenance, Objects and scope of Motor Vehicle Act-1988
- Labour Law, Trafficking in Human Beings

Unit-2

Financial Literacy

- Salary: Concept and components like Basic, DA, TA, HRA, Child Education Allowance etc.
- Business Income and Agricultural Income: Concept and difference between the two.
- Banks: Types and functions
- Post Office: Current saving schemes for individuals.
- Investment opportunities: Debt, Equity and Mutual Funds (concept, Merits and Demerits of each type). Procedure for applying and availing of loans for entrepreneurship and home construction/purchase from Banks.
- Insurance: concept and types of insurance related to business and individuals.

Unit-3

Gender Sensitization alongwith stories of Patriots/Martyr & Historical Play Veer Shiromani Maharaja Surajmal

- Introduction: Sex and Gender
- Types of Gender : Gender Roles and Gender Division of Labour
- Gender Stereotyping and Gender Discrimination
- From Women's Studies to Gender Studies: A Paradigm Shift
- Introduction Gender Roles: Biological vs Cultural Determinism
- Foundation of Gender: Power relations, Human Development indicators and gender disparity
- Social Dynamics of Gender Patriarchy and Gender -power
- Caste, Class and Gender
- Stories of Patriots: Bhagat Singh, Rajguru, Sukhdev, Rani Lakshmbai, Behan Subhasini Devi
- Historical Play: Veer Shiromani Maharaja Surajmal

Unit-4

Urban Planning

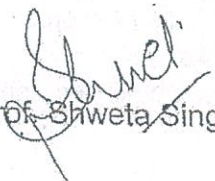
- History of Human Settlement & Planning Principles
- Housing & Community Planning
- Planning Theory and Techniques
- Urban Ecology & Environment Planning

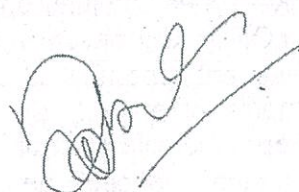
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- Transportation Planning
- Urban Infrastructure Planning
- Urban regeneration & Conservation Techniques
- Urban Development Models

The Committee further recommended that the HOD's may once again be requested to supply the list of courses to be offered through MOOCs alongwith the Academic Session from which they propose to commence the course as required by the UGC for further consideration of the committee.


Prof. Shweta Singh


Prof. Sanket Vij

पर्यावरण अध्ययन

Maximum Marks: 100
Time: 03 Hours
Credits: 04

External Marks: 80
Internal Marks: 20
Code: EYS 201

पाठ्यक्रम का उद्देश्य: पर्यावरण सम्बंधित विषयों के प्रति विद्यार्थियों को संवेदनशील बनाना। विभिन्न गतिविधियों के द्वारा विद्यार्थियों में स्वच्छ और हरित चेतना जगाना जैसे पौधारोपण, जल व बिजली संरक्षण और हरे व स्वच्छ परिसर ड्राइव आदि। इसके अलावा विभाग व विश्वविद्यालय स्तर पर ईको-क्लब गठन करने की योजना बनाई जाएगी जो कि एक सबसे महत्वपूर्ण उद्देश्य है। जिसके द्वारा पर्यावरण के प्रति जागरूकता फैलाने की विभिन्न मुहीम शुरू की जाएंगी। प्रत्येक विद्यार्थी को जो, एस म वि ईको-क्लब का सदस्य बनेगा।

इकाई 1।

पर्यावरण अध्ययन का परिचय - पर्यावरण अध्ययन की प्रकृति: क्षेत्र और महत्व; सतत विकास अवधारणा। प्राकृतिक संसाधन - भूमि संसाधन: भूमि का हास: मृदा अपरदन और मरुस्थलीकरण: वन संसाधन: वनों की कटाई: कारण और खन्न एव बांध निर्माण के वन और नजातियों पर प्रभाव। जल: सतही जल और भूजल का उपयोग और शोषण: पानी को ले कर टकराव। ऊर्जा के संसाधन नवीकरणीय और अनवीकरणीय: वैकल्पिक ऊर्जा के संसाधनों का उपयोग, प्रकरण अध्ययन।

इकाई 2

पारितंत्र - पारितंत्र की परिभाषा: पारितंत्र की संरचना और कार्य: ऊर्जा का प्रवाह, खाद्य शृंखला, खाद्य जाल और पारिस्थितिक वशाक्रम, पारितंत्र के प्रकार; प्रकरण अध्ययन।

जैव-विविधता और संरक्षण - जैव-विविधता का संरक्षण: परिभाषा; मूल्य; अनुवांशिक प्रजातिय और पारितंत्र विविधता; भारत के जैव-भौगोलिक क्षेत्र; विश्व में जैव-विविधता के अति सक्रिय क्षेत्र; भारत एक महा जैव-विविधता राष्ट्र के रूप में; भारत की विलुप्तप्राय और स्थानिक प्रजातियों, जैव-विविधता को खतरा व उसका संरक्षण।

इकाई 3

पर्यावरण प्रदूषण - पर्यावरण प्रदूषण: प्रकार, कारण, प्रभाव और नियंत्रण: वायु, जल, मृदा और ध्वनि प्रदूषण, नाभिकीय खतरा, ओज अपशिष्ट और उसका प्रबंधन - भूमंडलीय तापमान में वृद्धि, ओजोन परत का क्षरण, अम्लीय वर्षा व उनके प्रभाव, प्रदूषण प्रकरण अध्ययन।

आपदा प्रबंधन - सूखा, बाढ़, भूकंप, चक्रवात, सुनामी और भूस्खलन।

इकाई 4

पर्यावरण नीतियाँ और प्रथाएँ - पर्यावरण हेतु कानून: पर्यावरण सुरक्षा अधिनियम(1986); वायु (प्रदूषण निवारण और नियन्त्रण) अधिनियम(1981); जल (प्रदूषण निवारण और नियन्त्रण) अधिनियम(1974); वन्यजीव (संरक्षण) अधिनियम(1972); वन संरक्षण अधिनियम(1980)।

मानव समुदाय और पर्यावरण - मानव जनसंख्या वृद्धि: प्रभाव व नियंत्रण, औषधि व्यसन: मादक पदार्थ व उनके प्रभाव, पर्यावरण आन्दोलन चिपको, मूक घाटी (साइलेंट वैली), पर्यावरण नैतिकता: भारतीय एव अन्य धर्मों का पर्यावरण संरक्षण में भूमिका।

क्षेत्र कार्य - (किन्हीं दो गतिविधियों पर केवल आन्तरिक मूल्यांकन के लिए रिपोर्ट लिखें)

1. अपने इलाके की पर्यावरणीय समस्याओं का वर्णन करना और उनके निदान के बारे में सुझाव देना।
2. एक स्थानीय प्रदूषित क्षेत्र भ्रमण - शहरी/ ग्रामीण/ औद्योगिक/ कृषि क्षेत्र/ दूषित जल उपचार संयंत्र।
3. पर्यावरणीय सम्पदाओं के प्रलेखन के लिए एक क्षेत्र का भ्रमण: नदी/ वन/ वनस्पति/ जीव/ औषधिय उद्यान।
4. घरेलू अपशिष्ट पदार्थों में से जैव निम्नीकृत व अजैव निम्नीकृत घटकों को अलग करके उसकी खाद बनाना।

* विद्यार्थियों को पर्यावरणीय मुद्दों के बारे में जागरूक करने के लिए रैली, प्रश्नोत्तरी, निबंध व नारा लिखना और चित्रकला प्रतियोगिता आदि आयोजित की जाएंगी। कागज, पानी, व बिजली संरक्षण, पॉलिथीन मुक्त परिसर व पॉलिथीन मुक्त पर्यावरण, एक विधाथी एक पेड़ अभियान आदि की शुरुआत की जाएगी। इसके अलावा विद्यार्थियों को स्वच्छ भारत लक्ष्य में योगदान देने के लिए प्रोत्साहित किया जाएगा।

परीक्षक के लिए निर्देश

The examiner is requested to set nine questions in all taking two questions from each unit and one compulsory question. The compulsory question will consist of four parts and will be distributed over the whole syllabus. The candidate is required to attempt five questions in all by selecting at least one question from each unit along with one compulsory question.

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ENVIRONMENTAL STUDIES

Maximum Marks: 100
Time: 03 Hours
Credits: 04

External Marks: 80
Internal Marks: 20
Code: EVS 201

Course Objectives: To sensitize the students about environmental concerns and issues, to create a clean and green consciousness among students through various activities e.g. tree plantation, water conservation, energy conservation and green & clean campus drive etc. Moreover, constitution of Eco-Club at departmental and university level would be planned i.e. one of the most important objective. Through which different environmental awareness campaigns would be initiated. Every student will become a member of Eco-Club.

Unit 1

Introduction to Environmental Studies - Nature of environmental studies: scope and importance: concept of sustainable development.

Natural Resources - Land resources: land degradation: soil erosion and desertification. Forest resources: deforestation: causes and impacts of mining and dam building on forests and tribal people. Water: use and over-exploitation of surface and ground water: conflicts over water. Energy resources: renewable and non renewable, use of alternate energy sources, case studies.

Unit 2

Ecosystems - Definition; structure and function of an ecosystem; energy flow, food chains, food webs and ecological succession; types of ecosystems; case studies.

Biodiversity Conservation - Definition; value; genetic, species and ecosystem diversity; Biogeographic zones of India; hot spots of biodiversity; India as a mega-biodiversity nation; endangered and endemic species of India; threats and conservation of biodiversity.

Unit 3

Environmental Pollution - Type, causes, effects and controls measures of: air, water, soil and noise pollution. Nuclear hazards. Solid waste and its management, global warming, ozone layer depletion, acid rain and their impacts, pollution case studies.

Disaster management: Droughts, floods, earthquake, cyclones, tsunami and landslides.

Unit 4

Environmental Policies and Practices - Environment Protection Act (1986), Air (Prevention & Control of Pollution) Act (1981); Water (Prevention and control of Pollution) Act (1974); Wildlife Protection Act (1972); Forest Conservation Act (1980).

Human Communities and the Environment - Human population growth; impacts and control. Drug abuse: drugs and their effects. Environmental movements: Chipko and Silent valley movements, Environmental ethics: role of Indian and other religions in environmental conservation

Field Work - (write report on any two activities for internal assessment only)

1. To explain environmental issues of your area and suggest some solution for them
 2. Visit to a local polluted site-urban/rural/industrial/agricultural/sewage treatment plant.
 3. Visit to an area to document environmental assets: river forest flora/fauna/herbal park.
 4. Segregation of biodegradable and non biodegradable domestic solid waste to prepare its compost
- * The rally, quiz, essay and slogan writing and painting competitions etc. would be organized to aware the students about environmental issues. The campaigns like: paper, water and electricity conservation, polyethylene free campus and polyethylene free environment, one student one plant campaign etc. would be initiated. Moreover, students would also be provoked to contribute in Swachh Bharat Mission.

Instruction for Examiner

The examiner is requested to set nine questions in all taking two questions from each unit and one compulsory question. The compulsory question will consist of four parts and will be distributed over the whole syllabus. The candidate is required to attempt five questions in all by selecting at least one question from each unit along with one compulsory question.

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ANIN EXURE - 22

Pre-Ph.D. Course Work in Food and Nutrition

Scheme and Syllabi of Examination

for

Pre-Ph. D. Course Work

in

Food and Nutrition

(w. e. f. academic session 2024-2025)

Offered by

BPSIHL

Under

(Faculty of Science)



Bhagat Phool Singh Mahila Vishwavidyalaya

Khanpur Kalan (Sonapat), Haryana-131305

www.bpswomenuniversity.ac.in

06/12/2023

PPDL -701: Research Methodology

L T P
4 0 0 (4 Credits)

Marks for External Exam : 80
Marks for Internal Exam : 20
Total : 100
Time : 3 Hours

Note: The examiner is requested to set **nine** questions in all taking two questions from each unit and one **compulsory** question. The compulsory question will consist of four parts and will be distributed over the whole syllabus. The candidate is required to attempt **five** questions selecting one from each unit and the compulsory question.

UNIT-I

Introduction of Research Methodology: Meaning of research, objectives of research, types of research, significance of research, research and scientific method, research process.

Research Problem: Definition, necessity and techniques of defining research problem. Formulation of research problem. Objectives of research problem.

UNIT-II

Scientific Communications: Publishing Research Papers: Selection of a journal; writing of paper's abstract, formulation of problem, discussion and references, submission and handling of reviewer's comment.

Writing of thesis: Format of a thesis; Review of literature, formulation; Writing methods, results; preparation of Tables, figures; writing discussion; writing conclusion; writing summary and synopsis; Reference citing and listing/Bibliography. Avoiding Plagiarism.

UNIT-III

Computer Applications in Research: Practical aspects of MATLAB, Introduction to LATEX.

MS Office 2007: Word Basics, Mail Merge, Macros, Math Type, Equation Editor

MS Excel 2007: Excel Basics, Data Sort, Functions.

UNIT-IV

Presentation: Poster and Oral. Presentation tools: Introduction to presentation tool, MS Power Point: features and functions, creating presentation, customizing presentation, showing presentation.

Web Search: Internet Basics, Internal Protocols, Pre-requisites, Search Engines, Searching Hints, Using advanced search techniques

Books Recommended:

1. Gurumani, N. (2010), Scientific Thesis Writing and Paper Presentation, MJP Publishers
2. Kothari, C.R. (2010), Research Methodology (Methods and Techniques), New Age International Publishers.
3. Gerald, C.F. and Wheatley, P.O. : Applied numerical analysis, 6th Ed. Addison Wesley (2002)
4. Smith G.D. : Numerical solution of partial differential equations, Oxford University Press (1982)
5. Schwartz H.R., Stiefel: Numerical analysis of symmetric matrices, Prentice Hall (1976)

PPDLFN- 705: ADVANCES IN FOOD AND NUTRITION

L T P
4 0 0 (4 Credits)

Marks for External Exam : 80
Marks for Internal Exam : 20
Total : 100
Time : 3 Hours

Note: The examiner is requested to set **nine** questions in all taking two questions from each unit and one **compulsory** question. The compulsory question will consist of four parts and will be distributed over the whole syllabus. The candidate is required to attempt **five** questions selecting one from each unit and the compulsory question.

COURSE OBJECTIVE: To provide an insight of advanced knowledge of Food and Nutrition to the researcher.

COURSE OUTCOMES:

1. To gain knowledge regarding the advances in food additives and toxicants.
2. Be familiar with concept of prebiotics and probiotics and advancement of essential fatty acids.
3. To understand the chemical and physical changes which occur during the production, processing and storage of food and their application

UNIT- I

Interrelation between nutrients, Computer application in clinical nutrition., Non-nutritive components of food: Nutraceuticals, Phytochemicals etc., Food Biotechnology: definition and scope.

UNIT II

Assessment of nutritional status of the community ; current methodologies of assessment of nutritional status , their interpretation and comparative application of the Following: Food consumption, Anthropometry, Clinical and laboratory, Novel protein sources, Concept of Probiotics and Prebiotics, Concept of genetically modified foods.

UNIT III

Community media and method in nutrition education, National Nutrition Policy, Food safety and security.

UNIT IV

Food Packaging: Objectives and types of packaging, Basic packaging material and their protective quality, Advance trends in food packaging

REFERENCES:

- Goldberg I. 1994. Functional foods: Designer foods, Pharma foods, Nutraceuticals. Springer.
Nestle M. 2003. Safe food: Bacteria, Biotechnology and bioterrorism. University of California press.
Winick. 1973. Nutrition & Development ,univ. of calombia.
Ecames. 1972. Biology of Nutrition ,Palaniuma press
Akoh CC and MinDB. 1998. Food lipids- chemistry, Nutrition and Biotechnology, Marcel Dekker.

Full
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Unit - IV

Databases And Research Metrics : Databases - Indexing databases; Citation databases – Web of Science, Scopus, SCI, etc.; Research Metrics - Impact Factor of journal as per Journal Citation Report, SNIP, SIR, IPP, Cite Score; Metrics : h-index, g-index, i-index, Altmetrics journal database.

Suggested Readings:

1. Bird, A. (2006). Philosophy of Science, Routledge.
2. MacIntyre, Alasdair (1967) A Short History of Ethics, London.
3. P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
4. National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition, National Academies Press.
5. Resnik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10. Retrieved from <https://www.niehs.nih.gov/research/resouices/bioethics/whatis/index.cfm>
6. Bcall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179. <https://doi.org/10.1038/489179a>

Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance (2019), ISBN:978-81-939482-1-7. <http://www.insaindia.res.in/pdf/EthicsBook.pdf>

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06/12/2023

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Department of Basic and Applied Sciences

Minutes of the meeting

Proceedings of the Meeting of the PG Board of Studies of Department of Basic and Applied Sciences, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonipat), held on 06/12/2023 at 11:00 am.

The following were present:

1. Dr. Sunil Kumar, Department of BAS, BPSMV
2. Prof. Neera Raghav, Department of Chemistry, KUK
3. Prof. Kapil Kumar, Department of Mathematics, GJUS&T, Hisar,
4. Prof. R.S. Kundu, Department of Physics, GJUS&T, Hisar
5. Prof. Rajbala Grewal, Retired Prof. CCHAU, Hisar
6. Dr. Reenu Rana, Asstt. Prof. Deptt. of Nutrition & Dietetics, Geeta University Panipat
7. Dr. Veena, Principal BPSIHL, BPSMV

Chairperson
Outside Expert
Outside Expert
Special Invitee
Special Invitee
Member
Special Invitee

Following Members are on Exam duty and gave their consent telephonically

1. Dr. Bhupinder Singh, Associate Prof. Deptt. of BAS, BPSMV
2. Dr. Asha, Assistant Prof., Deptt. of BAS, BPSMV

Following member did not attend the meeting

1. Mr. Anuj Koundal, Senior Manager, Corporate Quality Assurance, Mother Dairy Fruit and Vegetable, New Delhi

All the items of the agenda were circulated vide letter no. BAS/23/428 dated 01/12/2023 and discussed in detail on 06/12/2023 at 11:00 am in the meeting. After detailed deliberations & discussions following were resolved and approved:

Item No. 1: Approval of Minutes of DRC held on 09.09.2023 to finalize the synopsis of Ms. Parul D/o Sheeshpal and Ms. Sonia D/o Wazir Singh for registration in Ph. D. Mathematics.

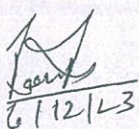
Minutes of the DRC held on 09.09.2023 were discussed and approved.

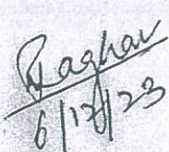
Item No. 2: To renew the panel of Examiners for evaluation of Ph.D. (food and Nutrition) Thesis of Ms. Sonal.

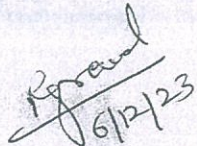
The fresh panel of examiners for evaluation of Ph.D. Thesis of Ms. Sonal, Registration no.2016041100022284 was prepared and approved.

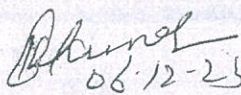
Item No. 3: To discuss the eligibility criteria for admission in M.Sc. Food and Nutrition.

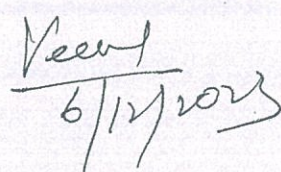
The agenda related to eligibility for admission in M.Sc. (Food and Nutrition) was discussed in detail and following was resolved:


6/12/23

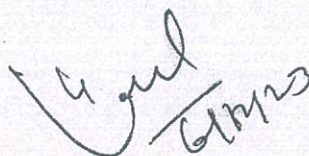

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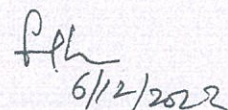

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6/12/23


6/12/2023

01/05/2024
05/01/2024



Office of Faculty of Sciences
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomenuniversity.ac.in

Minutes of the Meeting of the Faculty of Sciences, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), held on 05.01.2024 at 10:30 A.M. in the office of Dean, Faculty of Science.

The following were present:

1. Dr. Sunil Sangwan, Dean, Faculty of Science & Chairperson (Convener)
2. Ms. Sangeeta Sapra, Member
Principal Tau Devi Lal Govt. College for Women, Murthal
3. Dr. Sandep Kandhwal, Member
Principal Govt. College for Women Madlauda
4. Dr. Asha, Assistant Professor, BAS Member
5. Dr. Bhupinder Singh, Associate Prof. BAS Special Invitee
6. Worthy Registrar Member Secretary

Item No. 1: Approval of Minutes of PGBOS held on 06.12.2023 to finalize the synopsis of Ms. Parul D/o Sheeshpal and Ms. Sonia D/o Wazir Singh for registration in Ph. D. Mathematics.

Decision taken: The Faculty of Science approved the synopsis of Ms. Parul and Ms. Sonia as recommended by DRC and PGBOS for registration in Ph.D. Mathematics.

Sr. No	Roll no. (Pre-Ph.D.)	Name of Candidate	Name of Supervisor	Topic of synopsis
1	22122201	Parul D/o Sheeshpal	Dr. Sunil Kumar	Investigation of Thermomechanical Disturbances in Coupled Thermoelastic Media
2	22122202	Sonia D/o Wazir Singh	Dr. Sunil Kumar	Analysis of Transient Problems in Generalized Thermoelasticity

Item No. 2: To discuss the eligibility criteria for admission in M.Sc. Food and Nutrition.

Decision taken: The Faculty of Science approved the Minutes of PGBOS held on 06.12.2023 regarding eligibility criteria for admission in M.Sc. Food and Nutrition w.e.f academic session 2024-25.

Item No. 3: To revise the scheme of Pre-Ph.D. in Food & Nutrition.

Decision taken: The Faculty of Science approved the Minutes of PGBOS held on 06.12.2023 to revise the scheme of Pre-Ph.D. in Food & Nutrition w.e.f academic session 2024-25.

Meeting ended with a vote of thanks to the chair.

Sylabi
Sunil Sangwan 05/01/24

Sylabi
Sangeeta Sapra 05/01/24
Bhupinder Singh 5/1/24

Sylabi
Sandep Kandhwal
Registrar (Member Secretary) 05/01/24

Asha 05/01/24

Department of Basic and Applied Sciences

Minutes of the meeting

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7. Dr. Veena, Principal BPSIHL, BPSMV

Chairperson
 Outside Expert
 Outside Expert
 Special Invitee
 Special Invitee
 Member

Special Invitee

Following Members are on Exam duty and gave their consent telephonically

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2. Dr. Asha, Assistant Prof., Deptt. of BAS, BPSMV

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Item No. 1: Approval of Minutes of DRC held on 09.09.2023 to finalize the synopsis of Ms. Parul D/o Sheeshpal and Ms. Sonia D/o Wazir Singh for registration in Ph. D. Mathematics.

Minutes of the DRC held on 09.09.2023 were discussed and approved.

Item No. 2: To renew the panel of Examiners for evaluation of Ph.D. (food and Nutrition) Thesis of Ms. Sonal.

The fresh panel of examiners for evaluation of Ph.D. Thesis of Ms. Sonal, Registration no.2016041100022284 was prepared and approved.

Item No. 3: To discuss the eligibility criteria for admission in M.Sc. Food and Nutrition.

The agenda related to eligibility for admission in M.Sc. (Food and Nutrition) was discussed in detail and following was resolved:

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6/12/23

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6/12/2023

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[Signature]
6/12/23

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6/12/2023

Eligibility Conditions: Candidate who has passed one of the following examinations with an field of specialization, obtaining atleast 50% marks in aggregate:

B.Sc. (Home Science)/B.Sc.:(Home Science) with Honours/B.Sc. Human Nutrition & Dietetics.

OR

B.Sc. with Home Science/ Botany/ Zoology/ Genetics/ Biochemistry/ Microbiology/ Biotechnology/ Food Technology/ Food Microbiology/ Food Science / Food Processing as one of the main subjects.

Item No. 4: To revise the scheme & Syllabi of Pre-Ph.D. in Food & Nutrition.

The scheme & syllabi of Pre-Ph.D. in Food & Nutrition was prepared and recommended w.e.f 2024-25.

Item No. 5: Any other item.

No other item was discussed.

With this the meeting ended with a vote of thank to the chair.

Rajbala
Rajbala Grewal

Neera Raghav
Neera Raghav
06/12/23

Kapil Kumar
Kapil Kumar
06/12/23

R.S. Kundu
R.S. Kundu

Veena
Veena
06/12/2023

Bhupinder Singh

Asha

Reenu Rana
Reenu Rana
06/12/23

Sunil Kumar
Sunil Kumar
06/12/23

Endst. No. BPSMV/BAS/23/...435.....Dated...06/12/2023.....

A copy of the above is forwarded to the following for information:

1. All the members of PG Board of Studies.
2. AR (Academic) for information and necessary action.

MINUTES OF THE MEETING OF DEPARTMENTAL RESEARCH COMMITTEE (DRC).

A meeting of the Departmental Research Committee in Mathematics held in office of Chairperson, Department of Basic and Applied Sciences on 09.09.2023 at 11: 00 am.

The following were present:

1. Prof. Kuldeep Bansal, Deptt. of Mathematics, GJUS&T, Hisar (Outside Expert)
2. Prof. D.K. Madan, Department of Mathematics, CBLU, Bhiwani (Outside Expert)
3. Dr. Sunil Kumar, Department of BAS, BPSMV, Khanpur Kalan (Convener)
4. Dr. Asha, Department of BAS, BPSMV, Khanpur Kalan (Member)
5. Dr. Bhupinder Singh, Department of BAS, BPSMV, Khanpur Kalan (Special Invitee)

Departmental Research Committee considered the following agenda item:

Synopsis for registration to Ph.D. programme in Mathematics.

The following Research Scholars of the Department of Basic and Applied Sciences have given presentation on the synopsis for proposed Ph.D. work before the Departmental Research Committee in Mathematics.

Sr. No.	Name of Candidate	Name of Supervisor	Name of Synopsis Topic
1.	Ms. Parul	Dr. Sunil Kumar	Investigation of Thermomechanical Disturbances in Coupled Thermoelastic Media
2.	Ms. Sonia	Dr. Sunil Kumar	Analysis of Transient Problems in Generalized Thermoelasticity

The committee recommends the synopsis for registration to Ph.D. Programme of the above candidates for consideration by PGBOS in Mathematics.

The meeting ended with a vote of thanks to all the chair.

Kuldeep Bansal
09/09/2023

D.K. Madan
9/9/2023

Sunil Kumar
09/09/2023

Asha
09/09/23

Bhupinder Singh
9/9/23

05/01/2024

	Office of Faculty of Sciences Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), Haryana-131305 www.bpswomenuniversity.ac.in
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Minutes of the Meeting of the Faculty of Sciences, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), held on 05.01.2024 at 10:30 A.M. in the office of Dean, Faculty of Science.

The following were present:

1. Dr. Sunil Sangwan : Dean, Faculty of Science & Chairperson (Convener)
2. Ms. Sangeeta Sapra, : Member
Principal Tau Devi Lal
Govt. College for Women, Murthal
3. Dr. Sandep Kandhwal, : Member
Principal Govt. College for Women Madlauda
4. Dr. Asha, Assistant Professor, BAS : Member
5. Dr. Bhupinder Singh, Associate Prof. BAS : Special Invitee
6. Worthy Registrar : Member Secretary

Item No. 1: Approval of Minutes of PGBOS held on 06.12.2023 to finalize the synopsis of Ms. Parul D/o Sheeshpal and Ms. Sonia D/o Wazir Singh for registration in Ph. D. Mathematics.

Decision taken: The Faculty of Science approved the synopsis of Ms. Parul and Ms. Sonia as recommended by DRC and PGBOS for registration in Ph.D. Mathematics.

Sr. No	Roll no. (Pre-Ph.D.)	Name of Candidate	Name of Supervisor	Topic of synopsis
1	22122203	Parul D/o Sheeshpal	Dr. Sunil Kumar	Investigation of Thermomechanical Disturbances in Coupled Thermoelastic Media
2	22122204	Sonia D/o Wazir Singh	Dr. Sunil Kumar	Analysis of Transient Problems in Generalized Thermoelasticity

Item No. 2: To discuss the eligibility criteria for admission in M.Sc. Food and Nutrition.

Decision taken: The Faculty of Science approved the Minutes of PGBOS held on 06.12.2023 regarding eligibility criteria for admission in M.Sc. Food and Nutrition w.e.f academic session 2024-25.

Item No. 3: To revise the scheme ^{& syllabi} of Pre-Ph.D. in Food & Nutrition.

Decision taken: The Faculty of Science approved the Minutes of PGBOS held on 06.12.2023 to revise the scheme ^{and syllabi} of Pre-Ph.D. in Food & Nutrition w.e.f academic session 2024-25.

Meeting ended with a vote of thanks to the chair.

Sunil Sangwan 05/01/24

Sangeeta Sapra 05/01/24

Bhupinder Singh 5/1/24

Sandep Kandhwal

Registrar (Member Secretary)

Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomensuniversity.ac.in

Ref. No. BPSMV/Dean, FET/24/02

Date:- 10/01/2024

Proceeding of the meeting of Faculty of Engineering and Technology held on 10/01/2024 at 11.00 am. in the office of Dean, Faculty of Engineering and Technology BPSMV, Khanpur Kalan.

The following members were present:-

1. Dr. Sandeep Khandwal, Principal, Govt. College for Women, Sonipat
2. Dr. Priyanka, Associate Professor, Chairperson, ECE BPSMV, Khanpur Kalan, Sonipat
3. Dr. Sonal Chairperson, CSE&IT, BPSMV, Khanpur Kalan, Sonipat
4. Dr. Harinder Pal, In-Charge, Deptt of FT, BPSMV, Khanpur Kalan, Sonipat
5. Mrs. Sudesh Nandal, Associate Professor, Deptt of ECE, BPSMV, Khanpur Kalan, Sonipat
6. Dr. Manju Saroha, Assistant Professor, Department of CSE &IT, BPSMV, Khanpur Kalan, Sonipat
7. AR, Secretary, BPSMV, Khanpur Kalan

After detailed discussion and deliberation, the following decisions were taken:-

Agenda No.1: To consider the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric" under joint supervision of Dr. Harinder Pal, Assistant Professor, Department Fashion Technology as supervisor and Prof. J.N Chakraborty, as co-supervisor Department of Textile Technology, NIT, Jalandhar, Punjab duly approved by DRC in its meeting held on 12/08/2023 and PGBOS meeting held on 18/10/2023 of the Department of Fashion Technology (Copy attached).

Agenda No 2: To Consider the case of de-registration of Ms. Sunita, Ph.D Scholar having registration No 2017041100022985 in Department of Electronics and Communication Engineering.

Resolved and approved: - Considered and approved the case of de-registration of Ms. Sunita, Ph.D Scholar, having registration no 2017041100022985 as resolved and approved by DRC and PGBOS in its meeting held on 31/08/2022 and 05/1/2024 respectively (Copy attached).

Agenda No 3:- To consider the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques" under Joint supervision of Dr. Sunita Rani as supervisor and Dr. Vinod Kumar Saroha as

10/01/24 10/01/24 10/01/24 10/01/24 10/01/24 10/01/24

Co-Supervisor duly approved by DRC in its meeting held on 05/01/2024 and PGBOS meeting held on 09/01/2024 of the Department of Computer Science & Engineering and Information Technology (Copy attached).

Agenda No 4:- To consider the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering regarding implementation of AICTE directive for introduction of course on "Internet of things, Mobile Communication of Network and advance mobile communication" as well as and six month internship in FET.

Resolved and Approved: Considered and approved the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering. After detailed deliberation and discussion at length, the course "Internet of Things" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 5th semester having course code ECEL-357 and credit of 3 in place of the course "Internet of things and Applications". The scheme and syllabus is attached herewith.

1. The course "Mobile Communication and Network" as directed by AICTE (Email received dated 03/03/2023) is introduced as a core course in B.Tech 6th semester having course code ECL-360 and credit of 3 in place of the course "Computer Network" in B.Tech 6th semester. The scheme and syllabus is attached herewith.
2. The course "Advanced Mobile Communication" as directed by AICTE (Email received dated 03/03/2023) is introduced in B Tech 7th semester having course code ECEL-475-D and credit of 3 in place of the course "Mobile Programming". The scheme and syllabus is attached herewith.
3. The application as received from the students regarding one semester industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. Further, the matter was referred to UGBOS and was deliberated and discussed at length. It has been found that the same is adopted at other reputed Universities like DCRUST Murthal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

Vijay Nehra
Prof. (Dr) Vijay Nehra
Dean, FET

Sandeep
Dr. Sandeep Khandwal
Outside expert

Priyanka
Dr. Priyanka
Chairperson, ECE

Sonal
Dr. Sonal
Chairperson, CSE&IT

Harinder Pal
Dr. Harinder Pal
In-Charge, FT

Sudesh
Mrs. Sudesh Nandal
Member

Manjira
Dr. Manjira Saroha
Member

Assistant Registrar
Assistant Registrar
(Academic Branch)

Dated: -10/01/2024

Endst. No. BPSMV/ECE/24/02

Copy to:-

1. All Chairperson, Faculty of Engineering and Technology for information necessary action
2. Office Copy, Faculty of Engineering and Technology

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Department of Fashion Technology,
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan, Sonipat- 131305 (Haryana) India
Tel. No. 01263-283126

A meeting of PG BOS Fashion Technology held on 18/10/2023 at 11:00 a.m. in the office of Chairperson, Fashion Technology.

The following members of PG BOS (FT) attended the meeting:

1. Dr. Amandeep Singh Grover, Director (Outside Expert)
NIFT, Sector-23, Panchkula
2. Dr. Vijay Yadav, Executive Director (Outside Expert)
Textile Sector Skill Council, Delhi
3. Prof. Vijay Nehra
Dean, Faculty of Engineering & Technology, BPSMV Khanpur Kalan
4. Dr. Harinder Pal,
In-Charge, Department of Fashion Technology, BPSMV, Khanpur Kalan
5. Mr. Ashish Hooda,
Assistant Professor, Department of Fashion Technology, BPSMV, Khanpur Kalan
6. Ms. Pratibha Malik, Assistant Professor, (Alumni)
Department of Design, Amity, Noida (Attended Online)

All agenda items were discussed in detail in the PG BOS of Fashion Technology meeting and following decisions were taken:

1. Item No. 1: Resolved and Approved

The committee members considered and approved the recommendations of DRC (Fashion Technology) held on 12/08/2023 and approved the Ph.D topic "Design Development and Assessment of Sustainable Denim Fabric" for Ph.D. registration under joint supervision of Dr. Harinder Pal, Assistant Professor, Department of Fashion Technology, BPSMV, Khanpur Kalan and Prof. Dr. J.N. Chakraborty, Department of Textile Technology, NIT, Jalandhar, Punjab candidate Ms. Ritika Sharma.

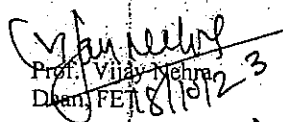
2. Item No. 2: Resolved and Approved

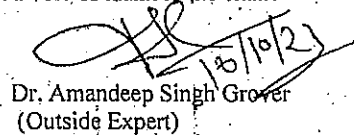
The panel for Paper Setters/ Examiners for theory and Practical Exams for both even and odd semesters for M.Tech. (Fashion Technology- Functional Garments) for the academic session 2023-24 were resolved and approved.

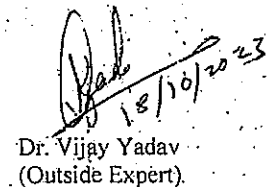
3. Item No. 3:

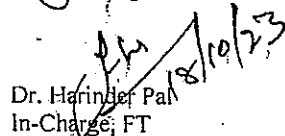
The Department of Fashion Technology will take initiative on the outcome based learning and will revise M.Tech Scheme and Syllabus in near future.

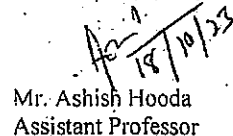
With this the meeting ended with a vote of thank to the chair.

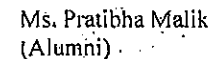

Prof. Vijay Nehra
Dean, FET 18/10/23


Dr. Amandeep Singh Grover
(Outside Expert) 18/10/23


Dr. Vijay Yadav
(Outside Expert) 18/10/2023


Dr. Harinder Pal
In-Charge, FT 18/10/23

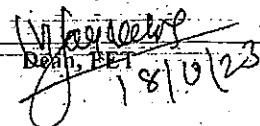

Mr. Ashish Hooda
Assistant Professor 18/10/23


Ms. Pratibha Malik
(Alumni)

Dean, FET

Copy of the above is forwarded to the following for information and further necessary action:

1. PS to Vice-Chancellor (for kind information of Hon'ble Vice-Chancellor) BPSMV, Khanpur Kalan.
2. PA to Registrar (for kind information of Worthy Registrar), BPSMV, Khanpur Kalan.
3. COE for information.
4. Assistant Registrar (Acad.) for information and necessary action.
5. Dean, faculty of Engineering & Sciences, for information.
6. Concerned person, for information.


Dean, FET 18/10/23



Department of Fashion Technology,
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan, Sonapat- 131305 (Haryana) India
Tel. No. 01263-283126

Reg. No. BPSMV/FT/23/177

Dated: 12/08/2023

Proceeding of the Departmental Research Committee of Fashion Technology meeting

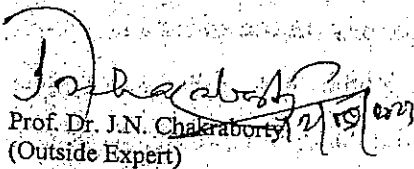
A meeting of the Departmental Research Committee of Fashion Technology is held on 12/08/2023 at 11:30 am in the office of Chairperson, Department of Fashion Technology.

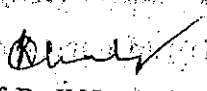
The following members of the DRC were present:

1. Prof. Dr. J.N. Chakraborty (Outside Expert)
Department of Textile Technology, NIT, Jalandhar, Punjab
2. Prof. K.N. Chatterjee, Visiting Professor (Outside Expert)
Design Department, Neta Ji Subhas Institute of Technology, New Delhi
3. Prof. Vijay Nehra
Dean, Faculty of Engineering & Technology, BPSMV Khanpur Kalan
4. Dr. Harinder Pal
Assistant Professor, Department of Fashion Technology, BPSMV, Khanpur Kalan

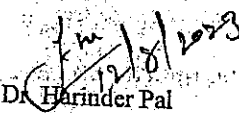
The Departmental Research Committee resolved the following outcomes:

- After detailed deliberation and discussion, DRC Evaluated Research Synopsis of Ms. Ritika Sharma, Roll No. 21151001 and approved the Ph.D. topic "Design, Development and Assessment of Sustainable Denim Fabric" for Ph.D registration under joint supervision of Dr. Harinder Pal, Assistant Professor, Department of Fashion Technology, BPSMV, Khanpur Kalan and Prof. Dr. J.N. Chakraborty Department of Textile Technology, NIT, Jalandhar, Punjab


Prof. Dr. J.N. Chakraborty
(Outside Expert)

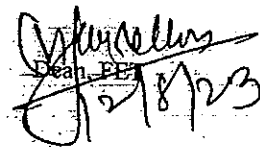

Prof. Dr. K.N. Chatterjee
(Outside Expert)

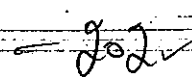

Prof. Dr. Vijay Nehra
(Dean, FET)


Dr. Harinder Pal
(Member)

Copy of the above is forwarded to the following for information and further necessary action:

1. PS to Hon'ble Vice-Chancellor (for kind information of Hon'ble Vice-Chancellor).
2. PA to Registrar (for kind information of Worthy Registrar)
3. Assistant Registrar (Academic) for information.
4. Assistant Registrar (R&S) for information.


Dean, FET



**Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305**

www.bpswomenuiversity.ac.in

Ref. No. BPSMV/Dean, FET/24/02

Date:- 10/01/2024

Proceeding of the meeting of Faculty of Engineering and Technology held on 10.01.2024 at 11.00 am. in the office of Dean, Faculty of Engineering and Technology, BPSMV, Khanpur Kalan.

The following members were present:-

1. Dr. Sandeep Khandhwal, Principal, Govt. College for Women, Sonipat
2. Dr. Priyanka, Associate Professor, Chairperson, ECE
BPSMV, Khanpur Kalan, Sonipat
3. Dr. Sonal Chairperson, CSE&IT, BPSMV, Khanpur Kalan, Sonipat
4. Dr. Harinder Pal, In-Charge, Deptt of FT, BPSMV, Khanpur Kalan, Sonipat
5. Mrs. Sudesh Nandal, Associate Professor, Deptt of ECE, BPSMV, Khanpur Kalan, Sonipat
6. Dr. Manju Saroha, Assistant Professor, Department of CSE &IT, BPSMV, Khanpur Kalan, Sonipat.
7. AR, Secretary, BPSMV, Khanpur Kalan

After detailed discussion and deliberation, the following decisions were taken:-

Agenda No.1: To consider the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric" under joint supervision of Dr. Harinder Pal, Assistant Professor, Department Fashion Technology as supervisor and Prof. J.N Chakraborty, as co-supervisor Department of Textile Technology, NIT, Jalandhar, Punjab duly approved by DRC in its meeting held on 12/08/2023 and PGBOS meeting held on 18/10/2023 of the Department of Fashion Technology (Copy attached).

Agenda No 2: To Consider the case of de-registration of Ms. Sunita, Ph.D Scholar having registration No 2017041100022985 in Department of Electronics and Communication Engineering.

Resolved and approved: - Considered and approved the case of de-registration of Ms. Sunita, Ph.D Scholar, having registration no 2017041100022985 as resolved and approved by DRC and PGBOS in its meeting held on 31/08/2022 and 05/1/2024 respectively (Copy attached).

Agenda No 3:- To consider the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques" under joint supervision of Dr. Sunita Rani as supervisor and Dr. Vinod Kumar Saroha as

10/1/24

Jyoti

Sonal

Manju

Sudesh

Priyanka

2024

2

66	Saya	Sh. Mahender Singh	HOGC	41.3	25	66.3	HOGC	Dr. Ajit Singh
21975	Punerva	Sh. Anil Kumar	HOGC	35	19	54	HOGC	Dr. Ajit Singh

em No.2:

considered the recommendation of DSC held on 4/1/2024 and approved the satisfactory progress report of following students:

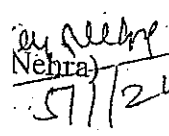
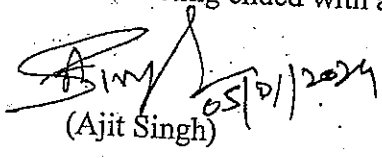
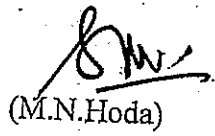
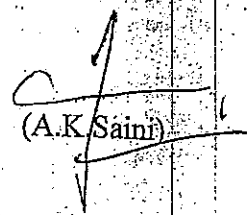
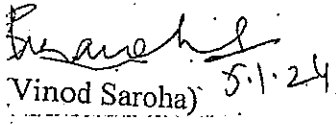

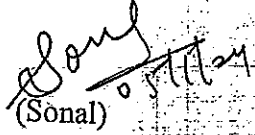
No	Roll No	Name	Supervisor Name	Duration
	16011001	Anjana	Prof. Ajit Singh	March 2022 to Dec 2023
	16011002	Ekta	Prof. Ajit Singh	March 2022 to Dec 2023
	21011001	Rajni	Prof. Ajit Singh	July 2023 to Dec 2023

No 3:

Departmental Research committee considered the recommendation of the Departmental Staff Committee on 4/1/2024 with regard to registration in Ph.D (CSE) and recommend the following candidate for registration in Ph.D programme along with her topic of research . Moreover the DRC recommends Dr. Vinod Saroha as co-supervisor of Ms. Rubi D/o Sh. Shab Singh.

Name of Candidate	Research Topic	Name of Supervisor	DRC Remarks/ Decision
Rubi D/o Sh Shab Singh	Enhancing Data Security in Cloud Computing using Cryptographic Techniques	Dr. Sunita Rani (Supervisor) Dr. Vinod Kumar Saroha (Co- Supervisor)	Recommended for Registration

The meeting ended with a vote of thanks to the Chair.

 (Nehra) 5/1/24
 (Ajit Singh) 05/01/2024
 (M.N.Hoda)
 (A.K.Saini)
 Vinod Saroha) 5.1.24
 (Sunita Rani) 05/01/2024
 (Sonal) 05/01/24
 Chairman, DRC

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	HOGC	76.41	64.2	61.53	78.23	67	46.9	Eligible
	HOGC	81.83	76.80	73.79	70.36	59	41.3	Eligible
Punerva	HOGC	95	76.40	67.48	79.04	50	35	Eligible

The following candidate appeared for the interview for admission in Ph.D. (CSE) for the academic session 2023-2024:

- | | |
|--------------------------------------|------------------------|
| 1. Deepali D/o Sh.Naresh Kumar | Exempted Category |
| 2. Nisha D/o Sh.Kuldeep Singh | Exempted Category |
| 3. Meenakshi D/o Sh Parveen Gahlawat | Entrance Test Category |
| 4. Saya D/o Sh. Mahender Singh | Entrance Test Category |
| 5. Punerva D/o Sh. Anil Kumar | Entrance Test Category |

The committee interviewed the candidate as per provision contained in the Ph.D. ordinance and awarded the marks as under:

Exempted Category- 25 marks							
S. No	Applicati on No	Name	Interview				Total Marks (25)
			Presentatio n (5marks)	Communication & Analytical Skill (6 marks)	Domain Knowledge (7 marks)	Research Statement & Research Ability (7 marks)	
1.	22329	Deepali	3	4	5	6	18
2.	21850	Nisha	4	5	5	6	20
Entrance Test Category 30 marks							
S. No	Applicati on No	Name	Interview				Total Marks (30)
			Presentatio n (7marks)	Communication & Analytical Skill (7 marks)	Domain Knowledge (8 marks)	Research Statement & Research Ability (8 marks)	
1.	22168	Meenakshi	5	6	6	6	23
2.	22166	Saya	6	6	6	7	25
3.	21975	Punerva	4	5	5	5	19

The final merit of the candidate is prepared on the basis of academic weightage and interview as under:

Sr. No	App No	Name	Father's Name	Category	Academic Record (out of 75)	Marks Awarded by DRC (out of 25)	Total (100)	Category	Allotment of Supervisor
1.	22329	Deepali	Sh. Naresh Kumar	HOGC	51.46	18	69.46	AIC	Dr. Sunita Rani
2.	21850	Nisha	Sh. Kuldeep Singh	HOGC	50.17	20	70.17	AIC	Dr. Vinod Kumar Saroha
					Entrance Test Wtg (70)				
3.	22168	Meenakshi	Sh. Parveen Gahlawat	HOGC	46.9	23	69.9	HOGC	Dr. Vinod Kumar Saroha

[Handwritten signatures and dates]
 05/01/2024
 205
 31/12/24
 5.1.24

Department of Computer Science & Engineering and Information Technology
BPS Mahila Vishwavidyalaya Khanpur Kalan Sonipat
 (A State University Established under the Legislative Act No. 31/2006)
 Office No. 01263-283127, www.bpswomenuniversity.ac.in

A meeting of the Departmental Research committee of the Department of CSE &IT was held on 05/01/2024 at 11:00 am in the Conference Hall Department of CSE &IT, BPSMV

The following members were present:

- | | |
|--|-----------------|
| 1. Prof. Vijay Nehra, Dean, FET, BPSMV, Khanpur Kalan | Member |
| 2. Prof. Ajit Singh, Dept. of CSE &IT, BPSMV, Khanpur Kalan | Member |
| 3. Ms. Sonal, Chairperson, Dept. of CSE &IT, BPSMV, Khanpur Kalan | Chairman |
| 4. Prof. M.N. Hoda, Director, BVICAM, New Delhi | Outside Expert |
| 5. Prof. A.K. Siani, USMS, GGSIPU, New Delhi | Outside Expert |
| 6. Dr. Sunita Rani, Assistant Professor, Dept. of CSE&IT, BPSMV | Member |
| 7. Dr. Vinod Saroha, Assistant Professor, Dept. of CSE & IT, BPSMV | Special Invitee |

Agenda:

- To conduct the interview for admission in Ph.D (CSE) for Academic Session 2023-24 (January, 2024).
- To consider the progress report of Ph.D(CSE) students- Ms. Anjana, Ms. Ekta and Ms. Rajni
- Any other item

To consider the registration of the candidate: Ms. Rubi D/o Sh. Shab Singh who have completed the Pre-PhD Course work during academic session 2023-24 and allotment of Dr. Vinod Saroha as co-supervisor (request of student attached)

Item No 1:

The DRC considered the agenda item of the DRC and resolved as under:

The committee considered the eligible list of candidate as provided by the admission committee vide letter no CSE&IT/24/R/14 dated: 04-01-2024:

Exempted Category (JRF Candidate)											
Name of the Candidate (Ms)	Category	10 th		12 th		UG		PG		Total Marks obtained out of 75	Eligibility
		%age Marks obtained	Wtg (10%)	% Marks obtained	Wtg (15%)	Marks obtained (%age)	Wtg (20%)	Marks obtained (%age)	Wtg (30%)		
Deepali	AIC	78 (CGPA)	7.02	56.2	8.43	73.8	14.76	70.83	21.25	51.46	Eligible
Nisha	AIC	52	5.2	59.8	8.97	60	12	80	24	50.17	Eligible
Entrance Test Category- 3.6.2.1											
Name of Candidate	Category	10 %	12 %	UG %	PG %	Entrance Marks	70 % wtg	Entrance Marks	Eligibility		

[Handwritten signatures and dates]
 25/11/24
 5/1/24
 26
 5/1/24
 5.1.24

(8)

Department of Computer Science & Engineering and Information Technology
BPS Mahila Vishwavidyalaya Khanpur Kalan Sonipat

(A State University Established under the Legislative Act No. 31/2006)

Accredited with 'B++' grade by NAAC

Ref. No BPSMV/CSE/IT/24/10/28

Dated ..09/01/24

Minutes of the meeting of the PGBOS of Computer Science & Engineering of Department of Computer Science & Engineering and Information Technology, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonipat), held on 9.01.2024 at 11:00 AM. The following PGBOS members were present in the meeting:

- | | |
|---|--|
| 1. Ms. Sonal, Chairperson, Dept. of CSE&IT, BPSMV, Khanpur Kalan | (Chairman) |
| 2. Dr. Ajit Singh, Prof. Dept. of CSE/IT | Member |
| 3. Prof. M N Hoda, Director, BVICAM, New Delhi | Outside expert (Online) |
| 4. Prof. P.S. Grover, Former Professor, Dept. of CSE, New Delhi | Outside expert (Online) |
| 5. Dr. Vinod Kumar Saroha, Assistant Professor, Dept. of CSE/IT | Member (Online) |
| 6. Dr. Manju Saroha, Assistant Professor, Dept. of CSE/IT | Member |
| 7. Ms. Sonia Dhull, Ericsson (Security Lead) | Alumni Representative (Online) |
| 8. Ms. Meenu Dhania, Senior Associate Consultant
BOSCH Bengaluru | Profession Trade & Industry
Representative (Online) |

The aforesaid meeting is convened in the Department of Computer Science & Engineering and Information Technology, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonipat in blended mode. The agenda items were discussed in detail and following decisions have been taken:

Considered and Approved:

1. The recommendations of DRC held on 5.01.2024 in the Department of CSE/IT has been approved as follows:

Sr. No.	Name of the candidate	Research Topic	Name of the Supervisor	DRC Remarks/Decision
1.	Ms. Rubi D/o Sh. Shab Singh	Enhancing Data Security in cloud Computing using Cryptographic Techniques	Dr. Sunita Rani (Supervisor) Dr. Vinod Saroha (Co-Supervisor)	Recommended for Registration

2. The panel of examiners for credit examination for M. Tech (CSE) 2nd and 4th semester in the academic session 2023-24 (even Semester) and Pre-Ph.D Coursework was drawn and approved.

With this, the meeting ended with a vote of thanks to the chair.

Dr. Vinod Kumar Saroha
(Member)

Not attended

Prof. Ajit Singh
(Member)

Ms. Meenu
(Member)

Ms. Sonia Dhull
(Member)

A copy of the above is forwarded to the following for information: -

1. PA to Hon'ble Vice-Chancellor (for kind information of Hon'ble Vice-Chancellor).
2. PA to Registrar (for kind information of Worthy Registrar).
3. Assistant Registrar (Academic), for information.
4. Controller of Examinations for information and necessary action.

Co-Supervisor duly approved by DRC in its meeting held on 05/01/2024 and PGBOS meeting held on 09/01/2024 of the Department of Computer Science & Engineering and Information Technology (Copy attached).

Agenda No 4:- To consider the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering regarding implementation of AICTE directive for introduction of course on "Internet of things, Mobile Communication of Network and advance mobile communication" as well as and six month internship in FET.

Resolved and Approved: Considered and approved the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering. After detailed deliberation and discussion at length, the course "Internet of Things" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 5th semester having course code ECEL-357 and credit of 3 in place of the course "Internet of things and Applications". The scheme and syllabus is attached herewith.

1. The course "Mobile Communication and Network" as directed by AICTE (Email received dated 03/03/2023) is introduced as a core course in B.Tech 6th semester having course code ECL-360 and credit of 3 in place of the course "Computer Network" in B.Tech 6th semester. The scheme and syllabus is attached herewith.
2. The course "Advanced Mobile Communication" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 7th semester having course code ECEL-475-D and credit of 3 in place of the course "Mobile Programming". The scheme and syllabus is attached herewith.
3. The application as received from the students regarding one semester industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. Further, the matter was referred to UGBOS and was deliberated and discussed at length. It has been found that the same is adopted at other reputed Universities like DCRUST, Muzhal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

Vijay Nehra
Prof. (Dr) Vijay Nehra
Dean, FET

Sandeep
Dr. Sandeep Khandhwal
Outside expert

Priyanka
Dr. Priyanka
Chairperson, ECE

Sonal
Dr. Sonal
Chairperson, CSE&IT

Harinder Pal
Dr. Harinder Pal
In-Charge, FT

Sudesh
Mrs. Sudesh Nandal
Member

Meha
Dr. Meha Saroha
Member

[Signature]
Assistant Registrar
(Academic Branch)
Dated: 10/01/2024

Endst. No. BPSMV/ECE/24/

Copy to:-

1. All Chairperson, Faculty of Engineering and Technology for information necessary action.
2. Office Copy, Faculty of Engineering and Technology

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Department of Computer Science & Engineering and Information Technology

BPS Mahila Vishwavidyalaya Khanpur Kalan Sonapat
(A State University Established under the Legislative Act No. 31/2006)
Accredited with 'B++' grade by NAAC

Proceedings of the meeting of Department Staff Committee (DSC) of Computer Science & Engineering and Information Technology:

A meeting of the Department Staff Committee of the Department of Computer Science & Engineering and Information Technology was held on 04.01.2024 at 11:00 AM in the Conference Hall, Department of Computer Science & Engineering and Information Technology.

The following are the members of Department Staff Committee:

1. Prof. Ajit Singh, Dept. of CSE&IT, BPSMV, Khanpur Kalan.
2. Ms. Sonal, Associate Professor/Chairperson, Dept. of CSE&IT, BPSMV, Khanpur Kalan.
3. Mr. Vikas Malik, Assistant Professor, Dept. of CSE&IT, BPSMV, Khanpur Kalan.
4. Dr. Vinod Saroha, Assistant Professor, Dept. of CSE&IT, BPSMV, Khanpur Kalan.
5. Dr. Manju Saroha, Assistant Professor, Dept. of CSE&IT, BPSMV, Khanpur Kalan.
6. Dr. Sunita Rani, Assistant Professor, Dept. of CSE&IT, BPSMV, Khanpur Kalan.

The following research scholars of Department of CSE & IT presented their progress report before the Staff Council for the period given as under:

Sr. No.	Roll No.	Name	Supervisor Name	Duration
1	16011001	Anjana	Prof. Ajit Singh	March, 2022 to Dec. 2023
2	16011002	Ekta	Prof. Ajit Singh	March, 2022 to Dec. 2023
3	21011001	Rani	Prof. Ajit Singh	July, 2023 to Dec. 2023

The progress report of all the above mentioned research scholars were found satisfactory.

After successfully completion of Pre-Ph.D course work, Ms. Rubi (Roll no 22011001), Research Scholar, under the supervision of Dr. Sunita Rani, presented her synopsis before the Staff Council and Council recommended the same for the DRC.

Sunita Rani
04/01/2024
Sunita Rani

Not attended
Vikas Malik

Manju Saroha
24/1/24
Manju Saroha

Sonal Beniwal
24/1/24
Sonal Beniwal

Vinod Kumar
04-1-24
Vinod Kumar

Ajit Singh
04/01/2024
Ajit Singh

**Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305**

Office No. 01263-283124, www.bpswomenuniversity.ac.in

Proceedings of the meeting of PG-Board of Studies of Electronics and Communication Engineering:-
A meeting of the PGBOS of Electronics and Communication Engineering was held on 05/01/2024 at 02:00 pm in the office of chairperson, Department of Electronics and Communication Engineering.

The following members were present:-

- | | |
|---|---------------------------------|
| 1. Prof. Priyanka
Department of Electronics and Communication Engineering
DCRUS&T, Murthal | Outside expert (Online Joined) |
| 2. Prof. Sanjeev Dhull
Department of Electronics and Communication Engineering
GJU&ST, Hissar | Outside expert(Online Joined) |
| 3. Prof. Vijay Nehra,
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan | Dean, FET |
| 4. Dr. Priyanka , Associate Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Chairperson, ECE |
| 5. Mrs. Sudesh Nandal, Associate Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Member |
| 6. Dr. Sandeep Dahiya, Associate Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Member |
| 7. Dr. Krishan Kumar, Associate Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Member |

The members of PGBOS deliberated & discussed at length the proposed agenda item and resolved the following:

Agenda 1: - Considered and Approved.

- (a) Considered the recommendation of DRC meeting held on 31/08/2022 and approved the case of de-registration of Ms. Sunita, Ph.D scholar, having registration No. 2017041100022985.

Prof. Priyanka
Outside expert

Prof. Sanjeev Dhull
Outside expert

Prof. Vijay Nehra
Member

Mrs. Sudesh Nandal
Member

Dr. Sandeep Dahiya
Member

Dr. Krishan Kumar
Member

Priyanka
Chairperson

Endst. No BPSMV/ECE/24/

Dated:- 05/01/2024

Copy to:-

- 1 P.S to VC for kind information of the Vice-Chancellor, BPSMV, Khanpur Kalan.
- 2 All members of PG BOS for information.

2/0

Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomenuniversity.ac.in

Ref. No. BPSMV/Dean, FET/24/02

Date:- 10/01/2024

Proceeding of the meeting of Faculty of Engineering and Technology held on 10.01.2024 at 11.00 am. in the office of Dean, Faculty of Engineering and Technology, BPSMV, Khanpur Kalan.

The following members were present:-

1. Dr. Sandeep Khandhwal, Principal, Govt. College for Women, Sonipat
2. Dr. Priyanka, Associate Professor, Chairperson, ECE
BPSMV, Khanpur Kalan, Sonipat
3. Dr. Sonal Chairperson, CSE&IT, BPSMV, Khanpur Kalan, Sonipat
4. Dr. Harinder Pal, In-Charge, Deptt of FT, BPSMV, Khanpur Kalan, Sonipat
5. Mrs Sudesh Nandal, Associate Professor, Deptt of ECE, BPSMV, Khanpur Kalan,
Sonipat
6. Dr. Manju Saroha, Assistant Professor, Department of CSE &IT, BPSMV, Khanpur
Kalan, Sonipat
7. AR, Secretary, BPSMV, Khanpur Kalan

After detailed discussion and deliberation, the following decisions were taken:-

Agenda No.1: To consider the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric" under joint supervision of Dr. Harinder Pal, Assistant Professor, Department Fashion Technology as supervisor and Prof. J.N Chakraborty, as co-supervisor Department of Textile Technology, NIT, Jalandhar, Punjab duly approved by DRC in its meeting held on 12/08/2023 and PGBOS meeting held on 18/10/2023 of the Department of Fashion Technology (Copy attached).

Agenda No 2: To Consider the case of de-registration of Ms. Sunita, Ph.D Scholar having registration No 2017041100022985 in Department of Electronics and Communication Engineering.

Resolved and approved: - Considered and approved the case of de-registration of Ms. Sunita, Ph.D Scholar, having registration no 2017041100022985 as resolved and approved by DRC and PGBOS in its meeting held on 31/08/2022 and 05/1/2024, respectively (Copy attached).

Agenda No 3:- To consider the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques" under joint supervision of Dr. Sunita Rani as supervisor and Dr. Vinod Kumar Saroha as

Dr. Sandeep Khandhwal
10/1/24

Dr. Priyanka
10/1/24

Dr. Sonal
10/1/24

Dr. Harinder Pal
10/1/24

Mrs. Sudesh Nandal
10/01/24

Dr. Manju Saroha
10/01/24

Co-Supervisor duly approved by DRC in its meeting held on 05/01/2024 and PGBOS meeting held on 09/01/2024 of the Department of Computer Science & Engineering and Information Technology (Copy attached).

Agenda No 4:- To consider the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering regarding implementation of AICTE directive for introduction of course on "Internet of things, Mobile Communication of Network and advance mobile communication" as well as and six month internship in FET.

Resolved and Approved: Considered and approved the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering. After detailed deliberation and discussion at length, the course "Internet of Things" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 5th semester having course code ECEL-357 and credit of 3 in place of the course "Internet of things and Applications". The scheme and syllabus is attached herewith.

1. The course "Mobile Communication and Network" as directed by AICTE (Email received dated 03/03/2023) is introduced as a core course in B.Tech 6th semester having course code ECL-360 and credit of 3 in place of the course "Computer Network" in B.Tech 6th semester. The scheme and syllabus is attached herewith.
2. The course "Advanced Mobile Communication" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 7th semester having course code ECEL-475-D and credit of 3 in place of the course "Mobile Programming". The scheme and syllabus is attached herewith.

3. The application as received from the students regarding on-campus industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. Further, the matter was referred to UGBOS and was deliberated and discussed at length. It has been found that the same is adopted at other reputed Universities like DCRUST Murthal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

Vijay Nehra
Prof. (Dr) Vijay Nehra
Dean, FET

Sandeep 10/11/24
Dr. Sandeep Khandhwal
Outside expert

Priyanka 10/01/24
Dr. Priyanka
Chairperson, ECE

Sonal 10/11/24
Dr. Sonal
Chairperson, CSE&IT

Harinder Pal 10/11/24
Dr. Harinder Pal
In-Charge, FT

Sudesh 10/01/24
Mrs. Sudesh Naïdal
Member

Mamta 10/11/24
Dr. Mamta Saroha
Member

Assistant Registrar
Assistant Registrar
(Academic Branch)
Dated: 10/01/2024

Endst. No. BPSMV/ECE/24/

Copy to:-

- 212 -
1. All Chairperson, Faculty of Engineering and Technology for Information and Communication Technology
 2. Office Copy, Faculty of Engineering and Technology

ECE/22/337
31/08/2022



Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
Office No. 01263-283124, www.bpswomenuniversity.ac.in

A meeting of DRC of Department of Electronics and Communication Engineering was held on 31/08/2022 at 12:00 pm in the office of Chairperson. Following members were present:

- | | |
|--|------------------|
| 1. Prof. B.K. Kaushik
Department of Electronics and Communication Engineering, IIT, Roorkee | Outside Expert |
| 2. Prof. Manoj Duhan
Department of Electronics and Communication Engineering, DCRUST, Murthal | Outside Expert |
| 3. Prof. Vijay Nehra
Department of Electronics and Communication Engineering BPSMV, Khanpur Kalan Sonapat. | Chairperson, ECE |
| 4. Dr. Priyanka, Assistant Prof
Department of Electronics and Communication Engineering BPSMV, Khanpur Kalan Sonapat. | Member |
| 5. Dr. Sandeep Dahiya
Department of Electronics and Communication Engineering BPSMV, Khanpur Kalan Sonapat. | Special Invitee |

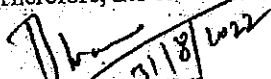
The agenda item was discussed in detail and after deliberation & discussion following decision was taken:

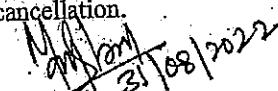
Agenda items No. 1:- To consider the 5th Progress Report of Ms. Asha, Registration No 2018041100016606.

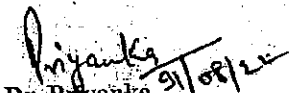
Ms. Asha presented her 5th progress report before DRC and found satisfactory. She satisfy the eligibility for pre-submission.

Agenda items No. 2:- To consider the Progress Report of Ms. Sunita, Registration No 2017041100022985.

Ms. Sunita neither paid any fee after registration nor she present any progress report till yet. An official communication was sent to the candidate vide BPSMV/ECE/22/ 214 dated- 31/05/2022. No response was received. Therefore, her case is forwarded to PGBOS for cancellation.


31/08/2022
Prof. B.K. Kaushik
(Outside Expert)



31/08/2022
Prof. Manoj Duhan
(Outside Expert)


31/08/2022
Dr. Priyanka
(Member)

Chairperson

Copy to:-

1. PS to Vice chancellor (for kind information of Hon'ble Vice-Chancellor) BPSMV, Khanpur Kalan.
2. Assistant Registrar (Acad) for information and necessary action.
3. Dean, Faculty of Engineering and Technology, for information.


31/08/2022

Minutes of the meeting of the committee constituted by the Vice-Chancellor held on 26.07.2023 at 11:00 am in the office of Dean Academic Affairs BPSMV, Khanpur Kalan to resolve the issue of nomenclature of DMCs of all integrated programmes.

The following were present:

- | | |
|--------------------------------------|----------|
| 1. Dean Academic Affairs | Convener |
| 2. Dean, Faculty of Arts & Languages | Member |
| 3. Controller of Examinations | Member |
| 4. Assistant Registrar, Academic | Member |

The committee deliberated upon the issue, taking into consideration the practices being observed in sister Universities for programmes of similar nature.

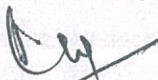
The committee recommends that the students of MA integrated programmes run by the university through Department of English and Department of Economics may be issued DMCs of first six semesters with the following nomenclature:

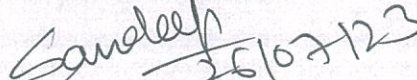
**Master of Arts English/Economics (Integrated)
(Bachelor of Arts Honors English/Economics Semester-
I/II/III/IV/V/VI)**


7th semester onwards, the format shall remain the same as is in practice now.

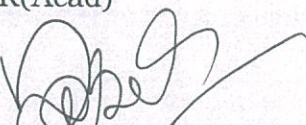
**Master of Arts English/Economics (Integrated)
Semester-VII/VIII/IX/X**

The meeting ended with vote of thanks to the chair.


Sh. Rajesh
AR(Acad)


Dr. Sandeep Dahiya
(Controller of Examinations)


Prof. Ashok Verma
(Dean, FAL) 26/07/2023


Prof. Sanket Vij
(Dean Academic Affairs)



ANNEXURE - 29

Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
Office No. 01263-283124, www.bpswomenuniversity.ac.in

Proceeding of the UG Board of Studies of Electronics and Communication Engineering meeting:-

A meeting of the UGBOS of Electronics and Communication Engineering was held on 12/09/2023 at 11:30 AM in the office of Chairperson, Department of Electronics and Communication Engineering.

The following members were present:-

Prof. Manoj Duhan Department of Electronics and Communication Engineering DCRUS&T, Murthal Email: duhan_manoj@rediffmail.com	Outside expert (Joined Online)
Prof. Nidhi Goel Department of Electronics and Communication Engineering, Indra Gandhi Delhi Technical University of women, Delhi, Phone No- 9212119300, Email:- nidhigoel@igdtuw.ac.in,	Outside expert (Joined Online)
Dr. Vijay Nehra Department of Electronics and Communication Engineering, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), Haryana-131305	Professor
Dr. Priyanka, Associate Professor Department of Electronics and Communication Engineering, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), Haryana-131305	Chairperson
Mrs. Sudesh Kumari Nandal Department of Electronics and Communication Engineering, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), Haryana-131305	Member (Joined Online)
Dr. Krishan Kumar Department of Electronics and Communication Engineering, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), Haryana-131305	Member

The members of UGBOS deliberated & discussed at length the proposed agenda items and the following decisions were taken:-

Agenda 1:- Considered and Approved.

Considered and approved the Panel of Examination of 1st, 3rd, 5th and 7th semester of B.Tech (ECE).

Agenda 2:- Considered and Approved.

1. After detailed deliberation and discussion at length, the course "Internet of Things" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 5th semester having course code ECEL-357 and credit of 3 in place of the course "Internet of things and Applications". The scheme and syllabus is attached herewith.
2. The course "Mobile Communication and Network" as directed by AICTE (Email received dated 03/03/2023) is introduced as a core course in B.Tech 6th semester having course code ECL-360 and credit of 3 in place of the course "Computer Network" in B.Tech 6th semester. The scheme and syllabus is attached herewith.

3. The course "Advanced Mobile Communication" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 7th semester having course code ECEL-475-D and credit of 3 in place of the course "Mobile Programming". The scheme and syllabus is attached herewith.

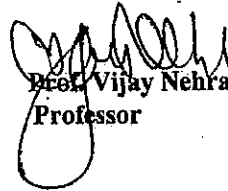
Any other Agenda items

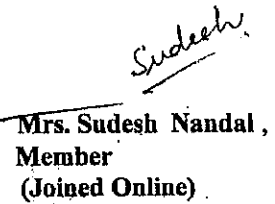
Agenda 3:- Considered and Resolved.


The application as received from the students regarding one semester industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. Further, the matter was referred to UGBOS and was deliberated and discussed at length. It has been found that the same is adopted at other reputed Universities like DCRUST Murthal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

Prof. Manoj Duhan,
Outside expert
(Joined Online)

Prof. Nidhi Goel,
Outside expert
(Joined Online)


Prof. Vijay Nehra
Professor


Mrs. Sudesh Nandal,
Member
(Joined Online)


Dr. Krishan Kumar
Member

~~Chairperson~~

Endst. No. BPSMV/ECE/23/408

Dated:-25/09/2023

Copy to:-

1. PS to Vice-chancellor (for kind information of Hon'ble Vice-chancellor) BPSMV Khanpur Kalan.
2. PA to Registrar (for kind information of Worthy Registrar), BPSMV Khanpur Kalan.
3. All members of UG BOS for information.
4. Office Copy, Department of Electronics and Communication Engineering for information records.


Chairperson

ANNEXURE-30



Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomenuniversity.ac.in

Ref. No. BPSMV/Dean, FET/24/ 02

Date:- 10/01/2024

Proceeding of the meeting of Faculty of Engineering and Technology held on 10.01.2024 at 11.00 am. in the office of Dean, Faculty of Engineering and Technology, BPSMV, Khanpur Kalan.

The following members were present:-

1. Dr. Sandeep Khandhwal, Principal, Govt. College for Women, Sonipat
2. Dr. Priyanka, Associate Professor, Chairperson, ECE BPSMV, Khanpur Kalan, Sonipat
3. Dr. Sonal Chairperson, CSE&IT, BPSMV, Khanpur Kalan, Sonipat
4. Dr. Harinder Pal, In-Charge, Deptt of FT, BPSMV, Khanpur Kalan, Sonipat
5. Mrs. Sudesh Nandal, Associate Professor, Deptt of ECE, BPSMV, Khanpur Kalan, Sonipat
6. Dr. Manju Saroha, Assistant Professor. Department of CSE &IT, BPSMV, Khanpur Kalan, Sonipat.
7. AR, Secretary, BPSMV, Khanpur Kalan

After detailed discussion and deliberation, the following decisions were taken:-

Agenda No.1: To consider the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric" under joint supervision of Dr. Harinder Pal, Assistant Professor, Department Fashion Technology as supervisor and Prof. J.N Chakraborty, as co-supervisor Department of Textile Technology, NIT, Jalandhar, Punjab duly approved by DRC in its meeting held on 12/08/2023 and PGBOS meeting held on 18/10/2023 of the Department of Fashion Technology (Copy attached).

Agenda No 2: To Consider the case of de-registration of Ms. Sunita, Ph.D Scholar having registration No 2017041100022985 in Department of Electronics and Communication Engineering.

Resolved and approved: - Considered and approved the case of de-registration of Ms. Sunita, Ph.D Scholar, having registration no 2017041100022985 as resolved and approved by DRC and PGBOS in its meeting held on 31/08/2022 and 05/1/2024 respectively (Copy attached).

Agenda No 3:- To consider the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques" under Joint supervision of Dr. Sunita Rani as supervisor and Dr. Vinod Kumar Saroha as

Jm 10/1/24
Priyanka
Sonal 10/1/24
Manju 10/1/24
Sudesh 10/01/24
Priyanka

Co-Supervisor duly approved by DRC in its meeting held on 05/01/2024 and PGBOS meeting held on 09/01/2024 of the Department of Computer Science & Engineering and Information Technology (Copy attached).

Agenda No 4:- To consider the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering regarding implementation of AICTE directive for introduction of course on "Internet of things, Mobile Communication of Network and advance mobile communication" as well as and six month internship in FET.

Resolved and Approved: Considered and approved the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering. After detailed deliberation and discussion at length, the course "**Internet of Things**" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 5th semester having course code ECEL-357 and credit of 3 in place of the course "**Internet of things- and Applications**". The scheme and syllabus is attached herewith.

1. The course "**Mobile Communication and Network**" as directed by AICTE (Email received dated 03/03/2023) is introduced as a core course in B.Tech 6th semester having course code ECL-360 and credit of 3 in place of the course "**Computer Network**" in B.Tech 6th semester. The scheme and syllabus is attached herewith.
2. The course "**Advanced Mobile Communication**" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 7th semester having course code ECEL-475-D and credit of 3 in place of the course "**Mobile Programming**". The scheme and syllabus is attached herewith.
3. The application as received from the students regarding one semester industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. Further, the matter was referred to UGBOS and was deliberated and discussed at length. It has been found that the same is adopted at other reputed Universities like DCRUST Murthal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

Vijay Nehra
Prof. (Dr) Vijay Nehra
Dean, FET

Sandeep Khandwal
Dr. Sandeep Khandwal
Outside expert

Priyanka
Dr. Priyanka
Chairperson, ECE

Sonal
Dr. Sonal
Chairperson, CSE&IT

Harinder Pal
Dr. Harinder Pal
In-Charge, FT

Sudesh
Mrs. Sudesh Nandal
Member

Mamta Saroha
Dr. Mamta Saroha
Member

Assistant Registrar
Assistant Registrar
(Academic Branch)
Dated:-10/01/2024

Endst. No. BPSMV/ECE/24/

Copy to:-

1. All Chairperson, Faculty of Engineering and Technology for Information necessary action.
2. Office Copy, Faculty of Engineering and Technology



Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

Office No. 01263-283124, www.bpswomenuniversity.ac.in

Minutes of Meeting

A meeting of Staff Council was held on 11/09/2023 at 11:00 am in the office of the Chairperson, Department of Electronics and Communication Engineering. The following members were present in the meeting.

1. Dr. Vijay Nehra, Professor & Dean, FET, BPSMV, Khanpur Kalan. *[Signature]*
2. Dr. Priyanka Anand, Associate Prof & Chairperson, ECE, BPSMV, Khanpur Kalan. *[Signature]*
3. Mrs. Sudesh Nandal, Associate Prof., ECE, BPSMV, Khanpur Kalan *[Signature]*
4. Dr. Sandeep Dahiya, Associate Prof., ECE, BPSMV, Khanpur Kalan
5. Dr. Rajender Kumar, Associate Prof., ECE, BPSMV, Khanpur Kalan *[Signature]*
6. Dr. Krishan Kumar, Asstt. Prof., ECE, BPSMV, Khanpur Kalan. *[Signature]*

The following matter were discussed and resolved:-

Agenda 1:- To Discuss the 8th semester internship.

Agenda 1:- Considered and Resolved.

The application as received from the students regarding one semester industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. It has been found that the same is adopted at other reputed Universities like DCRUST Murthal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

[Signature]
Secretary

Departmental Committee

Ref No. BPSMV/ECE/23/

Dated:-

Copy to:-

1. All members of the staff council, Dept. of ECE, for information.
2. Office Record file, Dept. of ECE

[Signature]
Chairperson



Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

(A state university established by govt. of Haryana vides Act no. 31 of 2006)
www.bpswomenuniversity.ac.in

Course Structure for B. Tech Eighth Semester (Fourth Year)									
S. No.	Code	Course Title	Hours/Week			Total Credits	Internal Marks	External Marks	Total Marks
			L	T	P				
Subjects									
1.	*	Program Elective-6	3	0	0	3	20	80	100
2.	**	Program Elective-7	3	0	0	3	20	80	100
3.	***	Open Elective-4	3	0	0	3	20	80	100
4.	****	Open Elective-5	3	0	0	3	20	80	100
Labs									
5.	ECP-480	Major Project	0	0	16	8	40	160	200
6.	ISS-480	Independent Study Seminar	0	3	0	1	100	0	100
7.	GPP-482	General Proficiency	0	0	0	0	0	50	50
Total			12	3	16	21	220	530	750
*Program Elective-6					**Program Elective-7				
Subject Code		Subject			Subject Code		Subject		
ECEL-480-A		High Speed Electronics			ECEL-482-A		CAD for VLSI Design		
ECEL-480-B		Transform Technique			ECEL-482-B		Bio Electronics		
ECEL-480-C		Virtual and Augmented Reality			ECEL-482-C		Automotive Technologies		
ECEL-480-D		Power Electronics			ECEL-482-D		Nano Electronics		
*****		MOOC/NPTEL Course			ECEL-482-E		Artificial Neural Networks		
Open Elective-4					* Open Elective-5				
Subject Code		Subject			Subject Code		Subject		
OEL-480-A		Cloud Computing & Big Data			OEL-482-A		Robotics and Automation		
OEL-480-B		Information Security			OEL-482-B		Web Designing		
OEL-480-C		Intellectual Property Rights & Patents			OEL-482-C		Entrepreneurial Development		
OEL-480-D		Self Awareness & Integral Development			OEL-482-D		Operational Research		
*****		MOOC/NPTEL Course			OEL-482-E		Introduction to Smart Grid		

OR

Course Structure for B. Tech Eighth Semester (Fourth Year)									
S. No.	Code	Course Title	Hours/Week			Total Credits	Internal Marks	External Marks	Total Marks
			L	T	P				
1.	ECP-482	Internship	0	0	0	21	350	350	700
2.	GPP-482	General Proficiency	0	0	0	0	0	50	50
Total			0	0	0	21	350	400	750

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002

Note: 1. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examination of the subject.

2. General Proficiency: A comprehensive viva-voce of the students will be taken by external examiner and Chairperson of the department (internal examiner) and Class Coordinator at the end of the semester. The evaluation of the student for General Fitness for the Profession will be carried out through viva-voce taken by the committee of examiners.
3. Students may opt Elective course / Additional course as decided by Departmental Committee from NPTEL/MOOCs/ Swayam or any other online platform. The course code for the same will be decided by Departmental Committee.
4. The students may opt individual Industrial Project/R&D Project/Start-Up Project in collaboration with industry, R&D institutions etc.
5. Students may opt Programme Elective/Open Elective/Generic elective course from CBCS offered by other department.
6. Students can opt for (minimum 16 weeks) Internship (ECP-482) in lieu of 8th Semester subjects for equivalent credits (21 credits). after fulfilling the conditions specified in "Internship Guidelines".

Internship

ECP-482
L T P
0 0 0

Total Credits: 21
Internal Marks: 350
External Marks: 350
Total Marks: 700

Guidelines for Internship

A student can opt for Internship (minimum 16 weeks) in 8th semester, in lieu of course work of 8th semester, in joint supervision of internal supervisor (allotted by the Department) and the supervisor/official of the organization under whom the candidate is associated for internship. A student can arrange the internship at his/her own and arranging internship for a student by the Department is never his/her right.

Pre-requisite conditions:

- The student has got selected through on-campus/off-campus placement and the same employer is willing to take that student for the Internship.
- The student has got offer of pursuing Internship from Government research organization/govt. sponsored projects IIT'S/IIT'S/IIMs/CDAC.
- The student has got offer of pursuing Internship from reputed private organization.

For pursuing Internship, student will require the prior approval of the Director/Principal of the institute or Chairperson of the University Teaching Department. While allowing Internship, the institute/department concerned must insure that the proposed Internship schedule does not disturb the academic calendar in force. The candidate should submit a synopsis of the proposed work to be done during Internship. This synopsis should be submitted to the Department before the start of the internship semester. The synopsis received will be examined/evaluated by the Departmental committee. The student will be allowed for internship only after approval of synopsis by the Departmental committee.

Intimation of commencement of internship shall be submitted to the Chairperson concerned before the commencement of the ongoing semester.

They will have to further deposit the 8th Semester fee. The internship will not be permitted through online mode

If a student feels that the internship work is not of high quality/not-related to their field of interest, then he/ she should submit the application to the Department within two weeks and can re-join the institute to carry out the course work of 8th Semester.

The internal supervisor will monitor the student specific progress of the internship. The overall monitoring of industrial training has to be done by a Departmental Faculty Co-coordinator for Internship.

The Departmental Faculty Co-coordinator will be allotted total weekly teaching load of 2 periods, while each internal supervisor will be allotted total weekly teaching load of 1 period (supervising upto 2 students), and 2 periods, if supervising more than 4 students.

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Evaluation Process:

Each student will submit 3 copies of the detailed internship report to the Department in prescribed format at the conclusion of training.

Internal assessment/Sessional of Internship will be made jointly by the Departmental Faculty Co-coordinator for Internship, the concerned organization training supervisor/official and internal supervisor.

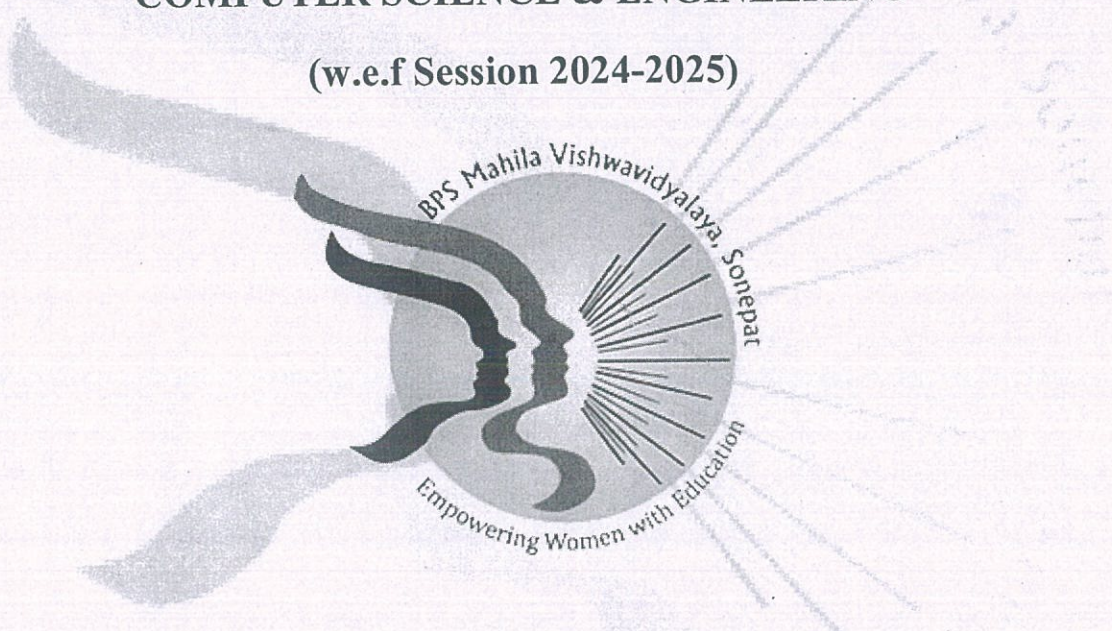
Assessment by the External supervisor/Mentor = 40% of Internal Assessment Marks

Assessment by the internal supervisor and Departmental Faculty Co-coordinator for Internship = 60% of Internal Assessment Marks

Practical Examination Assessment of Internship will be made by the committee consisting of the Chairperson of the Department, Departmental Faculty Co-coordinator for Internship and one external examiner appointed by the University.

SCHEME
(Choice Based Credit Scheme)

For
BACHELOR OF TECHNOLOGY PROGRAMME
In
COMPUTER SCIENCE & ENGINEERING
(w.e.f Session 2024-2025)



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
& INFORMATION TECHNOLOGY**

BPS MAHILA VISHWAVIDYALAYA, KHANPUR KALAN

Be *Manju* *At*
-224-
Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

STRUCTURE OF UNDERGRADUATE ENGINEERING PROGRAM

S.No	Category	Breakup of Credits (Total 160)
1	Humanities and Social Sciences including Management courses	12
2	Basic Science courses	24
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc	20
4	Professional core courses	60
5	Professional Elective courses relevant to chosen specialization/branch	17
6	Open subjects – Electives from other technical and /or emerging subjects	12
7	Project work, seminar and internship in industry or elsewhere	15
8	Mandatory Courses [Induction Program, Environmental Sciences, Constitution of India/ Essence of Indian Traditional Knowledge, Universal Human Valuses] , General Proficiency	Non-credit
9	Total *Minor variation is allowed as per need of the respective disciplines.	160

SEMESTER WISE SUMMARY OF THE PROGRAMME

S.No.	Semester	No. of Contact Hours	Marks	Credits
1.	I	21	500	17
2.	II	26	600	20
3.	III	32	800	24
4.	IV	32	800	24
5.	V	25	700	21
6.	VI	29	700	22
7.	VII	23	750	20
8.	VIII	20	550	12
	Total	208	5400	160

[Handwritten signatures]

Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR)

CREDIT DISTRIBUTION IN THE FIRST YEAR OF UNDERGRADUATE ENGINEERING PROGRAM

	Lecture (L)	Tutorial (T)	Laboratory/ Practical(P)	Total credits(C)
Chemistry -I	3	1	2	5
Physics	3	1	2	5
Maths-1	3	1	0	4
Maths -2	3	1	0	4
Programming for Problem solving	3	0	4	5
English	2	0	2	3
Engineering Graphics & Design	1	0	4	3
Workshop/Practicals	1	0	4	3
Basic Electrical Engg.	3	1	2	5
*Bioinformatics	2	1	0	2
*Engg. Mechanics	3	1	0	4
*Maths-3	3	1	0	4

COURSE CODE AND DEFINITION

Course Code	Definitions
L	Lecture
T	Tutorial
P	Practical
BSC	Basic Science Courses
ESC	Engineering Science Courses
HSMC	Humanities and Social Sciences including Management courses
PCC	Professional core courses
OEC	Open Elective courses
LC	Laboratory course
MC	Mandatory courses
PROJ	Project

MANDATORY INDUCTION PROGRAM (3-WEEKS DURATION)

- Physical activity
- Creative Arts ,Literary
- Universal Human Values
- Proficiency Modules
- Lectures by Eminent People
- Visits to local Areas
- Familiarization to Dept./Branch & Innovations

Signature 1 *Signature 2* *Signature 3*

Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (H.R.)

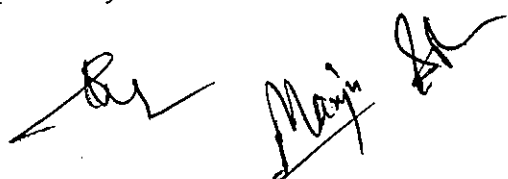
HUMANITIES & SOCIAL SCIENCES INCLUDING MANAGEMENT

S.No	Code No.	Course Title	Hours Per week			Total Credits	Semester
			L	T	P		
1	HSMC-101	English	2	0	2	3	2
2	HSMC-201	Humanities –I (Effective Technical Communication)	3	0	0	3	3
3	HSMC-202	Management-I (Organizational Behaviour)	3	0	0	3	4
4	HSMC-301	es –II (Economics for Engineers)	3	0	0	3	5
Total Credits						12	

BASIC SCIENCE COURSES [BSC]

S.No	Code No.	Course	Hours Per Week			Total Credits	Semester
			L	T	P		
1	BSC-101	Physics(Semi Conductor Physics)	3	1	2	5	1
2	BSC-103	Mathematics –I (Calculus & Linear Algebra)	3	1	0	4	1
3	BSC-104	Mathematics –II (Probability & Statistics)	3	1	0	4	2
4	BSC-102	Chemistry-I	3	1	2	5	2
5	BSC-201	Mathematics –III (Differential Calculus)	3	1	0	4	3
6	BSC-401	Bioinformatics	2	1	0	2	7
Total Credits						24	

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ENGINEERING SCIENCE COURSE [ESC]

S.No.	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	ESC- 101	Basic Electrical Engineering	3	1	2	5	1
2	ESC-102-P	Engineering Graphics & Design	1	0	4	3	1
3	ESC-103	Programming for Problem Solving	3	0	4	5	2
4	ESC-104-P	Workshop/Manufacturing Practices	1	0	4	3	2
5	ESC-203	Digital Electronics	3	0	2	4	3
Total Credits						20	

PROFESSIONAL CORE COURSES [PCC]

S.No.	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	PCC-CS 201	Data Structure & Algorithms	3	0	4	5	3
2	PCC-CS 203	Computer Organization & Architecture	3	0	0	3	3
3	PCC-CS 205	Object Oriented Programming with C++	3	0	4	5	3
4	PCC-CS 202	Discrete Mathematics	3	1	0	4	4
5	PCC-CS 204	Software Engineering	3	0	0	3	4
6	PCC-CS 206	Operating System	3	0	4	5	4
7	PCC-CS 208	Design and Analysis of Algorithms	3	0	0	3	4
8	PCC-CS 208P	Hardware Lab/MATLAB	0	0	2	1	4
9	PCC-CS 210	Python	3	0	4	5	4
10	PCC-CS-301	Database Management System	3	0	4	5	5
11	PCC-CS -303	Formal Language and Automata theory	3	0	0	3	5
12	PCC-CS-305	Java Programming	3	0	4	5	5
13	PCC-CS-307	Machine Learning	3	0	0	3	5
14	PCC-CS- 302	Compiler Design	3	0	4	5	6
15	PCC-CS 304	Computer Networks	3	0	4	5	6
Total Credits						60	

PROFESSIONAL ELECTIVE COURSES [PEC]

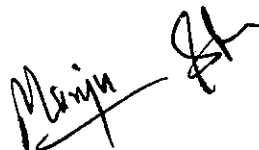
S.No.	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	PEC	Elective-I	3	0	2	4	6
2	PEC	Elective-II	3	0	0	3	6
3	PEC	Elective-III	3	0	2	4	7
4	PEC	Elective-IV	3	0	0	3	7
5	PEC	Elective-V	3	0	0	3	8
Total Credits						17	


OPEN ELECTIVE COURSES [OEC]

S.No	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	OEC	Open Elective-I	3	0	0	3	6
2	OEC	Open Elective-II	3	0	0	3	7
3	OEC	Open Elective-III	3	0	0	3	7
4	OEC	Open Elective-IV	3	0	0	3	8
Total Credits						12	

PROJECT/ SEMINAR/ INDUSTRIAL TRAINING

S.NO	CODE NO.	COURSE TITLE	HOURS PER WEEK			TOTAL CREDITS	SEMESTER
			L	T	P		
1	PROJ-CS-300-P	PROJECT I	0	0	4	2	6
2	PROJ-CS-401-P	PROJECT II	0	0	4	2	7
3	PROJ-CS-402-P	PROJECT III	0	0	12	5	8
4	PROJ-CS-403-P	SEMINAR	0	0	2	1	7
5	PROJ-CS-404-P	SEMINAR	0	0	2	1	8
6	IPT301-P	INDUSTRIAL PRACTICAL TRAINING- I	0	0	0	2	5
7	IPT-405-P	INDUSTRIAL TRAINING - II	0	0	0	2	7
TOTAL CREDITS						15	


 Chairperson
 Department of Computer Science &
 Engineering and Information Technology
 BPS Mania Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

**Department of Computer Science & Engineering & Information
Technology**

Course Curriculum & Scheme of Examinations

For

B.Tech. Computer Science & Engineering

(w.e.f Academic Session 2024- 2025)

Semester -1

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC - 101	Semi Conductor Physics	3	1	0	4	20	80	100
2.	BSC	BSC - 103	Mathematics –I : Calculus and Linear Algebra	3	1	0	4	20	80	100
3.	ESC	ESC - 101	Basic Electrical Engineering	3	1	0	4	20	80	100
Lab										
4.	BSC	BSC - 101-P	Physics Lab	0	0	2	1	10	40	50
5.	ESC	ESC - 102-P	Engineering Graphics & Design	1	0	4	3	20	80	100
6.	ESC	ESC - 101-P	Basic Electrical Engineering Lab	0	0	2	1	10	40	50
7.			Induction Program (Mandatory)				Non Credit			
Total				10	3	8	17	100	400	500

Total Contact Hours =21

Total Credit= 17

Note: 1. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

2. Every student has to participate in the MANDATORY INDUCTION PROGRAM OF ONE/THREE WEEK DURATION at the start of regular teaching of first semester. It comprises physical activity, creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Deptt. Branch & Innovations. Classes for Ist semester will commence after completion of Induction Program.




Chairperson
 Department of Computer Science &
 Engineering and Information Technology
 BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

**Department of Computer Science & Engineering & Information
Technology**

Course Curriculum & Scheme of Examinations

For

B.Tech Computer Science & Engineering

(w.e.f Academic Session 2024- 2025)

Semester -2

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC-102	Chemistry – I	3	1	0	4	20	80	100
2.	BSC	BSC - 104	Mathematics –II : Probability and Statistics	3	1	0	4	20	80	100
3.	ESC	ESC - 103	Programming for problem solving	3	0	0	3	20	80	100
4.	HSMC	HSMC - 101	English	2	0	0	2	10	40	50
Lab										
5.	HSMC	HSMC -101-P	English Language Lab	0	0	2	1	10	40	50
6.	ESC	ESC - 104-P	Workshop /Manufacturing Practices	1	0	4	3	20	80	100
7.	ESC	ESC - 103-P	Programming for problem solving Lab	0	0	4	2	10	40	50
8.	BSC	BSC - 102-P	Chemistry Lab	0	0	2	1	10	40	50
Total				12	2	12	20	120	480	600

Total Contact Hours =26

Total Credit= 20

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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**Department of Computer Science & Engineering & Information
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Course Curriculum & Scheme of Examinations

For

B.Tech Computer Science & Engineering

(w.e.f Academic Session 2024- 2025)

Semester - 3

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-201	Data Structure & Algorithms	3	0	0	3	20	80	100
2.	PCC	PCC-CS-203	Computer Organization & Architecture	3	0	0	3	20	80	100
3.	PCC	PCC-CS-205	Object Oriented Prog. with C++	3	0	0	3	20	80	100
4.	ESC	ESC-203	Digital Electronics	3	0	0	3	20	80	100
5.	BSC	BSC-201	Mathematics- III (Calculus and Ordinary Differential Equations)	3	1	0	4	20	80	100
6.	HS MC	HSMC-201	Humanities –I (Effective Technical Communication)	3	0	0	3	20	80	100
7.	MC	MC-201	Environmental Science	3	0	0	0	10	40	50
Lab										
8.	ESC	ESC-203-P	Digital Electronics Lab	0	0	2	1	10	40	50
9.	PCC	PCC-CS-201 –P	Data Structure & Algorithms Lab	0	0	4	2	10	40	50
10	PCC	PCC-CS-205 –P	Object Oriented Programming with C++ Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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Semester - 4

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-202	Discrete Mathematics	3	1	0	4	20	80	100
2.	PCC	PCC-CS-204	Software Engineering	3	0	0	3	20	80	100
3.	PCC	PCC-CS-206	Operating System	3	0	0	3	20	80	100
4.	PCC	PCC-CS-208	Design & Analysis of Algorithms	3	0	0	3	20	80	100
5.	PCC	PCC-CS-210	Python	3	0	0	3	20	80	100
6.	HSMC	HSMC-202	Management – I (Organizational Behavior)	3	0	0	3	20	80	100
7.	MC	MC-303	Universal Human Values	3	0	0	0	10	40	50
Lab										
8.	PCC	PCC-CS-206-P	Operating System LAB	0	0	4	2	10	40	50
9.	PCC	PCC-CS-208-P	Hardware Lab/ MATLAB	0	0	2	1	10	40	50
10.	PCC	PCC-CS-210-P	Python Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: 1). 4-6 weeks training will be held after fourth semester. However, Viva-Voce will be conducted in the fifth semester.

2). Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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**Department of Computer Science & Engineering & Information
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Semester - 5

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-301	Database Management Systems	3	0	0	3	20	80	100
2.	PCC	PCC-CS-303	Formal Language & Automata Theory	3	0	0	3	20	80	100
3.	PCC	PCC-CS-305	Java Programming	3	0	0	3	20	80	100
4.	PCC	PCC-CS-307	Machine Learning	3	0	0	3	20	80	100
5.	HSM C	HSMC-301	Humanities- II (Economics for Engineers)	3	0	0	3	20	80	100
6.	MC	MC-301	Constitution of India/Essence of Indian Traditional Knowledge	2	0	0	0	10	40	50
Lab										
7.	PCC	PCC-CS-301-P	Database Management Systems LAB	0	0	4	2	10	40	50
8.	PCC	PCC-CS-305-P	Java Programming LAB	0	0	4	2	10	40	50
9.	Project	IPT-CS-301-P	Industrial Practical Training-I	0	0	0	2	-	50	50
Total				17	0	8	21	130	570	700

Total Contact Hours =25

Total Credit= 21

- Note:** 1. Industrial Practical Training-I was conducted after fourth semester. However, Viva-Voce for evaluation of Practical Training will be conducted in this semester.
2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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For
B.Tech Computer Science & Engineering
(w.e.f Academic Session 2024- 2025)

Semester - 6

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-302	Compiler Design	3	0	0	3	20	80	100
2.	PCC	PCC-CS-304	Computer Networks	3	0	0	3	20	80	100
3.	PEC	PEC	Elective-I	3	0	0	3	20	80	100
4.	PEC	PEC	Elective-II	3	0	0	3	20	80	100
5.	OEC	OEC	Open Elective-I	3	0	0	3	20	80	100
Lab										
6.	Project	PROJ-CS-300-P	Project-I	0	0	4	2	10	40	50
7.	PCC	PCC-CS-302-P	Compiler Design lab	0	0	4	2	10	40	50
8.	PCC	PCC-CS-304-P	Computer Networking Lab	0	0	4	2	10	40	50
9.	PEC	PEC	Electives-I Course Lab	0	0	2	1	10	40	50
Total				15	0	14	22	140	560	700

Total Contact Hours =29

Total Credit= 22

Note: 1. 4-6 weeks industrial practical training –II training will be held after sixth semester. However, Viva- Voce will be conducted in the seventh semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective – I	Elective – I Lab	Elective –II	Open Elective- I
1.	PEC- CS-306 Digital Image Processing	PEC- CS-306- P Digital Image Processing Lab	PCC- IT-303 Multimedia and Technologies	OE-CS-322 Soft Skills & Interpersonal Communication
2.	PEC-CS-308 Artificial Intelligence.	PEC-CS-308-P Artificial Intelligence Lab	PEC-CS-316 High Speed Network	OE-CS-324 Cyber Law and Ethics
3.	PEC-CS-310 Computer Graphics	PEC-CS-310-P Computer Graphics Lab	PEC-CS-318 Soft Computing	OE-CS-326 Data Analytics using R
4.	PEC-CS-312 Cloud Computing	PEC-CS-312-P Cloud Computing Lab	PEC-CS-320 Data Mining	OE-CS-328 Microprocessor and Interfacing

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(w.e.f Academic Session 2024- 2025)
Semester -7

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-III	3	0	0	3	20	80	100
2.	PEC	PEC	Elective-IV	3	0	0	3	20	80	100
3.	OEC	OEC	Open Elective-II	3	0	0	3	20	80	100
4.	OEC	OEC	Open Elective-III	3	0	0	3	20	80	100
5.	BSC	BSC-401	Bioinformatics	2	1	0	2	20	80	100
Lab										
6.	Project	PROJ-CS-401-P	Project-II	0	0	4	2	10	40	50
7.	Project	PROJ-CS-403-P	Seminar	0	0	2	1	50	-	50
8.	Project	ITP-CS-405-P	Industrial Practical Training- II	0	0	0	2	-	100	100
9.	PEC	PEC	Electives-III Course Lab	0	0	2	1	10	40	50
Total				14	1	08	20	170	580	750

Total Contact Hours =23

Total Credit= 20

Note: 1. Practical training was conducted after sixth semester. However, Viva-Voce for evaluation of Practical Training will be conducted in this semester.


2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her

S.No	Elective –III	Elective –III Labs	Elective – IV	Open Elective- II	Open Elective – III
1.	PEC- CS-401 Information Security	PEC- CS-401 -P Information Security Lab	PEC- CS-409 Queuing Theory and Modeling	OE-CS-417 Human Resource Management	OE-CS-425 Financial Management
2.	PEC-CS-403 Wireless and Mobile Communication	PEC-CS-403-P Wireless and Mobile Communication Lab	PEC-CS-411 Internet of Things	OE-CS-419 ICT for Development	OE-CS-427 E-Commerce & Entrepreneurship
3.	PEC-CS-405 Advanced Operating Systems	PEC-CS-405 -P Advanced Operating Systems Lab	PEC-CS-413 Speech and Natural Language Processing	OE-CS-421 Intellectual Property Rights	OE-CS-429 Basics of Operation Research
4.	PCC-IT-302 Web and Internet Technology	PCC-IT-302-P Web and Internet Technology Lab	PEC-CS-415 Optimization Techniques	OE-CS-423 International Business Environment	OE-CS-431 Renewable Energy System

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Department of Computer Science & Engineering & Information Technology
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B.Tech Computer Science & Engineering
(w.e.f Academic Session 2024- 2025)

Semester - 8

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-V	3	0	0	3	20	80	100
2.	OEC	OEC	Open Elective-IV	3	0	0	3	20	80	100
Lab										
3.	Project	PROJ-CS-402 -P	Project-III	0	0	12	5	40	160	200
4.	Project	PROJ-CS-404-P	Seminar	0	0	2	1	50	0	50
5.	MC	GPP-CS-406-P	General Proficiency	0	0	0	0	0	100	100
Total				6	0	14	12	130	420	550

Total Contact Hours =20

Total Credit= 12

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

2. **General Fitness for Profession:** A comprehensive viva-voce of the students will be taken by external examiner and Chairperson of the department (internal examiner) and Class Coordinator at the end of the semester. The evaluation of the student for General Fitness for the Profession will be carried out through viva-voce taken by the committee of examiners.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective - V	Open Elective- IV
1.	PEC- CS-402 Block Chain	OE-CS-410 Economic policies in India
2.	PEC-CS-404 Deep Learning	OE-CS-412 Quality Engineering
3.	PEC-CS-406 Neural Networks	OE-CS-414 Optical Network Design
4.	PEC-CS-408 Software Testing and Quality Assurance	OE-CS-416 Embedded System

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**Department of Computer Science & Engineering & Information
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Course Curriculum & Scheme of Examinations

For

B.Tech. Computer Science & Engineering

(w.e.f Academic Session 2024- 2025)

Semester -1

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC - 101	Semi Conductor Physics	3	1	0	4	20	80	100
2.	BSC	BSC - 103	Mathematics -I : Calculus and Linear Algebra	3	1	0	4	20	80	100
3.	ESC	ESC - 101	Basic Electrical Engineering	3	1	0	4	20	80	100
Lab										
4.	BSC	BSC - 101-P	Physics Lab	0	0	2	1	10	40	50
5.	ESC	ESC - 102-P	Engineering Graphics & Design	1	0	4	3	20	80	100
6.	ESC	ESC - 101-P	Basic Electrical Engineering Lab	0	0	2	1	10	40	50
7.			Induction Program (Mandatory)				Non Credit			
Total				10	3	8	17	100	400	500

Total Contact Hours =21

Total Credit= 17

Note: 1. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

2. Every student has to participate in the MANDATORY INDUCTION PROGRAM OF ONE/THREE WEEK DURATION at the start of regular teaching of first semester. It comprises physical activity, creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Deptt. Branch & Innovations. Classes for Ist semester will commence after completion of Induction Program.

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B. Tech. Semester – I (Computer Science and Engineering)
SEMI CONDUCTOR PHYSICS
CODE: BSC - 101

NO. OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Prerequisite: "Introduction to Quantum Mechanics" Desirable.

Course objectives:-

1. To give knowledge about semiconductor physics and discuss working and applications of basic devices, including p-n junctions, BJTs and FETs.

UNIT- 1

Electronic materials (8): Free electron theory, Density of states and energy band diagrams, Kronig-Penny model (to introduce origin of band gap), Energy bands in solids, E-k diagram, Direct and indirect bandgaps, Types of electronic materials: metals, semiconductors, and insulators, Density of states, Occupation probability, Fermi level, Effective mass, Phonons.

UNIT- 2

Semiconductors (10): Intrinsic and extrinsic semiconductors, Dependence of Fermi level on carrier concentration and temperature (equilibrium carrier statistics), Carrier generation and recombination, Carrier transport: diffusion and drift, p-n junction, Metal-semiconductor junction (Ohmic and Schottky), Semiconductor materials of interest for optoelectronic devices.

UNIT-3

Light-semiconductor interaction (10): Optical transitions in bulk semiconductors: absorption, spontaneous emission, and stimulated emission; Joint density of states, Density of states for photons, Transition rates (Fermi's golden rule), Optical loss and gain; Photovoltaic effect, Exciton, Drude model.

Measurements (4): Four-point probe and van der Pauw measurements for carrier density, resistivity, and hall mobility; Hot-point probe measurement, capacitance-voltage measurements, parameter extraction from diode I-V characteristics,

UNIT- 4

Engineered semiconductor materials (8): Density of states in 2D, 1d and 0D (qualitatively). Practical examples of low-dimensional systems such as quantum wells, wires, and dots: design, fabrication, and characterization techniques. Heterojunctions and associated band-diagrams DLTS, band gap by UV-Vis spectroscopy, absorption/transmission.

Suggested Text books/References:

1. J. Singh, Semiconductor Optoelectronics: Physics and Technology, McGraw-Hill Inc. (1995).
2. B. E. A. Saleh and M. C. Teich, Fundamentals of Photonics, John Wiley & Sons, Inc., (2007).
3. S. M. Sze, Semiconductor Devices: Physics and Technology, Wiley (2008).

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4. A. Yariv and P. Yeh, Photonics: Optical Electronics in Modern Communications, Oxford University Press, New York (2007).
5. P. Bhattacharya, Semiconductor Optoelectronic Devices, Prentice Hall of India (1997).
6. Online course: "Semiconductor Optoelectronics" by M R Shenoy on NPTEL
7. Online course: "Optoelectronic Materials and Devices" by Monica Katiyar and Deepak Gupta on NPTEL

Course outcomes:-

1. Students will be able to understand free electron gas models in solids.
2. Students became familiar with Mechanism of semi conductors and their combination with metals.
3. Students became familiar with the mechanism of light and semiconductor interaction.
4. Students are able to appreciate various experiments to measure charge density, Resistivity hall. , mobility and I-V characteristics of semiconductors.
5. Students would be able to understand the Basics of Nonmaterial's.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Dr. Manish K


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B. Tech. Semester – I (Computer Science and Engineering)
MATHEMATICS- I: CALCULUS AND LINEAR ALGEBRA
CODE: BSC -103

NO OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. To understand the basic mathematical ideas and tools which are at the core of any engineering course.
2. To understand the basic techniques in matrix theory which are essential for analysing linear systems

UNIT- 1

Calculus: Evolutes and involutes; Evaluation of definite and improper integrals; Beta and Gamma functions and their properties; Applications of definite integrals to evaluate surface areas and volumes of revolutions.

Calculus: Rolle's Theorem, Mean value theorems, Taylor's and Maclaurin theorems with remainders; indeterminate forms and L'Hospital's rule; Maxima and minima.

UNIT- 2

Matrices (in case vector spaces is to be taught)

Matrices, vectors: addition and scalar multiplication, matrix multiplication; Linear systems of equations, linear Independence, rank of a matrix, determinants, Cramer's Rule, inverse of a matrix, Gauss elimination and Gauss-Jordan elimination.

UNIT- 3

Vector spaces (Prerequisite Module 3-Matrices)

Vector Space, linear dependence of vectors, basis, dimension; Linear transformations (maps), range and kernel of a linear map, rank and nullity, Inverse of a linear transformation, rank nullity theorem, composition of linear maps, Matrix associated with a linear map.

UNIT- 4

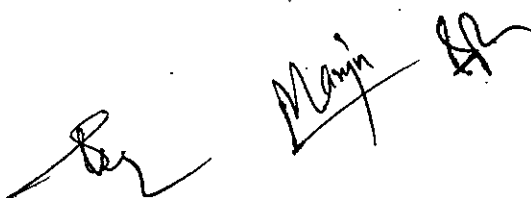
Vector spaces (Prerequisite Module 3 –Matrices & Module-4 Vector spaces


Eigenvalues, eigenvectors, symmetric, skew-symmetric, and orthogonal Matrices, eigenbases. Diagonalization; Inner product spaces, Gram-Schmidt orthogonalization.

Suggested Text/Reference Books:

1. G.B. Thomas and R.L. Finney, Calculus and Analytic geometry, 9th Edition, Pearson, Reprint, 2002.
2. Erwin Kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons, 2006.
3. D. Poole, Linear Algebra: A Modern Introduction, 2nd Edition, Brooks/Cole, 2005.
4. Veerarajan T., Engineering Mathematics for first year, Tata McGraw-Hill, New Delhi, 2008.
5. Ramana B.V., Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th Reprint, 2010.
6. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications,

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Reprint, 2010.

7. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 35th Edition, 2000.

8. V. Krishnamurthy, V.P. Mainra and J.L. Arora, An introduction to Linear Algebra, Affiliated East-West press, Reprint 2005.

Course Outcomes

1. To apply differential and integral calculus to notions of curvature and to improper integrals. Apart from various applications, they will have a basic understanding of Beta and Gamma functions.
2. The essential tools of matrices and linear algebra including linear transformations, eigenvalues, diagonalization and orthogonalization.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Dr. Manoj D.

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B. Tech. Semester – I (Computer Science and Engineering)
BASIC ELECTRICAL ENGINEERING
CODE: ESC- 101

NO. OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Pre-requisite: Basic understanding of Physics.

Course Objective: The aim of this course is to:

- To analyze DC and AC circuits.
- To analyze AC series and parallel circuits.
- To understand fundamental knowledge of electric machines.
- To assimilate elementary knowledge of electric installations.

UNIT- 1

DC Circuits (10 hours)

Electrical circuit elements (R, L and C), voltage and current sources, Kirchhoff current and voltage laws, Mesh and nodal analysis of simple circuits with dc excitation, Superposition theorem, Thevenin's theorem, Norton's theorem, Maximum power transfer theorem, Star to Delta conversion and vice versa, Time-domain analysis of first-order RL and RC circuits.

UNIT- 2

AC Circuits (10 hours)

Representation of sinusoidal waveforms, Peak and RMS values, phasor representation, real power, reactive power, apparent power, power factor, Analysis of single-phase ac circuits consisting of R, L, C, RL, RC, RLC combinations (series and parallel), Resonance (series and parallel circuits). Three-phase balanced circuits, voltage and current relations in star and delta connections, Measurement of Power and Power Factor using two wattmeter method.

UNIT- 3

Electrical Machines (12 hours)

Construction and working principle of Transformer, Ideal and practical transformer, phasor diagram and equivalent circuit of transformer, losses in transformers, voltage regulation and efficiency, Autotransformer Generation of rotating magnetic fields, Construction and working of a three-phase induction motor, Applications of three phase induction motor, Construction and working of DC machine, Speed control of dc machine.

UNIT- 4

Electrical Instruments and LT Installations (10 hours)

Electrical Instruments: Permanent Magnet Moving Coil, Electrodynamometer & Moving Iron type instruments, Induction type Energy meter.

Components of LT Switchgear: Switch Fuse Unit (SFU), MCB, ELCB, MCCB, Types of Wires and Cables, Earthing, Elementary calculations for energy consumption, power factor improvement.

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Suggested Text / Reference Books:

1. D. P. Kothari and I. J. Nagrath, "Basic Electrical Engineering", Tata McGraw Hill, 2010.
2. Del Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.
3. D. C. Kulshreshtha, "Basic Electrical Engineering", McGraw Hill, 2009.
4. L. S. Bobrow, "Fundamentals of Electrical Engineering", Oxford University Press, 2011.
5. E. Hughes, "Electrical and Electronics Technology", Pearson, 2010.
6. B. L. Theraja & A. K. Theraja, "Basic Electrical Engineering", Volume 1, S. Chand, 2015
7. V. D. Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.

Course Outcomes: At the end of the course, students will be able to:

1. Apply the concepts of KVL/KCL and network theorems in solving DC circuits.
2. Identify the applications of network theorems and resonance phenomenon in relevant area.
3. Analyze the steady state behaviour of single phase and three phase AC electrical circuits.
4. Identify the application areas of a single phase two winding transformer as well as an auto transformer and calculate their efficiency. Also, identify the connections of a three phase transformer.
5. Understand the fundamentals of Electrical circuits, Electrical machines, measuring instruments and LT installation.
6. Assess the type of electrical machines, instruments and LT switchgear to be used for a particular application.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – I (Computer Science and Engineering)

PHYSICS LAB

CODE: BSC- 101- P

NO OF CREDITS: 1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

Laboratory Objectives:-

1. To Impart technology aspects of applied physics
2. To lay foundation of practical application of physics in engineering.
3. To apply Basics Physics concepts in a broader sense.
4. Students will be able to understand the new development, research and breakthrough efficiency in engineering physics.
5. Understand and explain the various physics related problems in engineering field.

Pre-requisites (if any) - Basics of Statistics.

List of Experiments

1. To find the capacitance of unknown capacitor using flashing and quenching of Argon bulb.
2. To study the photo conducting cell and hence to verify the inverse square law.
3. To study the characteristics of a solar cell and to find the fill factor.
4. To find the value of Planck's constant by using a photo electric cell.
5. To find the value of Hall Co-efficient of semi-conductor.
6. To study the V-I characteristics of a p-n diode.
7. To find the band gap of intrinsic semi-conductor using four probe method.
8. To convert given galvanometer into an ammeter and voltmeter of given range.
9. To determine the wavelength of sodium light by Newton's rings experiment.
10. To find the Specific rotation of sugar solution by using Polarimeter.
11. To find the refractive of a material of a given prism using spectrometer.
12. To study rectification properties of a semiconductor.
13. Study of Characteristics of p-i-n and avalanche photo diode detectors.
14. To determine the resistivity of a semiconductor by four probe method.
15. To find the wavelength of various colours of white light with the help of a plane transmission diffracting grating

Laboratory Outcomes:-

1. Students would be able to determine the wavelength of white light by using diffraction grating.
2. Students will understand to determine the specific rotation of a canesugar solution.
3. Characterise the semiconductor materials by determining band gap & resistivity using four please method.
4. Students will be able to determine capacitance using flashing & Quenching of argon bulb.
5. Student learn about V-I characteristics of P-N Diode.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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B. Tech. Semester – I (Computer Science and Engineering)
BASIC ELECTRICAL ENGINEERING LAB
CODE: ESC -101- P

NO OF CREDITS: 1

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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

Laboratory Objective:

1. To get an exposure to common electrical components and their ratings.
2. To understand the DC and AC electrical circuits.
3. To analyze various laws and theorems in DC circuits.
4. To get the fundamental knowledge of electric machines.

Pre-requisite: 10+2 Physics.

List of experiments:

1. To demonstrate the various basic safety precautions and use of instruments like voltmeter, ammeter, multi-meter, oscilloscope, Real-life resistors, capacitors and inductors in Electrical Engineering Laboratories.
2. To verify the KVL and KCL.
3. To verify the Thevenin's and Norton's Theorems.
4. To verify the Superposition theorem.
5. To study frequency response of a series R-L-C circuit and determine resonant frequency and Q-factor for various values of R-L-C.
6. To study frequency response of a parallel R-L-C circuit and determine resonant frequency and Q-factor for various values of R-L-C.
7. To observe steady state and transient time response of R-L, R-C and R-L-C circuits to a step change in voltage.
8. To measure the power and power factor using three voltmeter / three ammeter method in a single phase AC circuit.
9. To measure the power and power factor for a balanced 3 phase load by two wattmeter method.
10. To perform the direct load test of a Transformer and plot load current versus (a) terminal voltage (b) efficiency.
11. To measure iron loss in a single phase transformer and to find the equivalent circuit parameters by performing open circuit and short circuit.
12. To study various types of meters such as: ammeter, voltmeter, Wattmeter, Multimeter, Energy Meter.
13. To demonstrate the cut-set of dc machine (Commutator-brush arrangement), induction machine.
14. To perform the torque-speed characteristics of a separately excited DC Motor.
15. To perform the open circuit and short circuit tests of a three phase Induction motor.

References and Suggested Text Books:

1. D. P. Kothari and I. J. Nagrath, "Basic Electrical Engineering", Tata McGraw Hill, 2010.

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for
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2. Del Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.
3. D. C. Kulshreshtha, "Basic Electrical Engineering", McGraw Hill, 2009.
4. L. S. Bobrow, "Fundamentals of Electrical Engineering", Oxford University Press, 2011.
5. E. Hughes, "Electrical and Electronics Technology", Pearson, 2010.
6. B. L. Theraja & A. K. Theraja, "Basic Electrical Engineering", Volume 1, S. Chand, 2015
7. V. D. Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.
8. Kirchhoff's laws: Virtual lab link: <http://vlab.amrita.edu/?sub=3&brch=75&sim=217&cnt=2>.
9. Thevenin Theorem: Virtual lab link: <https://vlab.amrita.edu/?sub=1&brch=75&sim=313&cnt=1>
10. RLC series resonance: Virtual lab link: <https://vlab.amrita.edu/?sub=1&brch=75&sim=330&cnt=1>

Laboratory Outcomes: At the end of the course, students will be able to:

1. Perform experimental work and gain technical knowledge of electrical circuits, Electrical machines and measuring instruments along with safety measures.
2. Conduct experiments illustrating the application of KVL/KCL and network theorems to DC electrical circuits.
3. Demonstrate the behavior of AC circuits connected to single phase AC supply and measure power in single phase as well as three phase electrical circuits.
4. Evaluate the performance of transformer and electrical machines under various operating conditions.
5. Organize reports based on experiments performed with effective demonstration and analysis of results.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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B. Tech. Semester – I (Computer Science and Engineering)
ENGINEERING GRAPHICS & DESIGN (THEORY & LAB)
CODE: ESC- 102- P

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. To prepare the students to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
2. To prepare students to communicate effectively
3. To prepare students to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Engineering Graphics & Design [A total of 10 lecture hours & 60 hours of lab.]

Traditional Engineering Graphics(5 hrs):

Principles of Engineering Graphics; Orthographic Projection; Descriptive Geometry; Drawing Principles; Isometric Projection; Surface Development; Perspective; Reading a Drawing; Sectional Views; Dimensioning & Tolerances; True Length, Angle; intersection, Shortest Distance.

Computer Graphics(5 hrs):

Engineering Graphics Software; -Spatial Transformations; Orthographic Projections; Model Viewing; Co-ordinate Systems; Multi-view Projection; Exploded Assembly; Model Viewing; Animation; Spatial Manipulation; Surface Modelling; Solid Modelling; Introduction to Building Information Modelling (BIM)

(Except the basic essential concepts, most of the teaching part can happen Concurrently in the laboratory)

Unit 1

Introduction to Engineering Drawing (12 hrs):

Principles of Engineering Graphics and their significance, usage of Drawing instruments, lettering, Conic sections including the Rectangular Hyperbola (General method only); Cycloid, Epicycloid, Hypocycloid and Involute; Scales – Plain, Diagonal and Vernier Scales; Orthographic Projections covering, Principles of Orthographic Projections-Conventions - Projections of Points and lines inclined to both planes; Projections of planes inclined Planes - Auxiliary Planes

Unit 2

Projections of Regular Solids (16 hrs):

Inclined to both the Planes- Auxiliary Views; Draw simple annotation, dimensioning and scale. Floor plans that include: windows, doors, and fixtures such as WC, bath, sink, shower, etc. Sections and Sectional Views of Right Angular Solids covering, Prism, Cylinder, Pyramid, Cone – Auxiliary Views; Development of surfaces of Right Regular Solids - Prism, Pyramid, Cylinder and Cone; Draw the sectional orthographic views of geometrical solids, objects from industry and dwellings (foundation to slab only), Isometric Projections covering, Principles of Isometric projection – Isometric Scale,

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Isometric Views, Conventions; Isometric Views of lines, Planes, Simple and compound Solids; Conversion of Isometric Views to Orthographic Views and Vice-versa, Conventions.

Unit 3

Overview of Computer Graphics (16 Hrs):

Listing the computer technologies that impact on graphical communication, Demonstrating knowledge of the theory of CAD software [such as: The Menu System, Toolbars (Standard, Object Properties, Draw, Modify and Dimension), Drawing Area (Background, Crosshairs, Coordinate System), Dialog boxes and windows, Shortcut menus (Button Bars), The Command Line (where applicable), The Status Bar, Different methods of zoom as used in CAD, Select and erase objects.; Isometric Views of lines, Planes, Simple and compound Solids]; Customisation & CAD Drawing consisting of set up of the drawing page and the printer, including scale settings, Setting up of units and drawing limits; ISO and ANSI standards for coordinate dimensioning and tolerancing; Orthographic constraints, Snap to objects manually and automatically; Producing drawings by using various coordinate input entry methods to draw straight lines, Applying various ways of drawing circles.

Unit 4

Annotations, layering & other functions (16 hrs):

Applying dimensions to objects, applying annotations to drawings; Setting up and use of Layers, layers to create drawings, Create, edit and use customized layers; Changing line lengths through modifying existing lines (extend/lengthen); Printing documents to paper using the print command; orthographic projection techniques; Drawing sectional views of composite right regular geometric solids and project the true shape of the sectioned surface; Drawing annotation, Computer-aided design (CAD) software modeling of parts and assemblies. Parametric and non-parametric solid, surface, and wireframe models. Part editing and two-dimensional documentation of models. Planar projection theory, including sketching of perspective, isometric, multiview, auxiliary, and section views. Spatial visualization exercises. Dimensioning guidelines, tolerancing techniques; dimensioning and scale multi views of dwelling; Demonstration of a simple team design project that illustrates Geometry and topology of engineered components: creation of engineering models and their presentation in standard 2D blueprint form and as 3D wire-frame and shaded solids; meshed topologies for engineering analysis and tool-path generation for component manufacture; geometric dimensioning and tolerancing; Use of solid-modeling software for creating associative models at the component and assembly levels; floor plans that include: windows, doors, and fixtures such as WC, bath, sink, shower, etc. Applying colour coding according to building drawing practice; Drawing sectional elevation showing foundation to ceiling; Introduction to Building Information Modelling (BIM).

Suggested Text/Reference Books:

1. Bhatt N.D., Panchal V.M. & Ingle P.R., (2014), Engineering Drawing, Charotar Publishing House
2. Shah, M.B. & Rana B.C. (2008), Engineering Drawing and Computer Graphics, Pearson Education
3. Agrawal B. & Agrawal C. M. (2012), Engineering Graphics, TMH Publication
4. Narayana, K.L. & P Kannaiah (2008), Text book on Engineering Drawing, Scitech Publishers
5. (Corresponding set of) CAD Software Theory and User Manuals

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Course Outcomes

All phases of manufacturing or construction require the conversion of new ideas and design concepts into the basic line language of graphics. Therefore, there are many areas (civil, mechanical, electrical, architectural and industrial) in which the skills of the CAD technicians play major roles in the design and development of new products or construction. Students prepare for actual work situations through practical training in a new state-of-the-art computer designed CAD laboratory using engineering software.

The student will learn:

- Introduction to engineering design and its place in society
- Exposure to the visual aspects of engineering design
- Exposure to engineering graphics standards
- Exposure to solid modelling
- Exposure to computer-aided geometric design
- Exposure to creating working drawings
- Exposure to engineering communication

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B. Tech. Semester – I (Computer Science and Engineering)
MANDATORY INDUCTION PROGRAM (3-WEEKS DURATION)

- Physical activity
- Creative Arts
- Universal Human Values
- Literary
- Proficiency Modules
- Lectures by Eminent People
- Visits to local Areas
- Familiarization to Dept./Branch & Innovations

A Guide to Induction Program

1 Introduction

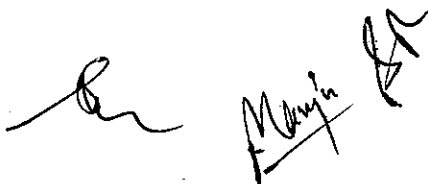
(Induction Program was discussed and approved for all colleges by AICTE in March 2017. It was discussed and accepted by the Council of IITs for all IITs in August 2016. It was originally proposed by a Committee of IIT Directors and accepted at the meeting of all IIT Directors in March 2016. This guide has been prepared based on the Report of the Committee of IIT Directors and the experience gained through its pilot implementation in July 2016 as accepted by the Council of IITs. Purpose of this document is to help institutions in understanding the spirit of the accepted Induction Program and implementing it.)


Engineering colleges were established to train graduates well in the branch/department of admission, have a holistic outlook, and have a desire to work for national needs and beyond. The graduating student must have knowledge and skills in the area of his study. However, he must also have broad understanding of society and relationships. Character needs to be nurtured as an essential quality by which he would understand and fulfill his responsibility as an engineer, a citizen and a human being. Besides the above, several meta-skills and underlying values are needed. There is a mad rush for engineering today, without the student determining for himself his interests and his goals. This is a major factor in the current state of demotivation towards studies that exists among UG students. The success of gaining admission into a desired institution but failure in getting the desired branch, with peer pressure generating its own problems, leads to a peer environment that is demotivating and corrosive. Start of hostel life without close parental supervision at the same time, further worsens it with also a poor daily routine. To come out of this situation, a multi-pronged approach is needed. One will have to work closely with the newly joined students in making them feel comfortable, allow them to explore their academic interests and activities, reduce unnecessary burden on the students besides making them self-oriented.

2 Induction Program

When new students enter an institution, they come with diverse thoughts, backgrounds and preparations. It is important to help them adjust to the new environment and inculcate in them the ethos of the institution with a sense of larger purpose. Precious little is done by most of the institutions, except for an orientation program lasting a couple of days. We propose a 3-week long induction program for the UG students entering the institution, right at the start. Normal classes start only after

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the induction program is over. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature. The time during the Induction Program is also used to rectify some critical lacunas, for example, English background, for those students who have deficiency in it. The following are the activities under the induction program in which the student would be fully engaged throughout the day for the entire duration of the program.

Induction Program as described here borrows from three programs running earlier at different institutions:

- (1) Foundation Program running at IIT Gandhinagar since July 2011,
- (2) Human Values course running at IIIT Hyderabad since July 2005, and
- (3) Counselling Service or mentorship running at several IITs for many decades. Contribution of each one is described next. (1) IIT Gandhinagar was the first IIT to recognize and implement a special 5-week Foundation Program for the incoming 1st year UG students. It took a bold step that the normal classes would start only after the five week period. It involved activities such as games, art, etc., and also science and other creative workshops and lectures by resource persons from outside. (2) IIIT Hyderabad was the first one to implement a compulsory course on Human Values. Under it, classes were held by faculty through discussions in small groups of students, rather than in lecture mode. Moreover, faculty from all departments got involved in conducting the group discussions under the course. The content is non-sectarian, and the mode is dialogical rather than sermonising or lecturing. Faculty were trained beforehand, to conduct these discussions and to guide students on issues of life. (3) Counselling at some of the IITs involves setting up mentor-mentee network under which 1st year students would be divided into small groups, each assigned a senior student as a student guide, and a faculty member as a mentor. Thus, a new student gets connected to a faculty member as well as a senior student, to whom he/she could go to in case of any difficulty whether psychological, financial, academic, or otherwise. The Induction Program defined here amalgamates all the three into an integrated whole, which leads to its high effectiveness in terms of building physical activity, creativity, bonding, and character. It develops sensitivity towards self and one's relationships, builds awareness about others and society beyond the individual, and also in bonding with their own batch-mates and a senior student besides a faculty member. Scaling up the above amalgamation to an intake batch of 1000 plus students was done at IIT (BHU), Varanasi starting from July 2016.

2.1 Physical Activity

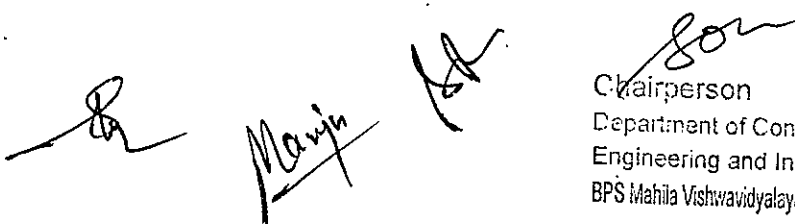
This would involve a daily routine of physical activity with games and sports. It would start with all students coming to the field at 6 am for light physical exercise or yoga. There would also be games in the evening or at other suitable times according to the local climate. These would help develop team work. Each student should pick one game and learn it for three weeks. There could also be gardening or other suitably designed activity where labor yields fruits from nature.

2.2 Creative Arts

Every student would chose one skill related to the arts whether visual arts or performing arts. Examples are painting, sculpture, pottery, music, dance etc. The student would pursue it every day for the

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duration of the program. These would allow for creative expression. It would develop a sense of aesthetics and also enhance creativity which would, hopefully, flow into engineering design later.

2.3 Universal Human Values

It gets the student to explore oneself and allows one to experience the joy of learning, stand up to peer pressure, take decisions with courage, be aware of relationships with colleagues and supporting staff in the hostel and department, be sensitive to others, etc. Need for character building has been underlined earlier. A module in Universal Human Values provides the base. Methodology of teaching this content is extremely important. It must not be through do's and don't's, but get students to explore and think by engaging them in a dialogue. It is best taught through group discussions and real life activities rather than lecturing. The role of group discussions, however, with clarity of thought of the teachers cannot be over emphasized. It is essential for giving exposure, guiding thoughts, and realizing values. The teachers must come from all the departments rather than only one department like HSS or from outside of the Institute. Experiments in this direction at IIT (BHU) are noteworthy and one can learn from them.3 Discussions would be conducted in small groups of about 20 students with a faculty mentor each. It is to open thinking towards the self. Universal Human Values discussions could even continue for rest of the semester as a normal course, and not stop with the induction program. Besides drawing the attention of the student to larger issues of life, it would build relationships between teachers and students which last for their entire 4-year stay and possibly beyond.

The Universal Human Values Course is a result of a long series of experiments at educational institutes starting from IIT-Delhi and IIT Kanpur in the 1980s and 1990s as an elective course, NIT Raipur in late 1990s as a compulsory one-week off campus program. The courses at IIT(BHU) which started from July 2014, are taken and developed from two compulsory courses at IIIT Hyderabad first introduced in July 2005.

2.4 Literary

Literary activity would encompass reading, writing and possibly, debating, enacting a play etc.

2.5 Proficiency Modules

This period can be used to overcome some critical lacunas that students might have, for example, English, computer familiarity etc. These should run like crash courses, so that when normal courses start after the induction program, the student has overcome the lacunas substantially. We hope that problems arising due to lack of English skills, wherein students start lagging behind or failing in several subjects, for no fault of theirs, would, hopefully, become a thing of the past.

2.6 Lectures by Eminent People

This period can be utilized for lectures by eminent people, say, once a week. It would give the students exposure to people who are socially active or in public life.

2.7 Visits to Local Area

A couple of visits to the landmarks of the city, or a hospital or orphanage could be organized. This would familiarize them with the area as well as expose them to the under privileged.

2.8 Familiarization to Dept./Branch & Innovations

The students should be told about different method of study compared to coaching that is needed at IITs. They should be told about what getting into a branch or department means what role it plays in society, through its technology. They should also be shown the laboratories, workshops & other facilities.

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3 Schedule

The activities during the Induction Program would have an Initial Phase, a Regular Phase and a Closing Phase. The Initial and Closing Phases would be two days each.

3.1 Initial Phase Time Activity

Day 0 Whole day Students arrive - Hostel allotment. (Preferably do pre- allotment)

Day 1 09:00 am - 03:00 pm Academic registration 04:30 pm - 06:00 pm Orientation

Day 2 09:00 am - 10:00 am Diagnostic test (for English etc.) 10:15 am - 12:25 pm Visit to respective depts. 12:30 pm - 01:55 pm Lunch 02:00 pm - 02:55 pm Director's address 03:00 pm - 05:00 pm Interaction with parents 03:30 pm - 05:00 pm Mentor-mentee groups - Introduction within group. (Same as Universal Human Values groups)

3.2 Regular Phase

After two days is the start of the Regular Phase of induction. With this phase there would be regular program to be followed every day.

3.2.1 Daily Schedule

Some of the activities are on a daily basis, while some others are at specified periods within the Induction Program. We first show a typical daily timetable. Sessn. Time Activity Remarks

Day 3 onwards 06:00 am Wake up call

I 06:30 am - 07:10 am Physical activity (mild exercise/yoga) 07:15 am - 08:55 am Bath, Breakfast, etc.

II 09:00 am - 10:55 am Creative Arts / Universal Human Values Half the groups do Creative Arts

III 11:00 am - 12:55 pm Universal Human Values / Creative Arts Complementary alternate 01:00 pm - 02:25 pm Lunch

IV 02:30 pm - 03:55 pm Afternoon Session See below.

V 04:00 pm - 05:00 pm Afternoon Session See below. 05:00 pm - 05:25 pm Break / light tea

VI 05:30 pm - 06:45 pm Games / Special Lectures 06:50 pm - 08:25 pm Rest and Dinner

VII 08:30 pm - 09:25 pm Informal interactions (in hostels) Sundays are off. Saturdays have the same schedule as above or have outings.

3.2.2 Afternoon Activities (Non-Daily)

The following five activities are scheduled at different times of the Induction Program, and are not held daily for everyone:

1. Familiarization to Dept./Branch & Innovations
2. Visits to Local Area
3. Lectures by Eminent People
4. Literary
5. Proficiency Modules

Here is the approximate activity schedule for the afternoons (may be changed to suit local needs):

Activity Session Remarks Familiarization with Dept/Branch & Innovations IV For 3 days (Day 3 to 5)

Visits to Local Area IV, V and VI For 3 days - interspersed (e.g., 3 Saturdays) Lectures by Eminent

People IV As scheduled - 3-5 lectures Literary (Play / Book Reading / Lecture) IV For 3-5 days

Proficiency Modules V Daily, but only for those who need it

3.3 Closing Phase Time Activity Last But One Day

08:30 am - 12 noon Discussions and finalization of presentation within each group 02:00 am - 05:00 pm Presentation by each group in front of 4 other groups besides their own (about 100 students) Last Day Whole day Examinations (if any). May be expanded to last 2 days, in case needed.

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3.4 Follow Up after Closure

A question comes up as to what would be the follow up program after the formal 3-week Induction Program is over? The groups which are formed should function as mentor- mentee network. A student should feel free to approach his faculty mentor or the student guide, when facing any kind of problem, whether academic or financial or psychological etc. (For every 10 undergraduate first year students, there would be a senior student as a student guide, and for every 20 students, there would be a faculty mentor.) Such a group should remain for the entire 4-5 year duration of the stay of the student. Therefore, it would be good to have groups with the students as well as teachers from the same department/discipline. Here we list some important suggestions which have come up and which have been experimented with.

3.4.1 Follow Up after Closure – Same Semester

It is suggested that the groups meet with their faculty mentors once a month, within the semester after the 3-week Induction Program is over. This should be a scheduled meeting shown in the timetable. (The groups are of course free to meet together on their own more often, for the student groups to be invited to their faculty mentor's home for dinner or tea, nature walk, etc.)

3.4.2 Follow Up – Subsequent Semesters

It is extremely important that continuity be maintained in subsequent semesters. It is suggested that at the start of the subsequent semesters (upto fourth semester), three days be set aside for three full days of activities related to follow up to Induction Program. The students be shown inspiring films, do collective art work, and group discussions be conducted. Subsequently, the groups should meet at least once a month.

4 Summary

Engineering institutions were set up to generate well trained manpower in engineering with a feeling of responsibility towards oneself, one's family, and society. The incoming undergraduate students are driven by their parents and society to join engineering without understanding their own interests and talents. As a result, most students fail to link up with the goals of their own institution. The graduating student must have values as a human being, and knowledge and meta- skills related to his/her profession as an engineer and as a citizen. Most students who get demotivated to study engineering or their branch, also lose interest in learning. The Induction Program is designed to make the newly joined students feel comfortable, sensitize them towards exploring their academic interests and activities, reducing competition and making them work for excellence, promote bonding within them, build relations between teachers and students, give a broader view of life, and building of character. The Universal Human Values component, which acts as an anchor, develops awareness and sensitivity, feeling of equality, compassion and oneness, draw attention to society and

We are aware that there are advantages in mixing the students from different depts. However, in mixing, it is our experience that the continuity of the group together with the faculty mentor breaks down soon after. Therefore, the groups be from the same dept. but hostel wings have the mixed students from different depts. For example, the hostel room allotment should be in alphabetical order irrespective of dept. nature, and character to follow through. It also makes them reflect on their relationship with their families and extended family in the college (with hostel staff and others). It also connects students with each other and with teachers so that they can share any difficulty they might be facing and seek help.

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations

For

B.Tech Computer Science & Engineering

(w.e.f Academic Session 2024- 2025)

Semester -2

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC-102	Chemistry – I	3	1	0	4	20	80	100
2.	BSC	BSC -104	Mathematics – II : Probability and Statistics	3	1	0	4	20	80	100
3.	ESC	ESC -103	Programming for problem solving	3	0	0	3	20	80	100
4.	HSMC	HSMC-101	English	2	0	0	2	10	40	50
Lab										
5.	HSMC	HSMC -101-P	English Language Lab	0	0	2	1	10	40	50
6.	ESC	ESC -104-P	Workshop /Manufacturing Practices	1	0	4	3	20	80	100
7.	ESC	ESC -103-P	Programming for problem solving Lab	0	0	4	2	10	40	50
8.	BSC	BSC -102-P	Chemistry Lab	0	0	2	1	10	40	50
Total				12	2	12	20	120	480	600

Total Contact Hours =26

Total Credit=20

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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B. Tech. Semester – II (Computer Science and Engineering)

CHEMISTRY- I

CODE: BSC-102

NO OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course objectives:

1. To impart technological aspects of applied chemistry
2. To lay foundation of practical application of chemistry in engineering aspects
3. To apply basic chemistry concepts to chemical process industries
4. Student will be able to understand the new developments, research and breakthrough efficiency in engineering chemistry
5. To understand and explain scientifically the various chemistry related problems in industry and engineering field.

Pre-requisites (if any) - Basics of Chemistry.

UNIT- 1

Atomic and molecular structure (12 lectures)

Schrodinger equation. Particle in a box solutions and their applications for conjugated molecules and nanoparticles. Forms of the hydrogen atom wave functions and the plots of these functions to explore their spatial variations. Molecular orbitals of diatomic molecules and plots of the multicenter orbitals. Equations for atomic and molecular orbitals. Energy level diagrams of diatomic. Pi-molecular orbitals of butadiene and benzene and aromaticity. Crystal field theory and the energy level diagrams for transition metal ions and their magnetic properties. Band structure of solids and the role of doping on band structures

UNIT- 2

Spectroscopic techniques and applications (4 lectures)

Principles of spectroscopy and selection rules. Electronic spectroscopy. Fluorescence and its applications in medicine. Vibrational and rotational spectroscopy of diatomic molecules. Applications. Nuclear magnetic resonance and magnetic resonance imaging, surface characterisation techniques. Diffraction and scattering.

Intermolecular forces and potential energy surfaces (4 lectures)

Ionic, dipolar and van Der Waals interactions. Equations of state of real gases and critical phenomena. Potential energy surfaces of H₃, H₂F and HCN and trajectories on these surfaces.

UNIT- 3

Use of free energy in chemical equilibria (6 lectures)

Thermodynamic functions: energy, entropy and free energy. Estimations of entropy and free energies. Free energy and emf. Cell potentials, the Nernst equation and applications. Acid base, oxidation reduction and solubility equilibria. Water chemistry. Corrosion. Use of free energy considerations in metallurgy through Ellingham diagrams.

Periodic properties (4 lectures)

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Effective nuclear charge, penetration of orbitals, variations of s, p, d and f orbital energies of atoms in the periodic table, electronic configurations, atomic and ionic sizes, ionization energies, electron affinity and electronegativity, polarizability, oxidation states, coordination numbers and geometries, hard soft acids and bases, molecular geometries

UNIT- 4

Stereochemistry (4 lectures)

Representations of 3 dimensional structures, structural isomers and stereoisomers, configurations and symmetry and chirality, enantiomers, diastereomers, optical activity, absolute configurations and conformational analysis. Isomerism in transitional metal compounds

Organic reactions and synthesis of a drug molecule (4 lectures)

Introduction to reactions involving substitution, addition, elimination, oxidation, reduction, cyclization and ring openings. Synthesis of a commonly used drug molecule

Stereochemistry (4 lectures)

Representations of 3 dimensional structures, structural isomers and stereoisomers, configurations and symmetry and chirality, enantiomers, diastereomers, optical activity, absolute configurations and conformational analysis. Isomerism in transitional metal compounds

Organic reactions and synthesis of a drug molecule (4 lectures)

Introduction to reactions involving substitution, addition, elimination, oxidation, reduction, cyclization and ring openings. Synthesis of a commonly used drug molecule.

Suggested Text Books:

- 1 University chemistry, by B. H. Mahan
- 2 Chemistry: Principles and Applications, by M. J. Sienko and R. A. Plane
- 3 Fundamentals of Molecular Spectroscopy, by C. N. Banwell
- 4 Engineering Chemistry (NPTEL Web-book), by B. L. Tembe, Kamaluddin and M. S. Krishnan
- 5 Physical Chemistry, by P. W. Atkins (vi) Organic Chemistry: Structure and Function by K. P. C. Volhardt and N. E. Schore, 5th Edition
<http://bcs.whfreeman.com/vollhardtschore5e/default.asp>

Course Outcomes

- Understanding the Schrödinger equation for 1-D box as well as hydrogen atom & its application
- Understanding the bonding in tetrahedral and octahedral complexes and their energy diagram
- Detailed discussion of electrochemistry and cell corrosion
- Understanding the stereochemistry of organic molecules

The course will enable the student to:

- Analyse microscopic chemistry in terms of atomic and molecular orbitals and intermolecular forces.
- Rationalise bulk properties and processes using thermodynamic considerations.
- Distinguish the ranges of the electromagnetic spectrum used for exciting different molecular energy levels in various spectroscopic techniques
- Rationalise periodic properties such as ionization potential, electronegativity, oxidation states and electronegativity.


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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – II (Computer Science and Engineering)
MATHEMATICS-II: PROBABILITY AND STATISTICS
CODE: BSC- 104

NO OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS 20

EXTERNAL MARKS: 80

TOTAL: 100

Course objective:

The main objective of this course is to provide students with the foundations of probabilistic and statistical analysis mostly used in varied applications in engineering and science like disease modeling, climate prediction and computer networks etc

Pre-requisites (if any) - Basics of Statistics.

UNIT- 1

Basic Probability: (12 lectures)

Probability spaces, conditional probability, independence; Discrete random variables, Independent random variables, the multinomial distribution, Poisson approximation to the binomial distribution, infinite sequences of Bernoulli trials, sums of independent random variables; Expectation of Discrete Random Variables, Moments, Variance of a sum, Correlation coefficient, Chebyshev's Inequality.

UNIT- 2

Continuous Probability Distributions: (4 lectures)

Continuous random variables and their properties, distribution functions and densities, normal, exponential and gamma densities.

Bivariate Distributions: (4 lectures)

Bivariate distributions and their properties, distribution of sums and quotients, conditional densities, Bayes' rule.

UNIT- 3

Basic Statistics: (8 lectures)

Measures of Central tendency: Moments, skewness and Kurtosis - Probability distributions: Binomial, Poisson and Normal - evaluation of statistical parameters for these three distributions, Correlation and regression – Rank correlation.

Applied Statistics: (4 lectures)

Curve fitting by the method of least squares- fitting of straight lines, second degree parabolas and more general curves.

UNIT- 4

Applied Statistics: (4 lectures):


Test of significance: Large sample test for single proportion, difference of proportions, single mean, difference of means, and difference of standard deviations.

Small samples: (4 lectures)

Test for single mean, difference of means and correlation coefficients, test for ratio of variances - Chi-square test for goodness of fit and independence of attributes.

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Suggested Text/Reference Books:

1. Erwin Kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons, 2006.
2. P. G. Hoel, S. C. Port and C. J. Stone, Introduction to Probability Theory, Universal Book Stall, 2003 (Reprint).
3. S. Ross, A First Course in Probability, 6th Ed., Pearson Education India, 2002.
4. W. Feller, An Introduction to Probability Theory and its Applications, Vol. 1, 3rd Ed., Wiley, 1968.
5. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications, Reprint, 2010.
6. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 35th Edition, 2000.
7. Veerarajan T., Engineering Mathematics (for semester III), Tata McGraw-Hill, New Delhi, 2010.

Course Outcomes

The objective of this course is to familiarize the prospective engineers with techniques in basic calculus and linear algebra. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling more advanced level of mathematics and applications that they would find useful in their disciplines.

The students will learn:

- The ideas of probability and random variables and various discrete and continuous probability distributions and their properties.
- The basic ideas of statistics including measures of central tendency, correlation and regression.
- The statistical methods of studying data samples.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – II (Computer Science and Engineering)
PROGRAMMING FOR PROBLEM SOLVING
CODE: ESC - 103

NO OF CREDITS: 3

L T P
3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Pre-requisites (if any) - Basics of Computers, Algorithms and flowcharts.

Course Objective:-

1. To provide basic understanding of computer including history, various operating systems, number system, various languages developed etc.
2. To impart adequate knowledge on the need and concept of algorithms and programming.
3. Develop, execute and document computerized solution for various problems using the features of C language.
4. To enable effective usage of arrays, structures, functions, pointers and to implement the concepts of file organization.

UNIT- 1

Introduction to Programming (12 lectures)

Introduction to components of a computer system (disks, memory, processor, where a program is stored and executed, operating system, compilers etc.). Idea of Algorithm: steps to solve logical and numerical problems. Representation of Algorithm: Flowchart/Pseudo code with examples. From algorithms to programs; source code, variables (with data types) variables and memory locations, Syntax and Logical Errors in compilation, object and executable code- Arithmetic expressions and precedence.

UNIT- 2

Basic of C Programming (10 lectures)

Concept of variables, program statements and function calls from the library (printf for example), C data types: int, char, float etc., C expressions, arithmetic operation, relational and logic operators, C assignment statements, extension of assignment of the operations. C primitive input output using get char and put char, exposure to scanf and printf functions, C Statements, conditional executing using if, else, switch case, goto and break statements.

UNIT- 3

Conditional Branching and Loops (12 lectures)

Concept of loops in C using for, while and do-while, Writing and evaluation of conditionals and consequent branching Iteration and loops Arrays Arrays (1-D, 2-D), Character arrays and Strings, example of iterative programs using arrays and use in matrix computations. Functions, parameters and return values, standard library functions, Basic Algorithms Searching, Basic Sorting Algorithms (Bubble, Insertion and Selection).

UNIT- 4

Pointers, Strings and Structure (12 lectures)

Pointers, relationship between arrays and pointers, Call by reference. Array of pointers, passing arrays as arguments. Character strings: processing strings using loops, and string library functions, Structures, Defining structures and Array of Structures.

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Mangal Singh

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BPS Mandla Vidyalaya, Khanpur Kalan, Sonapat (H.R.)

Suggested Text Books / Reference Books:

1. Byron Gottfried, Schaum's Outline of Programming with C, McGraw-Hill
2. E. Balaguruswamy, Programming in ANSI C, Tata McGraw-Hill
3. Brian W. Kernighan and Dennis M. Ritchie, The C Programming Language, Prentice Hall of India

Course Outcomes

1. Explain the basic architecture of computers and various programming language to solve various engineering problem.
2. Apply problem solving skills in programming.
3. Developing logical thinking using C programming.
4. Develop and run computer programs in C language.

The student will learn

1. To formulate simple algorithms for arithmetic and logical problems.
2. To translate the algorithms to programs (in C language).
3. To test and execute the programs and correct syntax and logical errors.
4. To implement conditional branching, iteration and recursion.
5. To decompose a problem into functions and synthesize a complete program using divide and conquer approach.
6. To use arrays, pointers and structures to formulate algorithms and programs.
7. To apply programming to solve matrix addition and multiplication problems and searching and sorting problems.
8. To apply programming to solve simple numerical method problems, namely root finding of function, differentiation of function and simple integration.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Department of Computer Science &
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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – II (Computer Science and Engineering)
ENGLISH
CODE: HSMC -101

No of CREDITS: 2

L T P
2 0 0

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

Course objectives:

1. Ability to be comfortable with English in use while reading or listening.
1. Ability to use receptive skills through reading and listening to acquire good exposure to language and literature.
2. Ability to write and speak good English in all situations.
3. Students should develop style in speech and writing and manipulate the tools of language for effective communication.
4. The course should provide exposure to the learners in Good Prose texts and Poems and expose the learners to value based ideas.
5. Students should enhance their language skills especially in the areas of grammar and pronunciation.

UNIT- 1

Vocabulary Building

The concept of Word Formation, Root words from foreign languages and their use in English, Acquaintance with prefixes and suffixes from foreign languages in English to form derivatives. Synonyms, antonyms and standard abbreviations.

Basic Writing Skills

Sentence Structures, Use of phrases and clauses in sentences Importance of proper punctuation Creating coherence, Organizing principles of paragraphs in documents, Techniques for writing precisely

UNIT- 2

Identifying Common Errors in Writing

Subject-verb agreement, Noun-pronoun agreement, Misplaced modifiers, Articles Prepositions 3.6 Redundancies, Clichés

UNIT- 3

Nature and Style of sensible Writing

Describing, Defining, Classifying, Providing examples or evidence, Writing introduction and conclusion

UNIT- 4

Writing Practices

Comprehension ,Précis Writing, Essay Writing

Oral Communication

(This unit involves interactive practice sessions in Language Lab)

Listening Comprehension

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Pronunciation, Intonation, Stress and Rhythm
Common Everyday Situations: Conversations and Dialogues
Communication at Workplace
Interviews
Formal Presentations

Suggested Readings:

1. Practical English Usage. Michael Swan. OUP. 1995.
2. Remedial English Grammar. F.T. Wood. Macmillan.2007
3. On Writing Well. William Zinsser. Harper Resource Book. 2001
4. Study Writing. Liz Hamp-Lyons and Ben Heasley. Cambridge University Press. 2006.
5. Communication Skills. Sanjay Kumar and PushpLata. Oxford University Press. 2011.
6. Exercises in Spoken English. Parts. I-III. CIEFL, Hyderabad. Oxford University Press

Course Outcomes

The student will acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (H.R.)

B. Tech. Semester – II (Computer Science and Engineering)
ENGLISH LANGUAGE LAB
CODE: HSMC -101-P

NO OF CREDITS: 1

L T P

0 0 2

INTERNAL MARKS: 10

PRACTICAL EXAM: 40

TOTAL: 50

Laboratory objectives:

The course will enable the students,

1. To implement English vocabulary at command and ensure language proficiency.
2. To achieve better Technical writing and Presentation skills.
3. Identify the common errors in speaking and writing English.
4. Acquire Employment and Workplace communication skills.

Oral Communication

Interactive practice sessions in Language Lab

Listening Comprehension

Pronunciation, Intonation, Stress and Rhythm

Common Everyday Situations: Conversations and Dialogues

Communication at Workplace

Interviews

Formal Presentations

Course Outcomes:

On completion of the course, students will be able to,

1. Identify common errors in spoken and written communication.
2. Get familiarized with English vocabulary and language proficiency.
3. Improve nature and style of sensible writing; acquire employment and workplace communication skills.
4. Improve their Technical Communication Skills through Technical Reading and Writing practices.
5. Perform well in campus recruitment, engineering and all other general competitive examinations.

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B. Tech. Semester – II (Computer Science and Engineering)
WORKSHOP / MANUFACTURING PRACTICES
CODE: ESC -104-P

NO OF CREDITS: 3

L T P

1 0 4

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. To understand various manufacturing processes.
2. To understand the metal cutting phenomena.
3. To select process parameter and tools for obtaining desired machining characteristic
4. To understand principles of manufacturing processes.

Contents:

1. Manufacturing Methods- casting, forming, machining, joining, advanced manufacturing Methods (3 lectures)
2. CNC machining, Additive manufacturing (1 lecture)
3. Fitting operations & power tools (1 lecture)
4. Electrical & Electronics (1 lecture)
5. Carpentry (1 lecture)
6. Plastic moulding, glass cutting (1 lecture)
7. Metal casting (1 lecture)
8. Welding (arc welding & gas welding), brazing (1 lecture)

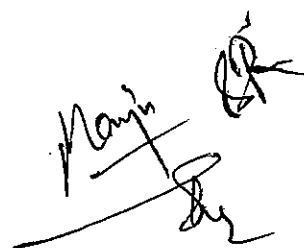
Suggested Text/Reference Books:


1. HajraChoudhury S.K., HajraChoudhury A.K. and Nirjhar Roy S.K., "Elements of Workshop Technology", Vol. I 2008 and Vol. II 2010, Media promoters and publishers private limited, Mumbai.
2. Kalpakjian S. And Steven S. Schmid, "Manufacturing Engineering and Technology", 4th edition, Pearson Education India Edition, 2002.
3. Gowri P. Hariharan and A. Suresh Babu, "Manufacturing Technology – I" Pearson Education, 2008.
4. Roy A. Lindberg, "Processes and Materials of Manufacture", 4th edition, Prentice Hall India, 1998.
5. Rao P.N., "Manufacturing Technology", Vol. I and Vol. II, Tata McGrawHill House, 2017.

Course Outcomes:

Upon completion of this course, the students will gain knowledge of the different manufacturing processes which are commonly employed in the industry, to fabricate components using different materials.

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Laboratory Objectives:

1. To impart knowledge and skill to use tools, machines, equipment, and measuring instruments.
2. To educate students of Safe handling of machines and tools.

Workshop Practice:

1. Machine shop (10 hours)
2. Fitting shop (8 hours)
3. Carpentry (6 hours)
4. Electrical & Electronics (8 hours)
5. Welding shop (8 hours (Arc welding 4 hrs + gas welding 4 hrs)
6. Casting (8 hours)
7. Smithy (6 hours)
8. Plastic moulding & Glass Cutting (6 hours)

Examinations could involve the actual fabrication of simple components, utilizing one or more of the techniques covered above.

Laboratory Outcomes:


Upon completion of this laboratory course, students will be able to fabricate components with their own hands. They will also get practical knowledge of the dimensional accuracies and dimensional tolerances possible with different manufacturing processes. By assembling different components, they will be able to produce small devices of their interest.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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B. Tech. Semester – II (Computer Science and Engineering)
PROGRAMMING FOR PROBLEM SOLVING LAB
CODE: ESC -103-P

NO OF CREDITS: 2

L T P
0 0 4

INTERNAL MARKS: 10
PRACTICAL EXAM: 40
TOTAL: 50

Laboratory Objectives:

1. To be familiarize with algorithm to solve simple problems
2. To develop programs to solve basic problems by understanding basic concepts in C like operators, control statements etc.
3. To develop modular, reusable and readable C Programs using the concepts like functions, arrays, strings pointers and structures.

List of Experiments:

The laboratory should be preceded or followed by a tutorial to explain the approach or algorithm to be implemented for the problem given.

Tutorial 1: Problem solving using computers: Lab1: Familiarization with programming environment

Tutorial 2: Variable types and type conversions: Lab 2: Simple computational problems using arithmetic expressions

Tutorial 3: Branching and logical expressions: Lab 3: Problems involving if-then-else structures

Tutorial 4: Loops, while and for loops: Lab 4: Iterative problems e.g., sum of series

Tutorial 5: 1D Arrays: searching, sorting: Lab 5: 1D Array manipulation

Tutorial 6: 2D arrays and Strings Lab 6: Matrix problems, String operations

Tutorial 7: Functions, call by value: Lab 7: Simple functions

Tutorial 8 &9: Numerical methods (Root finding, numerical differentiation, numerical integration):

Lab 8 and 9: Programming for solving Numerical methods problems

Tutorial 10: Recursion, structure of recursive calls Lab 10: Recursive functions

Tutorial 11: Pointers, structures and dynamic memory allocation Lab 11: Pointers and structures

Tutorial 12: File handling: Lab 12: File operations

Laboratory Outcomes:

1. To formulate the algorithms for simple problems
2. To translate given algorithms to a working and correct program
3. To be able to correct syntax errors as reported by the compilers
4. To be able to identify and correct logical errors encountered at run time
5. To be able to write iterative as well as recursive programs
6. To be able to represent data in arrays, strings and structures and manipulate them through a program.
7. To be able to declare pointers of different types and use them in defining self- referential structures.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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B. Tech. Semester – II (Computer Science and Engineering)

CHEMISTRY LAB

CODE: BSC -102 –P

NO OF CREDITS: 1.5

L T P

0 0 3

INTERNAL MARKS: 10

EXTERNAL MARKS 40

TOTAL: 50

Laboratory Objectives:

1. Incorporates the experiments which involve the volumetric estimation of chemicals and determination of various properties of fuel, water sample and lubricants like calorific value, hardness, viscosity and surface tension.
2. To enable the learners to get hands-on experience on the principles discussed in theory sessions and to understand the applications of these concepts in engineering.
3. Practical awareness is inculcated and students are trained both quantitatively and qualitatively during the lab sessions so that their understanding and problem solving abilities can be enhanced.
4. To provide students with a practical approach towards the various techniques used in engineering application.

List of experiments:

Choice of 10-12 experiments from the following:

1. Determination of surface tension and viscosity
2. Thin layer chromatography
3. Ion exchange column for removal of hardness of water
4. Determination of chloride content of water
5. Colligative properties using freezing point depression
6. Determination of the rate constant of a reaction
7. Determination of cell constant and conductance of solutions
8. Potentiometry– determination of redox potentials and emfs
9. Synthesis of a polymer/drug
10. Saponification/acid value of an oil
11. Chemical analysis of a salt
12. Lattice structures and packing of spheres
13. Models of potential energy surfaces
14. Chemical oscillations- Iodine clock reaction
15. Determination of the partition coefficient of a substance between two immiscible liquids
16. Adsorption of acetic acid by charcoal
17. Use of the capillary viscosimeters to demonstrate the isoelectric point as the pH of minimum viscosity for gelatin sols and/or coagulation of the white part of egg .

Laboratory Outcomes:

The chemistry laboratory course will consist of experiments illustrating the principles of chemistry relevant to the study of science and engineering.

The students will learn to:

1. Estimate rate constants of reactions from concentration of reactants/products as a function of time

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Engineering and Information Technology
PCCO, Vishwakarma Jyoti, Mangpur Kalan, Sargodha (P.R.)

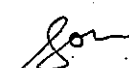
2. Measure molecular/system properties such as surface tension, viscosity, conductance of solutions, redox potentials, chloride content of water, etc
3. Synthesize a small drug molecule and analyses a salt sample.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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Department of Computer Science & Engineering & Information Technology

Course Curriculum & Scheme of Examinations

For

B.Tech Computer Science & Engineering

(w.e.f Academic Session 2024- 2025)

Semester - 3

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-201	Data Structure & Algorithms	3	0	0	3	20	80	100
2.	PCC	PCC-CS-203	Computer Organization & Architecture	3	0	0	3	20	80	100
3.	PCC	PCC-CS-205	Object Oriented Prog. with C++	3	0	0	3	20	80	100
4.	ESC	ESC-203	Digital Electronics	3	0	0	3	20	80	100
5.	BSC	BSC-201	Mathematics- III (Calculus and Ordinary Differential Equations)	3	1	0	4	20	80	100
6.	HSM C	HSMC-201	Humanities -I (Effective Technical Communication)	3	0	0	3	20	80	100
7.	MC	MC-201	Environmental Science	3	0	0	0	10	40	50
Lab										
8.	ESC	ESC-203-P	Digital Electronics Lab	0	0	2	1	10	40	50
9.	PCC	PCC-CS-201 -P	Data Structure & Algorithms Lab	0	0	4	2	10	40	50
10.	PCC	PCC-CS-205 -P	Object Oriented Programming with C++ Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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Chairperson
Department of Computer Science &
Engineering and Information Technology
BPC (Maula Vishwavidyalaya, Kharagpur, Sonepat (HR.))

B. Tech. Semester – III (Computer Science and Engineering)
DATA STRUCTURES & ALGORITHMS
CODE: PCC-CS-201

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To impart the basic concepts of data structures and algorithms.
2. To understand concepts about searching and sorting techniques
3. To understand basic concepts about stacks, queues, lists, trees and graphs.
4. To enable them to write algorithms for solving problems with the help of fundamental data structures

UNIT-1

Introduction

Basic Terminologies: Elementary Data Organizations, Data Structure Operations: insertion, deletion, traversal etc.; Analysis of an Algorithm, Asymptotic Notations.

Searching: Linear Search and Binary Search Techniques and their complexity analysis.

Stacks and Queues

ADT Stack and its operations: Algorithms and their complexity analysis, Applications of Stacks: Expression Conversion and evaluation – corresponding algorithms and complexity analysis. ADT queue, Types of Queue: Simple Queue, Circular Queue, Priority Queue; Operations on each types of Queues: Algorithms and their analysis

UNIT-2

Linked lists

Singly linked lists: Representation in memory, Algorithms of several operations: Traversing, Searching, Insertion into, Deletion from linked list; Linked representation of Stack and Queue, Header nodes, Doubly linked list: operations on it and algorithmic analysis; Circular Linked Lists: all operations their algorithms and the complexity analysis.

UNIT-3

Trees: Basic Tree Terminologies, Different types of Trees: Binary Tree, Threaded Binary Tree, Binary Search Tree, AVL Tree; Tree operations on each of the trees and their algorithms with complexity analysis. Applications of Binary Trees, B Tree, B+ Tree: definitions, algorithms and analysis.

UNIT-4

Sorting and Hashing

Objective and properties of different sorting algorithms: Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort, Heap Sort; Performance and Comparison among all the methods. Hashing and collision resolution.

Graph: Basic Terminologies and Representations, Graph search and traversal algorithms and

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Chairperson
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complexity analysis.

TEXT/ REFERENCE BOOKS

1. M. Tenenbaum, Langsam, Moshe J. Augentem , "Data Structures using C," PHI Pub.
2. K. Sharma, "Data Structures using C" Pearson Pub.
3. A.V. Aho, J.E. Hopcroft and T.D. Ullman, "Data Structures and Algorithms" Original edition, Addison-Wesley, 1999, Low Priced Edition.
4. Ellis Horowitz & Sartaj Sahni, "Fundamentals of Data structures" Pub, 1983, AW

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. For a given algorithm student will able to analyze the algorithms to determine the time and computation complexity and justify the correctness.
2. For a given Search problem (Linear Search and Binary Search) student will able to implement it.
3. For a given problem of Stacks, Queues, linked list and Tree, student will able to implement it and analyze the same to determine the time and computation complexity.
4. Student will able to write an algorithm Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort, Heap Sort and compare their performance in term of Space and Time complexity.
5. Student will able to implement Graph search and traversal algorithms and determine the time and computation complexity.

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C

B. Tech. Semester – III (Computer Science and Engineering)
COMPUTER ORGANIZATION AND ARCHITECTURE
CODE: PCC-CS-203

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. How Computer Systems work and the basic principles.
2. Concept of computer architecture and Micro programming.
3. The basic principles for accessing I/O devices and memory unit.
4. Concepts of advanced processors, parallel and pipelining techniques.

UNIT-1

Introduction

Functional blocks of a computer: CPU, memory, input-output subsystems, control unit, control and data path of a typical register based CPU, Bus structures, Register Transfer language, Arithmetic and Logic Unit-Micro operations (Arithmetic, logical and Shift Micro operations), Hardware Implementation. Data Representation: Fixed Point, Floating Point, Stored program control concept

UNIT-2

Control Unit Design

Design of CPU Control Unit- Hardwired :Instruction codes, Computer Registers, Computer instructions, Timing and control, Instruction-reference, Register Reference and Memory reference Instructions; Microprogrammed design: Micro programmed controlled unit, Control memory and address sequencing, Micro instruction Format ,Design of Control Unit.

UNIT-3

Central Processing Unit & Input-Output

General Register Organization, Stack Organization, Instruction Formats, Addressing Modes, RISC vs CISC Architectures, Overlapped register Window , Internal architecture of 8085 microprocessor. I/O Interface: I/O bus and Interface modules, I/O vs memory mapped, Asynchronous Data Transfer— Strobe Control and Handshaking, Asynchronous Serial Transfer, modes of transfer, DMA;

UNIT-4

Memory Organization: Memory hierarchy, Memory interleaving, Associative Memory, Cache Memory and its organization (Direct, Associative and Set Associative).

Multiprocessor Systems

Characteristics of Multi Processor Systems, Introduction to parallel processors and pipelined processors, typical example, Amdahl's Law and Flynn's Classification of computers (SISD, MISD, SIMD, and MIMD).

TEXT/ REFERENCE BOOKS:

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Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (H.R.)

1. Mano, M.M. : Computer System Architecture, Prentice- Hall of India.
2. Stallings, William : Computer Organization & Architecture.
3. Gill, Nasib Singh and Dixit J.B.: Digital Design and Computer Organization, University Science Press (Laxmi Publications), New Delhi.
4. Kai Hwang : Advanced Computer Architecture, McGraw Hill International.
5. John P. Hayes , "Computer Architecture and Organization", Mc-Graw Hill .
6. Carl Hamacher, "Computer Organization and Embedded system ", Mc-Graw Hill

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of this course, the students will be able to perform the following:

1. Draw the functional block diagram of single bus architecture of a computer and describe the function of the instruction execution cycle, RTL interpretation of instructions, addressing modes, instruction set.
2. Write assembly language program for specified microprocessors using different data representations.
3. Design the ALU, Control Unit and CPU of a computer system.
4. Design a memory module and analyze its operation by interfacing with a given CPU organization and instruction
5. Given a CPU organization, assess its performance, and apply design techniques to enhance performance using pipelining, parallelism and RISC methodology.

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B. Tech. Semester – III (Computer Science and Engineering)
OBJECT ORIENTED PROGRAMMING WITH C++
CODE: PCC-CS-205

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To familiarize students with basic concepts of object oriented programming
2. To familiarize students with operator overloading, inheritance, virtual functions and friend functions.
3. To familiarize students with advanced concepts of object oriented programming like templates and exception handling

UNIT- 1

Basic Concepts Of Object Oriented Programming:- Procedural Vs. Object oriented Programming, C++ Standard Library, Preprocessor Directives, illustrative Simple C++ Programs. Header Files and Namespaces, library files. Object Oriented Concepts: Introduction to Objects and Classes, Data Abstraction, Encapsulation (Information Hiding), Access Modifiers: Controlling access to a class, method, or variable (public, protected, private), Polymorphism, Inheritance, and Reusability
Classes: - Introduction, Structure Vs. Class, Class Scope and Accessing Class Members, Initializing Class Objects: Constructors.

UNIT- 2

Destructors, Friend Functions And Operator Overloading:- Destructors, Static Class Members, Const(Constant) Object And Const Member Functions, Object as Member of Classes, Friend Function and Friend Classes, Using This Pointer, Dynamic Memory Allocation with New and Delete, Container Classes and Iterators, Function overloading

Operator Overloading: - Introduction, Fundamentals of Operator Overloading, Restrictions on Operators Overloading, Operator Functions as Class Members vs. as Friend Functions, Overloading Binary Operators (+,-,*,/,=), Overloading Unary Operators(-,++,--)

UNIT- 3

Inheritance And Virtual Functions:- Introduction, Types of Inheritance, Base Classes And Derived Classes, Virtual Base class, Casting Base Class Pointers to Derived- Class Pointers, Using Member Functions, Overriding Base - Class Members in a Derived Class, Public, Protected and Private Inheritance, Using Constructors and Destructors in derived Classes, Composition Vs. Inheritance, Overloading Vs. Overriding. Run Time Polymorphism, Introduction to Virtual Functions, Pure Virtual Functions, Abstract Base Classes and Concrete Classes, Dynamic Binding, Virtual Destructors, Dynamic Binding.

UNIT-4

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Files, Templates And Exception Handling: - Files and I/O Streams and various operation on files. Stream Input/output Classes and Objects, Stream Output, Stream Input, Unformatted I/O (with read and write), Stream Manipulators, Stream Format States, Stream Error States.

Templates & Exception Handling: - Function Templates, Overloading Template Functions, Class Template, Class Templates and Non-Type Parameters, Templates and Inheritance, Templates and Friends.

Basics of C++ Exception Handling: - Try Throwing, Catch, and Throwing an Exception; - Catching an Exception, Re-throwing an Exception, Processing Unexpected Exceptions, Constructors, Destructors and Exception Handling.

TEXT / REFERENCE BOOKS:

1. Object Oriented Programming in Turbo C++ by Robert Lafore ,1994, The WAITE Group Press.
2. Programming with C++ By D Ravichandran, 2003, T.M.H 3. Object oriented Programming with C++ by E Balagurusamy, 2001, Tata McGraw-Hill.
3. C++ How to Program by H M Deitel and P J Deitel, 1998, Prentice Hall
4. Computing Concepts with C++ Essentials by Horstmann, 2003, John Wiley,
5. The Complete Reference in C++ By Herbert Schildt, 2002, TMH.
6. C++ Programming Fundamentals by Chuck Easttom, Firewall Media.

Note: - Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After successful completion of the course, students will be able:

1. To understand the difference between object oriented programming and procedural programming.
2. To understand the basic concepts of object oriented programming
3. To understand and implement C++ features such as Operator overloading, inheritance, virtual functions and friend functions.
4. To understand and apply the concepts of templates and exception handling

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BFS Mania Vishwavidyalaya, Kuanpur, Katan, Sonapat (B.R.)

B. Tech. Semester – III (Computer Science and Engineering)
DIGITAL ELECTRONICS
CODE: ESC-203

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT-1

Fundamentals of Digital Systems and Logic Families

Digital signals, digital circuits, AND, OR, NOT, NAND, NOR and Exclusive-OR operations, Boolean algebra, examples of IC gates, number systems-binary, signed binary, octal hexadecimal number, binary arithmetic, one's and two's complements arithmetic, codes, error detecting and correcting codes, characteristics of digital ICs, digital logic families, TTL and CMOS logic, interfacing CMOS and TTL, Tri-state logic. Standard representation for logic functions, K-map representation, and simplification of logic functions using K-map, minimization of logical functions. Don't care conditions

UNIT-2

Combinational Digital Circuits

Multiplexer, De-Multiplexer/Decoders, Adders, Subtractors, BCD arithmetic, carry look ahead adder, serial adder, ALU, digital comparator, parity checker/generator, code converters, priority encoders, decoders/drivers for display devices, Q-M method of function realization.

Sequential Circuits and Systems

A 1-bit memory, the circuit properties of Bistable latch, the clocked SR flip flop, J- K-T and D types flip flops, applications of flip flops, shift registers, applications of shift registers, serial to parallel converter, parallel to serial converter, ring counter, sequence generator, ripple (Asynchronous) counters, synchronous counters, counters design using flip flops, applications of counters.

UNIT-3

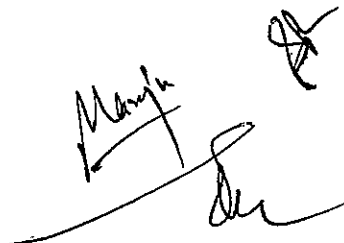


A/D and D/A Converters

Digital to analog converters: weighted resistor/converter, R-2R Ladder D/A converter, specifications for D/A converters, examples of D/A converter ICs, sample and hold circuit, analog to digital converters: quantization and encoding, parallel comparator A/D converter, successive approximation A/D converter, counting A/D converter, dual slope A/D converter, A/D converter using voltage to frequency and voltage to time conversion, specifications of A/D converters, example of A/D converter ICs

UNIT-4

Semiconductor Memories and Programmable Logic Devices

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BPS Mania Vishwavidyalaya, Kharanpur Kalan, Sonapat R.)

Memory organization and operation, expanding memory size, classification and characteristics of memories, sequential memory, read only memory (ROM), read and write memory (RAM), content addressable memory (CAM), charge de coupled device memory (CCD), commonly used memory chips, ROM as a PLD, Programmable logic array, Programmable array logic, complex Programmable logic devices (CPLDS), Field Programmable Gate Array (FPGA).

TEXT/REFERENCE BOOKS:

1. R. P. Jain, "Modern Digital Electronics", McGraw Hill Education, 2009.
2. M. M. Mano, "Digital logic and Computer design", Pearson Education India, 2016.
3. A. Kumar, "Fundamentals of Digital Circuits", Prentice Hall India, 2016.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

At the end of this course, students will demonstrate the ability to

1. Understand working of logic families and logic gates.
2. Design and implement Combinational and Sequential logic circuits.
3. Understand the process of Analog to Digital conversion and Digital to Analog conversion.
4. Be able to use PLDs to implement the given logical problem.

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Chairperson
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Bho. Manla Vishwavidyalaya, Khanpur Kalan, Sonapat (M.P.)

B. Tech. Semester – III (Computer Science and Engineering)
MATHEMATICS- III (Calculus and Ordinary Differential Equations)
CODE: BSC-201

NO OF CREDITS: 4

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT-1

SEQUENCES AND SERIES

Convergence of sequence and series, tests for convergence, power series, Taylor's series. Series of exponential, trigonometric and logarithmic functions.

MULTIVARIABLE CALCULUS (DIFFERENTIATION)

Limit, continuity and partial derivatives, directional derivatives, total derivative; Tangent plane and normal line; Maxima, minima and saddle points; Method of Lagrange multipliers; Gradient, curl and divergence.

UNIT-2

MULTIVARIABLE CALCULUS (INTEGRATION)

Multiple Integration: double and triple integrals (Cartesian and polar), change of order of integration in double integrals, Change of variables (Cartesian to polar). Theorems of Green, Gauss and Stokes, orthogonal curvilinear coordinates, Simple applications involving cubes, sphere and rectangular parallelepipeds.

UNIT-3

FIRST ORDER ORDINARY DIFFERENTIAL EQUATIONS

Exact, linear and Bernoulli's equations, Euler's equations, Equations not of first degree: equations solvable for p, equations solvable for y, equations solvable for x and Clairaut's type.

UNIT-4

ORDINARY DIFFERENTIAL EQUATIONS OF HIGHER ORDERS

Second order linear differential equations with variable coefficients, method of variation of parameters, Cauchy-Euler equation; Power series solutions; Legendre polynomials, Bessel functions of the first kind and their properties.

TEXT/REFERENCES BOOKS

1. G.B. Thomas and R.L. Finney, "Calculus and Analytic geometry", 9th Edition, Pearson, Reprint, 2002.
2. Veerarajan T., "Engineering Mathematics for first year", Tata McGraw-Hill, New Delhi, 2008.
3. Ramana B.V., "Higher Engineering Mathematics", Tata McGraw Hill New Delhi, 11th Reprint, 2010.
4. N.P. Bali and Manish Goyal, "A text book of Engineering Mathematics", Laxmi Publications, Reprint, 2010.
5. B.S. Grewal, "Higher Engineering Mathematics", Khanna Publishers, 35th Edition, 2000.
6. Erwin Kreyszig, "Advanced Engineering Mathematics", 9th Edition, John Wiley & Sons, 2006.

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Manish Goyal

for

Chairperson
Department of Computer Science &
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P.O. Model Village, Gyalaya, Khanpur Kalan, Sec.

7. W. E. Boyce and R. C. DiPrima, "Elementary Differential Equations and Boundary Value Problems, 9th Edition, Wiley India, 2009.
8. S. L. Ross, "Differential Equations", 3rd Ed., Wiley India, 1984.
9. E. A. Coddington, "An Introduction to Ordinary Differential Equations", Prentice Hall India, 1995.
10. E. L. Ince, "Ordinary Differential Equations", Dover Publications, 1958.
11. G.F. Simmons and S.G. Krantz, "Differential Equations", Tata McGraw Hill, 2007.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonbhadra (M.P.)

B. Tech. Semester – III (Computer Science and Engineering)
HUMANITIES – I (EFFECTIVE TECHNICAL COMMUNICATION)
CODE: HSMC-201

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT-1

Information Design and Development

Different kinds of technical documents, Information development life cycle, Organization structures, factors affecting information and document design, Strategies for organization, Information design and writing for print and for online media.

Technical writing

Technical writing process, forms of discourse, Writing drafts and revising, Collaborative writing, creating indexes, technical writing style and language.

UNIT-2

Grammar and editing

Basics of grammar, study of advanced grammar, editing strategies to achieve appropriate technical style. Introduction to advanced technical communication, Usability, Human factors, Managing technical communication projects, time estimation, Single sourcing, Localization.

Self Development and Assessment

Self assessment, Awareness, Perception and Attitudes, Values and belief, Personal goal setting, career planning, Self-esteem. Managing Time; Personal memory, Rapid reading, Taking notes; Complex problem solving; Creativity

UNIT-3

Communication and Technical writing

Public speaking, Group discussion, Oral; presentation, Interviews. Graphic presentation, Presentation aids, Personality Development. Writing reports, project proposals, brochures, newsletters, technical articles, manuals, official notes, business letters, memos, progress reports, minutes of meetings, event report.

UNIT-4

Ethics

Business ethics, Etiquettes in social and office settings, Email etiquettes, Telephone Etiquettes, Engineering ethics, Managing time, Role and responsibility of engineer, Work culture in jobs, Personal memory, Rapid reading, Taking notes, Complex problem solving, Creativity.

TEXT/REFERENCE BOOKS

1. David F. Beer and David McMurrey, Guide to writing as an Engineer, John Willey. New York, 2004

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Handwritten signatures and initials:
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Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Keeran, Sonapat (HR.)

2. Diane Hacker, Pocket Style Manual, Bedford Publication, New York, 2003. (ISBN 0312406843)
3. Shiv Khera, You Can Win, Macmillan Books, New York, 2003.
4. Raman Sharma, Technical Communications, Oxford Publication, London, 2004.
5. Dale Jungk, Applied Writing for Technicians, McGraw Hill, New York, 2004. (ISBN: 07828357-4)
6. Sharma, R. and Mohan, K. Business Correspondence and Report Writing, TMH New Delhi 2002.
7. Xebec, Presentation Book, TMH New Delhi, 2000. (ISBN 0402213)

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – III (Computer Science and Engineering)
ENVIRONMENTAL SCIENCES
CODE: MC-201

NO OF CREDITS: 0
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

Course Objectives:

The prime objective of the course is to provide the students a detailed knowledge on the threats and challenges to the environment due to developmental activities. The students will be able to identify the natural resources and suitable methods for their conservation and sustainable development. The focus will be on awareness of the students about the importance of ecosystem and biodiversity for maintaining ecological balance. The students will learn about various attributes of pollution management and waste management practices. The course will also describe the social issues both rural and urban environment and environmental legislation

UNIT-1

The Multidisciplinary Nature of Environmental Studies

Definition, scope and importance. Need for public awareness.

Natural Resources: Renewable and Non-Renewable Resources

Natural resources and associated problems:

Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. Mineral resources: Use and exploitation, environmental effects of extracting and mineral resources, case studies. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles.

UNIT-2

Ecosystems

Concept of an ecosystem. Structure and function of an ecosystem. Producers, consumers and decomposers. Energy flow in the ecosystem. Ecological succession. Food chains, food webs and ecological pyramids. Introduction, types, characteristic features, structure and function of the following ecosystem: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

Biodiversity and its Conservation

Introduction – Definition: genetic, species and ecosystem diversity. Biogeographical classification of India. Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values. Biodiversity at global, National and local levels. India as a mega-diversity nation. Hot-spots of

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BPS Mahila Vishwavidyalaya, Khanpur Yaton, Sonapat (H.R.)

biodiversity. Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India. Conservation of biodiversity: insitu and ex-situ conservation of biodiversity

UNIT-3

Environmental Pollution Definition

Causes, effects and control measures of: Air pollution b) Water pollution c) Soil pollution d) Marine pollution e) Noise pollution f) Thermal pollution g) Nuclear hazards .Solid waste Management: Causes, effects and control measures of urban and industrial wastes. Role of an individual in prevention of pollution. Pollution case studies. Disaster management: floods, earthquake, cyclone and landslides.

Social Issues and the Environment

From Unsustainable to Sustainable development Urban problems related to energy. Water conservation, rain water harvesting, watershed management. Resettlement and rehabilitation of people; its problems and concerns. Case studies.

Environmental ethics: Issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies. Wasteland reclamation. Consumerism and waste products. Environment Protection Act. Air (Prevention and Control of Pollution) Act. Water (Prevention and Control of Pollution) Act Wildlife Protection Act. Forest Conservation Act. Issues involved in enforcement of environmental legislation Public awareness.

UNIT-4

Human Population and the Environment

Population growth, variation among nations. Population explosion – Family Welfare Programme. Environment and human health. Human Rights. Value Education. HIV/AIDS. Women and Child Welfare. Role of Information Technology in Environment and human health. Case Studies.

Field Work

Visit to a local area to document environmental assets-river / forest / grassland / hill / mountain. Visit to a local polluted site – Urban / Rural / Industrial / Agricultural. Study of common plants, insects, birds. Study of simple ecosystems – pond, river, hill slopes, etc.

TEXT/REFERENCES BOOKS

1. Environmental Science: towards a sustainable future by Richard T. Wright. 2008 PHL Learning Private Ltd. New Delhi.
2. Environmental Engineering and science by Gilbert M. Masters and Wendell P. Ela 2008 PHI Learning Pvt Ltd.
3. Environmental Science by Daniel B. Botkin & Edwards A. Keller, Wiley INDIA edition.
4. Fundamentals of Ecology by Odum, E.P., Barrick, M. and Barret, G.W. Thomson Brooks/Cole Publisher, California, 2005.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Manju

Chairperson
Department of Computer Science &
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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – III (Computer Science and Engineering)
DIGITAL ELECTRONICS LAB
CODE: ESC-203-P

NO OF CREDITS: 1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments related to the course must be performed.

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Chairperson
Department of Computer Science &
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BPS Mahila Vishwavidyalaya, Khatu (Raj.), Sonepat (HR.)

B. Tech. Semester – III (Computer Science and Engineering)
DATA STRUCTURES & ALGORITHMS LAB
CODE: PCC-CS-201-P

NO OF CREDITS: 2

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

Course Objectives:

1. To impart the basic concepts of data structures and algorithms.
2. To understand concepts about searching and sorting techniques
3. To understand basic concepts about stacks, queues, lists, trees and graphs.
4. To enable them to write algorithms for solving problems with the help of fundamental data structures

S.No.	Experiment
1	Five /six programs on Strings
2	Five/ six programs on Array
3	Programs on Pointer
4	Write a program to search an element from an array using Linear Search
5	Write a program to search an element from an array using Binary Search
6	Write a program to sort elements of an array using selection sort
7	Write a program to sort elements of an array using insertion sort
8	Write a program to sort elements of an array using bubble sort
9	Write a program to sort elements of an array using Quick sort
10	Write a program to sort elements of an array using Merge sort
11	Write a program to push , pop and display the elements in a stack using array
12	Write a program to convert infix into postfix notation using stack using array
13	Write a program to evaluate postfix notation using stack
14	Write a program to insert, delete and display the elements in a queue using array
15	Write a program to insert, delete and display the elements in a circular queue
16	Write a program to insert, delete and display the elements in a one way linked list at beginning, at end and at certain point
17	Write a program to insert, delete and display the elements in a two way linked list at beginning, at end and at certain point
18	Write a program to push , pop and display the elements in a stack using linked list
19	Write a program to convert infix into postfix notation using stack using linked list
20	Write a program to insert, delete and display the elements in a queue using linked list

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21	Write a program to insert, delete and display the elements in a binary tree
22	Write a program to insert, delete and display the elements in a binary search tree
23	Write a program to sort elements using heap sort
24	Write a program to insert, delete and display elements in a graph
25	Write a program to insert, delete and display the elements in a B-tree
26	Other programs based on above concepts that teacher finds appropriate

Course Outcomes:

1. For a given Search problem (Linear Search and Binary Search) student will able to implement it.
2. For a given problem of Stacks, Queues, linked list and Tree, student will able to implement it.
3. Student will able to write programs - Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort, Heap Sort.
4. Student will able to implement Graph search and traversal algorithms.

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Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – III (Computer Science and Engineering)
OBJECT ORIENTED PROGRAMMING WITH C++ LAB
CODE: PCC-CS-205-P

NO OF CREDITS: 2

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

Course Objectives:

1. To apply the basic knowledge of Object and classes.
2. To implement features of Object oriented programming like inheritance, polymorphism, operator overloading
3. To apply the concepts of exception handling and templates.

1. Raising a number n to a power p is the same as multiplying n by itself p times. Write a function called `power()` that takes a double value for n and an int value for p , and returns the result as double value Use a default argument of 2 for p . so that if this argument is omitted, the number will be squared. Write a main () function that gets values from the user to test this function.
2. Create the equivalent of a four function calculator. The program should request the user to enter a number, an operator, and another number. It should then carry out the specified arithmetical operation: adding, subtracting, multiplying, or dividing the two numbers. (It should use a switch statement to select the operation). Finally it should display the result.
3. When it finishes the calculation, the program should ask if the user wants to do another calculation. The response can be 'Y' or 'N'. Some sample interaction with the program might look like this.
4. Enter first number. Operator, second number: 10/3 Answer = 3.333333
5. Do another (Y I N)? Y Enter first number. Operator, second number 12 + 100 Answer = 11 Do another (Y I N)? N
6. Write a program to overload constructors:
7. Create two classes DM and DB which store the value of distances. DM stores distances in metres and centimeters and DB in feet and inches. Write a program that can read values for the class objects and add one object of DM with another object of DB. Use a friend function to carry out the addition operation. The object that stores the results maybe DM object or DB object. depending on the units in which the results are required. The display should be in the format of feet and inches or metres and centimetres depending on object on display.
8. Write a Program to overload $+, -, *, /, +=$ on a class of complex numbers.
9. Write a Program to overload $+, =$ on a class of strings.
10. Create a class rational which represents a numerical value by NUMERATOR & DENOMINATOR . Write a Program to overload $+, -$ for class of rational .
11. Make a class Employee with a name and salary. Make a class Manager inherit from Employee. Add an instance variable, named department, of type string. Supply a method to toString that prints the manager's name, department and salary. Make a class Executive inherit from Manager

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Supply a method to String that prints the string Executive followed by the information stored in the Manager superclass object. Supply a test program that tests these classes and methods.

12. Imagine a tollbooth with a class called toll Booth. The two data items of a type unsigned int to hold the total number of cars, and a type double to hold the total amount of money collected. A constructor initializes both these to 0. A member function called payingCar () increments the car total and adds 0.50 to the cash total. Another function, called nopayCar (). increments the car.
13. Write a program to create a class template to implement stack operations.
14. Write a program to demonstrate exception handling.

Course Outcomes:

After successful completion of the course, students will be able to:

1. Develop program using the concepts of object oriented programming like class, objects, constructors and destructors.
2. Develop programs using C++ features such as Operator overloading and
3. Develop programs to illustrate virtual functions and friend functions.
4. Develop programs to apply the concepts of templates and exception handling

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Course Curriculum & Scheme of Examinations

For

B.Tech Computer Science & Engineering

(w.e.f Academic Session 2024- 2025)

Semester - 4

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-202	Discrete Mathematics	3	1	0	4	20	80	100
2.	PCC	PCC-CS-204	Software Engineering	3	0	0	3	20	80	100
3.	PCC	PCC-CS-206	Operating System	3	0	0	3	20	80	100
4.	PCC	PCC-CS-208	Design & Analysis of Algorithms	3	0	0	3	20	80	100
5.	PCC	PCC-CS-210	Python	3	0	0	3	20	80	100
6.	HSMC	HSMC-202	Management – I (Organizational Behavior)	3	0	0	3	20	80	100
7.	MC	MC- 303	Universal Human Values	3	0	0	0	10	40	50
Lab										
8.	PCC	PCC-CS-206- P	Operating System LAB	0	0	4	2	10	40	50
9.	PCC	PCC-CS-208- P	Hardware Lab/ MATLAB	0	0	2	1	10	40	50
10.	PCC	PCC-CS-210- P	Python Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: 1). 4-6 weeks training will be held after fourth semester. However, Viva-Voce will be conducted in the fifth semester.

2). Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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B. Tech. Semester – IV (Computer Science and Engineering)
DISCRETE MATHEMATICS
CODE: PCC-CS-202

NO OF CREDITS: 4

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. Throughout the course, students will be expected to demonstrate their understanding of Discrete Mathematics by being able to do each of the following:
2. Use mathematically correct terminology and notation.
3. Construct correct direct and indirect proofs.
4. Use division into cases in a proof.
5. Use counterexamples.
6. Apply logical reasoning to solve a variety of problems.

UNIT-1

Sets, Relation and function: Operations and Laws of Sets, Cartesian Products, Binary Relation, Partial Ordering Relation, Equivalence Relation, Image of a Set, Sum and Product of Functions, Bijective functions, Inverse and Composite Function, Size of a Set, Finite and infinite Sets, Countable and uncountable Sets, Cantor's diagonal argument and The Power Set theorem, Schroeder-Bernstein theorem.

Principles of Mathematical Induction: The Well-Ordering Principle, Recursive definition, The Division algorithm: Prime Numbers, The Greatest Common Divisor: Euclidean Algorithm, The Fundamental Theorem of Arithmetic.

UNIT-2

Basic counting techniques-inclusion and exclusion, pigeon-hole principle, permutation and combination.

Propositional Logic: Syntax, Semantics, Validity and Satisfiability, Basic Connectives and Truth Tables, Logical Equivalence: The Laws of Logic, Logical Implication, Rules of Inference, The use of Quantifiers. Proof Techniques: Some Terminology, Proof Methods and Strategies, Forward Proof, Proof by Contradiction, Proof by Contraposition, Proof of Necessity and Sufficiency.

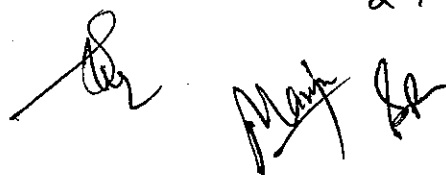
UNIT-3


Algebraic Structures and Morphism: Algebraic Structures with one Binary Operation, Semi Groups, Monoids, Groups, Congruence Relation and Quotient Structures, Free and Cyclic Monoids and Groups, Permutation Groups, Substructures, Normal Subgroups, Algebraic Structures with two Binary Operation, Rings, Integral Domain and Fields: Boolean Algebra and Boolean Ring, Identities of Boolean Algebra, Duality, Representation of Boolean Function, Disjunctive and Conjunctive Normal Form

UNIT-4

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Graphs and Trees: Graphs and their properties, Degree, Connectivity, Path, Cycle, Sub Graph, Isomorphism, Eulerian and Hamiltonian Walks, Graph Colouring, Colouring maps and Planar Graphs, Colouring Vertices, Colouring Edges, List Colouring, Perfect Graph, definition properties and Example, rooted trees, trees and sorting, weighted trees and prefix codes, Bi-connected component and Articulation Points, Shortest distances.

TEXT/REFERNCE BOOKS

1. Kenneth H. Rosen, Discrete Mathematics and its Applications, Tata McGraw – Hill
2. Susanna S. Epp, Discrete Mathematics with Applications, 4th edition, Wadsworth Publishing Co. Inc.
3. C L Liu and D P Mohapatra, Elements of Discrete Mathematics A Computer Oriented Approach, 3rd Edition by, Tata McGraw – Hill.
4. J.P. Tremblay and R. Manohar, Discrete Mathematical Structure and It's Application to Computer Science", TMG Edition, TataMcgraw-Hill
5. Norman L. Biggs, Discrete Mathematics, 2nd Edition, Oxford University Press. Schaum's Outlines Series, Seymour Lipschutz, Marc Lipson, Discrete Mathematics, Tata McGraw – Hill

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. For a given logic sentence express it in terms of predicates, quantifiers, and logical connectives
2. For a given a problem, derive the solution using deductive logic and prove the solution based on logical inference
3. For a given a mathematical problem, classify its algebraic structure
4. Evaluate Boolean functions and simplify expressions using the properties of Boolean algebra
5. Develop the given problem as graph networks and solve with techniques of graph theory.

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B. Tech. Semester – IV (Computer Science and Engineering)
SOFTWARE ENGINEERING
CODE: PCC-CS-204

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To enable the students to apply a systematic application of scientific knowledge in creating and building cost effective software solutions to business and other types of problems.
2. To make the students understand project management concepts & their metrics.
3. To make the students understand requirement engineering and its models (Information, functional, behavioural).

UNIT-1

INTRODUCTION

Evolving role of software, Software Characteristics, Software crisis, Silver bullet, Software myths, Software process, Personal Software Process (PSP), Team Software Process (TSP), emergence of software engineering, Software process, project and product, Software Process Models: Waterfall Model, Prototype Model, Spiral, Model, RAD Model, Iterative Model, Incremental Model, Aspect-oriented Model, Agile Model.

UNIT-2

SOFTWARE PROJECT MANAGEMENT

Project management concepts, Planning the software project, Estimation—LOC based, FP based, Use-case based, empirical estimation COCOMO- A Heuristic estimation techniques, staffing level estimation, team structures, staffing, risk analysis and management.

UNIT-3

REQUIREMENTS, ANALYSIS AND SPECIFICATION

Software Requirements engineering, Requirement engineering process, Requirement Engineering Tasks, Types of requirements, SRS. System modeling: Data Modeling, Functional modeling and information flow: Data flow diagrams, Behavioral Modeling, The mechanics of structured analysis: Creating entity/ relationship diagram, data flow model, control flow model, the data dictionary.

SYSTEM DESIGN

Design principles, the design process; Design concepts: Abstraction, refinement, modularity, software architecture, control hierarchy, structural partitioning, data structure, software procedure, information hiding; Effective modular design: Functional independence, Cohesion, Coupling;

UNIT-4

TESTING AND MAINTENANCE

Testing terminology- error, bug/defect/fault, failure, Verification and validation, Test case design, Static testing, Dynamic testing--- Black box testing—Boundary value analysis, White box testing-- basis path testing, Unit testing, Integration testing, Acceptance Testing

SOFTWARE QUALITY MODELS AND STANDARDS

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Quality concepts, Software quality assurance, SQA activities, Formal approaches to SQA; Statistical software quality assurance; CMM, The ISO 9126 Standard

TEXT/REFERENCES BOOKS:

1. Software Engineering – A Practitioner's Approach, Roger S. Pressman, 1996, MGH.
2. Fundamentals of software Engineering, Rajib Mall, PHI
3. Software Engineering by Ian Sommerville, Pearson Edu, 5th edition, 1999, AW,
4. Software Engineering – David Gustafson, 2002, T.M.H

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Dr.
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B. Tech. Semester – IV (Computer Science and Engineering)

OPERATING SYSTEMS

CODE: PCC-CS-206

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn the fundamentals of Operating Systems.
2. To learn the mechanisms of OS to handle processes, threads and their communication.
3. To know the components and management aspects of concurrency management viz. Mutual exclusion algorithms, deadlock detection algorithms and agreement protocols.
4. To learn the mechanisms involved in memory management in contemporary OS.
5. To gain knowledge on Input/Output management aspects of Operating systems.

UNIT-1

Introduction

Concept of Operating Systems, Evolution and Generations of Operating systems, Types of Operating Systems, OS Services, Hardware Support for Operating Systems, Types of Resources, System Calls, Structure of an OS -, Monolithic, Layered, Microkernel and Hybrid Operating Systems; Concept of Virtual Machine

Process Management

Definition of process, Process Relationship, Different states of a Process, Process State transitions, Process Control Block (PCB), Context switching, Thread: Definition, Various states, Benefits of threads, Types of threads, Concept of multithreads; Process Scheduling: Foundation and Scheduling objectives, Types of Schedulers, Scheduling criteria: CPU utilization, Throughput, Turnaround Time, Waiting Time, Response Time; Scheduling algorithms: Pre-emptive and Non pre-emptive, First come first served, , Priority and Round Robin scheduling.

UNIT-2

Inter-Process Communication and Synchronization

Critical Section, Race Conditions, Mutual Exclusion, Hardware Solution, Strict Alternation, Peterson's Solution, The Producer-Consumer Problem, Semaphores, , Monitors, Message Passing, Classical IPC Problems: Reader's & Writer Problem, Dining Philosopher Problem etc.

Deadlocks

Definition, Necessary and sufficient conditions for Deadlock, Deadlock Prevention, Deadlock Avoidance: Banker's algorithm, Deadlock detection and Recovery.

UNIT-3

Memory Management

Basic concept, Logical and Physical address map, Memory allocation: Contiguous Memory allocation– Fixed and variable partition–Internal and External fragmentation and Compaction; Paging: Principle of

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operation – Page allocation – Hardware support for paging, Protection and sharing, Disadvantages of paging; Virtual Memory: Basics of Virtual Memory – Hardware and control structures – Locality of reference, Page fault, Working Set , Dirty page/Dirty bit – Demand paging, Page Replacement algorithms: Optimal, First in First Out (FIFO), Second Chance (SC), Not recently used (NRU) and Least Recently used (LRU).

UNIT-4

I/O Management

Device independent I/O software, Secondary-Storage Structure: Disk structure, Disk scheduling algorithms; Disk scheduling - FCFS, SSTF, SCAN, C-SCAN File Management: Concept of File, Access methods, File types, File operation, Directory structure, File System structure, Allocation methods (contiguous, linked, indexed), Free-space management (bit vector, linked list, grouping), directory implementation (linear list, hash table), efficiency and performance; Disk Management: Disk structure, , Disk reliability, Disk formatting, Boot-block, Bad blocks

Case Study on Linux/Unix and Windows

TEXT/REFERENCES BOOKS:

1. Abraham Silberschatz, Peter Galvin, Greg Gagne, "Operating System Concepts Essentials", 9th Edition, Wiley Asia Student Edition.
2. William Stallings, "Operating Systems: Internals and Design Principles", 5th Edition, Prentice Hall of India.
3. NareshChauhan, "Principles of operating systems". Oxford university Press.
4. Charles Crowley, "Operating System: A Design-oriented Approach", 1st Edition, Irwin Publishing.
5. Gary J. Nutt, "Operating Systems: A Modern Perspective", 2nd Edition, Addison-Wesley
6. Maurice Bach, "Design of the Unix Operating Systems", 8th Edition, PHI
7. Daniel P. Bovet, Marco Cesati, "Understanding the Linux Kernel", 3rd Edition, O'Reilly and Associates

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After the completion of the course, the students will be able to:

1. Create processes and threads.
2. Develop algorithms for process scheduling for a given specification of CPU utilization, Throughput, Turnaround Time, Waiting Time, and Response Time.
3. For a given specification of memory organization, develop the techniques for optimally allocating memory to processes by increasing memory utilization and for improving the access time.
4. Design and implement file management system.
5. For a given I/O device and OS (specify), develop the I/O management functions in OS as part of a uniform device abstraction by performing operations for synchronization between CPU and I/O controllers.

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B. Tech. Semester – IV (Computer Science and Engineering)
DESIGN AND ANALYSIS OF ALGORITHMS
CODE: PCC-CS-208

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. Analyze the asymptotic performance of algorithms.
2. Write rigorous correctness proofs for algorithms.
3. Demonstrate a familiarity with major algorithms and data structures.
4. Apply important algorithmic design paradigms and methods of analysis.
5. Synthesize efficient algorithms in common engineering design situations.

UNIT-1

Introduction

Characteristics of algorithm, Analysis of algorithm: Asymptotic analysis of complexity bounds – best, average and worst-case behavior; Performance measurements of Algorithm, Time and space trade-offs, Analysis of recursive algorithms through recurrence relations: Substitution method, Recursion tree method and Masters' theorem.

UNIT-2

Fundamental Algorithmic Strategies

Brute-Force, Greedy, Dynamic Programming, Branch and-Bound and backtracking methodologies for the design of algorithms; Illustrations of these techniques for Problem-Solving, Bin Packing, Knapsack, Job sequencing with deadline, Optimal Binary Search tree, N-Queen problem, Hamiltonian Cycle, TSP, Heuristics – characteristics and their application domains.

UNIT-3

Graph and Tree Traversal Algorithms

Depth First Search (DFS) and Breadth First Search (BFS); Shortest path algorithms, Transitive closure, Minimum Spanning Tree, Topological sorting, Network Flow Algorithm.

UNIT-4

Tractable and Intractable Problems

Computability of Algorithms, Computability classes – P, NP, NP-complete and NP-hard, Cook's theorem, Standard NP-complete problems and Reduction techniques.

Advanced Topics

Approximation algorithms, Randomized algorithms, Class of problems beyond NP – P SPACE

TEXT/REFERENCE BOOKS

1. Thomas H Cormen, Charles E Lieserson, Ronald L Rivest and Clifford Stein, "Introduction to Algorithms", MIT Press/McGraw-Hill; 3rd edition, [ISBN: 978-0262533058], 2009.

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2. Ellis Horowitz, SartajSahni and SanguthevarRajasekaran, "Fundamentals of Algorithms", Universities Press; 2nd edition [ISBN:978-8173716126],2008.
3. Jon Kleinberg and ÉvaTardos, "Algorithm Design", Pearson Publisher; 1st edition [ISBN:978-0321295354],2012.
4. Michael T Goodrich and Roberto Tamassia, "Fundamentals of Algorithms" Wiley Press; 1st edition [ISBN:978-8126509867],2006.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After the completion of course, student should be able to:

1. Analyze worst-case running times of algorithms based on asymptotic analysis and justify the correctness of algorithms.
2. Describe the greedy paradigm and explain when an algorithmic design situation calls for it. For a given problem develop the greedy algorithms.
3. Describe the divide-and-conquer paradigm and explain when an algorithmic design situation calls for it. Synthesize divide-and-conquer algorithms. Derive and solve recurrence relation.
4. Describe the dynamic-programming paradigm and explain when an algorithmic design situation calls for it. For a given problems of dynamic-programming and develop the dynamic programming algorithms, and analyze it to determine its computational complexity.
5. Explain the ways to analyze randomized algorithms (expected running time, probability of error).
6. Explain what an approximation algorithm is. Compute the approximation factor of an approximation algorithm (PTAS and FPTAS).

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B. Tech. Semester – IV (Computer Science and Engineering)

PYTHON

CODE: PCC-CS-210

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course objectives:

1. Fundamentals and Data structures of python's programming language.
2. Object oriented concepts in python programming language.
3. Retrieving, processing, storing and visualization of data using python.

UNIT-1

INTRODUCTION TO PYTHON

Brief history of python, Data types - Built-in, Sequence, Sets, Strings, Literals, constants, keywords, variables, naming convention. Operators – Types, Precedence & Associativity, Input, Output, file handling, Control Statements.

UNIT-2

FUNCTIONS AND DATA STRUCTURES IN PYTHON

Functions – basics of functions, functions as objects, recursive functions, List –methods to process lists, Shallow & Deep copy, Nested lists, lists as matrices, lists as stacks, Queues, - Deques, Tuples - basic operations on tuples, nested tuples, Dictionaries – operations on dictionary, ordered dictionary, iteration on dictionary, conversion of lists & strings into dictionary, Sets & frozen sets, looping techniques on lists & dictionaries, Lamda, filter, reduce, map, list comprehension, iterators and generators.

UNIT-3

OBJECTS IN PYTHON & DATA MANIPULATION AND VISUALIZATION IN PYTHON

Class and instance attributes, inheritance, multiple inheritance, methods resolution order, magic methods and operator overloading, meta classes, abstract and inner classes, exception handling, modular programs and packages.

Data frames in panda, Creating dataframes from .csv and excel files, Lists of tuples, Dataframes aggregation and concatenation, plotting data using matplotlib & panda

UNIT-4

NUMERICAL ANALYSIS IN PYTHON

Introduction to NumPy, NumPy array object, Creating a multidimensional array, NumPy numerical types - Data type objects, Character codes, dtype constructors. dtype attributes. N-dimensional slicing and indexing. Manipulating array shapes -- Stacking arrays, Splitting NumPy arrays, NumPy array attributes, Converting arrays, Creating array views and copies. Indexing with a list of locations. Indexing NumPy arrays with Booleans. Broadcasting NumPy arrays.

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TEXT/REFERENCE BOOKS:

1. Wesley J Chun, Core Python Programming, Prentice Hall, Second Edition, 2006
2. Ivan Idris, Python Data Analysis, Packt Publishing, UK, 2014 (freely available online)
3. Wes McKinney, Python for Data Analysis, O'Reilly - 2013

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Write programs efficiently in python
2. Effectively use numerical analysis libraries of python
3. Carry out basic data science operations like retrieving, processing and visualizing using python.

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Manju

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BPS Mahila Vishwavidyalaya, Kharpur K (V), Sonepat (HR.)

**B. Tech. Semester – IV (Computer Science and Engineering)
MANAGEMENT –I (ORGANIZATIONAL BEHAVIOUR)
CODE: HSMC-202**

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The objective of this course is to expose the students to basic concepts of management and provide insights necessary to understand behavioral processes at individual, team and organizational level.

UNIT-1

Introduction to management: concept, nature; evolution of management thoughts –traditional, behavioural, system, contingency and quality viewpoints; Managerial levels, skills and roles in an organization; Functions of Management: Planning, Organizing, Directing, Controlling, Problem solving and Decision making; Management control; managerial ethics and social responsibility; Management Information System (MIS).

UNIT-2

Fundamentals of Organizational Behavior: Concept, evolution, importance and relationship with other Fields; Contemporary challenges of OB; Individual Processes and Behavior – differences, Personality concept, determinant, theories and applications; Values, Attitudes and Emotions, Perception- concept, process and applications, Learning and Reinforcement; Motivation: concept, theories and applications; Stress management.

UNIT-3

Interpersonal Processes- Work teams and groups- Definition of Group, Stages of group development, Group cohesiveness, Types of groups, Group processes and Decision Making; Team Building; Conflict- concept, sources, types, management of conflict; Power and Political Behavior; Leadership: concept, function and styles.

UNIT-4

Organizational Processes and structure: organizational design: various organizational structures and their effect on human behavior; Organizational climate; Organizational culture; Organizational change: Concept, Nature, Resistance to Change, Change Management, Implementing Change and Organizational Development

TEXT/REFERENCES BOOKS:

1. Robbins, S.P. and Decenzo, D.A. Fundamentals of Management, Pearson Education Asia, New Delhi.
2. Stoner, J et. al, Management, New Delhi, PHI, New Delhi
3. Satya Raju, Management – Text & Cases, PHI, New Delhi
4. Kavita Singh, Organisational Behaviour: Text and cases. New Delhi: Pearson Education.

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5. Pareek, Udai, Understanding Organisational Behaviour, Oxford University Press, New Delhi
6. Robbins, S.P. & Judge, T.A., Organisational Behaviour, Prentice Hall of India, New Delhi

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No. 1 is compulsory which is from entire syllabus.

Course Outcomes:

1. The students learn how to influence the human behaviour.
2. Students will be able to understand behavioural dynamics in organizations.
3. Students will be able to apply managerial concepts in practical life.
4. Students will be able to understand organizational culture and change.

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B. Tech. Semester – IV (Computer Science and Engineering)

UNIVERSAL HUMAN VALUES

CODE: MC-303

NO OF CREDITS: 0

L T P

3 0 0

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

Course Objectives:

1. To help students distinguish between values and skills, and understand the need, basic guidelines, content and process of value education.
2. To help students initiate a process of dialog within themselves to know what they 'really want to be' in their life and profession
3. To help students understand the meaning of happiness and prosperity for a human being.
4. To facilitate the students to understand harmony at all the levels of human living, and live accordingly.
5. To facilitate the students in applying the understanding of harmony in existence in their profession and lead an ethical life.

UNIT-1

Introduction

Need, Basic Guidelines, Content and Process for Value Education Understanding the need, basic guidelines, content and process for Value Education, Self-Exploration, 'Natural Acceptance' and Experiential Validation- as the mechanism for self exploration, Continuous Happiness and Prosperity, Right understanding, Relationship and Physical Facilities- the basic requirements for fulfillment of aspirations of every human being with their correct priority, Understanding Happiness and Prosperity correctly- A critical appraisal of the current scenario, Method to fulfill the above human aspirations: understanding and living in harmony at various levels.

UNIT-2

Understanding Harmony in the Human Being

Harmony in Myself Understanding human being as a co-existence of the sentient 'I' and the material 'Body', Understanding the needs of Self ('I') and 'Body' - Sukh and Suvidha, Understanding the Body as an instrument of 'I' (I being the doer, seer and enjoyer), Understanding the characteristics and activities of 'I' and harmony in 'I', Understanding the harmony of I with the Body: Sanyam and Swasthya; meaning of Prosperity in detail.

UNIT-3

Understanding Harmony in the Family and Society

Harmony in Human-Human Relationship Understanding harmony in the Family- the basic unit of human interaction , Understanding values in human-human relationship; meaning of Nyaya and program for its fulfillment to ensure Ubhay-tripti; Trust (Vishwas) and Respect (Samman) as the foundational values of relationship, Understanding the meaning of Vishwas; Difference between intention and competence, Understanding the meaning of Samman, Difference between respect and

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differentiation, Understanding the harmony in the society, Visualizing a universal harmonious order in society.

UNIT-4

Understanding Harmony in the Nature and Existence

Whole existence as Co-existence Understanding the harmony in the Nature, Interconnectedness and mutual fulfillment among the four orders of nature- recyclability and self-regulation in nature, Understanding Existence as Co-existence (Sah-astitva) of mutually interacting units in all-pervasive space, Holistic perception of harmony at all levels of existence.

Implications of the above Holistic Understanding of Harmony on Professional Ethics

TEXT/REFERENCE BOOKS

1. R R Gaur, R Sangal, G P Bagaria, 2009, A Foundation Course in Human Values and Professional Ethics.
2. Ivan Illich, 1974, Energy & Equity, The Trinity Press, Worcester, and Harper Collins, USA
3. E.F. Schumacher, 1973, Small is Beautiful: a study of economics as if people mattered, Blond & Briggs, Britain.
4. Sussan George, 1976, How the Other Half Dies, Penguin Press. Reprinted 1986, 1991
5. Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, 1972, Limits to Growth – Club of Rome’s report, Universe Books.
6. A Nagraj, 1998, Jeevan Vidya Ek Parichay, Divya Path Sansthan, Amarkantak.
7. P L Dhar, RR Gaur, 1990, Science and Humanism, Commonwealth Publishers.
8. A N Tripathy, 2003, Human Values, New Age International Publishers.
9. SubhasPalekar, 2000, How to practice Natural Farming, Pracheen (Vaidik) KrishiTantraShodh, Amravati.
10. E G Seebauer & Robert L. Berry, 2000, Fundamentals of Ethics for Scientists & Engineers , Oxford University Press
11. M Govindrajran, S Natrajan & V.S. Senthil Kumar, Engineering Ethics (including Human Values), Eastern Economy Edition, Prentice Hall of India Ltd.
12. B P Banerjee, 2005, Foundations of Ethics and Management, Excel Books.
13. B L Bajpai, 2004, Indian Ethos and Modern Management, New Royal Book Co., Lucknow. Reprinted 2008.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

On completion of this course, the students will be able to

1. Understand the significance of value inputs in a classroom, distinguish between values and skills, understand the need, basic guidelines, content and process of value education, explore the meaning of happiness and prosperity and do a correct appraisal of the current scenario in the society

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Dr. Manjiv

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2. Distinguish between the Self and the Body, understand the meaning of Harmony in the Self the Co-existence of Self and Body.
3. Understand the value of harmonious relationship based on trust, respect and other naturally acceptable feelings in human-human relationships and explore their role in ensuring a harmonious society
4. Understand the harmony in nature and existence, and work out their mutually fulfilling participation in the nature.
5. Distinguish between ethical and unethical practices, and start working out the strategy to actualize a harmonious environment wherever they work.

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B. Tech. Semester – IV (Computer Science and Engineering)
OPERATING SYSTEM LAB
CODE: PCC-CS-206-P

NO OF CREDITS: 2

L T P

0 0 4

INTERNAL MARKS: 10

EXTERNAL MARKS: 40


TOTAL : 50

At least 10 to 15 experiments related to the course must be performed.

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B. Tech. Semester – IV (Computer Science and Engineering)
HARDWARE LAB/MATLAB
CODE: PCC-CS-208-P

NO OF CREDITS: 1

L T P

0 0 2

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments related to the course must be performed.

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Dr. Manju *JA*

for
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B. Tech. Semester – IV (Computer Science and Engineering)

PYTHON LAB

CODE: PCC-CS-210-P

NO OF CREDITS: 2

L T P

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments related to the course must be performed.

- 310 -

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech Computer Science & Engineering
(w.e.f Academic Session 2024- 2025)
Semester - 5

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-301	Database Management Systems	3	0	0	3	20	80	100
2.	PCC	PCC-CS-303	Formal Language & Automata Theory	3	0	0	3	20	80	100
3.	PCC	PCC-CS-305	Java Programming	3	0	0	3	20	80	100
4.	PCC	PCC-CS-307	Machine Learning	3	0	0	3	20	80	100
5.	HSMC	HSMC-301	Humanities- II (Economics for Engineers)	3	0	0	3	20	80	100
6.	MC	MC -301	Constitution of India/Essence of Indian Traditional Knowledge	2	0	0	0	10	40	50
Lab										
7.	PCC	PCC-CS-301-P	Database Management Systems LAB	0	0	4	2	10	40	50
8.	PCC	PCC-CS-305- P	Java Programming LAB	0	0	4	2	10	40	50
9.	Project	IPT-CS-301-P	Industrial Practical Training-I	0	0	0	2	-	50	50
Total				17	0	8	21	130	570	700

Total Contact Hours =25

Total Credit=21

- Note:** 1. Industrial Practical Training-I was conducted after fourth semester. However, Viva-Voce for evaluation of Practical Training will be conducted in this semester.
2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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B. Tech. Semester – V (Computer Science and Engg.)
DATABASE MANAGEMENT SYSTEMS
CODE: PCC-CS-301

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. To understand the different issues involved in the design and implementation of a database system.
2. To study the physical and logical database designs, database modeling, relational, hierarchical, and network models
3. To understand and use data manipulation language to query, update, and manage a Database
4. To develop an understanding of essential DBMS concepts such as: database security, integrity, concurrency, distributed database, and intelligent database, Client/Server (Database Server), Data Warehousing.

UNIT-1

Database system architecture: Data Abstraction, Data Independence, Data Definition Language (DDL), Data Manipulation Language (DML).

Data models: Entity-relationship model, network model, relational and object oriented data models, integrity constraints, data manipulation operations.

UNIT-2

Relational query languages: Relational algebra, Tuple and domain relational calculus, SQL3, DDL and DML constructs, Open source and Commercial DBMS - MYSQL, ORACLE, DB2, SQL server.

Relational database design: Domain and data dependency, Armstrong's axiom, Normal forms; Dependency preservation, Lossless design.

Query processing and optimization: Evaluation of relational algebra expressions, Query equivalence, Join strategies, Query optimization algorithms.

UNIT-3

Storage strategies: Indices, B-trees, hashing.

Transaction processing: Concurrency control, ACID property, Serializability of scheduling, Locking and timestamp based schedulers, Multi-version and optimistic Concurrency Control schemes, Database recovery.

UNIT-4

Database Security: Authentication, Authorization and access control, DAC, MAC and RBAC models, Intrusion detection, SQL injection.

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Advanced topics: Object oriented and object relational databases, Logical databases, Web databases, Distributed databases, Data warehousing and data mining.

TEXT/REFERENCES BOOKS:

1. "Database System Concepts", 6th Edition by Abraham Silberschatz, Henry F. Korth, S. Sudarshan, McGraw-Hill.
2. "Principles of Database and Knowledge – Base Systems", Vol 1 by J. D. Ullman, Computer Science Press.
3. "Fundamentals of Database Systems", 5th Edition by R. Elmasri and S. Navathe, Pearson Education
4. "Foundations of Databases", Reprint by Serge Abiteboul, Richard Hull, Victor Vianu, Addison-Wesley

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After successful completion of the course, students will be able to:

1. Understand basic concepts of database system and data models for relevant problems.
2. Understand the basic elements of a relational database management system.
3. Design entity relationship model and convert entity relationship diagrams into rdbms and formulate SQL queries on the data.
4. Apply normalization for the development of application software.

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B. Tech. Semester – V (Computer Science and Engg.)
FORMAL LANGUAGE AND AUTOMATA THEORY
CODE: PCC-CS-303

NO OF CREDITS: 3

L T P
3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. Develop a formal notation for strings, languages and machines.
2. Design finite automata to accept a set of strings of a language.
3. Prove that a given language is regular and apply the closure properties of languages.
4. Design context free grammars to generate strings from a context free language and convert them into normal forms.
5. Prove equivalence of languages accepted by Push Down Automata and languages generated by context free grammars
6. Identify the hierarchy of formal languages, grammars and machines.
7. Distinguish between computability and non-computability and Decidability and undecidability.

UNIT-1

Introduction: Alphabet, languages and grammars, productions and derivation, Chomsky hierarchy of languages. Regular languages and finite automata: Regular expressions and languages, deterministic finite automata (DFA) and equivalence with regular expressions, nondeterministic finite automata (NFA) and equivalence with DFA

UNIT-2

Regular grammars and equivalence with finite automata, properties of regular languages, pumping lemma for regular languages, minimization of finite automata. Context-free languages and pushdown automata: Context-free grammars (CFG) and languages (CFL), Chomsky and Greibach normal forms,

UNIT-3

Nondeterministic pushdown automata (PDA) and equivalence with CFG, parse trees, ambiguity in CFG, pumping lemma for context-free languages, deterministic pushdown automata, closure properties of CFLs. Context-sensitive languages: Context-sensitive grammars (CSG) and languages, linear bounded automata and equivalence with CSG.

UNIT-4

Turing machines: The basic model for Turing machines (TM), Turing- recognizable (recursively enumerable) and Turing-decidable (recursive) languages and their closure properties, variants of Turing machines, nondeterministic TMs and equivalence with deterministic TMs, unrestricted grammars and equivalence with Turing machines, TMs as enumerators. Undecidability: Church-Turing

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thesis, universal Turing machine, the universal and diagonalization languages, reduction between languages and Rice's theorem, undecidable problems about languages.

TEXT/REFERENCES BOOKS:

1. John E. Hopcroft, Rajeev Motwani and Jeffrey D. Ullman, Introduction to Automata Theory, Languages, and Computation, Pearson Education Asia.
2. Harry R. Lewis and Christos H. Papadimitriou, Elements of the Theory of Computation, Pearson Education Asia.
3. Dexter C. Kozen, Automata and Computability, Undergraduate Texts in Computer Science, Springer.
4. Michael Sipser, Introduction to the Theory of Computation, PWS Publishing.
5. John Martin, Introduction to Languages and The Theory of Computation, Tata McGraw Hill.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After successful completion of the course, students will be able to:

1. Write a formal notation for strings, languages and machines.
2. Design finite automata to accept a set of strings of a language and determine whether the given language is regular or not.
3. Design context free grammars to generate strings of context free language.
4. Determine equivalence of languages accepted by Push Down Automata and languages generated by context free grammars
5. Write the hierarchy of formal languages, grammars and machines.
6. Distinguish between computability and non-computability and Decidability and decidability.

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NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The course will introduce standard tools and techniques for software development, using object oriented approach, use of a version control system, an automated build process, and an appropriate framework for automated unit and integration tests.

UNIT-1

Abstract Data Types: Decomposition & Abstraction, Abstraction Mechanisms – parameterization, specification, Kind of Abstractions – Procedural, Data, Type hierarchies, Iteration. ADT implementation - Concrete state space, concrete invariant, abstraction function, implementing operations, illustrated by the Text example

Features of Object-Oriented Programming, Encapsulation, object identity, polymorphism – Inheritance in OO design. Implementing OO language features, Classes, Objects and variables, Type Checking,

UNIT-2

Procedures - Commands as methods and as objects, Exceptions, Polymorphic procedures, Templates, Memory management

Design Patterns: Introduction and classification. Creational Pattern – Abstract Factory Pattern, Factory Method, Singleton, Structural Pattern – Bridge, Flyweight, Behavioral Pattern - The iterator pattern, Observer pattern, Model-view-controller pattern

UNIT-3

Generic Types and Collections: Simple Generics, Generics and Subtyping, Wildcards, Generic Methods, Set Interface, List Interface, Queue Interface, Deque Interface, Map Interface, Object Ordering, SortedSet Interface, SortedMap Interface

UNIT-4

GUIs. Graphical Programming with Scala And Swing: Swing components, Laying out components in a container, Panels, Look & Feel, Event listener, concurrency in swing.

The Software Development Process: Requirement specification and analysis, Data Model, Design, Implementation, Testing.

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TEXT/REFERENCES BOOKS:




1. Barbara Liskov, Program Development in Java, Addison-Wesley, 2001

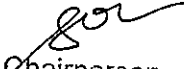
Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After taking the course, students will be able to:

1. Specify simple abstract data types and design implementations, using abstraction functions to document them.
2. Recognize features of object-oriented design such as encapsulation, polymorphism, inheritance, and composition of systems based on object identity.
3. Name and apply some common object-oriented design patterns and give examples of their use.
4. Design applications with an event-driven graphical user interface.


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B. Tech. Semester – V (Computer Science and Engg.)

MACHINE LEARNING

CODE: PCC-CS-307

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course objectives:

1. To learn the concept of how to learn patterns and concepts from data without being explicitly programmed in various IOT nodes.
2. To design and analyze various machine learning algorithms and techniques with a modern outlook focusing on recent advances.
3. Explore supervised and unsupervised learning paradigms of machine learning.
4. To explore Deep learning technique and various feature extraction strategies.

UNIT-1

Supervised Learning (Regression/Classification): Basic methods: Distance-based methods, Nearest-Neighbours, Decision Trees, Naive Bayes Linear models: Linear Regression, Logistic Regression, Generalized Linear Models, Support Vector Machines, Nonlinearity and Kernel Methods Beyond Binary Classification: Multi-class/Structured Outputs, Ranking

UNIT-2

Unsupervised Learning: Clustering: K-means/Kernel K-means

Dimensionality Reduction: PCA and kernel PCA, Matrix Factorization and Matrix Completion
Generative Models (mixture models and latent factor models)

UNIT-3

Evaluating Machine Learning algorithms and Model Selection, Introduction to Statistical Learning Theory, Ensemble Methods (Boosting, Bagging, Random Forests)
Sparse Modeling and Estimation, Modeling Sequence/Time-Series Data, Deep Learning and Feature Representation Learning

UNIT-4


Scalable Machine Learning (Online and Distributed Learning), Introduction to Bayesian Learning and Inference, Recent trends in various learning techniques of machine learning and classification methods.

TEXT/REFERENCES BOOKS:

1. Kevin Murphy, Machine Learning: A Probabilistic Perspective, MIT Press, 2012
2. Trevor Hastie, Robert Tibshirani, Jerome Friedman, The Elements of Statistical Learning, Springer 2009 (freely available online)

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3. Christopher Bishop, Pattern Recognition and Machine Learning, Springer, 2007

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course outcomes:

After completion of course, students would be able to:

1. Extract features that can be used for a particular machine learning approach in various IOT applications.
2. To compare and contrast pros and cons of various machine learning techniques and to get an insight of when to apply a particular machine learning approach.
3. To mathematically analyze various machine learning approaches and paradigms.

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B. Tech. Semester – V (Computer Science and Engg.)
HUMANITIES- II (ECONOMICS FOR ENGINEERS)
CODE: HSMC -301

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT-1

Introduction to the subject: Micro and Macro Economics, Relationship between Science, Engineering, Technology and Economic Development. Production Possibility Curve, Nature of Economic Laws.

Time Value of Money: concepts and application. Capital budgeting; Traditional and modern methods, Payback period method, IRR, ARR, NPV, PI (with the help of case studies)

UNIT-2

Meaning of Demand, Law of Demand, Elasticity of Demand; meaning, factors effecting it and its practical application and importance. Demand forecasting (a brief explanation), Meaning of Production and factors of production, Law of variable proportions and returns to scale. Internal and external economies and diseconomies of scale, Concepts of cost of production, different types of costs; accounting cost, sunk cost, marginal cost, Opportunity cost.

UNIT-3

Break even analysis, Make or Buy decision (case study), Relevance of Depreciation towards industry. Meaning of market, types of market, perfect competition, Monopoly, Monopolistic, Oligopoly. (main features), Supply and law of supply, Role of demand and supply in price determination.

UNIT-4


Indian Economy, nature and characteristics. Basic concepts; fiscal and monetary policy, LPG, Inflation, Sensex, GATT, WTO and IMF, Difference between Central bank and Commercial banks

TEXT/REFERENCES BOOKS:

1. Jain T.R., Economics for Engineers, VK Publication
2. Chopra P. N., Principle of Economics, Kalyani Publishers
3. Dewett K. K., Modern economic theory, S. Chand
4. H. L. Ahuja., Modern economic theory, S. Chand
5. Dutt Rudar & Sundhram K. P. M., Indian Economy
6. Mishra S. K., Modern Micro Economics, Pragati Publications
7. Pandey I.M., Financial Management; Vikas Publishing House

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – V (Computer Science and Engg.)
CONSTITUTION OF INDIA/ ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE
CODE: MC-301

NO OF CREDITS: 0

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

CONSTITUTION OF INDIA– BASIC FEATURES AND FUNDAMENTAL PRINCIPLES

The Constitution of India is the supreme law of India. Parliament of India cannot make any law which violates the Fundamental Rights enumerated under the Part III of the Constitution. The Parliament of India has been empowered to amend the Constitution under Article 368, however, it cannot use this power to change the —basic structure of the constitution, which has been ruled and explained by the Supreme Court of India in its historical judgments. The Constitution of India reflects the idea of —Constitutionalism – a modern and progressive concept historically developed by the thinkers of —liberalism – an ideology which has been recognized as one of the most popular political ideology and result of historical struggles against arbitrary use of sovereign power by state. The historic revolutions in France, England, America and particularly European Renaissance and Reformation movement have resulted into progressive legal reforms in the form of —constitutionalism in many countries. The Constitution of India was made by borrowing models and principles from many countries including United Kingdom and America. The Constitution of India is not only a legal document but it also reflects social, political and economic perspectives of the Indian Society. It reflects India's legacy of —diversity. It has been said that Indian constitution reflects ideals of its freedom movement, however, few critics have argued that it does not truly incorporate our own ancient legal heritage and cultural values. No law can be —static and therefore the Constitution of India has also been amended more than one hundred times. These amendments reflect political, social and economic developments since the year 1950. The Indian judiciary and particularly the Supreme Court of India has played an historic role as the guardian of people. It has been protecting not only basic ideals of the Constitution but also strengthened the same through progressive interpretations of the text of the Constitution. The judicial activism of the Supreme Court of India and its historic contributions has been recognized throughout the world and it gradually made it —as one of the strongest court in the world.

COURSE CONTENT

UNIT-1

1. Meaning of the constitution law and constitutionalism.
2. Historical perspective of the Constitution of India.
3. Salient features and characteristics of the Constitution of India.

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UNIT-2

4. Scheme of the fundamental rights.
5. The scheme of the Fundamental Duties and its legal status.
6. The Directive Principles of State Policy – Its importance and implementation.
7. Federal structure and distribution of legislative and financial powers between the Union and the States.

UNIT-3

8. Parliamentary Form of Government in India – The constitution powers and status of the President of India
9. Amendment of the Constitutional Powers and Procedure
10. The historical perspectives of the constitutional amendments in India
11. Emergency Provisions: National Emergency, President Rule, Financial Emergency

UNIT-4

12. Local Self Government – Constitutional Scheme in India
13. Scheme of the Fundamental Right to Equality
14. Scheme of the Fundamental Right to certain Freedom under Article 19
15. Scope of the Right to Life and Personal Liberty under Article 21

REFERENCES:

1. The Constitutional Law Of India 9th Edition, by Pandey. J. N.
2. The Constitution of India by P.M.Bakshi
3. Constitution Law of India by Narender Kumar
4. Bare Act by P. M. Bakshi

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – V (Computer Science and Engg.)
DATABASE MANAGEMENT SYSTEMS LAB
CODE: PCC-CS-301-P

NO OF CREDITS: 2

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – V (Computer Science and Engg.)
JAVA PROGRAMMING LAB
CODE: PCC-CS-305-P

NO OF CREDITS: 2

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INTERNAL MARKS: 10




EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – V (Computer Science and Engg.)
INDUSTRIAL PRACTICAL TRAINING- I
CODE: IPT-CS-301-P

NO OF CREDITS: 2

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INTERNAL MARKS: 00

EXTERNAL MARKS: 50

TOTAL: 50

Note: Practical training conducted after fourth semester will be evaluated in the fifth Semester based on Viva-Voce.

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech Computer Science & Engineering
(w.e.f Academic Session 2024- 2025)

Semester - 6

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-302	Compiler Design	3	0	0	3	20	80	100
2.	PCC	PCC-CS-304	Computer Networks	3	0	0	3	20	80	100
3.	PEC	PEC	Elective-I	3	0	0	3	20	80	100
4.	PEC	PEC	Elective-II	3	0	0	3	20	80	100
5.	OEC	OEC	Open Elective-I	3	0	0	3	20	80	100
Lab										
6.	Project	PROJ-CS-300-P	Project-I	0	0	4	2	10	40	50
7.	PCC	PCC-CS-302-P	Compiler Design lab	0	0	4	2	10	40	50
8.	PCC	PCC-CS-304-P	Computer Networking Lab	0	0	4	2	10	40	50
9.	PEC	PEC	Electives-I Course Lab	0	0	2	1	10	40	50
Total				15	0	14	22	140	560	700

Total Contact Hours =29

Total Credit= 22

Note: 1. 4-6 weeks industrial practical training –II training will be held after sixth semester. However, Viva- Voce will be conducted in the seventh semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective – I	Elective – I Lab	Elective –II	Open Elective- I
1.	PEC- CS-306 Digital Image Processing	PEC- CS-306- P Digital Image Processing Lab	PCC-IT-303 Multimedia and Technologies	OE-CS-322 Soft Skills & Interpersonal Communication
2.	PEC-CS-308 Artificial Intelligence	PEC-CS-308-P Artificial Intelligence Lab	PEC-CS-316 High Speed Network	OE-CS-324 Cyber Law and Ethics
3.	PEC-CS-310 Computer Graphics	PEC-CS-310-P Computer Graphics Lab	PEC-CS-318 Soft Computing	OE-CS-326 Data Analytics using R
4.	PEC-CS-312 Cloud Computing	PEC-CS-312-P Cloud Computing Lab	PEC-CS-320 Data Mining	OE-CS-328 Microprocessor and Interfacing

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B. Tech. Semester – VI (Computer Science and Engineering)

COMPILER DESIGN

CODE: PCC-CS-302

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. Apply the knowledge of lex tool & yacc tool to develop a scanner & parser.
2. Design and conduct experiments for Intermediate Code Generation in compiler.
3. Develop program to solve complex problems in compiler
4. Learn the new code optimization techniques to improve the performance of a program in terms of speed and space.

UNIT-1

Introduction: Compilers and translators need of translators, structure of compiler: its different phases, Compiler construction tools.

Lexical Analysis: Role of lexical analyzer; Design of lexical analyzer; Regular expressions ;Specification and recognition of tokens; Input buffering; Finite automata; Conversion from regular expression to finite automata, and vice versa; Minimizing the number of states of DFA. Implementation of lexical analyzer.

UNIT-2

Syntactic Techniques & Parsing: Context free Grammars; Derivations & parse trees; Capabilities of CFGs; Role of parsers, Shift- Reduce Parsing : Operator precedence parsing; top down parsing; predictive parsing, LR parsers; LR(0) items SLR, LALR and Canonical LR parser.

UNIT-3

Syntax Directed Translation , Symbol Table & Error Handling : Syntax directed definition, construction of syntax trees, syntax directed translation scheme, implementation of syntax directed translation, Intermediate Code ;Parse trees & Syntax trees; Three address code, quadruples and triples; Translation of Boolean Expressions. Symbol tables, its contents and data structure for symbol tables; trees, arrays, linked lists, hash tables; Operations on symbol table; Errors (lexical phase error, syntactic phase error, semantic error).

UNIT-4

Code Optimization & Code Generation: Sources of code optimization; Loop optimization (Denominators, Reducible flow graphs, depth first search, loop invariant computation, Induction variable elimination); Directed acyclic representation of basic blocks Code generation, forms of objects code, machine dependent code, register allocation for temporary and user defined variables; Problems in code generation; Peephole optimization.

TEXT / REFERENCE BOOKS:

1. Compilers Principle, Techniques & Tools - Alfred V. AHO, Ravi Sethi & J.D. Ullman; - 1998 Addison Wesley.
2. Theory and practice of compiler writing, Tremblay & Sorenson, 1985, Mc. Graw Hill.

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A large signature on the left, possibly "S. R.". In the center, the name "Mani" is written with a checkmark below it. To the right, the name "Soni" is written in a cursive style.

3. System Software by Dhamdhare, 1986, MGH.

4. Principles of Compiler Design, Alfred V Aho , Jeffery D. Ullman , Narosa Publication

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After taking the course, students will be able to:

1. Students will get the concepts of Compilers and the actual roles of the lexical analyzer
2. Students will get the concepts of different Parsing techniques and Construction of syntax trees
3. Students will get the concepts of Type checking and Run time environments
4. Students will get the concepts of Intermediate code generation, Code optimization and Code generations.

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B. Tech. Semester – VI (Computer Science and Engineering)
COMPILER DESIGN LAB
CODE: PCC-CS-302-P

NO OF CREDITS:2

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Computer Science and Engineering)
COMPUTER NETWORKS
CODE: PCC-CS-304

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To develop an understanding of modern-network architectures from a design and performance perspective.
2. To introduce the student to the major concepts involved in wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs).
3. To provide an opportunity to do network programming
4. To provide a WLAN measurement ideas.

UNIT-1

Data Communication Components: Representation of data and its flow Networks , Various Connection Topology, Protocols and Standards, OSI model, Transmission Media, LAN: Wired LAN, Wireless LANs, Connecting LAN and Virtual LAN, Techniques for Bandwidth utilization: Multiplexing - Frequency division, Time division and Wave division, Concepts on spread spectrum.

UNIT-2

Data Link Layer and Medium Access Sub Layer: Error Detection and Error Correction - Fundamentals, Block coding, Hamming Distance, CRC; Flow Control and Error control protocols - Stop and Wait, Go back – N ARQ, Selective Repeat ARQ, Sliding Window, Piggybacking, Random Access, Multiple access protocols -Pure ALOHA, Slotted ALOHA, CSMA/CD,CDMA/CA

UNIT-3

Network Layer: Switching, Logical addressing – IPV4, IPV6; Address mapping – ARP, RARP, BOOTP and DHCP-Delivery, Forwarding and Unicast Routing protocols.

UNIT-4

Transport Layer: Process to Process Communication, User Datagram Protocol (UDP), Transmission Control Protocol (TCP), SCTP Congestion Control; Quality of Service, QoS improving techniques: Leaky Bucket and Token Bucket algorithm.

Application Layer: Domain Name Space (DNS), DDNS, TELNET, EMAIL, File Transfer Protocol (FTP), WWW, HTTP, SNMP, Bluetooth, Firewalls, Basic concepts of Cryptography

TEXT / REFERENCE BOOKS:

1. Data Communication and Networking, 4th Edition, Behrouz A. Forouzan, McGrawHill.
2. Data and Computer Communication, 8th Edition, William Stallings, Pearson Prentice Hall India.
3. Computer Networks, 8th Edition, Andrew S. Tanenbaum, Pearson New International Edition.
4. Internetworking with TCP/IP, Volume 1, 6th Edition Douglas Comer, Prentice Hall of India.

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5. TCP/IP Illustrated, Volume 1, W. Richard Stevens, Addison-Wesley, United States of America

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After taking the course, students will be able to:

1. Explain the functions of the different layer of the OSI Protocol.
2. Draw the functional block diagram of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) describe the function of each block.
3. For a given requirement (small scale) of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) design it based on the market available component
4. For a given problem related TCP/IP protocol developed the network programming.
5. Configure DNS DDNS, TELNET, EMAIL, File Transfer Protocol (FTP), WWW, HTTP, SNMP, Bluetooth, Firewalls using open source available software and tools.

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B. Tech. Semester – VI (Computer Science and Engineering)
COMPUTER NETWORKING LAB
CODE: PCC-CS-302-P

NO OF CREDITS:2

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Computer Science and Engineering)
DIGITAL IMAGE PROCESSING (ELECTIVE-I)
CODE: PEC-CS-306

NO OF CREDITS: 3
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3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To learn and understand the fundamentals of digital image processing.
2. To learn and understand various image Transforms.
3. To learn and understand Image Enhancement Techniques.
4. To learn image restoration Techniques and methods, image compression and Segmentation used in digital image processing.

UNIT- 1

Digital Image Fundamental: - Elements of visual perception, image sensing and acquisition, image sampling and quantization, basic relationships between pixels – neighborhood, adjacency, connectivity, distance measures.

UNIT- 2

Image Enhancements, Filtering And Restoration:- Enhancement in spatial domain; pixel grey level transformation, image negatives, logarithmic transformation; bit-plane slicing, histogram processing; enhancement in frequency domain; image smoothing (low pass filter), image sharpening (high pass filter), selective filtering (band pass and band reject filters); noise models for images, signal-to-noise ratio, image restoration in the presence of noise using spatial filtering, periodic noise reduction by frequency domain filtering; estimating the degradation function, inverse filtering.

UNIT- 3

Color Image Processing & Image Segmentation:- Color fundamentals, color models, RGB, CMY and CMYK color models, HSI model; pseudocolor image processing, basics of full color processing, color transformations, smoothing and sharpening; noise in color images, grey level to color transformation; Image Segmentation: fundamentals, edge-based segmentation; image thresholding, intensity thresholding; basic global thresholding, multi-variable thresholding.

UNIT- 4

Image Compression:- Redundancy–inter-pixel and psycho-visual; Loss less compression – predictive, entropy; Lossy compression- predictive and transform coding; Discrete Cosine Transform; Still image compression standards – JPEG and JPEG-2000.

TEXT AND REFERENCE BOOKS:

1. R.C. Gonzalez and R.E. Woods, Digital Image Processing, Second Edition, Pearson Education 3rd edition 2008.

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- 33 3

2. Anil Kumar Jain, Fundamentals of Digital Image Processing, Prentice Hall of India. 2nd edition 2004.
3. Murat Tekalp, Digital Video Processing" Prentice Hall, 2nd edition 2015.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

At the end of the course, students will demonstrate the ability to:

1. Represent various types of images and analyze them.
2. Process these images for the enhancement of certain properties or for optimized use of the resources.
3. Work with colored images and perform image segmentation.
4. Develop algorithms for image compression and coding.

**B. Tech. Semester – VI (Computer Science and Engineering)
DIGITAL IMAGE PROCESSING LAB (ELECTIVE-I LAB)
CODE: PEC-CS-306-P**

NO OF CREDITS:1
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Computer Science and Engineering)
ARTIFICIAL INTELLIGENCE (ELECTIVE-I)
CODE: PEC-CS-308

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To understand the basic concepts of AI and problem solving
2. To analyze and formalize the problem as a state space, graph, design heuristics and select amongst different search techniques to solve them
3. To represent knowledge and draw inferences
4. To explore learning techniques and existing expert systems

UNIT- 1

Introduction: The AI problems; what is an AI technique; Characteristics of AI applications Problem Solving, Search and Control Strategies General Problem solving; Production systems; Control strategies: forward and backward chaining Exhaustive searches: Depth first Breadth first search.

UNIT- 2

Heuristic Search Techniques: Hill climbing; Branch and Bound technique; Best first search and A* algorithm; AND/OR Graphs; Problem reduction and AO* algorithm; Constraint Satisfaction problems Game Playing Minmax search procedure; Alpha-Beta cutoffs; Additional Refinements

UNIT- 3

Knowledge Representation & Reasoning:- Propositional logic, First order predicate logic, Inference in FOPL, Skolemisation; Resolution Principle and Unification; Forward & Backward chaining, Inference Mechanisms Horn's Clauses; Semantic Networks; Frame Systems and Value Inheritance; Conceptual Dependency

UNIT- 4

Learning Techniques: - Supervised and unsupervised learning, Decision trees, Statistical learning models, Reinforcement learning.

Expert Systems: Introduction to Expert Systems, Architecture of Expert Systems; Expert System Shells; Knowledge Acquisition; Case Studies: MYCIN, Learning, Rote Learning; Learning by Induction; Explanation based learning.

TEXT/REFERENCES BOOKS:

1. Elaine Rich and Kevin Knight: Artificial Intelligence- Tata McGraw Hill.
2. Dan W.Patterson, Introduction to Artificial Intelligence and Expert Systems- Prentice Hall of India.
3. Nils J.Nilsson: Principles of Artificial Intelligence- Narosa Publishing house.

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4. Artificial Intelligence : A Modern Approach, Stuart Russell, Peter Norvig, Pearson Education

5. Artificial Intelligence, Winston, Patrick, Henry, Pearson Education

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Analyze and formalize problem and solve them using AI techniques
2. Use Heuristic search techniques for game playing and other problems
3. Represent diverse knowledge using AI and analyze
4. Understand and design an expert system

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B. Tech. Semester – VI (Computer Science and Engineering)
ARTIFICIAL INTELLIGENCE LAB (ELECTIVE-I LAB)
CODE: PEC-CS-308-P

NO OF CREDITS:1

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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Computer Science and Engineering)
COMPUTER GRAPHICS (ELECTIVE-I)
CODE: PEC-CS-310

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To list the basics concepts used in computer graphics.
2. To implement various algorithms to scan, convert the basic geometrical primitives, transformations, area filling, clipping.
3. To describe the importance of viewing and projections.
4. To design an application with the principles of virtual reality and understand a typical image processing.

UNIT-1

Introduction to Computer Graphics: What is Computer Graphics, Computer Graphics Applications, Computer Graphics Hardware and software, Two dimensional Graphics Primitives: Points and Lines, Line drawing algorithms: DDA, Bresenham's; Circle drawing algorithms: Using polar coordinates. Bresenham's circle drawing, mid point circle drawing algorithm; Filled area algorithms: Scanline: Polygon filling algorithm, boundary filled algorithm.

UNIT-2

Two/Three Dimensional Viewing: The 2-D viewing pipeline, windows, viewports, window to view port mapping; Clipping: point, clipping line (algorithms):- 4 bit code algorithm, Sutherland-cohen algorithm, parametric line clipping algorithm (Cyrus Beck). Polygon clipping algorithm: Sutherland-Hodgeman polygon clipping algorithm. Two dimensional transformations: transformations, translation, scaling, rotation, reflection, composite transformation. Three dimensional transformations: Three dimensional graphics concept, Matrix representation of 3-D Transformations, Composition of 3-D transformation.

UNIT-3

Viewing in 3D: Projections, types of projections, the mathematics of planner geometric projections, coordinate systems.

Hidden surface removal: Introduction to hidden surface removal .Z- buffer algorithm , scanline algorithm, area sub-division algorithm.

UNIT-4

Representing Curves and Surfaces: Parametric representation of curves: Bezier curves, B-Spline curves. Parametric representation of surfaces; Interpolation method.

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Illumination, shading, image manipulation: Illumination models, shading models for polygons, shadows, transparency. What is an image? Filtering, image processing, geometric transformation of images.

TEXT/REFERENCE BOOKS:

1. Computer Graphics Principles and Practices second edition by James D. Foley, Andeies van Dam, Stevan K. Feiner and Johb F. Hughes, 2000, Addison Wesley.
2. Computer Graphics by Donald Hearn and M.Pauline Baker, 2nd Edition, 1999, PHI.
3. Procedural Elements for Computer Graphics – David F. Rogers, 2001, T.M.H Second Edition
4. Fundamentals of 3Dimensional Computer Graphics by Alan Watt, 1999, Addison Wesley.
5. Computer Graphics: Secrets and Solutions by Corrign John, BPB
6. Graphics, GUI, Games & Multimedia Projects in C by Pilaian & Mahendra, Standard Publ.
7. Computer Graphics Secrets and solutions by Corrign John, 1994, BPV
8. Introduction to Computer Graphics By N. Krishanmurthy T.M.H 2002

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completing the course the student will be able to:

1. Understand the basics concepts used in computer graphics.
2. Implement various algorithms to scan, convert the basic geometrical primitives, transformations, area filling, clipping.
3. Understand the importance of viewing and projections.
4. Design an application with the principles of virtual reality and understand a typical image processing.

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B. Tech. Semester – VI (Computer Science and Engineering)
COMPUTER GRAPHICS LAB (ELECTIVE-I LAB)
CODE: PEC-CS-310-P

NO OF CREDITS:1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Define concepts related to cloud computing
2. Express deployment models for clouds.
3. Apply cloud computing techniques for various applications.
4. Analyse cloud computing services used at various levels.
5. Assess real time cloud services

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B. Tech. Semester – VI (Computer Science and Engineering)
CLOUD COMPUTING (ELECTIVE-I)
CODE: PEC-CS-312

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

The objective of the course is to give students a comprehensive view of storage and networking infrastructures for highly virtualized cloud ready deployments. The course discusses the concepts and features related to Virtualized data-centre and cloud, information storage and design of applications.

UNIT- 1

Introduction: Distributed Computing, Cluster Computing, Grid Computing, Overview of Cloud Computing, History of Cloud Computing, Defining a Cloud, Benefits of Cloud Computing, Cloud Computing Architecture, Services Models (XaaS), Infrastructure as a Service, Platform as a Service, Software as a Service.

UNIT -2

Deployment Models, Public Cloud, Private Cloud, Hybrid Cloud, CommUNITY Cloud, Dynamic Provisioning and Resource Management, Virtualization: Characteristics of Virtualized Environment, Taxonomy of Virtualization Techniques, Pros and Cons of Virtualization, Xen, VMware, Hyper-V.

UNIT -3

Cloud Platform in Industry: Amazon Web Services- Compute Services, Storage Services, Communication Services, Additional Services, Google App Engine- Architecture and Core Concepts, Application Life Cycle, Cost Model, Microsoft Azure – Azure Core Concepts, SQL Azure, Windows Azure Platform Appliance.

UNIT -4

Cloud Application: Scientific Applications- ECG Analysis in cloud, Protein Structure Prediction, Gene Expression data analysis for Cancer Diagnosis, Satellite Image Processing, Business and Consumer Applications-CRM and ERP, Productivity, Social Networking, Media Applications, Multiplayer Online gaming, Cloud Security.

TEXT/ REFERENCE BOOKS:

1. Rajkumar Buyya, Christian Vecchiola and S ThamaraiSelvi, Mastering Cloud Computing, Tata McGraw Hill Education Pvt. Ltd., 2013.
2. Kai Hwang, Geoffery C. Fox and Jack J. Dongarra, Distributed and Cloud Computing, Elsevier, 2012.
3. John W. Ritting and James F. Ransome, Cloud Computing: Implementation Management and Security, CRC press, 2012.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required

B. Tech. Semester – VI (Computer Science and Engineering)
CLOUD COMPUTING LAB (ELECTIVE-I LAB)
CODE: PEC-CS-312-P

NO OF CREDITS:1
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Computer Science and Engineering)
MULTIMEDIA AND TECHNOLOGIES (ELECTIVE-II)
CODE: PCC-IT-303

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The objective of this course is to make students learn how to develop multimedia programs and demonstrate how still images, sound, and video can be digitized on the computer.

UNIT -1

Introduction to Multimedia concepts, Types of Multi-media Applications, Methods to deliver Multimedia, Introduction to Multimedia Database, Multimedia Input and Output Devices.

UNIT -2

Introduction about font and faces, Using Text in Multimedia, Applying different types of text in multimedia Font Editing and Design tools, Hypermedia and Hypertext application.

UNIT -3

The power of images, Making Still Images, Colouring, Image File Formats (GIF, JPEG, PNG etc.)
The power of sound, MIDI Vs. Digital Audio, Audio File Formats (AIFF, WAV, MPEG, MOV etc.)
Adding Sound to multimedia project.

UNIT -4

Working of a Video and its Display, Digital Video Containers (Codecs & Video Format Converters)
Obtaining Video Clips, Shooting and editing Video, Non Linear Editing(NLE) in Videos The stages of Multimedia Project, Hardware and Software requirements ,Authoring Systems Team for Multimedia Development, Different stages of multimedia, The internet and multimedia Text and

TEXT/REFERENCE BOOKS

1. Tay Vaughan, Multimedia: Making It Work, Tata McGraw Hills, 2008.
2. James E Shuman, Multimedia in Action, Vikas Publishing House, 1997.
3. Andreas Holzinger, Multimedia Basics Technology, Volume 1, Firewall Media, 2005.
4. Rangan Parekh, Principles of Multimedia, Tata McGraw Hills, 2007

Course Outcomes:

1. By the end of the course students will be able to:
2. Outline the basic concepts of multimedia technology.
3. Discuss the concepts of animation, digitized sound, video control, and scanned images.
4. Use basic instructional design principles in the development of Multimedia.
5. Compare various audio and video file formats.
6. Devise solutions for multimedia problems.

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B. Tech. Semester – VI (Computer Science and Engineering)
HIGH SPEED NETWORK (ELECTIVE-II)
CODE: PEC-CS-316

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

High Speed Network Technologies is a professional core course based around Network Architectures, protocols used across the layers, techniques used in communication and modes of data transfer. The course deals with creating High Speed Networks for any organization/institute with its various phases/life cycles.

UNIT -1

High Speed LAN

Gigabit Ethernet: Overview of fast Ethernet, Gigabit Ethernet – overview, specifications, layered protocol architecture, frame format, network design using Gigabit Ethernet, applications, 10GB Ethernet – overview, layered protocol architecture, frame format. Fiber Channel: Fiber channel – overview, topologies, ports, layered protocol architecture, frame structure, class of service.

UNIT- 2

High Speed WAN

Frame Relay: Protocol architecture and frame format. ISDN & B-ISDN: Channels, interfaces, addressing, protocol architecture, services. ATM: Virtual circuits, cell switching, reference model, traffic management.

UNIT- 3

Wireless LAN

Wireless Networks: Existing and emerging standards, Wireless LAN (802.11), Broadband Wireless (802.16), Bluetooth (802.15) their layered protocol architecture and security. Mobile Networks – GSM, CDMA.

UNIT- 4

Internet Suite of Protocols

Internet Layer: IPV4 and IPV6, IP addressing, IP classes, CIDR. Transport Layer: UDP/TCP protocols & architecture, TCP connection management. Application Layer: DNS, E-Mail, Voice over IP.

TEXT/ REFERENCE BOOKS:

1. Jochen Schiller, Mobile Communication, 2nd Edition, Pearson, 2009.
2. Andrew S Tanenbaum, Computer Networks, 5th Edition, Pearson 2013.
3. William C Y Lee, Mobile Communication Engineering: Theory and Applications, 2nd Edition, McGraw Hill, 1997.

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Course Outcomes:

By the end of the course students will be able to:

1. Define different high speed network technologies
2. Explain working of different wired / wireless technologies suitable for LAN and WAN communication.
3. Illustrate the mapping of OSI reference model to different high speed technologies and Internet Suite of Protocols
4. Analyze the performance of different high speed technologies in different scenarios / situations.
5. Design a network for any organization using high speed technologies along with Internet connectivity.

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B. Tech. Semester – VI (Computer Science and Engineering)
SOFT COMPUTING (ELECTIVE-II)
CODE: PEC-CS-318

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To introduce soft computing concepts and techniques and foster their abilities in designing appropriate technique for a given scenario.
2. To implement soft computing based solutions for real-world problems.
3. To give students knowledge of non-traditional technologies and fundamentals of artificial neural networks, fuzzy sets, fuzzy logic, genetic algorithms.
4. To provide students a hand-on experience on MATLAB to implement various strategies.

UNIT-1

Introduction to soft computing:- Evolution of Computing: Soft Computing Constituents, From Conventional AI to Computational Intelligence: Machine Learning Basics.

UNIT-2

Fuzzy Logic:- Fuzzy Sets, Operations on Fuzzy Sets, Fuzzy Relations, Membership Functions: Fuzzy Rules and Fuzzy Reasoning, Fuzzy Inference Systems, Fuzzy Expert Systems, Fuzzy Decision Making.

UNIT-3

Neural Networks:- Machine Learning Using Neural Network, Adaptive Networks, Feed forward Networks, Supervised Learning Neural Networks, Radial Basis Function Networks: Reinforcement Learning, Unsupervised Learning Neural Networks, Adaptive Resonance architectures, Advances in Neural networks.

UNIT-4

Genetic Algorithms & MATLAB:- Introduction to Genetic Algorithms (GA), Applications of GA in Machine Learning: Machine Learning Approach to Knowledge Acquisition, Study of neural network toolbox and fuzzy logic toolbox, Simple implementation of Artificial Neural Network and Fuzzy Logic

TEXT/REFERENCE BOOKS:

1. George J. Klir and Bo Yuan, "Fuzzy Sets and Fuzzy Logic: Theory and Applications", PHI
2. Satish Kumar, "Neural Networks: A classroom approach" Tata McGrawHill.
3. Haykin S., "Neural Networks-A Comprehensive Foundations", PHI
4. Anderson J.A., "An Introduction to Neural Networks", PHI
5. M.Ganesh, "Introduction to Fuzzy sets and Fuzzy Logic" PHI.

-348-
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6. N P Padhy and S P Simon. " Soft Computing with MATLAB Programming", Oxford University Press.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Identify and describe soft computing techniques and their roles in building intelligent Machines.
2. Apply fuzzy logic and reasoning to handle uncertainty and solve various engineering problems.
3. Apply genetic algorithms to combinatorial optimization problems.
4. Evaluate and compare solutions by various soft computing approaches for a given problem.

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B. Tech. Semester – VI (Computer Science and Engineering)
DATA MINING (ELECTIVE-II)
CODE: PEC-CS-320

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn data mining and Data pre-processing concepts.
2. To know about the association rules in data mining.
3. To perform various Classification and clustering algorithms.
4. To understand the strengths and limitations of various data mining models.

UNIT - 1

Introduction to Data Mining:- Introduction, What is Data Mining, Definition, KDD, Challenges, Data Mining Tasks, Data Preprocessing, Data Cleaning, Missing data, Dimensionality Reduction, Feature Subset Selection, Discretization and Binaryzation, Data Transformation; Measures of Similarity and Dissimilarity- Basics.

UNIT - 2

Association Rules:- Problem Definition, Frequent Item Set Generation, Frequent Itemsets, Closed Itemsets, and Association Rules. Apriori Algorithm: Finding Frequent Itemsets by Confined Candidate Generation, Generating Association Rules from Frequent Itemsets , Improving the Efficiency of Apriori, A Pattern-Growth Approach for Mining Frequent Itemsets ,Mining Frequent Itemsets Using Vertical Data Format, Mining Closed and Max Patterns.

UNIT - 3

Classification:- Problem Definition, General Approaches to solving a classification problem , Evaluation of Classifiers , Classification techniques, Decision Trees-Decision tree Construction ,Naive-Bayes Classifier, Bayesian Belief Networks; K- Nearest neighbor classification-Algorithm and Characteristics.

Clustering:- Problem Definition, Clustering Overview, Evaluation of Clustering Algorithms, Partitioning Clustering-K-Means Algorithm, PAM Algorithm, Hierarchical Clustering - Agglomerative Methods and divisive methods, Strengths and Weakness; Outlier Detection.

UNIT - 4

Web and Text Mining:- Introduction, web mining, web content mining, web structure mining, Text mining –unstructured text, episode rule discovery for texts, hierarchy of categories, text clustering.

TEXT/ REFERENCE BOOKS:

1. Data Mining- Concepts and Techniques- Jiawei Han, Micheline Kamber, Morgan Kaufmann Publishers, Elsevier, 2 Edition,2006.

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2. Introduction to Data Mining, Pang-Ning Tan, Vipin Kumar, Michael Steinbach, Pearson Education.
3. Data Mining Techniques and Applications, Hongbo Du Cengage India Publishing
4. Data Mining Techniques, Arun K Pujari, 3rd Edition, Universities Press
5. Data Mining Principles & Applications – T.V Sveresh Kumar, B. Esware Reddy, Jagadish S Kalimani, Elsevier.
6. Data Mining, Vikaram Pudi, P Radha Krishna, Oxford University Press

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completing the course the student will be able to:

1. Perform the pre-processing of data and apply mining techniques on it.
2. Identify the association rule applied on datasets.
3. Perform Classification and clustering algorithms
4. Classify web pages, extract knowledge from the Web.

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C

B. Tech. Semester – VI (Computer Science and Engineering)
SOFT SKILLS & INTERPERSONAL COMMUNICATION (OPEN ELECTIVE-I)
CODE: OE-CS-322

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The course aims at creating awareness among the stock holders of the corporate world in which the role of individuals as team players and also as responsible leaders materializes to a great extent. The course, with its interactive and need based modules, will address various challenges of communication as well as behavioral skills faced by individuals at workplace and organizations in bridging the gaps through effective skills of interviews, group discussions, meeting management, presentations and nuances of drafting various business documents for sustainability in today's global world.

UNIT-1

Introduction: Introduction to Soft Skills, Aspects of Soft Skills, Effective Communication Skills, Classification of Communication, Personality Development, Positive Thinking, Telephonic Communication Skills, Telephonic Communication Skills, Communicating Without Words, Paralanguage, Proxemics, Haptics: The Language of Touch, Meta-communication, Listening Skills, Types of Listening, Negotiation Skills, Culture as Communication, Communicating across Cultures . Organizational Communication.

UNIT-2

Communication breakdown: Advanced Writing Skills, Principles of Business Writing, Types of Business Writing, Business Letters, Business Letters: Format and Style, Types of Business Letter.

UNIT-3

Skill development: Writing Reports, Types of Report, Strategies for Report Writing, Strategies for Report Writing, Evaluation and Organization of Data, Structure of Report, Report Style, Group Communication Skills, Leadership Skills, Group Discussion, Meeting Management, Adaptability & Work Ethics.

Advanced Speaking Skills, Oral Presentation, Speeches & Debates, Combating Nervousness, Patterns & Methods of Presentation, Oral Presentation: Planning & Preparation

UNIT-4

Presentation and interviews: Making Effective Presentations, Speeches for Various Occasions, Interviews, Planning & Preparing, Effective Résumé, Drafting an Effective Résumé, Facing Job Interviews, Emotional Intelligence & Critical Thinking, Applied Grammar

Course Outcomes:

After completion of the course student will be able to:

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1. Understand the concept of soft skills including communication skills, listening skills, positive thinking and also will be able to enhance own personality.
2. Able to write business letters.
3. Able to write reports.
4. Able to make effective resume and will also be able to present himself/herself in interview, speeches, presentations, talks etc.

TEXT/REFERENCES BOOKS:

1. Butterfield, Jeff. Soft Skills for Everyone. New Delhi: Cengage Learning. 2010.
2. Chauhan, G.S. and Sangeeta Sharma. Soft Skills. New Delhi: Wiley. 2016.
3. Goleman, Daniel. Working with Emotional Intelligence. London: Bantam Books. 1998.
4. Hall, Calvin S. et al. Theories of Personality. New Delhi: Wiley. rpt. 2011.
5. Holtz, Shel. Corporate Conversations. New Delhi: PHI. 2007.
6. Kumar, Sanajy and Pushp Lata. Communication Skills. New Delhi: OUP. 2011.
7. Lucas, Stephen E. The Art of Public Speaking. McGraw-Hill Book Co. International Edition, 11th Ed. 2014.
8. Penrose, John M., et al. Business Communication for Managers. New Delhi: Thomson South Western. 2007.
9. Sharma, R.C. and Krishna Mohan. Business Correspondence and Report Writing New Delhi: TMH. 2016.
10. Sharma, Sangeeta and Binod Mishra. Communication Skills for Engineers and Scientists. New Delhi: PHI Learning. 2009, 6th Reprint 2015.
11. Thorpe, Edgar and Showick Thorpe. Winning at Interviews. Pearson Education. 2004.
12. Turk, Christopher. Effective Speaking. South Asia Division: Taylor & Francis. 1985.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VI (Computer Science and Engineering)
CYBER LAW AND ETHICS (OPEN ELECTIVE-I)
CODE: OE-CS-324

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT-1

Introduction: Computers and its Impact in Society, Overview of Computer and Web Technology, Need for Cyber Law, Cyber Jurisprudence at International and Indian Level

Cyber law- international perspectives: UN & International Telecommunication Union (ITU) Initiatives Council of Europe – Budapest Convention on Cybercrime, Asia-Pacific Economic Cooperation (APEC), Organization for Economic Co-operation and Development (OECD), World Bank, Commonwealth of Nations

UNIT-2

Constitutional & human rights issues in cyberspace: Freedom of Speech and Expression in Cyberspace, Right to Access Cyberspace – Access to Internet, Right to Privacy, Right to Data Protection

Cyber crimes & legal framework: Cyber Crimes against Individuals, Institution and State, Hacking, Digital Forgery, Cyber Stalking/Harassment, Cyber Pornography, Identity Theft & Fraud, Cyber terrorism, Cyber Defamation, Different offences under IT Act, 2000

UNIT-3

Cyber torts: Cyber Defamation, Different Types of Civil Wrongs under the IT Act, 2000

Intellectual property issues in cyber space: Interface with Copyright Law, Interface with Patent Law, Trademarks & Domain Names Related issues

UNIT-4

E-commerce concept: E-commerce-Salient Features, Online approaches like B2B, B2C & C2C Online contracts, Click Wrap Contracts, Applicability of Indian Contract Act, 1872

Dispute resolution in cyberspace: Concept of Jurisdiction, Indian Context of Jurisdiction and IT Act, 2000, International Law and Jurisdictional Issues in Cyberspace, Dispute Resolutions, Information warfare policy and ethical Issues

TEXT/REFERNCE BOOKS

1. Chris Reed & John Angel, Computer Law, OUP, New York, (2007).
2. Justice Yatindra Singh, Cyber Laws, Universal Law Publishing Co, New Delhi, (2012)
3. Verma S, K, Mittal Raman, Legal Dimensions of Cyber Space, Indian Law Institute, NewDelhi, (2004)
4. Jonthan Rosenoer, Cyber Law, Springer, New York, (1997).

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5. Sudhir Naib, The Information Technology Act, 2005: A Handbook, OUP, New York, (2011)
 6. S. R. Bhansali, Information Technology Act, 2000, University Book House Pvt. Ltd., Jaipur(2003).
 7. Vasu Deva, Cyber Crimes and Law Enforcement, Commonwealth Publishers, New Delhi,(2003).

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VI (Computer Science and Engineering)
DATA ANAYTICS USING R (OPEN ELECTIVE-I)
CODE: OE-CS-326

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

Data analytics is a growing and stimulating field that turns data into valuable insights. This course includes programming in R for acquiring, cleaning, visualizing and analyzing data. In addition, it also involves predictive modeling. This course will introduce students to the basic principles, tools and the craft for devising solutions for problems that come in the domain of data science. The emphasis of the course is on integration and synthesis of concepts and their applications for effective engineering solutions.

UNIT- 1

Introduction to R programming: Data types or objects in R, Creating and manipulating objects like factors, vectors, lists and data frames, Subsetting matrices and data frames, Vectorized operations for vectors and matrices and data frames, Getting data in and out of R.

UNIT- 2

Control structure in R: If-else statements, for and while loops, loop functions like lapply, apply, sapply and mapply etc.; writing user defined functions in R. visualizing data through various plots and charts (bar charts, histogram, frequency polygon, scatter plot, quantile and box plots etc.), basics of ggplot package.

UNIT- 3

Doing basic descriptive statistics: Data types for data analysis and their mapping to R objects, Mean, Median, Mode, Quantiles, Five-point summary, Variance, Correlation and Covariance, Hypothesis testing, Basic probability, permutation and combination, normal distribution, uniform distribution using R, cleaning, transforming and exploring data, basics of dplyr package.

UNIT -4

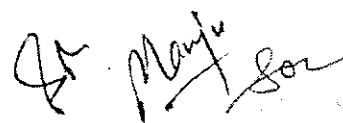
Predictive modelling: Linear Regression, Classification, Decision tree (ID3 or C5.0), Knn, and Bayesian classification models, Evaluating predictive models, Bias and variance trade off. Text and

TEXT/REFERENCE BOOKS

1. Hadley Wickham and Garrett Grolemund., R for Data Science Import, Tidy, Transform and model Data, O'Reilly, 2017.
2. Roger D. Peng, R Programming for Data Science, Lean Publishing, 2015.
3. Paul Teeter, R Cookbook, O'Reilly, 2011.
4. W. N. Venables, D. M. Smith and the R core Team, An introduction to R, Notes on R: A Programming Environment for Data Analysis and Graphics, version 3.3.2, 2016.

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5. Michael J. Crawley, Statistics, An introduction using R, Second edition, John Wiley, 2015
6. Han, J., Kamber, M, Pei, J.. Data Mining Concepts and Techniques, Third edition, Morgan Kaufmann, 2012.
7. Trevor Hastie, Robert Tibshirani, Jerome Friedman, The Elements of Statistical Learning: Data Mining, Inference and Prediction, Springer, 2nd edition, 2009.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

By the end of the course students will be able to:

1. Outline concepts related to R programming and data analysis.
2. Explain the basic concepts and tools that are used to solve problems in data analytics.
3. Interpreting results of descriptive and inferential statistics.
4. Apply R programming for reading, cleaning, visualizing and analysing data.
5. Analyse the trends in data through exploratory data analysis.
6. Devise solutions for descriptive and predictive modeling.

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B. Tech. Semester – VI (Computer Science and Engineering)
MICROPROCESSOR AND INTERFACING (OPEN ELECTIVE-I)
CODE: OE-CS-328

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To become familiar with 8085 & 8086 Microprocessor Architecture, Instructions, Operating Modes and Programming.
2. To use 8086 microprocessor for various applications.
3. To study various peripherals for microprocessor based systems.

UNIT- 1

Introduction to 8085 Microprocessor: Development of microprocessors, 8085 Microprocessor - Architecture, Organization, Instruction set, Addressing modes, Basic Timing Diagrams, Interrupts and Simple Programs.

UNIT- 2

Introduction to 8086 Microprocessor: 8086 Microprocessor - Architecture, Organization, Instruction set, Addressing modes, Interrupt system. Pin diagram, Minimum mode 8086 system and timings. Maximum mode 8086 system and timings.

UNIT -3

Assembly Language Programming: Assembler directives, Assembly language programs (8086) with Assembler directives for addition, subtraction, multiplication, division etc., sorting and searching, bit manipulation, look-up tables, string manipulations, Macros and Delay subroutines, Debugging.

UNIT- 4

Data transfer schemes and Peripheral Interfacing: Synchronous, Asynchronous, Interrupt driven and DMA type schemes, 8255 PPI and its interfacing, Programmable Communication Interface (8251 USART) and its interfacing, Programmable Interval Timer (8254) and its interfacing, Programmable interrupt controller (8259) and its interfacing, Programmable DMA controller (8257) and its interfacing.
Memory and I/O Interfacing to 8086: Address decoding techniques, Interfacing Static RAM and ROM chips, ADC and DAC Interfacing.
Case studies: Traffic light controller, Stepper motor control, Data acquisition, Temperature measurement and control.

TEXT/REFERENCE BOOKS

1. Ramesh S. Gaonkar, "Microprocessor architecture, programming and its applications with 8085", Penram International Publications, 4th Edition.

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2. Douglas V. Hall, "Microprocessors and Interfacing: Programming and Hardware", 2nd Edition, Tata McGraw-Hill.
3. Barry B. Brey, "The Intel Microprocessors-Architecture, Programming and Interfacing", 8th Edition, PHI

1. Raj Kamal, Microcontrollers Architecture, Programming, Interfacing and System Design . Pearson Education, 2005.
2. Steve Furbur, ARM System onchip Architecture, 2nd Edition, Addison Wesley, 2000.
3. Y. Liu and Glenn A. Gibson, "Microcomputer Systems: 8086/8088 Family Architecture, Programming and Design", 2nd Edition, PHI.
4. Y. Liu and Glenn A. Gibson, "Microcomputer Systems: 8086/8088 Family Architecture, Programming and Design", 2nd Edition, PHI.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VI (Computer Science and Engineering)

PROJECT-1

CODE: PROJ-CS-300-P

NO OF CREDITS:2

INTERNAL MARKS: 10

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EXTERNAL MARKS: 40

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TOTAL: 50

Students may choose a project based on any subject of Computer Science. The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format. The student will have to present the progress of the work through seminars and progress reports.

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech Computer Science & Engineering
(w.e.f Academic Session 2024- 2025)
Semester -7

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-III	3	0	0	3	20	80	100
2.	PEC	PEC	Elective-IV	3	0	0	3	20	80	100
3.	OEC	OEC	Open Elective-II	3	0	0	3	20	80	100
4.	OEC	OEC	Open Elective-III	3	0	0	3	20	80	100
5.	BSC	BSC-401	Bioinformatics	2	1	0	2	20	80	100
Lab										
6.	Project	PROJ-CS-401-P	Project-II	0	0	4	2	10	40	50
7.	Project	PROJ-CS-403-P	Seminar	0	0	2	1	50	-	50
8.	Project	JTP-CS-405-P	Industrial Practical Training- II	0	0	0	2	-	100	100
9.	PEC	PEC	Electives-III Course Lab	0	0	2	1	10	40	50
Total				14	1	08	20	170	580	750
Total Contact Hours =23				Total Credit= 20						

Note: 1. Practical training was conducted after sixth semester. However, Viva-Voce for evaluation of Practical Training will be conducted in this semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her

S.No	Elective -III	Elective -III Labs	Elective - IV	Open Elective- II	Open Elective - III
1.	PEC- CS-401 Information Security	PEC- CS-401 -P Information Security Lab	PEC- CS-409 Queuing Theory and Modeling	OE-CS-417 Human Resource Management	OE-CS-425 Financial Management
2.	PEC-CS-403 Wireless and Mobile Communication	PEC-CS-403-P Wireless and Mobile Communication Lab	PEC-CS-411 Internet of Things	OE-CS-419 ICT for Development	OE-CS-427 E-Commerce & Entrepreneurship
3.	PEC-CS-405 Advanced Operating Systems	PEC-CS-405 -P Advanced Operating Systems Lab	PEC-CS-413 Speech and Natural Language Processing	OE-CS-421 Intellectual Property Rights	OE-CS-429 Basics of Operation Research
4.	PCC-IT-302 Web and Internet Technology	PCC-IT-302-P Web and Internet Technology Lab	PEC-CS-415 Optimization Techniques	OE-CS-423 International Business Environment	OE-CS-431 Renewable Energy System

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B. Tech. Semester – VII (Computer Science and Engineering)
INFORMATION SECURITY (ELECTIVE-III)
CODE: PEC-CS-401

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To learn about data hiding applications and their techniques.
2. To learn about hacking.
3. To learn security based protocols, attacks and intrusions.
4. To work with advance data hiding techniques.

UNIT- 1

Introduction: - The need for security, security approach, principles of security, types of attack, denial of service, IP spoofing, Phishing, Digital signature, Firewall.

UNIT- 2

Hacking:- Basics. Email hacking, computer hacking, types of hacking, practice against hacking, Access Authorization, Compression, LZW Compression and Decompression Method.

UNIT- 3

Data hiding:- Terms related to data hiding, Differences between cryptography, stenography & watermarking, history of stenography. Applications of data hiding.

UNIT- 4

Advance data hiding techniques :- Transform domain, difference between special domains and transform domain, wavelets, advantages of wavelet, and wavelet based techniques for data hidings.

TEXT/ REFERENCE BOOKS:

1. Cryptography and Network Security by Atul Khat e, Mc Graw Hill Publisher
2. E-mail Hacking by Ankit Fadia, Vikash Publishers
3. Data communication and Networking , Behrouz A. Forouzan .

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completing the course the student will be able to:

Explain information security.

1. Give an overview of access control of relational databases.
2. State the basic concept in information systems security, including security technology and principles, software security and trusted systems and IT security management.
3. Learn advance data hiding techniques.

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**B. Tech. Semester – VII (Computer Science and Engineering)
INFORMATION SECURITY LAB (ELECTIVE-III LAB)
CODE: PEC-CS-401**

NO OF CREDITS: 1
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Computer Science and Engineering)
WIRELESS AND MOBILE COMMUNICATION (ELECTIVE-III)
CODE: PEC-CS-403

NO OF CREDITS: 3
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3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT -1

Introduction to Wireless Communication Systems , Evolution, Mobile Systems around the World, Example of the mobile radio systems, Recent trends, 2G, 3G , 4G and 5G Cellular networks. The Cellular Concept Frequency reuse, Channel assignment, Hand off process, Types of Interference, Cellular Capacity.

UNIT -2

Mobile Radio Propagation Path loss, Radio wave propagation, Reflection, Diffraction, Scattering, Link budget Design, Outdoor and indoor propagation models
Principle of multi path propagation
Impulse response model of channels, parameters for mobile multi path channels, concept of fading, Rayleigh and Ricean fading, Simulation of fading channels.

UNIT-3

Modulation techniques for mobile communication
Pulse shaping, Linear and non-linear Modulation techniques, constant envelop modulation, QPSK, MSK, GMSK. Spread spectrum modulation techniques - Direct sequence and Frequency Hopping
Spread Spectrum and their applications.

UNIT -4

Multiple access techniques [5 hrs.]
Introduction, FDMA, TDMA, CDMA, SDMA, capacity of cellular systems
Introduction to Multicarrier systems [5 hrs.]
OFDM and wireless LAN, WiMAX, GSM, WCDMA, 3GPP LTE and other 4G standards.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VII (Computer Science and Engineering)
WIRELESS AND MOBILE COMMUNICATION LAB (ELECTIVE-III LAB)
CODE: PEC-CS-403-P

NO OF CREDITS: 1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Computer Science and Engineering)
ADVANCED OPERATING SYSTEMS (ELECTIVE-III)
CODE: PEC-CS-405

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To learn the fundamentals of different types of Operating Systems.
2. To learn the mechanisms to handle processes scheduling, synchronization and memory management in Distributed OS.
3. To understand the system architecture of Multiprocessor OS and learn the mechanisms to handle processes scheduling, synchronization, memory management and fault tolerance in Multiprocessor OS.
4. To understand the characteristics and system architecture of Real-Time OS and learn the mechanisms of processes scheduling, real-time OS protocols and Case studies.
5. To learn the mechanisms to design fast OS with proper resource utilization.

UNIT-1

Introduction

Introduction of Operating Systems, Evolution of OS, Types of OS: Batch OS, single user & Multi-user OS, Multiprogramming and Multi-tasking, Multi-threading, Time-sharing, Embedded OS, Distributed Operating Systems, Multi-processor Operating Systems, Real-time Operating Systems, Mobile Operating Systems

UNIT-2

Distributed operating systems

Introduction, Characteristics, Network OS & Distributed OS, Various issues, Communication in Distributed Systems, Clock Synchronization, Mutual Exclusion Algorithms, Deadlock Detection and Prevention, Distributed Process Scheduling Algorithms, Distributed File Systems.

UNIT-3

Multi-processor operating systems

Introduction, System Architecture, Structure of Multi-processor OS, Process Synchronization, Processor Scheduling Algorithms, Memory Sharing, Process Migration, Fault Tolerance

Real-time operating systems

Introduction, Characteristics, Structure of a Real-time System, Scheduling Algorithms, Mutual Exclusion, Priority Inheritance Protocol, Priority Ceiling Protocol, Case Studies

UNIT-4

Mobile operating systems

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Introduction, Mobile Devices, Characteristics of Mobile Devices, Resource management in Mobile OS: Power Management, Battery Management, Thermal Management, Memory Management, Scheduling, File System, Security, Android OS.

TEXT/REFERENCES BOOKS

1. MukeshSinghal, Niranjana G. Shivaratri, "Advanced Concepts In Operating Systems", Tata McGraw-Hill Education; 2nd edition, [ISBN: 007057572X], 2001.
2. Dr. Naresh Chauhan, "Principles of Operating Systems", Oxford University Press; 1st edition, [ISBN: 978-0198082873], 2014.
3. Andrew S. Tanenbaum, Herbert Bos, "Modern Operating Systems", Pearson Prentice Hall™, 4th edition, [ISBN: 9781292061429], 2014.
4. D. M. Dhamdhere, "Operating Systems", Tata McGraw Hill; 1st edition, [ISBN: 9781282187245], 2006.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After the successful completion of the course students will be able to:

1. Understand the characteristics of different OS.
2. Develop algorithms for process scheduling, synchronization for different OS.
3. For a given specification of memory organization develop the techniques for optimally allocating memory to processes by increasing memory utilization and for improving the access time for different OS.
4. Design and implement file management system for different OS.
5. Design and implement security policies in OS.

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B. Tech. Semester – VII (Computer Science and Engineering)
ADVANCED OPERATING SYSTEMS LAB (ELECTIVE-III LAB)
CODE: PEC-CS-405-P

NO OF CREDITS: 1
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Computer Science and Engineering)
WEB & INTERNET TECHNOLOGY (ELECTIVE-III)
CODE: PCC-IT-302

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To familiarize the students with the basic concepts of internet, its history, ways to connect to internet and basics of World Wide Web and search engines.
2. To familiarize the student with the fundamental language of internet i.e. HTML
3. To teach the student aware of the concepts of cascading style sheets
4. To teach the student the students the basics of client side and Server side scripting

UNIT-1

Introduction to networks and www

Introduction to internet, history, Working of Internet, Modes of Connecting to Internet, Internet Address, standard address, classful and classless ip addressing, subnetting, supernetting, w3c consortium, searching the www: Directories search engines and Meta search engines, search fundamentals, search strategies, Architecture of the search engines, Crawlers and its types, Delivering multimedia over web pages, VRML.

UNIT-2

Hypertext markup language

The anatomy of an HTML document: Marking up for structure and style: basic page markup, absolute and relative links, ordered and unordered lists, embedding images and controlling appearance, table creation and use, frames, nesting and targeting.

Style sheets

Separating style from structure with style sheets, internal style specifications within HTML, External linked style specification using CSS, page and site design considerations.

UNIT-3

Client side programming

Introduction to Client side programming, Java Script syntax, the Document object model, Event handling, Output in JavaScript, Forms handling, cookies, Introduction to VBScript, Form Handling.

UNIT-4

Server side scripting

CGI, Server Environment, Servlets, Servlet Architecture, Java Server Pages, JSP Engines, Beans, Introduction to J2EE.

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TEXT/REFERENCE BOOKS:

1. Fundamentals of the Internet and the World Wide Web, Raymond Greenlaw and Ellen Hepp 2001, TMH.
2. Internet & World Wide Programming, Deitel, Deitel & Nieto, 2000, Pearson Education
3. Complete idiots guide to java script., Aron Weiss, QUE, 1997.
4. Network firewalls, Kironjectsyan - New Rider Pub.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

At the end of the course/session the student would be

1. Acquainted with the basics of internet & search engines.
2. Have a hands on HTML
3. Learned the need and basics of CSS
4. Learned the concepts of client side and server side scripting.

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B. Tech. Semester – VII (Computer Science and Engineering)
WEB & INTERNET TECHNOLOGY LAB (ELECTIVE-III LAB)
CODE: PCC-IT-302-P

NO OF CREDITS: 1
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Computer Science and Engineering)
QUEUING THEORY AND MODELING (ELECTIVE-IV)
CODE: PEC-CS-409

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. It provides an essential base for mathematical modeling which is normally used to solve the problems of pattern recognition and machine learning.
2. It is used in the research of various science and engineering problem.

UNIT-1

Introduction to Queues and Queuing Theory, Stochastic Processes, Markov Processes and Markov Chains, Birth-Death Process, Basic Queuing Theory (M/M/1 Type Queues, Departure Process from M/M/1 Queue, Time Reversibility, Method of Stages, Queues with Bulk Arrivals, Equilibrium Analysis of the M/G/1 Queue

UNIT-2

Analyzing the M/G/1 Queue using the Method of Supplementary Variables, M/G/1 Queue with Vacations, M[x] /G/1 Queue, Priority Operation of the M/G/1 Queue, M/M/n/K Queue with Multiple Priorities

UNIT-3

M/G/1/K Queue, G/M/1, G/G/1 G/G/m, and M/G/m/m Queues, Queuing Networks - Classification and Basic Concepts, Open and Closed Networks of M/M/m Type Queues, Jackson's Theorem

UNIT-4

Analysis of Closed Queuing Networks using Convolution and Mean Value Algorithms, Norton's Theorem for Closed Queuing Networks, Mixed Queuing Networks, Queuing Network Analyzer (QNA) Approach, Simulation Techniques for Queues and Queuing Networks, Discrete Time Queues.

TEXT/REFERENCES BOOKS:

1. Donald Gross, James M. Thompson, John F. Shortle and Carl W. Harris, Fundamentals of Queuing Theory, Wiley 2008.
2. Sanjay K. Bose, An Introduction to Queuing Systems, Springer 2002.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After undergoing the course, students will be able to

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1. Develop an understanding to the basic concepts of Queuing theory and type of queues.
2. Understand and apply the Queuing theory to Science and Engineering problems and applications.
3. Calculate the n-step transition probabilities for any Markov chain and understand about the birth and death of processes.
4. Apply Markov chain & Birth Death process to real life problems.
5. Develop an understanding of various Queuing Systems.

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B. Tech. Semester – VII (Computer Science and Engineering)
INTERNET OF THINGS (ELECTIVE-IV)
CODE: PEC-CS-411

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. Student will be able to learn the basics of IOT.
2. Student will be able to analyse basic protocols of wireless and MAC.
3. Students will get familiar with web of things.
4. Students will get basic knowledge of resource management.

UNIT-1

Introduction to IOT

Introduction to IoT, Characteristics of IoT, Physical design of IoT, Logical design of IoT, Functional blocks of IoT, Communication models & APIs ,IoT& M2M Machine to Machine, Difference between IoT and M2M, Software define Network, Challenges in IoT(Design ,Development, Security).

UNIT-2

Network and communication aspects

Wireless medium access issues, MAC protocol survey, Survey routing protocols, Sensor deployment & Node discovery, Data aggregation & dissemination.

UNIT-3

Web of things

Web of Things vs Internet of things, two pillars of web, Architecture and standardization of IoT, Unified multitier-WoT architecture, WoT portals and Business intelligence, Cloud of things: Grid/SOA and cloud computing, Cloud middleware, cloud standards

UNIT-4

Resource management in iot

Domain specific applications of IoT, Home automation, Industry applications, Surveillance applications, Other IoT applications Clustering, Synchronization, Software agents.

TEXT/ REFERENCE BOOKS:

1. Vijay Madisetti, ArshdeepBahga, "Internet of Things: A Hands-On Approach"
2. WaltengusDargie,ChristianPoellabauer, "Fundamentals of Wireless Sensor Networks: Theory and Practice"

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to

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attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

On successful completion of the course, the student will:

1. Understand the concepts of Internet of Things
2. Analyze basic protocols network
3. Understand the concepts of Web of Things
4. Design IoT applications in different domain and be able to analyze their performance

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B. Tech. Semester – VII (Computer Science and Engineering)
SPEECH AND NATURAL LANGUAGE PROCESSING (ELECTIVE-IV)
CODE: PEC-CS-413

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To make the students familiar with difference levels/stages of natural language processing and to introduce concept of Formal languages and grammars: Chomsky hierarchy and problems associated (like Left-Associative grammars, ambiguous grammars) with them.
2. To introduce the students with Morphology and Part of Speech Tagging by taking examples from Hindi, English.
3. To introduce the top down and the bottom up parsing approaches and their respective types of parsers.
4. To make the students familiar with grammar types like ATN & RTN.
5. To make the students familiar with the basic techniques of parsing like CKY, Earley & Tomita's algorithms and role Hidden Markov Model in NLP
6. To make the students familiar with Semantics-knowledge and its utilization.

UNIT-1

Automatic speech recognition

Introduction to Automatic Speech Recognition (ASR), Components in ASR, Challenges in ASR, Issues in ASR based Application development.

COMPONENTS OF NATURAL LANGUAGE PROCESSING

Lexicography, syntax, semantics, pragmatics: word level representation of natural languages prosody & natural languages.

UNIT-2

Formal languages and grammars

Chomsky hierarchy, Left-Associative grammars, ambiguous grammars, resolution of ambiguities. Introduction of top down and bottom up parsers.

UNIT-3

Computation linguistics

Morphology of natural languages like Hindi, English etc., Part of Speech Tagging (POS), recognition and parsing of natural language structures: ATN & RTN, General techniques of parsing: CKY, Earley & Tomita's algorithms. Introduction to Hidden Markov Model (HMM)

UNIT-4

Semantics-knowledge representation

Semantic networks logic and inference pragmatics, graph models and optimization, Prolog for natural language semantic (e.g. DCG).

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Application of NLP: Intelligent Work Processors

Machine translation, user interfaces, Man-Machine interfaces, natural language querying, tutoring and authoring systems, speech recognition, commercial use of NLP.

TEXT/REFERENCE BOOKS:

1. "Natural Language Understanding" James Allen, -1995 Benjamin/cummings Pub. Comp. Ltd
2. "Language as a cognitive process", Terry Winograd 1983, AW
3. "Natural Language processing in prolog", G. Gazder, 1989, Addison Wesley.
4. "Introduction of Formal Language Theory", MdljArbib&Kfaury, 1988, Springer Verlog.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course outcomes:

Upon successful completion of the course, the student will be able to understand:

1. Difference levels/stages of natural language processing and the concept of Formal languages and grammars: Chomsky hierarchy and problems associated (like Left Associative grammars, ambiguous grammars) with them.
2. The top down and the bottom up parsing approaches and their respective types of parsers like CKY, Earley & Tomita's
3. The Hidden Markov Model and its application in NLP
4. The student will be able to write small ATN & RTN grammars for simple English sentences.
5. The student will be able to do Morphology of words from natural languages like Hindi, English and Semantics-knowledge and its important to understand the documents.

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B. Tech. Semester – VII (Computer Science and Engineering)
OPTIMIZATION TECHNIQUES (ELECTIVE-IV)
CODE: PEC-CS-415

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. The objective of this course is to provide insight to the mathematical formulation of real world problems.
2. To optimize these mathematical problems using nature based algorithms. And the solution is useful, especially for NP-Hard problems.

UNIT-1

Engineering applications of optimization, Formulation of design problems as mathematical programming problems. General Structure of Optimization Algorithms, Constraints, The Feasible Region.

UNIT-2

Branches of Mathematical Programming: Optimization using calculus, Graphical Optimization, Linear Programming, Quadratic Programming, Integer Programming, Semi Definite Programming.

UNIT-3

Optimization Algorithms like Genetic Optimization, Particle Swarm Optimization, Ant Colony Optimization etc.

UNIT-4

Real life Problems and their mathematical formulation as standard programming problems.

TEXT/REFERENCE BOOKS:

1. Laurence A. Wolsey (1998, "Integer programming". Wiley. ISBN 978-0-471-28366-9.
2. Andreas Antoniou, "Practical Optimization Algorithms and Engineering Applications".
3. Edwin K., P. Chong & Stanislaw h. Zak, "An Introduction to Optimization".
4. Dimitris Bertsimas; Robert Weismantel (2005), "Optimization over integers. Dynamic Ideas". ISBN 978-0-9759146-2-5.
5. John K. Karlof (2006), "Integer programming: theory and practice" .CRC Press. ISBN 978-0-8493-1914-3.
6. H. Paul Williams (2009), "Logic and Integer Programming". Springer. ISBN 978-0-387-92279-9.
7. Michael Jünger; Thomas M. Lieblich; Denis Naddef; George Nemhauser; William R. Pulleyblank; Gerhard Reinelt; Giovanni Rinaldi; Laurence A. Wolsey, eds. (2009), "50 Years of Integer Programmin". 1958-2008: From the Early Years to the State-of-the- Art. Springer. ISBN 978-3-540-68274-5.

8. Der-San Chen; Robert G. Batson; Yu Dang (2010), " Applied Integer Programming: Modeling and Solution". John Wiley and Sons. ISBN 978-0-470-37306-4.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Apply basic concepts of mathematics to formulate an optimization problem
2. Understand and apply the concept of optimality criteria for various types of optimization problems.
3. Solve various constrained and unconstrained problems in Single variable as well as multivariable.
4. Apply the methods of optimization in real life situations.

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B. Tech. Semester – VII (Computer Science and Engineering)
HUMAN RESOURCE MANAGEMENT (OPEN ELECTIVE-II)
CODE: OE-CS-417

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course objectives:

The primary concern of this course is to sensitize students to the various facts of managing people and to create an understanding of the various policies and practices of human resource management.

UNIT-1

Human Resource Management: concept, evolution and scope; Strategic objectives of HR management; Roles, responsibilities and competencies of HR manager; Challenges to HR professionals; Human Resource Planning & Forecasting: significance and process; Human Resource Information System.

UNIT-2

HR Sourcing and Recruitment; Selection: process, Placement; Induction and Socialization. Job Analysis: job Description and job Specification; Job Design: approaches and methods; Job Evaluation-concept & methods; Performance Management System: appraisal and counselling.

UNIT-3

Training: training process, training need analysis (TNA); training methods and techniques; Designing Training programs; Training evaluation; Career planning and Development; Potential Appraisal and Succession planning; Employee Compensation: basic concepts & determinants; New trends in compensation management.

UNIT-4

Industrial Relations and Grievance Handling; Employee welfare; Dispute Resolution; International Human Resource Management; Contemporary Issues in HRM: knowledge Management, HR Audit & Accounting, HR in virtual organizations, ethics & corporate social responsibility.

TEXT/REFERENCE BOOKS:

1. K. Aswathapa Human resource Management: Text and cases, 6th edition, Tata McGraw Hill, New Delhi.
2. Uday Kumar Haldar & Juthika Sarkar Human resource Management New Delhi, Oxford University Press.
3. De Cenzo, Da & Robbins S.P. Fundamentals of Human Resource Management, 9th edition, New York, John Wiley & Sons.
4. Gary Dessler, Human Resource Management, 11th edition New Delhi: Pearson Prentice Hall.
5. Tanuja Agarwala, Strategic Human resource Management, Oxford University Press

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. The course will help to understand the basics of HRM with roles and responsibilities of a HR manager.
2. This course enables the students to meet HR challenges in present scenario
3. It will facilitate them in employing, maintaining and promoting a motivated force in an organization.
4. Students will be aware about contemporary issues of human resource management.

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B. Tech. Semester – VII (Computer Science and Engineering)
ICT FOR DEVELOPMENT (OPEN ELECTIVE-II)
CODE: OE-CS-419

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course objectives:

With rising use of Information and Communication technologies available, there is a high potential for these technologies to address sustainability issues. The students must be equipped with the knowledge about their applications in the development field so as to enable them to provide ICT solutions to the target communities. The students will gain knowledge and skills on how ICTs can be best used to overcome sustainability challenges. In order to succeed in the practice of sustainable development, professionals must be trained in a basic set of competencies that integrate cross-disciplinary knowledge for practical problem solving with the use of information and communication technologies.

UNIT-1

Introduction

Introduction to ICTs for sustainable Development Introduction to Information and Communication Technology (ICT); Role of ICTs in Sustainable Development; Current Status of ICTs in Sustainable Development- Global and India Scenario. Potential of ICTs in various fields, impact of information Technologies on GDP growth

Building knowledge societies

The concept of Knowledge Society; identifying stakeholders and target communities; Understanding information needs. Traditional vs. contemporary knowledge systems, information processing and retrieval; Understanding means of communication in different areas, developing an effective communication strategy Case: Warna Unwired

UNIT-2

Information and communication technologies

The hardware and software, the physical infrastructure, satellite, wireless solutions, telecommunication technologies, mobiles, fixed line, internet and world wide web, community radio, technology-user interface, design of relevant ICT products and services.

ICT applications

Applications of ICT in education, Health (telchealth, telemedicine and health Informatics), Gender Equality, Agriculture (e Governance, telecentres, Mobiles for development, climate change and disaster management, ICT Networks for water management (This module will be dealt with the help of country case studies in all the sectors and inputs from ICT4D practitioners Case Studies: eCME, Apollo Telemedicine Network Foundation, Bhoomi, eSewa, Gyandoot, eAgriculture. M-PESA, CYCLETEL)

UNIT-3

ICT for development in India

Policy and Institutional Framework in India, e governance, ICT Models in health, education, agriculture, finance, gender equality, Mobiles for Development Experience sharing by ICT for Development practitioners Case Studies: Reuters Market Light, Ifico Kisan Sanchar Ltd.

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ICT 4D implementation

UNIT-4

Developing an ICT4D Project, Critical Success factors for technology diffusion and use, Constraints in adoption, The role of national policies, Institutional Policy framework, Multistakeholder partnerships, Role of Private Sector Case Studies: echaupal , Lifelines India.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of the course:

1. Students will be familiarized with main theories and conceptual frameworks in the field of ICT for development
2. Students will learn potential of both information and communication technologies in different areas such as health, education, agriculture, finance, gender equality and climate change.
3. Students will be able to understand the existing innovative business models and other applications in the above mentioned areas with reference to India and other developing countries
4. Students will be able to compare and contrast various business models (public, private sector, PPP, civil society) with respect to technology, infrastructure, capacity building, human resource etc.
5. Students will be able to learn how ICT models can be successfully implemented at the field and understand critical success factors and constraints in adoption.

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B. Tech. Semester – VII (Computer Science and Engineering)
INTELLECTUAL PROPERTY RIGHTS (OPEN ELECTIVE-II)
CODE: OE-CS-421

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To make the student aware about Intellectual Property and why it is important
2. To study the concept of Patents, history of patent and its categorization.
3. To learn the procedure of obtaining Patents.
4. To make the student learn Assignment and Revocation of Patent
5. To study the concept of infringement and its defence.

UNIT-1

Introduction to Intellectual Property

Concept of Intellectual Property, Kinds of Intellectual Property, Economic Importance of Intellectual Property, Indian Theory on Private Property: Constitutional Aspects of Property, Constitutional Protection of Property and Intellectual Property, Economic Development and Intellectual Property Rights Protection

UNIT-2

Introduction to Patents

Overview, Historical Development, Concepts: Novelty, Utility, Patentable Subject-matter: Patent Act, 1970- Amendments of 1999, 2000, 2002 and 2005, Pharmaceutical Products and Process and Patent , Protection, Software Patents, Business Method, Protection of Plant Varieties and Farmers' Rights Act, 2001, Patenting of Micro-organism

UNIT-3

Procedure of obtaining of Patents

Concepts of a Patent Application,, Specification: Provisional, Complete, Disclosure Aspects, Claims: Principal, Dependant, Omnibus, Examination of Application, Opposition of Application, Sealing of Patents

UNIT-4

Working of Patents – Compulsory License

Commercialization of Inventions: License- Terms of License Agreement, Assignments of Patents, Revocation of Patents

Infringement

What is Infringement?, How is Infringement determined? Who is an Infringer?, Direct, Contributory and Induced, Defences of Infringement: Research Exemption, Invalidity, Misuse, Failure to mark, Laches and Estoppel and first sale doctrine

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TEXT/REFERENCE BOOKS:

1. W.R. Cornish, Intellectual Property, Sweet & Maxwell, London (2000)
2. P. Narayana, Patent Law, Wadhwa Publication
3. Merges, Patent Law and Policy: Cases and Materials, 1996
4. Brian C. Reid, A Practical Guide to Patent Law, 2nd Edition, 1993
5. Brinkhof (Edited), Patent Cases, Wolters Kluwer.
6. Prof. Willem Hoyng & Frank Eijsvogels, Global Patent Litigation, Strategy and Practice, Wolters Kluwer.
7. Gregory Stobbs. Software Patents Worldwide, Wolters Kluwer.
8. Feroz Ali Khader. The Law of Patents- With a special focus on Pharmaceuticals in India, Lexis Nexis Butterworths Wadhwa, Nagpur.
9. Sookman, Computer Law, 1996
10. N.S. Gopalakrishnan & T.G. Agitha, Principles of Intellectual Property (2009). Eastern Book Company, Lucknow

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of the course student will be able to:

1. Understand the concept of Intellectual Property and its importance.
2. Understand Patents, categorization and procedure for obtaining patents.
3. Understand the commercialization of invention
4. Understand the concept of infringement and its defence.

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B. Tech. Semester – VII (Computer Science and Engineering)
INTERNATIONAL BUSINESS ENVIRONMENT (OPEN ELECTIVE-II)
CODE: OE-CS-423

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

To provide knowledge about International Business Environment. To provide the framework on basis of which business can be run smoothly.

UNIT-1

International business environment; Concept of international business; domestic vs international business, stages of internationalization, tariff and non-tariff barriers, Risks involved in international business

UNIT-2

Theories of international trade: Adam Smith, Ricardo and Ohlin & Heckler theory, Leontif paradox, PLC

UNIT-3

International Monetary Systems: Historical background and structure. International Financial institutions: IMF, World Bank, Euro Currency. International financial markets and instruments.

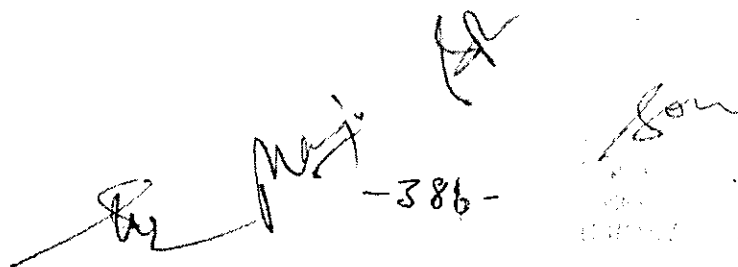
UNIT-4

Free trade zones. Bilateral and Multilateral Trade Laws – General Agreement on Trade and Tariffs. (GATT). World Trade Organization – IPR, TRIPS, TRIMS, GATS. Regional Economic Integrations: NAFTA, EU. Trade Blocks; ASEAN, SAAARC, BRICS

TEXT/REFERENCE BOOKS:

1. Lasserre, Philippe Global Strategic Management, Palgrave MacMillan.
2. John D Daniels, Lee H Radebaugh Daniel P Sullivan, Prashant Salwan. International Business Environments and Operations, Pearson Education
3. Tamer Cavusgil, Gary Knight International Business: Strategy, Management and the New Realities, 1st Edition, Pearson Education.
4. K Aswathappa, International Business, Tata Mcgraw Hill.
5. Richard Hodgetts, Fred Luthans, Jonathan Doh. International Management: Culture, Strategy And Behaviour, Pearson Education.
6. Deresky, International Management: Managing across borders and culture. Pearson Education.
7. Nandi : "International Business Environment" McGraw Hill Education.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to


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attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. The student will be aware of the international organizations in which India is a member or otherwise.
2. The students may take opportunity to take their business from domestic to international.
3. International organizations and their links to India will be understood by students in an easy manner.
4. The students will be aware business environment at international level

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B. Tech. Semester – VII (Computer Science and Engineering)
FINANCIAL MANAGEMENT (OPEN ELECTIVE-III)
CODE: OE-CS-425

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

To develop understanding among the students regarding nature of finance and its interaction with other Management functions and the objectives of Financial Management.

UNIT-1

Financial management-scope finance functions and its organisation, objectives of financial management; time value of money; sources of long term finance.

UNIT-2

Investment decisions importance, difficulties, determining cash flows, methods of capital budgeting with excel: risk analysis (risk adjusted discount rate method and certainty equivalent method); cost of different sources of raising capital; weighted average cost of capital.

UNIT-3

Capital structure decisions-financial and operating leverage; EBIT/EPS Analysis, capital structure theories- NI, NOI, traditional and M-M theories; determinants of dividend policy and dividend models -Walter, Gordon & M.M. models.

UNIT-4

Working Capital- meaning, need, determinants; estimation of working capital need; management of cash, inventory and receivables.

TEXT/REFERENCE BOOKS:

1. Pandey, I.M., "Financial Management", Vikas Publishing House, New Delhi
2. Khan M.Y, and Jain P.K., "Financial Management", Tata McGraw Hill, New Delhi
3. Keown, Arthur J., Martin, John D., Petty, J. William and Scott, David F, "Financial Management", Pearson Education
4. Chandra, Prasanna, "Financial Management", TMH, New Delhi
5. Van Horne, James C., "Financial Management and Policy", Prentice Hall of India
6. Brigham & Houston, "Fundamentals of Financial Management", Thomson Learning, Bombay.
7. Kishore, R., "Financial Management", Taxman's Publishing House, New Delhi

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. It creates understanding among the students regarding the key decisions like Investment, Financing and dividend Decisions of financial Management.
2. They are able to understand the usage and applications of leverages in financial decisions.
3. The students are able to use their best knowledge in finance towards the value creation for the organization.
4. The students will be made aware of working capital management concept.

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B. Tech. Semester – VII (Computer Science and Engineering)
E-COMMERCE AND ENTERPRNEURSHIP (OPEN ELECTIVE-III)
CODE: OE-CS-427

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To understand the basic concept of electronic transactions, types of business models and about customer relationship management.
2. To study about various legal and ethical issues related to electronic transactions and also understating the concepts of IPR.
3. To understand the skills of Entrepreneurship, to identify the projects and the analysis and report making.

UNIT-1

Introduction To E-Commerce

Need, importance, Business models, revenue models and business processes, economic forces & e-commerce, identifying e-commerce opportunities, international nature of e-commerce, technology infrastructure-internet & WWW; Business strategies for ecommerce: Revenue models in transaction, revenue strategic issues, customer behavior and relationship intensity, advertising on the web, e-mail marketing, technology enabled CRM

UNIT-2

Business To Business Strategies

(Overview strategic methods for Developing E-Commerce) Purchasing, logistics and supply activities, electronic data interchange (EDI), electronic data interchange on the internet, supply chain management using internet technologies, electronic market place & portals (Home shopping, E-marketing, Tele marketing), auctions, online auctions, virtual communicative & web portals; legal, and ethical issues in e-commerce — use and protection of intellectual property in online business, online crime, terrorism & warfare, ethical issues.

UNIT-3

Entrepreneurship

Definition, Concept, Growth and role. The Entrepreneur: types, Characteristics, theories of Entrepreneurial class, Urges and importance of Entrepreneurship Stimulants; Seed-Beds of Entrepreneurship, Influencing Factors; Problems (Operational and Non-Operational) and Obstacles. Entrepreneurial Management. Role of socio-economic environment

UNIT-4

Skills for a New Class of Entrepreneurs, The Ideal Entrepreneurs, The Entrepreneurship Audit, Identification of opportunities by an Entrepreneur, The steps to identify the project /ventures, Process of converting business opportunities into reality. Feasibility Report and analysis, Process of setting up a

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small scale industry / unit Promotion of a venture, External Environment Analysis: Economic, Social, Technological and competition, Legal Framework for establishing and fund raising Venture Capital: Sources and Documents required.

TEXT/REFERENCE BOOKS:

1. Gary P. Schneider, "Electronic Commerce", Seventh Edition, CENGAGE Learning India Pvt. Ltd., New Delhi.
2. K.K.Bajaj, D. Nag "E-Commerce", 2nd Edition, McGraw Hill Education, New Delhi
3. P.T. Joseph, "E-Commerce An Indian Perspective", PHI Publication, NewDelhi.
4. Bhaskar Bharat, "Electronic Commerce-Technology and Application", McGraw Hill Education, New Delhi
5. Mary Sumner, "Enterprise Resource Planning", 2005, PHI Learning India Pvt. Ltd. / Pearson Education, Inc. New Delhi.
6. Chan, " E-Commerce fundamentals and Applications", Wiley India, New Delhi

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. The students will be able to understand the basic concepts of electronic transactions.
2. Study of various types of business models and customer relationship management.
3. Students will be able to understand about various business strategies and marketing strategies.
4. Study of various legal and ethical issues related to electronic transactions.
5. Study of intellectual property rights and its importance.
6. Study of Entrepreneurship management
7. Study of analyzing the external environment, the competition and designing the framework for establishing a venture capital.
8. Study of business intelligence and knowledge management tools.

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Department of Information Systems
Faculty of Business Administration
University of Toronto

**B. Tech. Semester – VII (Computer Science :
BASIC OF OPERATION RESEARCH (OPEN
CODE: OE-CS-429**

NO OF CREDITS: 3

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Course Objectives:

1. Understand what R is and what it can be used for
2. Why would you choose R over another tool
3. Troubleshoot software installs (keep your fingers crossed)
4. Gain familiarity with using R from within the RStudio IDE
5. Get to know the basic syntax of R functions
6. Be able to install and load a package into your R library

UNIT-1

Definition of operations research, models of operations research, scientific methodology of operations research, scope of operations research, importance of operations research in decision making, role of operations management, limitations of OR.

UNIT-2

Linear Programming: Introduction -- Mathematical formulation of a problem -- Graphical solutions, standard forms the simplex method for maximization and minimization problems. Method application to management decisions.

Transportation problem -- Introduction -- Initial basic feasible solution - NWC method -- Least cost method -- Vogel's method -- MODI -- moving towards optimality -- solution procedure without degeneracy

UNIT-3

Sequencing and replacement model: Sequencing problem -- processing through 2 machines, 3 machine -- s jobs and k machines and traveling salesman problem.
Replacement of items that deteriorate gradually -- with time, without time, that fails completely -- individual replacement -- group replacement

UNIT-4

Network models and simulation. Network models for project analysis CPM; Network construction and time analysis; cost time trade off, PERT -- problems

TEXT/REFERENCE BOOKS:

1. Jared P. Lander, R for Everyone: Advanced Analytics and Graphics, Pearson Edu. Inc.
2. Christian Heumann, Michael Schomaker and Shalabh, Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R . Springer, 2016
3. Pierre Lafaye de Micheaux, Rémy Drouilhet, Benoit Liquet, The R Software-

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Fundamentals of Probability
4. By Alain F. Zuur
2009
Note: 1/6

Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of the course, students will be able to:

1. Familiarize themselves with R and the RStudio IDE
2. Understand and use R functions
3. Install and load a package into your R library
4. Get insight into the capabilities of the language as a productivity tool for data manipulation and statistical analyses.

By Manjiv AR
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B. Tech. Semester – VII (Computer Science and Engineering)
RENEWABLE ENERGY SYSTEMS (OPEN ELECTIVE-III)
CODE: OE-CS-431

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn various renewable energy sources
2. To gain understanding of integrated operation of renewable energy sources
3. To understand Power Electronics Interface with the Grid

UNIT-1

Introduction, Distributed vs Central Station Generation Sources of Energy such as Micro-turbines Internal Combustion Engines.

UNIT-2

Introduction to Solar Energy, Wind Energy, Combined Heat and Power Hydro Energy, Tidal Energy, Wave Energy Geothermal Energy, Biomass and Fuel Cells.

UNIT-3

Power Electronic Interface with the Grid Impact of Distributed Generation on the Power System Power Quality Disturbances

UNIT-4

Transmission System Operation, Protection of Distributed Generators, Economics of Distributed Generation

TEXT/REFERENCE BOOKS:

1. Ranjan Rakesh, Kothari D.P, Singal K.C, "Renewable Energy Sources and Emerging Technologies", 2nd Ed. Prentice Hall of India ,2011
2. Math H. Bollen, Fainan Hassan, "Integration of Distributed Generation in the Power System", July 2011, Wiley –IEEE Press
3. Loi Lei Lai, Tze Fun Chan, "Distributed Generation: Induction and Permanent Magnet Generators", October 2007, Wiley-IEEE Press.
4. Roger A. Messenger, Jerry Ventre, "Photovoltaic System Engineering", 3rd Ed, 2010
5. James F. Manwell, Jon G.McGowan, Anthony L Rogers, "Wind energy explained: Theory Design and Application", John Wiley and Sons 2nd Ed, 2010

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of the course, Students will be able to:

1. Gain knowledge about renewable energy
2. Understand the working of distributed generation system in autonomous/grid connected modes
3. Know the Impact of Distributed Generation on Power System

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Dr. J. K. Jha

Assistant Professor

Department of Electrical Engineering

Indian Institute of Technology

Delhi

India

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B. Tech. Semester – VII (Computer Science and Engineering)
BIOINFORMATICS
CODE: BSC-401

NO OF CREDITS: 2

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT-1

Introduction to bioinformatics and data generation

What is bioinformatics and its relation with molecular biology. Examples of related tools (FASTA, BLAST, BLAT, RASMOL), databases (GENBANK, Pubmed, PDB) and software (RASMOL, Ligand Explorer).

Data generation: Generation of large scale molecular biology data. (Through Genome sequencing, Protein sequencing, Gel electrophoresis, NMR Spectroscopy, X-Ray Diffraction, and microarray). Applications of Bioinformatics.

UNIT-2

Biological Database and its Types

Introduction to data types and Source. Population and sample, Classification and Presentation of Data. Quality of data, private and public data sources. General Introduction of Biological Databases; Nucleic acid databases (NCBI, DDBJ, and EMBL). Protein databases (Primary, Composite, and Secondary). Specialized Genome databases: (SGD, TIGR, and ACeDB). Structure databases (CATH, SCOP, and PDBsum)

UNIT-3

Data storage and retrieval and Interoperability Flat files, relational, object oriented databases and controlled vocabularies. File Format (Genbank, DDBJ, FASTA, PDB, SwissProt).

Introduction to Metadata and search; Indices, Boolean, Fuzzy, Neighboring search. The challenges of data exchange and integration. Ontologies, interchange languages and standardization efforts. General Introduction to XML, UMLS, CORBA, PYTHON and OMG/LIFESCIENCE.

UNIT-4

Sequence Alignments and Visualization

Introduction to Sequences, alignments and Dynamic Programming; Local alignment and Global alignment (algorithm and example), Pairwise alignment (BLAST and FASTA Algorithm) and multiple sequence alignment (Clustal W algorithm).

Methods for presenting large quantities of biological data: sequence viewers (Artemis, SeqVISTA), 3D structure viewers (Rasmol, SPDBv, Chime, Cn3D, PyMol), Anatomical visualization.

TEXT/REFERENCE BOOKS:

1. "Biology: A global approach" Campbell, N. A.; Reece, J. B.; Urry, Lisa; Cain, M.
2. L.; Wasserman, S. A.; Minorsky, P. V.; Jackson, R. B. Pearson Education Ltd
3. "Outlines of Biochemistry", Conn, E.E; Stumpf, P.K; Bruening, G; Doi, R.H.

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4. John Wiley and Sons
5. "Principles of Biochemistry(V Edition)". By Nelson, D. L.; and Cox, M. M.W.H. Freeman and Company
6. "Molecular Genetics (Second edition)", Stent, G. S.; and Calender, R. W.H. Freeman and company, Distributed by Satish Kumar Jain for CBS Publisher
7. "Microbiology" , Prescott, L.M J.P. Harley and C.A. Klein 1995. 2nd edition Wm, C. Brown Publishers

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After studying the course, the student will be able to:

1. Describe how biological observations of 18th Century that lead to major discoveries.
2. Convey that classification per se is not what biology is all about but highlight the underlying criteria, such as morphological, biochemical and ecological
3. Highlight the concepts of recessiveness and dominance during the passage of genetic material from parent to offspring
4. Convey that all forms of life have the same building blocks and yet the manifestations are as diverse as one can imagine
5. Classify enzymes and distinguish between different mechanisms of enzyme action.
6. Identify DNA as a genetic material in the molecular basis of information transfer.
7. Analyse biological processes at the reductionistic level
8. Apply thermodynamic principles to biological systems.
9. Identify and classify microorganisms.

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B. Tech. Semester – VII (Computer Science and Engineering)
PROJECT-II
CODE: PROJ-CS-401-P

NO OF CREDITS: 2

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

Note: Students may choose a project based on any subject of Computer Science. The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format. The student will have to present the progress of the work through seminars and progress reports.

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B. Tech. Semester – VII (Computer Science and Engineering)
SEMINAR
CODE: PROJ-CS-403-P

NO OF CREDITS: 1
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INTERNAL MARKS: 50
EXTERNAL MARKS: 00
TOTAL : 50

The topic of the seminar will be based on emerging technology or any topic related to the field of Computer Science & Engineering. An assigned teacher will evaluate the performance of the students & marks will be awarded accordingly.

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B. Tech. Semester – VII (Computer Science and Engineering)
INDUSTRIAL PRACTICAL TRAINING- II
CODE: ITP-CS-405-P

NO OF CREDITS: 2
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INTERNAL MARKS: 00
EXTERNAL MARKS: 100
TOTAL : 100

Industrial practical training conducted after sixth semester will be evaluated in the Seventh Semester based on Viva-Voce.

Manjiv
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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech Computer Science & Engineering
(w.e.f Academic Session 2024- 2025)

Semester - 8

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-V	3	0	0	3	20	80	100
2.	OEC	OEC	Open Elective-IV	3	0	0	3	20	80	100
Lab										
3.	Project	PROJ-CS-402-P	Project-III	0	0	12	5	40	160	200
4.	Project	PROJ-CS-404-P	Seminar	0	0	2	1	50	0	50
5.	MC	GPP-CS-406-P	General Proficiency	0	0	0	0	0	100	100
Total				6	0	14	12	130	420	550

Total Contact Hours =20

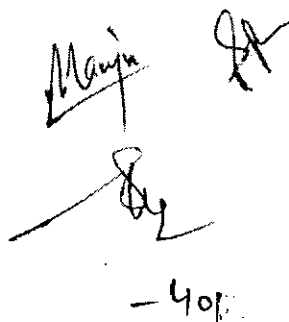
Total Credit= 12

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

2. General Fitness for Profession: A comprehensive viva-voce of the students will be taken by external examiner and Chairperson of the department (internal examiner) and Class Coordinator at the end of the semester. The evaluation of the student for General Fitness for the Profession will be carried out through viva-voce taken by the committee of examiners.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective - V	Open Elective- IV
1.	PEC- CS-402 Block Chain	OE-CS-410 Economic policies in India
2.	PEC-CS-404 Deep Learning	OE-CS-412 Quality Engineering
3.	PEC-CS-406 Neural Networks	OE-CS-414 Optical Network Design
4.	PEC-CS-408 Software Testing and Quality Assurance	OE-CS-416 Embedded System


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B. Tech. Semester – VIII (Computer Science and Engineering)
BLOCKCHAIN (ELECTIVE-V)
CODE: PEC-CS-402

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To introduce basic concepts of Blockchain.
2. To understand abstract models for Blockchain technology
3. To learn about usage of Blockchain technology in financial services.
4. To visualize the scope of blockchain & its role in futuristic development.

UNIT- 1

Introduction to Blockchain:- Overview of blockchain, need for blockchain, history of centralized services, trusted third party, Distributed consensus in open environments, Distributed Vs Decentralized Network, 51 % attack theory, Public blockchains, Private blockchains, Blockchain Architecture and working, Mining, Limitations of blockchain, Applications of blockchain

UNIT- 2

Models for blockchain:- GARAY model, RLA Model, Proof of Work (PoW), HashcashPoW, PoW Attacks and the monopoly problem, Proof of Stake(PoS), hybrid models(PoW+PoS). Proof of Burn and Proof of Elapsed Time.

UNIT-3

Permissioned Blockchain:- Permissioned model and use cases, Design issues for Permissioned blockchains, State machine replication, Consensus models for permissioned blockchain, Distributed consensus in closed environment, Paxos, RAFT Consensus, Byzantine general problem, Byzantine fault tolerant system, Lamport-Shostak-Pease BFT Algorithm, BFT over Asynchronous systems.

UNIT- 4

Blockchain in Financial Service:- Digital Currency, Cross border payments, Steller and Ripple protocols, Project Ubin, Know Your Customer (KYC), Privacy Consents, Mortgage over Blockchain, Blockchain enabled Trade, We Trade – Trade Finance Network, Supply Chain Financing, Insurance.

Blockchain Security: Security properties, Security considerations for Blockchain, Intel SGX, Identities and Policies, Membership and Access Control, Blockchain Crypto Service Providers, Privacy in a Blockchain System, Privacy through Fabric Channels, Smart Contract Confidentiality.

TEXT/REFERENCES BOOKS:

1. Blockchain: Blueprint for a New Economy, by Melanie Swan.
2. Blockchain: The blockchain for beginners guide to blockchain technology and leveraging blockchain programming, by Josh Thompsons
3. Blockchain Basics by Daniel Drescher, Apress

B. Tech. Semester – VIII (Computer Science and Engineering)
DEEP LEARNING (ELECTIVE-V)
CODE: PEC-CS-404

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT-1

Mathematical Preliminaries Introduction to Linear Algebra; Principal Component Analysis; Probability and Statistics; Numerical Methods, Gradient and constraint-based optimization

UNIT-2

Machine Learning Basics Learning algorithms; Training, validation and test sets; neural networks. convolution and recurrent networks, back propagation; Performance metrics, hyper parameters and debugging strategies

UNIT-3

Introduction to Deep Networks Problems with back propagation and modern approaches; Auto encoders, representation learning; Regularization, dropout, optimization strategies
Sequence Learning and LSTMs Deep recurrent networks, bidirectional networks and encoder-decoder architectures; Introduction to LSTM, building an LSTM network

UNIT-4

Applications Deep convolution network for Telugu OCR and performance analysis; LSTM networks for text processing
GANs and Latest Advances Generative adversarial networks (GAN), building and training GANs; GAN variants and current results; limitations and weaknesses of deep learning

TEXT/REFERENCE BOOKS:

1. Ian Goodfellow, Yoshua Bengio, Aaron Courville. Deep Learning, MIT Press, 2015.
2. Technical papers from time-to-time on different topics (some of these will be given at the beginning of the semester and others during the semester).

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Dr -403

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

At the end of the course, students will develop understanding for:

1. Recognizing goals of Blockchain.
2. Smart Contracts, transactions in Blockchain and Permissioned Blockchain.
3. Analyzing usage of Blockchain in finance.
4. Security issues in Blockchain.

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for

UNIVERSITY OF PUNJAB
FACULTY OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING
JALANDHAR

B. Tech. Semester – VIII (Computer Science and Engineering)
NEURAL NETWORKS (ELECTIVE-V)
CODE: PEC-CS-406

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To introduce neural networks concepts and associated techniques
2. To design appropriate neural network based technique for a given scenario.
3. To introduce the concept of associative memories and their capabilities in pattern completion and repair.
4. To introduce the unsupervised learning self organizing maps

UNIT-1

Introduction to neural networks

Artificial neurons, Neural networks and architectures, Feedforward and feedback architectures, Learning types-supervised, unsupervised and reinforced, learning mechanisms-Gradient Descent, Boltzmann, and Hebbian, Single Perceptron as classifier, Multi-layer perceptron model.

UNIT-2

Recurrent networks

Attractor Neural Networks, Associative learning and Memory Model, Discrete Hopfield Network, Condition for Perfect Recall in Associative Memory, Bi-direction Associative memories (BAM)-Auto and Hetro-association, Boltzmann machine, Introduction to Adaptive Resonance Networks.

UNIT-3

Feed forward networks

Gradient Descent and Least Mean Squares Algorithm, Back Propagation Algorithms, Multi-Class Classification Using Multi-layered Perceptrons., Support Vector Machine (SVM), Radial Basis Function Networks: Cover's Theorem, Learning Mechanisms in RBF.

UNIT-4

Principal components and analysis

Introduction to PCA, Dimensionality reduction Using PCA, Hebbian-Based Principal Component Analysis, Introduction to Self Organizing Maps : Cooperative and Adaptive Processes in SOM, and Vector-Quantization Using SOM.

TEXT/REFERENCE BOOKS:

1. Haykin S., "Neural Networks-A Comprehensive Foundations", Prentice-Hall International, New Jersey, 1999.
2. Anderson J.A., "An Introduction to Neural Networks", PHI, 1999.
3. Satish Kumar, "Neural Networks: A Classroom Approach"

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4. Hertz J, Krogh A, R.G. Palmer, "Introduction to the Theory of Neural Computation", Addison-Wesley, California, 1991.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After successful completion of the course, the students will be able to:

1. Use neural networks concepts and associated techniques for solving classification and regression problems.
2. Design and Use neural networks for pattern recall, completion and repair.
3. Design and Use neural networks for self learning and unsupervised classifications.
4. Choose the appropriate classifier.

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B. Tech. Semester – VIII (Computer Science and Engineering)
SOFTWARE TESTING AND QUALITY ASSURANCE (ELECTIVE-V)
CODE: PEC-CS-408

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objective:

The purpose of this course is to presents the knowledge about Testing background such introduction of Bug , cause of Bug, how it effect on cost of project, role of STLC cycle realities of software testing. This subject also gives the knowledge software testing fundamentals, under the study of types of testing this subject enlighten the Configuration testing, Compatibility testing, Foreign language testing, Usability testing, Testing the documentation, Testing for software security, Web site testing and more. At the end this subject focuses on the test planning and quality assurance.

UNIT-1

Introduction to Software Testing

Introduction – s/w testing background - What is a bug? Why do bugs occur? The cost of bugs. Goals of a software tester. Characteristics of s/w tester. Software development process- product component, software project staff, software development lifecycle model. The realities of s/w testing – testing axioms, s/w testing terms and definitions, Software Testing Life Cycle(STLC).

Unit-2

S/w testing fundamentals

S/w testing fundamentals- Examining the specifications - Black box and white box testing, Static and dynamic testing, Static black box testing, Performing a high level review of the specification, low level specification test techniques. Testing the s/w with blinders on – Dynamic black box testing, Test to pass and test to fail, Equivalence partitioning, data testing, State testing, Other black box test techniques. Examining the code – Static white box testing, Formal review, Coding standards and guidelines, Generic code review checklist. Testing the software with X-ray glasses – Dynamic white box testing, Dynamic white box testing, verses debugging testing the pieces

UNIT-3

Types of testing

Configuration testing, Compatibility testing, Foreign language testing, Usability testing, Testing the documentation, Testing for software security. Web site testing, Automated testing and test tools- Benefits of automation and tools, various test tools, Software test automation, Random testing. Bug bashes and beta testing – Having other people test your s/w, Test sharing, Beta testing, Outsourcing your testing. Performance Testing – Introduction, Benefits of performance testing, Types of performance testing Tools for performance Testing, Process for performance testing, challenges.

UNIT-4

Test planning and quality assurance

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Planning the test – Goal of test planning, Various test planning topics, Writing and tracking test cases- Goal of test case planning, Test case planning overview, Test case organization and tracking, Reporting what you find - Getting the bug fixed, Isolating and replacing bugs, Bug's lifecycle, Bug tracking system, Measuring the success, Software quality assurance- Quality is free, Testing and quality assurance in the work place, Test management and organizational structures, capability maturity model (CMM), ISO 9000 Test Metrics and Measurement – Test Defect Metrics.

TEXT/ REFERENCE BOOKS:

1. Ron Patton, "Software Testing" SAMS Publishing
2. Marnei L. Hutcheson – "Software Testing Fundamentals: Methods and Metrics" WILEY Pub.
3. Pressman "Software Engineering" McGraw-Hill publications.
4. Strinivasan Desikan and Gopal swami Ramesh, Software Testing – Principles and Practices, Pearsons.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After completion of course students will be able to

1. To discuss software testing background
2. To introduce software testing techniques
3. To explain different types of testing to understand realistic problem
4. To create awareness about the process part as per as software testing is concern

By *Minky* *SR*
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B. Tech. Semester – VIII (Computer Science and Engineering)
ECONOMIC POLICIES IN INDIA (OPEN ELECTIVE-IV)
CODE: OE-CS-410

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The candidates at the post-graduate level are expected to analyze various issues pertaining to India's economic development. The performance of the economy is to be assessed on the backdrop of various Five Year Plans implemented in the economy. Wherever possible, critical appraisal is expected by taking cognizance of the contemporary developments in the economy.

UNIT-1

Framework of Indian Economy

National Income: Trends and Structure of National Income, Demographic Features and Indicators of Economic Growth and Development Rural-Urban Migration and issues related to Urbanization, Poverty debate and Inequality, Nature, Policy and Implications, Unemployment-Nature, Central and State Government's policies, policy implications, Employment trends in Organized and Unorganized Sector

UNIT-2

Development Strategies In India

Agricultural- Pricing, Marketing and Financing of Primary Sector, Economic Reforms- Rationale of Economic Reforms, Liberalization, Privatization and Globalization of the Economy, Changing structure of India's Foreign Trade, Role of Public Sector- Redefining the role of Public Sector, Government Policy towards Public Sector, problems associated with Privatization, issues regarding Deregulation- Disinvestment and future of Economic Reforms

UNIT-3

The Economic Policy And Infrastructure Development

Energy and Transport, Social Infrastructure- Education, Health and Gender related issues, Social Inclusion, Issues and policies in Financing Infrastructure Development, Indian Financial System- issues of Financial Inclusion, Financial Sector Reforms-review of Monetary Policy of R.B.I. Capital Market in India.

UNIT-4

The Economic Policy And Industrial Sector

Industrial Sector in Pre-reforms period, Growth and Pattern of Industrialization, Industrial Sector in Post-reform period- growth and pattern of Micro, Small, Medium Enterprises s, problems of India's Industrial Exports, Labour Market- issues in Labour Market Reforms and approaches to Employment Generation Basic.

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TEXT/REFERENCE BOOKS

1. Brahmaananda, P.R. and V.A. Panchmukhi.[2001], Ed. 'Development Experience in Indian Economy, Inter-state Perspective,' Bookwell, New Delhi.
2. Gupta,S.P.[1989]. 'Planning and Development in India: A Critique,' Allied Publishers Private Limited, New Delhi.
3. Bhagwati, Jagdish.[2004]. 'In Defense of Globalization,' Oxford University
4. Dhingra, Ishwar C.[2006]. 'Indian Economy,' Sultan Chand and Sons, New Delhi.
5. Datt, Ruddar and Sundaram, K.P.M.[Latest edition] 'Indian Economy,' S. Chand and Co, New Delhi.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VIII (Computer Science and Engineering)
QUALITY ENGINEERING (OPEN ELECTIVE-IV)
CODE: OE-CS-412

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT -1

Basic Concept Quality Costs: Fitness for Use, Quality Characteristics, and Parameters of Fitness for use, Definition of quality and its meaning and importance in industry, Control and Quality control, Quality Tasks, Quality functions, The system Concept, Quality systems, quality assurance and ISO 9000 quality system standards, Quality costs concept, Quality cost categories, Examples of Quality cost studies. Securing the Cost figures, Pareto Analysis, Cost reduction Programs and economics of quality.

UNIT-2

Control charts: Statistical Tools in Quality control, The concept of variation, Tabular Summarization of Data, Frequency distribution, Graphical Summarization of Data: The Histogram, Quantitative methods of summarizing data: Numerical Indices, Probability distributions : General, The normal Probability distribution, The normal curve and Histogram Analysis, The causes of variation, statistical aspect of control charting. concept of rational sub-grouping and detecting patterns on the control charts, for variables and attributes: X and R, X and S, p, np, c and u charts; specification and tolerances, natural tolerance limits, specification limits, process capability ratio analysis and narrow limit gauging

UNIT-3

Basic statistical concepts: Descriptions of Binomial, Poisson and Normal distribution with practical examples basics of sampling distribution. Acceptance Sampling: Principle of acceptance sampling, Acceptance sampling by attributes: single multiple and sequential sampling plans, lot quality protection and average outgoing quality protection, Acceptance sampling by variables sampling plans of process parameters,

UNIT-4

Total quality Management: Basic concepts of TQM, historical review, leadership, concepts, role of senior management, quality statements, plans for process parameters, Modern Quality Management Techniques: TQM tools: Benchmarking, QFD, Taguchi quality loss function TPM, FMEA. Lean Manufacturing continuous improvement techniques, JIT systems, pareto diagrams, cause and effect diagrams, scatter diagram, run charts, affinity diagrams, inter-relationship diagram, process decision program charts

TEXT/ REFERENCE BOOKS:

1. Quality planning and Analysis, Juran and Gryna, TMH, New Delhi
2. Quality Management, Kanishka Bed, Oxford University Press, New Delhi
3. Introduction to SQC, Montgomery DC, 3e, Wiley, New Delhi

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- 4. Fundamentals of quality control and improvement, A Mitra, Mcmillan pub. Company, NY
- 5. Fundamentals of Applied Statistics, Gupta and Kapoor, Sultan Chand and Sons, New Delhi.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Date

B. Tech. Semester – VIII (Computer Science and Engineering)
OPTICAL NETWORK DESIGN (OPEN ELECTIVE-IV)
CODE: OE-CS-414

NO OF CREDITS: 3

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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To make students familiar with SONET and SDH Architecture and add Drop Multiplexer.
2. To make students aware of wavelength division multiplexing techniques.
3. To introduce T-Carrier multiplexed hierarchy.
4. To introduce features of SONET and SDH.
4. To study about LDP protocol in detail

UNIT-1

Introduction To Optical Networking

Introduction SONET/SDH and dense wavelength-division multiplexing (DWDM) , Add/drop multiplexers (ADMs), DWDM, CWDM, Time-Division Multiplexing, Synchronous TDMs, Statistical TDMs, Circuit Switched Networks, T-Carrier multiplexed Hierarchy, DS framing, DS multiframing formats, D4 Superframe, D5 extended superframe, E-Carrier multiplexed Hierarchy, TDM network elements, and Ethernet switching.

Sonet Architectures

SONET integration of TDM signals, SONET electrical and optical signals, SONET Layers, SONET framing, SONET transport overhead, SONET alarms, multiplexing, virtual tributaries, SONET network elements, SONET topologies, SONET protection mechanisms, APS, two-fiber UPSR, DRI, and two-fiber and four-fiber BLSR rings. SPR,RPR

UNIT-2

SDH Architectures

SDH integration of TDM signals, SDH electrical and optical signals, SDH Layers, SDH framing, SDH higher layer framing, SDH transport overhead, SDH alarms, multiplexing, virtual containers, SDH network elements, SDH topologies, SDH protection mechanisms, APS, 1+1 protection, 1:1 protection, 1:N protection, Unidirectional v/s bidirectional rings, Path and multiplex section switching, Subnetwork Connection protection rings, DRI, and two-fiber and four-fiber Multiplex section-shared protection rings,

UNIT-3

Wavelength-Division Multiplexing

Wavelength-division multiplexing principles, coarse wavelength-division multiplexing, dense wavelength-division multiplexing, WDM systems, WDM characteristics, impairments to transmission, and dispersion and compensation in WDM systems. Optical link design, factors affecting system design, point-to-point link based on Q-factor and OSNR, OSNR calculations for fiber amplifiers.

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UNIT-4

LABEL DISTRIBUTION PROTOCOLS

The Label Distribution Protocol (LDP), Label Spaces, LDP Sessions, and Hello Adjacencies , The LDP PDU Format, The LDP Message Format, The LDP Messages, The Multi-Protocol Label Switching (MPLS) Architecture, Label Allocation Schemes, The Next Hop Label Forwarding Entry (NHLFE), Explicit Routing, An Example of the Use of the Label Stack, Schemes for Setting up an LSP

TEXT/REFERENCE BOOKS

1. "Optical Network Design and Implementation (Networking Technology)", by Vivek Alwayn, Cisco press
2. "Handbook of Fiber Optic Data Communication", Third Edition: A Practical Guide to Optical Networking by Casimer De Cusatis

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

Upon successful completion of the course, the student will be able to understand

1. SONET and SDH Architecture.
2. Wavelength and time division multiplexing techniques.
3. SONET and SDH frames and their architectures
4. LDP protocol in detail

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B. Tech. Semester – VIII (Computer Science and Engineering)
EMBEDDED SYSTEM (OPEN ELECTIVE-IV)
CODE: OE-CS-416

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objective:

An embedded system is a self-contained unit that have a dedicated purpose within a device. We come across a variety of applications of embedded systems in navigation tools, telecom applications, and networking equipment to name just a few. An Embedded System's Architecture begins with a view of embedded development and how it differs from the other systems. Students learn about setting up a development environment and then move on to the core system architectural concepts, exploring pragmatic designs, boot-up mechanisms, and memory management. They are also explored to programming interface and device drivers to establish communication via TCP/IP and take measures to increase the security of IoT solutions.

UNIT- 1

Embedded Systems: A Pragmatic Approach-Domain definitions, Embedded Linux systems, Low-end 8-bit microcontrollers, Hardware architecture, Understanding the challenge, Multithreading, RAM, Flash memory, Interfaces and peripherals, Asynchronous UART-based serial communication:-SPI -I2C -USB, Connected systems, The reference platform. ARM reference design, The Cortex-M microprocessor

Work Environment and Workflow Optimization: Workflow overview, C compiler, Linker, Build automation, Debugger, Embedded workflow, The GCC toolchain, The cross-compiler, Compiling the compiler, Linking the executable, Binary format conversion, Interacting with the target, The GDB session, Validation, Functional tests, Hardware tools, Testing off-target, Emulators.

UNIT- 2

Architectural Patterns: Configuration management, Revision control, Tracking activities, Code reviews, Continuous integration, Source code organization, Hardware abstraction, Middleware Application code, The life cycle of an embedded project, Defining project steps, Prototyping Refactoring, API and documentation,

The Boot-Up Procedure: The interrupt vector table, Startup code, Reset handler, Allocating the stack, Fault handlers, Memory layout, Building and running the boot code, The makefile, Running the application, Multiple boot stages, Bootloader, Building the image, Debugging a multi-stage system, Shared libraries

UNIT-3

Distributed Systems and IoT Architecture: Network interfaces, Media Access Control, Ethernet, Wi-Fi, Low-Rate Wireless Personal Area Networks (LR-WPAN), LR-WPAN industrial link-layer extensions, 6LoWPAN, Bluetooth, Mobile networks, Low-power Wide Area Networks (LPWANs), Selecting the appropriate network interfaces, The Internet Protocols, TCP/IP implementations, Network device drivers, Running the TCP/IP stack, Socket communication, Mesh networks and dynamic

routing, Transport Layer Security, Securing socket communication, Application protocols, Message protocols, REST architectural pattern, Distributed systems; single points of failure, Summary

UNIT- 4

Low-Power Optimizations: System configuration, Hardware design, Clock management, Voltage control, Low-power operating modes, Deep-sleep configuration, Stop mode, Standby mode, Wake-up intervals, Measuring power, Development boards, Designing low-power embedded applications, Replacing busy loops with sleep mode, Deep sleep during longer inactivity periods, Choosing the clock speed, Power state transitions

Embedded Operating Systems: Real-time application platforms, FreeRTOS, ChibiOS, Low-power IoT systems, Contiki OS, Riot OS, POSIX-compliant systems, NuttX, Frosted, The future of safe embedded systems, Process isolation; Tock, Summary.

TEXT AND REFERENCE BOOKS:

1. Daniele Lacamera, Embedded Systems Architecture, Packt Publishing, May 2018, ISBN: 9781788832502.
2. Raj Kamal, Embedded Systems, TMH, 2004.
3. M.A. Mazidi and J. G. Mazidi, The 8051 Microcontroller and Embedded Systems, PHI, 2004.
4. David E. Simon, An Embedded Software Primer, Pearson Education, 1999.
5. K.J. Ayala, . The 8051 Microcontroller, Penram International, 1991.
6. Rajiv Kapadia, 8051 Microcontroller & Embedded Systems, Jaico Press, 2004.
7. Prasad, Embedded Real Time System, Wiley Dreamtech, 2004.
8. John B. Peatman, Design with PIC Microcontrollers, Pearson Education Asia, 2002.
9. Wayne Wolf, Computers as components: Principles of Embedded Computing System Design, Morgan Kaufman Publication, 2000.
10. Tim Wilmshurst, The Design of Small-Scale embedded systems, Palgrave, 2003.
11. Marwedel, Peter, Embedded System Design, Kluwer Publishers, 2004.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

By the end of the course students will be able to:

1. State the concepts related to embedded systems and their applications
2. Discuss the principles of embedded systems and their applications
3. Apply the principles of embedded design for problem solving.
4. Analyze architectural design patterns and engineering tradeoffs.
5. Design architectural patterns for connected and distributed devices in the IoT

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B. Tech. Semester – VIII (Computer Science and Engineering)
PROJECT-III
CODE: PROJ-CS-402-P

NO OF CREDITS: 5

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INTERNAL MARKS: 40
EXTERNAL MARKS: 160
TOTAL: 200

Note: Students may choose a project based on any subject of Computer Science. The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format. The student will have to present the progress of the work through seminars and progress reports.

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B. Tech. Semester – VIII (Computer Science and Engineering)
SEMINAR
CODE: PROJ-CS-404-P

NO OF CREDITS: 1
L T P
0 0 2

INTERNAL MARKS: 50
EXTERNAL MARKS: 00
TOTAL : 50

The topic of the seminar will be based on emerging technology or any topic related to the field of Computer Science & Engineering. An assigned teacher will evaluate the performance of the students & marks will be awarded accordingly.

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B. Tech. Semester – VIII (Computer Science and Engineering)
GENERAL PROFICIENCY
CODE: GPP-CS-406-P

NO OF CREDITS: 0

L T P
0 0 0

INTERNAL MARKS: 00
EXTERNAL MARKS: 100
TOTAL : 100

General Fitness for Profession: A comprehensive viva-voce of the students will be taken by external examiner and Chairperson of the department (internal examiner) and Class Coordinator at the end of the semester. The evaluation of the student for General Fitness for the Profession will be carried out through viva-voce taken by the committee of examiners

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Manjiv



SCHEME
(Choice Based Credit Scheme)

For
BACHELOR OF TECHNOLOGY PROGRAMME
In
INFORMATION TECHNOLOGY
(w.e.f Session 2024-2025)



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
& INFORMATION TECHNOLOGY**

BPS MAHILA VISHWAVIDYALAY, KHANPUR KALAN

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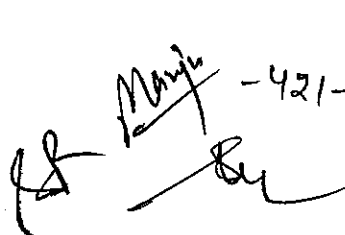
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Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (H.P.)

STRUCTURE OF UNDERGRADUATE ENGINEERING PROGRAM

S.No	Category	Breakup of Credits (Total 160)
1	Humanities and Social Sciences including Management courses	12
2	Basic Science courses	24
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc	20
4	Professional core courses	60
5	Professional Elective courses relevant to chosen specialization/branch	17
6	Open subjects – Electives from other technical and /or emerging subjects	12
7	Project work, seminar and internship in industry or elsewhere	15
8	Mandatory Courses [Induction Program, Environmental Sciences, Constitution of India/ Essence of Indian Traditional Knowledge, Universal Human Valuses] , General Proficiency	Non-credit
9	Total *Minor variation is allowed as per need of the respective disciplines.	160

SEMESTER WISE SUMMARY OF THE PROGRAMME

S.No.	Semester	No. of Contact Hours	Marks	Credits
1.	I	21	500	17
2.	II	26	600	20
3.	III	32	800	24
4.	IV	32	800	24
5.	V	25	700	21
6.	VI	29	700	22
7.	VII	23	750	20
8.	VIII	20	550	12
	Total	208	5400	160



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CREDIT DISTRIBUTION IN THE FIRST YEAR OF UNDERGRADUATE ENGINEERING PROGRAM

	Lecture (L)	Tutorial (T)	Laboratory/ Practical(P)	Total credits(C)
Chemistry -I	3	1	2	5
Physics	3	1	2	5
Maths-1	3	1	0	4
Maths -2	3	1	0	4
Programming for Problem solving	3	0	4	5
English	2	0	2	3
Engineering Graphics & Design	1	0	4	3
Workshop/Practicals	1	0	4	3
Basic Electrical Engg.	3	1	2	5
*Bioinformatics	2	1	0	2
*Engg. Mechanics	3	1	0	4
*Maths-3	3	1	0	4

COURSE CODE AND DEFINITION

Course Code	Definitions
L	Lecture
T	Tutorial
P	Practical
BSC	Basic Science Courses
ESC	Engineering Science Courses
HSMC	Humanities and Social Sciences including Management courses
PCC	Professional core courses
OEC	Open Elective courses
LC	Laboratory course
MC	Mandatory courses
PROJ	Project

MANDATORY INDUCTION PROGRAM (3-WEEKS DURATION)

- Physical activity
- Creative Arts ,Literary
- Universal Human Values
- Proficiency Modules
- Lectures by Eminent People
- Visits to local Areas
- Familiarization to Dept./Branch & Innovations

Dr. Manjiv
-422-

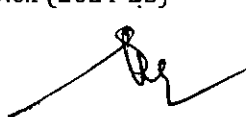
Chairperson
Department of Computer Science &
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HUMANITIES & SOCIAL SCIENCES INCLUDING MANAGEMENT

S.No	Code No.	Course Title	Hours Per week			Total Credits	Semester
			L	T	P		
1	HSMC-101	English	2	0	2	3	2
2	HSMC-201	Humanities –I (Effective Technical Communication)	3	0	0	3	3
3	HSMC-202	Management-I (Organizational Behaviour)	3	0	0	3	4
4	HSMC-301	Humanities –II (Economics for Engineers)	3	0	0	3	5
Total Credits						12	

BASIC SCIENCE COURSES [BSC]

S.No	Code No.	Course	Hours Per Week			Total Credits	Semester
			L	T	P		
1	BSC-101	Physics(Semi Conductor Physics)	3	1	2	5	1
2	BSC-103	Mathematics –I (Calculus & Linear Algebra)	3	1	0	4	1
3	BSC-104	Mathematics –II (Probability & Statistics)	3	1	0	4	2
4	BSC-102	Chemistry-I	3	1	2	5	2
5	BSC-201	Mathematics –III (Differential Calculus)	3	1	0	4	3
6	BSC-401	Bioinformatics	2	1	0	2	7
Total Credits						24	


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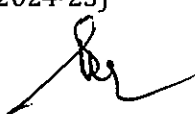

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ENGINEERING SCIENCE COURSE [ESC]


S.No.	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	ESC- 101	Basic Electrical Engineering	3	1	2	5	1
2	ESC-102-P	Engineering Graphics & Design	1	0	4	3	1
3	ESC-103	Programming for Problem Solving	3	0	4	5	2
4	ESC-104-P	Workshop/Manufacturing Practices	1	0	4	3	2
5	ESC-203	Digital Electronics	3	0	2	4	3
Total Credits						20	

PROFESSIONAL CORE COURSES [PCC]

S.No.	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	PCC-CS 201	Data Structure & Algorithms	3	0	4	5	3
2	PCC-CS 203	Computer Organization & Architecture	3	0	0	3	3
3	PCC-CS 205	Object Oriented Programming with C++	3	0	4	5	3
4	PCC-CS 202	Discrete Mathematics	3	1	0	4	4
5	PCC-CS 204	Software Engineering	3	0	0	3	4
6	PCC-CS 206	Operating System	3	0	4	5	4
7	PCC-CS 208	Design and Analysis of Algorithms	3	0	0	3	4
8	PCC-CS 208P	Hardware Lab/MATLAB	0	0	2	1	4
9	PCC-CS 210	Python	3	0	4	5	4
10	PCC-CS-301	Database Management System	3	0	4	5	5
11	PCC-IT -303	Multimedia and Technology	3	0	0	3	5
12	PCC-CS-305	Java Programming	3	0	4	5	5
13	PCC-CS-307	Machine Learning	3	0	0	3	5
14	PCC-IT- 302	Web & Internet Technology	3	0	4	5	6
15	PCC-CS 304	Computer Networks	3	0	4	5	6
Total Credits						60	



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PROFESSIONAL ELECTIVE COURSES [PEC]

S.No.	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	PEC	Elective-I	3	0	2	4	6
2	PEC	Elective-II	3	0	0	3	6
3	PEC	Elective-III	3	0	2	4	7
4	PEC	Elective-IV	3	0	0	3	7
5	PEC	Elective-V	3	0	0	3	8
Total Credits						17	

OPEN ELECTIVE COURSES [OEC]

S.No	Code No.	Course Title	Hours Per Week			Total Credits	Semester
			L	T	P		
1	OEC	Open Elective-I	3	0	0	3	6
2	OEC	Open Elective-II	3	0	0	3	7
3	OEC	Open Elective-III	3	0	0	3	7
4	OEC	Open Elective-IV	3	0	0	3	8
Total Credits						12	

PROJECT/ SEMINAR/ INDUSTRIAL TRAINING

S.NO	CODE NO.	COURSE TITLE	HOURS PER WEEK			TOTAL CREDITS	SEMESTER
			L	T	P		
1	PROJ-IT-300-P	PROJECT I	0	0	4	2	6
2	PROJ-IT-401-P	PROJECT II	0	0	4	2	7
3	PROJ-IT-402-P	PROJECT III	0	0	12	5	8
4	PROJ-IT-403-P	SEMINAR	0	0	2	1	7
5	PROJ-IT-404-P	SEMINAR	0	0	2	1	8
6	IPT-IT-301-P	INDUSTRIAL PRACTICAL TRAINING-I	0	0	0	2	5
7	IPT-IT-405-P	INDUSTRIAL TRAINING-II	0	0	0	2	7
TOTAL CREDITS						15	



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**Department of Computer Science & Engineering & Information
Technology**

Course Curriculum & Scheme of Examinations

For

B.Tech. (Information Technology)

(w.e.f Academic Session 2024- 2025)

Semester - 1

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC - 101	Semi Conductor Physics	3	1	0	4	20	80	100
2.	BSC	BSC - 103	Mathematics -I : Calculus and Linear Algebra	3	1	0	4	20	80	100
3.	ESC	ESC - 101	Basic Electrical Engineering	3	1	0	4	20	80	100
Lab										
4.	BSC	BSC - 101-P	Physics Lab	0	0	2	1	10	40	50
5.	ESC	ESC - 102-P	Engineering Graphics & Design	1	0	4	3	20	80	100
6.	ESC	ESC - 101-P	Basic Electrical Engineering Lab	0	0	2	1	10	40	50
7.			Induction Program (Mandatory)				Non Credit			
Total				10	3	8	17	100	400	500

Total Contact Hours =21

Total Credit= 17

Note: 1. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

2. Every student has to participate in the MANDATORY INDUCTION PROGRAM OF ONE/THREE WEEK DURATION at the start of regular teaching of first semester. It comprises physical activity, creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Deptt. Branch & Innovations. Classes for 1st semester will commence after completion of Induction Program.

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Chairperson
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 BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sunepal (H.R.)

**Department of Computer Science & Engineering & Information
Technology**

Course Curriculum & Scheme of Examinations

For

B.Tech. (Information Technology)

(w.e.f Academic Session 2024- 2025)

Semester - 2

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC-102	Chemistry – I	3	1	0	4	20	80	100
2.	BSC	BSC - 104	Mathematics –II : Probability and Statistics	3	1	0	4	20	80	100
3.	ESC	ESC - 103	Programming for problem solving	3	0	0	3	20	80	100
4.	HSMC	HSMC - 101	English	2	0	0	2	10	40	50
Lab										
5.	HSMC	HSMC -101-P	English Language Lab	0	0	2	1	10	40	50
6.	ESC	ESC - 104-P	Workshop /Manufacturing Practices	1	0	4	3	20	80	100
7.	ESC	ESC - 103-P	Programming for problem solving Lab	0	0	4	2	10	40	50
8.	BSC	BSC - 102-P	Chemistry Lab	0	0	2	1	10	40	50
Total				12	2	12	20	120	480	600

Total Contact Hours =26

Total Credit= 20

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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 Chairperson
 Department of Computer Science &
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**Department of Computer Science & Engineering & Information
Technology**

Course Curriculum & Scheme of Examinations

For

**B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)**

Semester - 3

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-201	Data Structure & Algorithms	3	0	0	3	20	80	100
2.	PCC	PCC-CS-203	Computer Organization & Architecture	3	0	0	3	20	80	100
3.	PCC	PCC-CS-205	Object Oriented Programming with C++	3	0	0	3	20	80	100
4.	ESC	ESC-203	Digital Electronics	3	0	0	3	20	80	100
5.	BSC	BSC-201	Mathematics- III (Calculus and Ordinary Differential Equations)	3	1	0	4	20	80	100
6.	HSM C	HSMC-201	Humanities –I (Effective Technical Communication)	3	0	0	3	20	80	100
7.	MC	MC-201	Environmental Science	3	0	0	0	10	40	50
Lab										
8.	ESC	ESC-203-P	Digital Electronics Lab	0	0	2	1	10	40	50
9.	PCC	PCC-CS-201 –P	Data Structure & Algorithms Lab	0	0	4	2	10	40	50
10.	PCC	PCC-CS-205 –P	Object Oriented Programming with C++ Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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Chairperson
Department of Computer Science &
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BPS Mahila Vishwavidyalaya, Khanpur Kalen, Sonapat (HR.)

Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations

For
B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)

Semester-4

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-202	Discrete Mathematics	3	1	0	4	20	80	100
2.	PCC	PCC-CS-204	Software Engineering	3	0	0	3	20	80	100
3.	PCC	PCC-CS-206	Operating System	3	0	0	3	20	80	100
4.	PCC	PCC-CS-208	Design & Analysis of Algorithms	3	0	0	3	20	80	100
5.	PCC	PCC-CS-210	Python	3	0	0	3	20	80	100
6.	HSMC	HSMC-202	Management – I (Organizational Behavior)	3	0	0	3	20	80	100
7.	MC	MC-303	Universal Human Values	3	0	0	0	10	40	50
Lab										
8.	PCC	PCC-CS-206- P	Operating System LAB	0	0	4	2	10	40	50
9.	PCC	PCC-CS-208- P	Hardware Lab/ MATLAB	0	0	2	1	10	40	50
10.	PCC	PCC-CS-210- P	Python Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: 1). 4-6 weeks training will be held after fourth semester. However, Viva-Voce will be conducted in the fifth semester.

2). Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

w.e.f (2024-25)

Page 10

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Chairperson
 Department of Computer Science &
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 BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR)

Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)
Semester -5

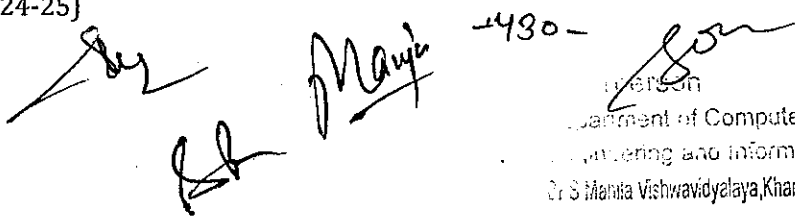
S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-301	Database Management Systems	3	0	0	3	20	80	100
2.	PCC	PCC-IT-303	Multimedia and Technologies	3	0	0	3	20	80	100
3.	PCC	PCC-CS-305	Java Programming	3	0	0	3	20	80	100
4.	PCC	PCC-CS-307	Machine Learning	3	0	0	3	20	80	100
5.	HSMC	HSMC-301	Humanities- II (Economics for Engineers)	3	0	0	3	20	80	100
6.	MC	MC -301	Constitution of India/Essence of Indian Traditional Knowledge	2	0	0	0	10	40	50
Lab										
7.	PCC	PCC-CS-301-P	Database Management Systems LAB	0	0	4	2	10	40	50
8.	PCC	PCC-CS-305- P	Java Programming LAB	0	0	4	2	10	40	50
9.	Project	IPT-IT-301-P	Industrial Practical Training-I	0	0	0	2	-	50	50
Total				17	0	8	21	130	570	700

Total Contact Hours =25

Total Credit= 21

Note: 1. Industrial Practical Training-I was conducted after fourth semester. However, Viva-Voce for evaluation of Practical Training will be conducted in this semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.



 Department of Computer Science & Engineering and Information Technology
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Department of Computer Science & Engineering & Information Technology

Course Curriculum & Scheme of Examinations

For

B.Tech. (Information Technology)

(w.e.f Academic Session 2024- 2025)

Semester - 6

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-IT-302	Web and Internet Technology	3	0	0	3	20	80	100
2.	PCC	PCC-CS-304	Computer Networks	3	0	0	3	20	80	100
3.	PEC	PEC	Elective-I	3	0	0	3	20	80	100
4.	PEC	PEC	Elective-II	3	0	0	3	20	80	100
5.	OEC	OEC	Open Elective-I	3	0	0	3	20	80	100
Lab										
6.	Project	PROJ-CS-300-P	Project-I	0	0	4	2	10	40	50
7.	PCC	PCC-IT-302-P	Web and Internet Technology Lab	0	0	4	2	10	40	50
8.	PCC	PCC-CS-304-P	Computer Networking Lab	0	0	4	2	10	40	50
9.	PEC	PEC	Electives-I Course Lab	0	0	2	1	10	40	50
Total				15	0	14	22	140	560	700

Total Contact Hours =29

Total Credit= 22

Note: 1. 4-6 weeks industrial practical training –II training will be held after sixth semester. However, Viva- Voce will be conducted in the seventh semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective – I	Elective – I Lab	Elective –II	Open Elective- I
1.	PEC- CS-306 Digital Image Processing	PEC- CS-306-P Digital Image Processing Lab	PEC- IT-314 Theory of Computation	OE-CS-322 Soft Skills & Interpersonal Communication
2.	PEC-CS-308 Artificial Intelligence	PEC-CS-308-P Artificial Intelligence Lab	PEC-CS-316 High Speed Network	OE-CS-324 Cyber Law and Ethics
3.	PEC-CS-310 Computer Graphics	PEC-CS-310-P Computer Graphics Lab	PEC-CS-318 Soft Computing	OE-CS-326 Data Analytics using R
4.	PEC-CS-312 Cloud Computing	PEC-CS-312-P Cloud Computing Lab	PEC-CS-320 Data Mining	OE-CS-328 Microprocessor and Interfacing

w.e.f (2024-25)

Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)
Semester -7

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-III	3	0	0	3	20	80	100
2.	PEC	PEC	Elective-IV	3	0	0	3	20	80	100
3.	OEC	OEC	Open Elective-II	3	0	0	3	20	80	100
4.	OEC	OEC	Open Elective-III	3	0	0	3	20	80	100
5.	BSC	BSC-401	Bioinformatics	2	1	0	2	20	80	100
Lab										
6.	Project	PROJ-IT-401-P	Project-II	0	0	4	2	10	40	50
7.	Project	PROJ-IT-403-P	Seminar	0	0	2	1	50	-	50
8.	Project	IIT-IT-405-P	Industrial Practical Training- II	0	0	0	2	-	100	100
9	PEC	PEC	Electives-III Course Lab	0	0	2	1	10	40	50
Total				14	1	08	20	170	580	750

Total Contact Hours =23

Total Credit= 20

Note: 1. Practical training was conducted after sixth semester. However, Viva-Voce for evaluation of Practical Training will be conducted in this semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her

S.No	Elective –III	Elective –III Labs	Elective – IV	Open Elective- II	Open Elective - III
1.	PEC- CS-401 Information Security	PEC- CS-401 -P Information Security Lab	PEC- CS-409 Queuing Theory and Modeling	OE-CS-417 Human Resource Management	OE-CS-425 Financial Management
2.	PEC-CS-403 Wireless and Mobile Communication	PEC-CS-403-P Wireless and Mobile Communication Lab	PEC-CS-411 Internet of Things	OE-CS-419 ICT for Development	OE-CS-427 E-Commerce & Entrepreneurship
3.	PEC-CS-405 Advanced Operating Systems	PEC-CS-405 -P Advanced Operating Systems Lab	PEC-CS-413 Speech and Natural Language Processing	OE-CS-421 Intellectual Property Rights	OE-CS-429 Basics of Operation Research
4.	PEC-IT-407 Principles of Compiler Design	PEC-IT-407-P Principles of Compiler Design Lab	PEC-CS-415 Optimization Techniques	OE-CS-423 International Business Environment	OE-CS-431 Renewable Energy System

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For

B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)

Semester -8

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-V	3	0	0	3	20	80	100
2.	OEC	OEC	Open Elective-IV	3	0	0	3	20	80	100
Lab										
3.	Project	PROJ-IT-402-P	Project-III	0	0	12	5	40	160	200
4.	Project	PROJ-IT-404-P	Seminar	0	0	2	1	50	0	50
5.	MC	GPP-IT-406-P	General Proficiency	0	0	0	0	0	100	100
Total				6	0	14	12	130	420	550

Total Contact Hours =20

Total Credit=12

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

2. **General Fitness for Profession:** A comprehensive viva-voce of the students will be taken by external examiner and Chairperson of the department (internal examiner) and Class Coordinator at the end of the semester. The evaluation of the student for General Fitness for the Profession will be carried out through viva-voce taken by the committee of examiners.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective – V	Open Elective- IV
1.	PEC- CS-402 Block Chain	OE-CS-410 Economic policies in India
2.	PEC-CS-404 Deep Learning	OE-CS-412 Quality Engineering
3.	PEC-CS-406 Neural Networks	OE-CS-414 Optical Network Design
4.	PEC-CS-408 Software Testing and Quality Assurance	OE-CS-416 Embedded System

Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations

For

B.Tech. (Information Technology)

(w.e.f Academic Session 2024- 2025)

Semester - 1

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC - 101	Semi Conductor Physics	3	1	0	4	20	80	100
2.	BSC	BSC - 103	Mathematics –I : Calculus and Linear Algebra	3	1	0	4	20	80	100
3.	ESC	ESC - 101	Basic Electrical Engineering	3	1	0	4	20	80	100
Lab										
4.	BSC	BSC - 101-P	Physics Lab	0	0	2	1	10	40	50
5.	ESC	ESC - 102-P	Engineering Graphics & Design	1	0	4	3	20	80	100
6.	ESC	ESC - 101-P	Basic Electrical Engineering Lab	0	0	2	1	10	40	50
7.			Induction Program (Mandatory)				Non Credit			
Total				10	3	8	17	100	400	500

Total Contact Hours =21

Total Credit= 17

Note: 1. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

2. Every student has to participate in the MANDATORY INDUCTION PROGRAM OF ONE/THREE WEEK DURATION at the start of regular teaching of first semester. It comprises physical activity, creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Deptt. Branch & Innovations. Classes for Ist semester will commence after completion of Induction Program.



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for
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Department of Computer Science &
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BPS Mahila Vishwavidyalaya, Kherpur Kalan, Sonapat

B. Tech. Semester – I (Information Technology)
SEMI CONDUCTOR PHYSICS
CODE: BSC - 101

NO. OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Prerequisite: "Introduction to Quantum Mechanics" Desirable.

Course objectives:-

1. To give knowledge about semiconductor physics and discuss working and applications of basic devices, including p-n junctions, BJTs and FETs.

UNIT- 1

Electronic materials (8): Free electron theory, Density of states and energy band diagrams, Kronig-Penny model (to introduce origin of band gap), Energy bands in solids, E-k diagram, Direct and indirect bandgaps, Types of electronic materials: metals, semiconductors, and insulators, Density of states, Occupation probability, Fermi level, Effective mass, Phonons.

UNIT- 2

Semiconductors (10): Intrinsic and extrinsic semiconductors, Dependence of Fermi level on carrier concentration and temperature (equilibrium carrier statistics), Carrier generation and recombination, Carrier transport: diffusion and drift, p-n junction, Metal-semiconductor junction (Ohmic and Schottky), Semiconductor materials of interest for optoelectronic devices.

UNIT-3

Light-semiconductor interaction (10): Optical transitions in bulk semiconductors: absorption, spontaneous emission, and stimulated emission; Joint density of states, Density of states for photons, Transition rates (Fermi's golden rule), Optical loss and gain; Photovoltaic effect, Exciton, Drude model.

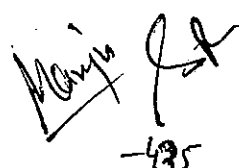
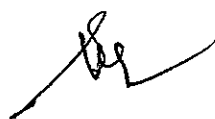
Measurements (4): Four-point probe and van der Pauw measurements for carrier density, resistivity, and hall mobility; Hot-point probe measurement, capacitance-voltage measurements, parameter extraction from diode I-V characteristics,

UNIT- 4


Engineered semiconductor materials (8): Density of states in 2D, 1d and 0D (qualitatively). Practical examples of low-dimensional systems such as quantum wells, wires, and dots: design, fabrication, and characterization techniques. Heterojunctions and associated band-diagrams DLTS, band gap by UV-Vis spectroscopy, absorption/transmission.

Suggested Text books/References:

1. J. Singh, Semiconductor Optoelectronics: Physics and Technology, McGraw-Hill Inc. (1995).
2. B. E. A. Saleh and M. C. Teich, Fundamentals of Photonics, John Wiley & Sons, Inc., (2007).
3. S. M. Sze, Semiconductor Devices: Physics and Technology, Wiley (2008).



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4. A. Yariv and P. Yeh, Photonics: Optical Electronics in Modern Communications, Oxford University Press, New York (2007).

5. P. Bhattacharya, Semiconductor Optoelectronic Devices, Prentice Hall of India (1997).

6. Online course: "Semiconductor Optoelectronics" by M R Shenoy on NPTEL


7. Online course: "Optoelectronic Materials and Devices" by Monica Katiyar and Deepak Gupta on NPTEL

Course outcomes:-

1. Students will be able to understand free electron gas models in solids.
2. Students became familiar with Mechanism of semi conductors and their combination with metals.
3. Students became familiar with the mechanism of light and semiconductor interaction.
4. Students are able to appreciate various experiments to measure charge density, Resistivity hall , mobility and I-V characteristics of semiconductors.
5. Students would be able to understand the Basics of Nonmaterial's.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


Manjiv J.S.
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Chairperson
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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – I (Information Technology)
MATHEMATICS- I: CALCULUS AND LINEAR ALGEBRA
CODE: BSC -103

NO OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. To understand the basic mathematical ideas and tools which are at the core of any engineering course.
2. To understand the basic techniques in matrix theory which are essential for analysing linear systems

UNIT- 1

Calculus: Evolutes and involutes; Evaluation of definite and improper integrals; Beta and Gamma functions and their properties; Applications of definite integrals to evaluate surface areas and volumes of revolutions.

Calculus: Rolle's Theorem, Mean value theorems, Taylor's and Maclaurin theorems with remainders; indeterminate forms and L'Hospital's rule; Maxima and minima.

UNIT- 2

Matrices (in case vector spaces is to be taught)

Matrices, vectors: addition and scalar multiplication, matrix multiplication; Linear systems of equations, linear Independence, rank of a matrix, determinants, Cramer's Rule, inverse of a matrix, Gauss elimination and Gauss-Jordan elimination.

UNIT- 3

Vector spaces (Prerequisite Module 3-Matrices)

Vector Space, linear dependence of vectors, basis, dimension; Linear transformations (maps), range and kernel of a linear map, rank and nullity, Inverse of a linear transformation, rank nullity theorem, composition of linear maps, Matrix associated with a linear map.

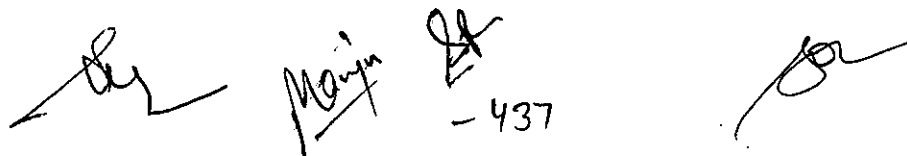
UNIT- 4

Vector spaces (Prerequisite Module 3 –Matrices & Module-4 Vector spaces

Eigenvalues, eigenvectors, symmetric, skew-symmetric, and orthogonal Matrices, eigenbases. Diagonalization; Inner product spaces, Gram-Schmidt orthogonalization.

Suggested Text/Reference Books:

1. G.B. Thomas and R.L. Finney, Calculus and Analytic geometry, 9th Edition, Pearson, Reprint, 2002.
2. Erwin Kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons, 2006.
3. D. Poole, Linear Algebra: A Modern Introduction, 2nd Edition, Brooks/Cole, 2005.
4. Veerarajan T., Engineering Mathematics for first year, Tata McGraw-Hill, New Delhi, 2008.
5. Ramana B.V., Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th Reprint, 2010.
6. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications,


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Reprint, 2010.

7. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 35th Edition, 2000.


8. V. Krishnamurthy, V.P. Mainra and J.L. Arora, An introduction to Linear Algebra, Affiliated East-West press, Reprint 2005.

Course Outcomes

1. To apply differential and integral calculus to notions of curvature and to improper integrals. Apart from various applications, they will have a basic understanding of Beta and Gamma functions.
2. The essential tools of matrices and linear algebra including linear transformations, eigenvalues, diagonalization and orthogonalization.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

 
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Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khatanpur Kalan, Sonapat (HR.)

B. Tech. Semester – I (Information Technology)
BASIC ELECTRICAL ENGINEERING
CODE: ESC- 101

NO. OF CREDITS: 4

L T P
3 1 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL: 100

Pre-requisite: Basic understanding of Physics.

Course Objective: The aim of this course is to:

- To analyze DC and AC circuits.
- To analyze AC series and parallel circuits.
- To understand fundamental knowledge of electric machines.
- To assimilate elementary knowledge of electric installations.

UNIT- 1

DC Circuits (10 hours)

Electrical circuit elements (R, L and C), voltage and current sources, Kirchoff current and voltage laws, Mesh and nodal analysis of simple circuits with dc excitation, Superposition theorem, Thevenin's theorem, Norton's theorem, Maximum power transfer theorem, Star to Delta conversion and vice versa, Time-domain analysis of first-order RL and RC circuits.

UNIT- 2

AC Circuits (10 hours)

Representation of sinusoidal waveforms, Peak and RMS values, phasor representation, real power, reactive power, apparent power, power factor, Analysis of single-phase ac circuits consisting of R, L, C, RL, RC, RLC combinations (series and parallel), Resonance (series and parallel circuits). Three-phase balanced circuits, voltage and current relations in star and delta connections, Measurement of Power and Power Factor using two wattmeter method.

UNIT- 3

Electrical Machines (12 hours)

Construction and working principle of Transformer, Ideal and practical transformer, phasor diagram and equivalent circuit of transformer, losses in transformers, voltage regulation and efficiency, Autotransformer Generation of rotating magnetic fields, Construction and working of a three-phase induction motor, Applications of three phase induction motor, Construction and working of DC machine, Speed control of dc machine.


UNIT- 4

Electrical Instruments and LT Installations (10 hours)

Electrical Instruments: Permanent Magnet Moving Coil, Electrodynamometer & Moving Iron type instruments, Induction type Energy meter.

Components of LT Switchgear: Switch Fuse Unit (SFU), MCB, ELCB, MCCB, Types of Wires and Cables, Earthing, Elementary calculations for energy consumption, power factor improvement.


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Suggested Text / Reference Books:

1. D. P. Kothari and I. J. Nagrath, "Basic Electrical Engineering", Tata McGraw Hill, 2010.
2. Del Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.
3. D. C. Kulshreshtha, "Basic Electrical Engineering", McGraw Hill, 2009.
4. L. S. Bobrow, "Fundamentals of Electrical Engineering", Oxford University Press, 2011.
5. E. Hughes, "Electrical and Electronics Technology", Pearson, 2010.
6. B. L. Theraja & A. K. Theraja, "Basic Electrical Engineering", Volume 1, S. Chand, 2015
7. V. D. Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.

Course Outcomes: At the end of the course, students will be able to:

1. Apply the concepts of KVL/KCL and network theorems in solving DC circuits.
2. Identify the applications of network theorems and resonance phenomenon in relevant area.
3. Analyze the steady state behaviour of single phase and three phase AC electrical circuits.
4. Identify the application areas of a single phase two winding transformer as well as an auto transformer and calculate their efficiency. Also, identify the connections of a three phase transformer.
5. Understand the fundamentals of Electrical circuits, Electrical machines, measuring instruments and LT installation.
6. Assess the type of electrical machines, instruments and LT switchgear to be used for a particular application.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Dr. Manju
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Dr. Son
Chairperson
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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (H.R.)

B. Tech. Semester – I (Information Technology)

PHYSICS LAB

CODE: BSC- 101- P

NO OF CREDITS: 1

L T P

0 0 3

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

Laboratory Objectives:-

1. To Impart technology aspects of applied physics
2. To lay foundation of practical application of physics in engineering.
3. To apply Basics Physics concepts in a broader sense.
4. Students will be able to understand the new development, research and breakthrough efficiency in engineering physics.
5. Understand and explain the various physics related problems in engineering field.

Pre-requisites (if any) - Basics of Statistics.

List of Experiments


1. To find the capacitance of unknown capacitor using flashing and quenching of Argon bulb.
2. To study the photo conducting cell and hence to verify the inverse square law.
3. To study the characteristics of a solar cell and to find the fill factor.
4. To find the value of Planck's constant by using a photo electric cell.
5. To find the value of Hall Co-efficient of semi-conductor.
6. To study the V-I characteristics of a p-n diode.
7. To find the band gap of intrinsic semi-conductor using four probe method.
8. To convert given galvanometer into an ammeter and voltmeter of given range.
9. To determine the wavelength of sodium light by Newton's rings experiment.
10. To find the Specific rotation of sugar solution by using Polarimeter.
11. To find the refractive of a material of a given prism using spectrometer.
12. To study rectification properties of a semiconductor.
13. Study of Characteristics of p-i-n and avalanche photo diode detectors.
14. To determine the resistivity of a semiconductor by four probe method.
15. To find the wavelength of various colours of white light with the help of a plane transmission diffracting grating

Laboratory Outcomes:-

1. Students would be able to determine the wavelength of white light by using diffraction grating.
2. Students will understand to determine the specific rotation of a canesugar solution.
3. Characterise the semiconductor materials by determining band gap & resistivity using four please method.
4. Students will be able to determine capacitance using flashing & Quenching of argon bulb.
5. Student learn about V-I characteristics of P-N Diode.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.


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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – I (Information Technology)

BASIC ELECTRICAL ENGINEERING LAB

CODE: ESC -101- P

NO OF CREDITS: 1

L T P

0 0 2

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

Laboratory Objective:

1. To get an exposure to common electrical components and their ratings.
2. To understand the DC and AC electrical circuits.
3. To analyze various laws and theorems in DC circuits.
4. To get the fundamental knowledge of electric machines.

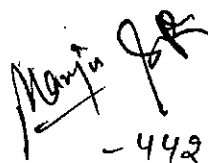
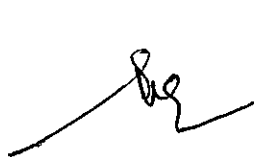
Pre-requisite: 10+2 Physics.


List of experiments:

1. To demonstrate the various basic safety precautions and use of instruments like voltmeter, ammeter, multi-meter, oscilloscope, Real-life resistors, capacitors and inductors in Electrical Engineering Laboratories.
2. To verify the KVL and KCL.
3. To verify the Thevenin's and Norton's Theorems.
4. To verify the Superposition theorem.
5. To study frequency response of a series R-L-C circuit and determine resonant frequency and Q-factor for various values of R-L-C.
6. To study frequency response of a parallel R-L-C circuit and determine resonant frequency and Q-factor for various values of R-L-C.
7. To observe steady state and transient time response of R-L, R-C and R-L-C circuits to a step change in voltage.
8. To measure the power and power factor using three voltmeter / three ammeter method in a single phase AC circuit.
9. To measure the power and power factor for a balanced 3 phase load by two wattmeter method.
10. To perform the direct load test of a Transformer and plot load current versus (a) terminal voltage (b) efficiency.
11. To measure iron loss in a single phase transformer and to find the equivalent circuit parameters by performing open circuit and short circuit.
12. To study various types of meters such as: ammeter, voltmeter, Wattmeter, Multimeter, Energy Meter.
13. To demonstrate the cut-set of dc machine (Commutator-brush arrangement), induction machine.
14. To perform the torque-speed characteristics of a separately excited DC Motor.
15. To perform the open circuit and short circuit tests of a three phase Induction motor.

References and Suggested Text Books:

1. D. P. Kothari and I. J. Nagrath, "Basic Electrical Engineering", Tata McGraw Hill, 2010.



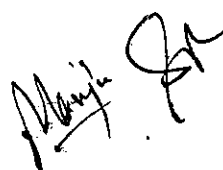

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2. Del Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.
3. D. C. Kulshreshtha, "Basic Electrical Engineering", McGraw Hill, 2009.
4. L. S. Bobrow, "Fundamentals of Electrical Engineering", Oxford University Press, 2011.
5. E. Hughes, "Electrical and Electronics Technology", Pearson, 2010.
6. B. L. Theraja & A. K. Theraja, "Basic Electrical Engineering", Volume 1, S. Chand, 2015
7. V. D. Toro, "Electrical Engineering Fundamentals", Prentice Hall India, 1989.
8. Kirchoff's laws: Virtual lab link: <http://vlab.amrita.edu/?sub=3&brch=75&sim=217&cnt=2>.
9. Thevenin Theorem: Virtual lab link: <https://vlab.amrita.edu/?sub=1&brch=75&sim=313&cnt=1>
10. RLC series resonance: Virtual lab link: <https://vlab.amrita.edu/?sub=1&brch=75&sim=330&cnt=1>

Laboratory Outcomes: At the end of the course, students will be able to:

1. Perform experimental work and gain technical knowledge of electrical circuits, Electrical machines and measuring instruments along with safety measures.
2. Conduct experiments illustrating the application of KVL/KCL and network theorems to DC electrical circuits.
3. Demonstrate the behavior of AC circuits connected to single phase AC supply and measure power in single phase as well as three phase electrical circuits.
4. Evaluate the performance of transformer and electrical machines under various operating conditions.
5. Organize reports based on experiments performed with effective demonstration and analysis of results.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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B. Tech. Semester – I (Information Technology)
ENGINEERING GRAPHICS & DESIGN (THEORY & LAB)
CODE: ESC- 102- P

NO OF CREDITS: 3
L T P
1 0 4

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL: 100

Course Objectives:

1. To prepare the students to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
2. To prepare students to communicate effectively
3. To prepare students to use the techniques, skills, and modern engineering tools necessary forengineering practice.

Engineering Graphics & Design [A total of 10 lecture hours & 60 hours of lab.]

Traditional Engineering Graphics(5 hrs):

Principles of Engineering Graphics; Orthographic Projection; Descriptive Geometry; Drawing Principles; Isometric Projection; Surface Development; Perspective; Reading a Drawing; Sectional Views; Dimensioning & Tolerances; True Length, Angle; intersection, Shortest Distance.

Computer Graphics(5 hrs):

Engineering Graphics Software; -Spatial Transformations; Orthographic Projections; Model Viewing; Co-ordinate Systems; Multi-view Projection; Exploded Assembly; Model Viewing; Animation; Spatial Manipulation; Surface Modelling; Solid Modelling; Introduction to Building Information Modelling (BIM)

(Except the basic essential concepts, most of the teaching part can happen
Concurrently in the laboratory)

Unit 1

Introduction to Engineering Drawing (12 hrs):

Principles of Engineering Graphics and their significance, usage of Drawing instruments, lettering, Conic sections including the Rectangular Hyperbola (General method only); Cycloid, Epicycloid, Hypocycloid and Involute; Scales – Plain, Diagonal and Vernier Scales; Orthographic Projections covering, Principles of Orthographic Projections-Conventions - Projections of Points and lines inclined to both planes; Projections of planes inclined Planes - Auxiliary Planes

Unit 2

Projections of Regular Solids (16 hrs):

Inclined to both the Planes- Auxiliary Views; Draw simple annotation, dimensioning and scale. Floor plans that include: windows, doors, and fixtures such as WC, bath, sink, shower, etc. Sections and Sectional Views of Right Angular Solids covering, Prism, Cylinder, Pyramid, Cone – Auxiliary Views; Development of surfaces of Right Regular Solids - Prism, Pyramid, Cylinder and Cone; Draw the sectional orthographic views of geometrical solids, objects from industry and dwellings (foundation to slab only), Isometric Projections covering, Principles of Isometric projection – Isometric Scale,

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Isometric Views, Conventions; Isometric Views of lines, Planes, Simple and compound Solids; Conversion of Isometric Views to Orthographic Views and Vice-versa, Conventions.

Unit 3

Overview of Computer Graphics (16 Hrs):

Listing the computer technologies that impact on graphical communication, Demonstrating knowledge of the theory of CAD software [such as: The Menu System, Toolbars (Standard, Object Properties, Draw, Modify and Dimension), Drawing Area (Background, Crosshairs, Coordinate System), Dialog boxes and windows, Shortcut menus (Button Bars), The Command Line (where applicable), The Status Bar, Different methods of zoom as used in CAD, Select and erase objects.; Isometric Views of lines, Planes, Simple and compound Solids]; Customisation & CAD Drawing consisting of set up of the drawing page and the printer, including scale settings, Setting up of units and drawing limits; ISO and ANSI standards for coordinate dimensioning and tolerancing; Orthographic constraints, Snap to objects manually and automatically; Producing drawings by using various coordinate input entry methods to draw straight lines, Applying various ways of drawing circles.

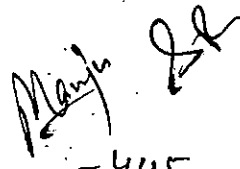
Unit 4

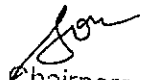
Annotations, layering & other functions (16 hrs):

Applying dimensions to objects, applying annotations to drawings; Setting up and use of Layers, layers to create drawings, Create, edit and use customized layers; Changing line lengths through modifying existing lines (extend/lengthen); Printing documents to paper using the print command; orthographic projection techniques; Drawing sectional views of composite right regular geometric solids and project the true shape of the sectioned surface; Drawing annotation, Computer-aided design (CAD) software modeling of parts and assemblies. Parametric and non-parametric solid, surface, and wireframe models. Part editing and two-dimensional documentation of models. Planar projection theory, including sketching of perspective, isometric, multiview, auxiliary, and section views. Spatial visualization exercises. Dimensioning guidelines, tolerancing techniques; dimensioning and scale multi views of dwelling; Demonstration of a simple team design project that illustrates Geometry and topology of engineered components: creation of engineering models and their presentation in standard 2D blueprint form and as 3D wire-frame and shaded solids; meshed topologies for engineering analysis and tool-path generation for component manufacture; geometric dimensioning and tolerancing; Use of solid-modeling software for creating associative models at the component and assembly levels; floor plans that include: windows, doors, and fixtures such as WC, bath, sink, shower, etc. Applying colour coding according to building drawing practice; Drawing sectional elevation showing foundation to ceiling; Introduction to Building Information Modelling (BIM).

Suggested Text/Reference Books:

1. Bhatt N.D., Panchal V.M. & Ingle P.R., (2014), Engineering Drawing, Charotar Publishing House
2. Shah, M.B. & Rana B.C. (2008), Engineering Drawing and Computer Graphics, Pearson Education
3. Agrawal B. & Agrawal C. M. (2012), Engineering Graphics, TMH Publication
4. Narayana, K.L. & P Kannaiyah (2008), Text book on Engineering Drawing, Scitech Publishers
5. (Corresponding set of) CAD Software Theory and User Manuals



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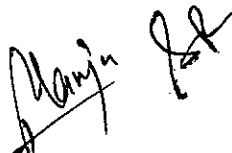
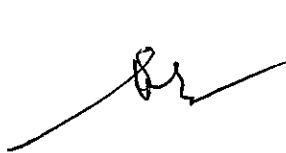

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Course Outcomes


All phases of manufacturing or construction require the conversion of new ideas and design concepts into the basic line language of graphics. Therefore, there are many areas (civil, mechanical, electrical, architectural and industrial) in which the skills of the CAD technicians play major roles in the design and development of new products or construction. Students prepare for actual work situations through practical training in a new state-of-the-art computer designed CAD laboratory using engineering software.

The student will learn:

- Introduction to engineering design and its place in society
- Exposure to the visual aspects of engineering design
- Exposure to engineering graphics standards.
- Exposure to solid modelling
- Exposure to computer-aided geometric design
- Exposure to creating working drawings
- Exposure to engineering communication



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B. Tech. Semester – I (Information Technology)
MANDATORY INDUCTION PROGRAM (3-WEEKS DURATION)

- Physical activity
- Creative Arts
- Universal Human Values
- Literary
- Proficiency Modules
- Lectures by Eminent People
- Visits to local Areas
- Familiarization to Dept./Branch & Innovations

A Guide to Induction Program

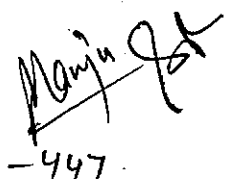
1 Introduction

(Induction Program was discussed and approved for all colleges by AICTE in March 2017. It was discussed and accepted by the Council of IITs for all IITs in August 2016. It was originally proposed by a Committee of IIT Directors and accepted at the meeting of all IIT Directors in March 2016. This guide has been prepared based on the Report of the Committee of IIT Directors and the experience gained through its pilot implementation in July 2016 as accepted by the Council of IITs. Purpose of this document is to help institutions in understanding the spirit of the accepted Induction Program and implementing it.)


Engineering colleges were established to train graduates well in the branch/department of admission, have a holistic outlook, and have a desire to work for national needs and beyond. The graduating student must have knowledge and skills in the area of his study. However, he must also have broad understanding of society and relationships. Character needs to be nurtured as an essential quality by which he would understand and fulfill his responsibility as an engineer, a citizen and a human being. Besides the above, several meta-skills and underlying values are needed. There is a mad rush for engineering today, without the student determining for himself his interests and his goals. This is a major factor in the current state of demotivation towards studies that exists among UG students. The success of gaining admission into a desired institution but failure in getting the desired branch, with peer pressure generating its own problems, leads to a peer environment that is demotivating and corrosive. Start of hostel life without close parental supervision at the same time, further worsens it with also a poor daily routine. To come out of this situation, a multi-pronged approach is needed. One will have to work closely with the newly joined students in making them feel comfortable, allow them to explore their academic interests and activities, reduce unnecessary burden on the students besides making them self-oriented.

2 Induction Program

When new students enter an institution, they come with diverse thoughts, backgrounds and preparations. It is important to help them adjust to the new environment and inculcate in them the ethos of the institution with a sense of larger purpose. Precious little is done by most of the institutions, except for an orientation program lasting a couple of days. We propose a 3-week long induction program for the UG students entering the institution, right at the start. Normal classes start only after



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the induction program is over. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature. The time during the Induction Program is also used to rectify some critical lacunas, for example, English background, for those students who have deficiency in it. The following are the activities under the induction program in which the student would be fully engaged throughout the day for the entire duration of the program.

Induction Program as described here borrows from three programs running earlier at different institutions:

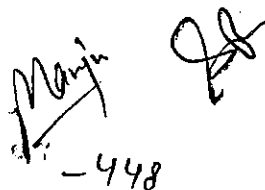
- (1) Foundation Program running at IIT Gandhinagar since July 2011,
- (2) Human Values course running at IIIT Hyderabad since July 2005, and
- (3) Counselling Service or mentorship running at several IITs for many decades. Contribution of each one is described next. (1) IIT Gandhinagar was the first IIT to recognize and implement a special 5-week Foundation Program for the incoming 1st year UG students. It took a bold step that the normal classes would start only after the five week period. It involved activities such as games, art, etc., and also science and other creative workshops and lectures by resource persons from outside. (2) IIIT Hyderabad was the first one to implement a compulsory course on Human Values. Under it, classes were held by faculty through discussions in small groups of students, rather than in lecture mode. Moreover, faculty from all departments got involved in conducting the group discussions under the course. The content is non-sectarian, and the mode is dialogical rather than sermonising or lecturing. Faculty were trained beforehand, to conduct these discussions and to guide students on issues of life. (3) Counselling at some of the IITs involves setting up mentor-mentee network under which 1st year students would be divided into small groups, each assigned a senior student as a student guide, and a faculty member as a mentor. Thus, a new student gets connected to a faculty member as well as a senior student, to whom he/she could go to in case of any difficulty whether psychological, financial, academic, or otherwise. The Induction Program defined here amalgamates all the three into an integrated whole, which leads to its high effectiveness in terms of building physical activity, creativity, bonding, and character. It develops sensitivity towards self and one's relationships, builds awareness about others and society beyond the individual, and also in bonding with their own batch-mates and a senior student besides a faculty member. Scaling up the above amalgamation to an intake batch of 1000 plus students was done at IIT (BHU), Varanasi starting from July 2016.

2.1 Physical Activity


This would involve a daily routine of physical activity with games and sports. It would start with all students coming to the field at 6 am for light physical exercise or yoga. There would also be games in the evening or at other suitable times according to the local climate. These would help develop team work. Each student should pick one game and learn it for three weeks. There could also be gardening or other suitably designed activity where labor yields fruits from nature.

2.2 Creative Arts

Every student would chose one skill related to the arts whether visual arts or performing arts. Examples are painting, sculpture, pottery, music, dance etc. The student would pursue it every day for the



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duration of the program. These would allow for creative expression. It would develop a sense of aesthetics and also enhance creativity which would, hopefully, flow into engineering design later.

2.3 Universal Human Values

It gets the student to explore oneself and allows one to experience the joy of learning, stand up to peer pressure, take decisions with courage, be aware of relationships with colleagues and supporting staff in the hostel and department, be sensitive to others, etc. Need for character building has been underlined earlier. A module in Universal Human Values provides the base. Methodology of teaching this content is extremely important. It must not be through do's and don'ts, but get students to explore and think by engaging them in a dialogue. It is best taught through group discussions and real life activities rather than lecturing. The role of group discussions, however, with clarity of thought of the teachers cannot be over emphasized. It is essential for giving exposure, guiding thoughts, and realizing values. The teachers must come from all the departments rather than only one department like HSS or from outside of the Institute. Experiments in this direction at IIT (BHU) are noteworthy and one can learn from them. Discussions would be conducted in small groups of about 20 students with a faculty mentor each. It is to open thinking towards the self. Universal Human Values discussions could even continue for rest of the semester as a normal course, and not stop with the induction program. Besides drawing the attention of the student to larger issues of life, it would build relationships between teachers and students which last for their entire 4-year stay and possibly beyond.

The Universal Human Values Course is a result of a long series of experiments at educational institutes starting from IIT-Delhi and IIT Kanpur in the 1980s and 1990s as an elective course, NIT Raipur in late 1990s as a compulsory one-week off campus program. The courses at IIT(BHU) which started from July 2014, are taken and developed from two compulsory courses at IIIT Hyderabad first introduced in July 2005.

2.4 Literary

Literary activity would encompass reading, writing and possibly, debating, enacting a play etc.

2.5 Proficiency Modules

This period can be used to overcome some critical lacunas that students might have, for example, English, computer familiarity etc. These should run like crash courses, so that when normal courses start after the induction program, the student has overcome the lacunas substantially. We hope that problems arising due to lack of English skills, wherein students start lagging behind or failing in several subjects, for no fault of theirs, would, hopefully, become a thing of the past.

2.6 Lectures by Eminent People

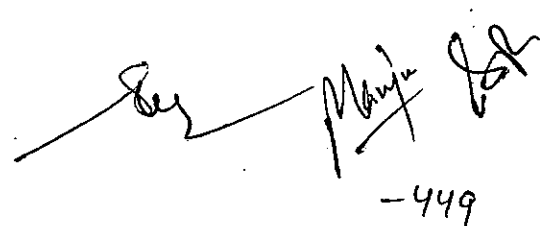
This period can be utilized for lectures by eminent people; say, once a week. It would give the students exposure to people who are socially active or in public life.

2.7 Visits to Local Area

A couple of visits to the landmarks of the city, or a hospital or orphanage could be organized. This would familiarize them with the area as well as expose them to the under privileged.

2.8 Familiarization to Dept./Branch & Innovations

The students should be told about different method of study compared to coaching that is needed at IITs. They should be told about what getting into a branch or department means what role it plays in society, through its technology. They should also be shown the laboratories, workshops & other facilities.

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3 Schedule

The activities during the Induction Program would have an Initial Phase, a Regular Phase and a Closing Phase. The Initial and Closing Phases would be two days each.

3.1 Initial Phase Time Activity

Day 0 Whole day Students arrive - Hostel allotment. (Preferably do pre- allotment)

Day 1 09:00 am - 03:00 pm Academic registration 04:30 pm - 06:00 pm Orientation

Day 2 09:00 am - 10:00 am Diagnostic test (for English etc.) 10:15 am - 12:25 pm Visit to respective depts. 12:30 pm - 01:55 pm Lunch 02:00 pm - 02:55 pm Director's address 03:00 pm - 05:00 pm Interaction with parents 03:30 pm - 05:00 pm Mentor-mentee groups - Introduction within group. (Same as Universal Human Values groups)

3.2 Regular Phase

After two days is the start of the Regular Phase of induction. With this phase there would be regular program to be followed every day.

3.2.1 Daily Schedule

Some of the activities are on a daily basis, while some others are at specified periods within the Induction Program. We first show a typical daily timetable. Sessn. Time Activity Remarks

Day 3 onwards 06:00 am Wake up call

I 06:30 am - 07:10 am Physical activity (mild exercise/yoga) 07:15 am - 08:55 am Bath, Breakfast, etc.

II 09:00 am - 10:55 am Creative Arts / Universal Human Values Half the groups do Creative Arts

III 11:00 am - 12:55 pm Universal Human Values / Creative Arts Complementary alternate 01:00 pm - 02:25 pm Lunch

IV 02:30 pm - 03:55 pm Afternoon Session See below.

V 04:00 pm - 05:00 pm Afternoon Session See below. 05:00 pm - 05:25 pm Break / light tea

VI 05:30 pm - 06:45 pm Games / Special Lectures 06:50 pm - 08:25 pm Rest and Dinner

VII 08:30 pm - 09:25 pm Informal interactions (in hostels) Sundays are off. Saturdays have the same schedule as above or have outings.

3.2.2 Afternoon Activities (Non-Daily)

The following five activities are scheduled at different times of the Induction Program, and are not held daily for everyone:

1. Familiarization to Dept./Branch & Innovations
2. Visits to Local Area
3. Lectures by Eminent People
4. Literary
5. Proficiency Modules

Here is the approximate activity schedule for the afternoons (may be changed to suit local needs):

Activity Session Remarks Familiarization with Dept/Branch & Innovations IV For 3 days (Day 3 to 5)

Visits to Local Area IV, V and VI For 3 days - interspersed (e.g., 3 Saturdays) Lectures by Eminent

People IV As scheduled - 3-5 lectures Literary (Play / Book Reading / Lecture) IV For 3-5 days


Proficiency Modules V Daily, but only for those who need it


3.3 Closing Phase Time Activity Last But One Day

08:30 am - 12 noon Discussions and finalization of presentation within each group 02:00 am - 05:00

pm Presentation by each group in front of 4 other groups besides their own (about 100 students) Last

Day Whole day Examinations (if any). May be expanded to last 2 days, in case needed.


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3.4 Follow Up after Closure

A question comes up as to what would be the follow up program after the formal 3-week Induction Program is over? The groups which are formed should function as mentor- mentee network. A student should feel free to approach his faculty mentor or the student guide, when facing any kind of problem, whether academic or financial or psychological etc. (For every 10 undergraduate first year students, there would be a senior student as a student guide, and for every 20 students, there would be a faculty mentor.) Such a group should remain for the entire 4-5 year duration of the stay of the student. Therefore, it would be good to have groups with the students as well as teachers from the same department/discipline⁴. Here we list some important suggestions which have come up and which have been experimented with.

3.4.1 Follow Up after Closure – Same Semester

It is suggested that the groups meet with their faculty mentors once a month, within the semester after the 3-week Induction Program is over. This should be a scheduled meeting shown in the timetable. (The groups are of course free to meet together on their own more often, for the student groups to be invited to their faculty mentor's home for dinner or tea, nature walk, etc.)

3.4.2 Follow Up – Subsequent Semesters

It is extremely important that continuity be maintained in subsequent semesters. It is suggested that at the start of the subsequent semesters (upto fourth semester), three days be set aside for three full days of activities related to follow up to Induction Program. The students be shown inspiring films, do collective art work, and group discussions be conducted. Subsequently, the groups should meet at least once a month.

4 Summary

Engineering institutions were set up to generate well trained manpower in engineering with a feeling of responsibility towards oneself, one's family, and society. The incoming undergraduate students are driven by their parents and society to join engineering without understanding their own interests and talents. As a result, most students fail to link up with the goals of their own institution. The graduating student must have values as a human being, and knowledge and meta- skills related to his/her profession as an engineer and as a citizen. Most students who get demotivated to study engineering or their branch, also lose interest in learning. The Induction Program is designed to make the newly joined students feel comfortable, sensitize them towards exploring their academic interests and activities, reducing competition and making them work for excellence, promote bonding within them, build relations between teachers and students, give a broader view of life, and building of character. The Universal Human Values component, which acts as an anchor, develops awareness and sensitivity, feeling of equality, compassion and oneness, draw attention to society and

⁴We are aware that there are advantages in mixing the students from different depts. However, in mixing, it is our experience that the continuity of the group together with the faculty mentor breaks down soon after. Therefore, the groups be from the same dept. but hostel wings have the mixed students from different depts. For example, the hostel room allotment should be in alphabetical order irrespective of dept. nature, and character to follow through. It also makes them reflect on their relationship with their families and extended family in the college (with hostel staff and others). It also connects students with each other and with teachers so that they can share any difficulty they might be facing and seek help.

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For

B.Tech Information Technology
(w.e.f Academic Session 2024- 2025)

Semester -2

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	BSC	BSC-102	Chemistry – I	3	1	0	4	20	80	100
2.	BSC	BSC -104	Mathematics – II : Probability and Statistics	3	1	0	4	20	80	100
3.	ESC	ESC -103	Programing for problem solving	3	0	0	3	20	80	100
4.	HSMC	HSMC-101	English	2	0	0	2	10	40	50
Lab										
5.	HSMC	HSMC -101-P	English Language Lab	0	0	2	1	10	40	50
6.	ESC	ESC -104-P	Workshop /Manufacturing Practices	1	0	4	3	20	80	100
7.	ESC	ESC -103-P	Programming for problem solving Lab	0	0	4	2	10	40	50
8.	BSC	BSC -102-P	Chemistry Lab	0	0	2	1	10	40	50
Total				12	2	12	20	120	480	600

Total Contact Hours =26

Total Credit= 20

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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B. Tech. Semester – II (Information Technology)

CHEMISTRY- I

CODE: BSC-102

NO OF CREDITS: 4

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course objectives:

1. To impart technological aspects of applied chemistry
2. To lay foundation of practical application of chemistry in engineering aspects
3. To apply basic chemistry concepts to chemical process industries
4. Student will able to understand the new developments, research and breakthrough efficiency in engineering chemistry
5. To understand and explain scientifically the various chemistry related problems in industry and engineering field.

Pre-requisites (if any) - Basics of Chemistry.

UNIT- 1

Atomic and molecular structure (12 lectures)

Schrodinger equation. Particle in a box solutions and their applications for conjugated molecules and nanoparticles. Forms of the hydrogen atom wave functions and the plots of these functions to explore their spatial variations. Molecular orbitals of diatomic molecules and plots of the multicenter orbitals. Equations for atomic and molecular orbitals. Energy level diagrams of diatomic. Pi-molecular orbitals of butadiene and benzene and aromaticity. Crystal field theory and the energy level diagrams for transition metal ions and their magnetic properties. Band structure of solids and the role of doping on band structures

UNIT- 2

Spectroscopic techniques and applications (4 lectures)

Principles of spectroscopy and selection rules. Electronic spectroscopy. Fluorescence and its applications in medicine. Vibrational and rotational spectroscopy of diatomic molecules. Applications. Nuclear magnetic resonance and magnetic resonance imaging, surface characterisation techniques. Diffraction and scattering.

Intermolecular forces and potential energy surfaces (4 lectures)

Ionic, dipolar and van Der Waals interactions. Equations of state of real gases and critical phenomena. Potential energy surfaces of H₃, H₂F and HCN and trajectories on these surfaces.

UNIT- 3

Use of free energy in chemical equilibria (6 lectures)

Thermodynamic functions: energy, entropy and free energy. Estimations of entropy and free energies. Free energy and emf. Cell potentials, the Nernst equation and applications. Acid base, oxidation reduction and solubility equilibria. Water chemistry. Corrosion. Use of free energy considerations in metallurgy through Ellingham diagrams.

Periodic properties (4 lectures)

2

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Effective nuclear charge, penetration of orbitals, variations of s, p, d and f orbital energies of atoms in the periodic table, electronic configurations, atomic and ionic sizes, ionization energies, electron affinity and electronegativity, polarizability, oxidation states, coordination numbers and geometries, hard soft acids and bases, molecular geometries

UNIT- 4

Stereochemistry (4 lectures)

Representations of 3 dimensional structures, structural isomers and stereoisomers, configurations and symmetry and chirality, enantiomers, diastereomers, optical activity, absolute configurations and conformational analysis. Isomerism in transitional metal compounds

Organic reactions and synthesis of a drug molecule (4 lectures)

Introduction to reactions involving substitution, addition, elimination, oxidation, reduction, cyclization and ring openings. Synthesis of a commonly used drug molecule

Stereochemistry (4 lectures)

Representations of 3 dimensional structures, structural isomers and stereoisomers, configurations and symmetry and chirality, enantiomers, diastereomers, optical activity, absolute configurations and conformational analysis. Isomerism in transitional metal compounds

Organic reactions and synthesis of a drug molecule (4 lectures)

Introduction to reactions involving substitution, addition, elimination, oxidation, reduction, cyclization and ring openings. Synthesis of a commonly used drug molecule.

Suggested Text Books:

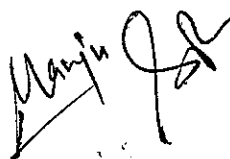
- 1 University chemistry, by B. H. Mahan
- 2 Chemistry: Principles and Applications, by M. J. Sienko and R. A. Plane
- 3 Fundamentals of Molecular Spectroscopy, by C. N. Banwell
- 4 Engineering Chemistry (NPTEL Web-book), by B. L. Tembe, Kamaluddin and M. S. Krishnan
- 5 Physical Chemistry, by P. W. Atkins (vi) Organic Chemistry: Structure and Function by K. P. C. Volhardt and N. E. Schore, 5th Edition
<http://bcs.whfreeman.com/vollhardtschore5e/default.asp>

Course Outcomes

- Understanding the Schrödinger equation for 1-D box as well as hydrogen atom & its application
- Understanding the bonding in tetrahedral and octahedral complexes and their energy diagram
- Detailed discussion of electrochemistry and cell corrosion
- Understanding the stereochemistry of organic molecules

The course will enable the student to:



- Analyse microscopic chemistry in terms of atomic and molecular orbitals and intermolecular forces.
- Rationalise bulk properties and processes using thermodynamic considerations.
- Distinguish the ranges of the electromagnetic spectrum used for exciting different molecular energy levels in various spectroscopic techniques
- Rationalise periodic properties such as ionization potential, electronegativity, oxidation states and electronegativity.

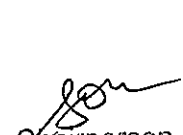


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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

 
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B. Tech. Semester – II (Information Technology)
MATHEMATICS-II: PROBABILITY AND STATISTICS
CODE: BSC- 104

NO OF CREDITS: 4
L T P
3 1 0

INTERNAL MARKS 20
EXTERNAL MARKS: 80
TOTAL: 100

Course objective:

The main objective of this course is to provide students with the foundations of probabilistic and statistical analysis mostly used in varied applications in engineering and science like disease modeling, climate prediction and computer networks etc

Pre-requisites (if any) - Basics of Statistics.

UNIT- 1

Basic Probability: (12 lectures)

Probability spaces, conditional probability, independence; Discrete random variables, Independent random variables, the multinomial distribution, Poisson approximation to the binomial distribution, infinite sequences of Bernoulli trials, sums of independent random variables; Expectation of Discrete Random Variables, Moments, Variance of a sum, Correlation coefficient, Chebyshev's Inequality.

UNIT- 2

Continuous Probability Distributions: (4 lectures)

Continuous random variables and their properties, distribution functions and densities, normal, exponential and gamma densities.

Bivariate Distributions: (4 lectures)

Bivariate distributions and their properties, distribution of sums and quotients, conditional densities, Bayes' rule.

UNIT- 3

Basic Statistics: (8 lectures)

Measures of Central tendency: Moments, skewness and Kurtosis - Probability distributions: Binomial, Poisson and Normal - evaluation of statistical parameters for these three distributions, Correlation and regression – Rank correlation.

Applied Statistics: (4 lectures)

Curve fitting by the method of least squares- fitting of straight lines, second degree parabolas and more general curves.

UNIT- 4

Applied Statistics: (4 lectures):

Test of significance: Large sample test for single proportion, difference of proportions, single mean, difference of means, and difference of standard deviations. .

Small samples: (4 lectures)


Test for single mean, difference of means and correlation coefficients, test for ratio of variances - Chi-square test for goodness of fit and independence of attributes.





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Suggested Text/Reference Books:

1. Erwin Kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons, 2006.
2. P. G. Hoel, S. C. Port and C. J. Stone, Introduction to Probability Theory, Universal Book Stall, 2003 (Reprint).
3. S. Ross, A First Course in Probability, 6th Ed., Pearson Education India, 2002.
4. W. Feller, An Introduction to Probability Theory and its Applications, Vol. 1, 3rd Ed., Wiley, 1968.
5. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications, Reprint, 2010.
6. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 35th Edition, 2000.
7. Veerarajan T., Engineering Mathematics (for semester III), Tata McGraw-Hill, New Delhi, 2010.

Course Outcomes

The objective of this course is to familiarize the prospective engineers with techniques in basic calculus and linear algebra. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling more advanced level of mathematics and applications that they would find useful in their disciplines.

The students will learn:

- The ideas of probability and random variables and various discrete and continuous probability distributions and their properties.
- The basic ideas of statistics including measures of central tendency, correlation and regression.
- The statistical methods of studying data samples.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – II (Information Technology)
PROGRAMMING FOR PROBLEM SOLVING
CODE: ESC - 103

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Pre-requisites (if any) - Basics of Computers, Algorithms and flowcharts.

Course Objective:-

1. To provide basic understanding of computer including history, various operating systems, number system, various languages developed etc.
2. To impart adequate knowledge on the need and concept of algorithms and programming.
3. Develop, execute and document computerized solution for various problems using the features of C language.
4. To enable effective usage of arrays, structures, functions, pointers and to implement the concepts of file organization.

UNIT- 1

Introduction to Programming (12 lectures)

Introduction to components of a computer system (disks, memory, processor, where a program is stored and executed, operating system, compilers etc.). Idea of Algorithm: steps to solve logical and numerical problems. Representation of Algorithm: Flowchart/Pseudo code with examples. From algorithms to programs; source code, variables (with data types) variables and memory locations, Syntax and Logical Errors in compilation, object and executable code- Arithmetic expressions and precedence.

UNIT- 2

Basic of C Programming (10 lectures)

Concept of variables, program statements and function calls from the library (printf for example), C data types: int, char, float etc., C expressions, arithmetic operation, relational and logic operators, C assignment statements, extension of assignment of the operations. C primitive input output using get char and put char, exposure to scanf and printf functions, C Statements, conditional executing using if, else, switch case, goto and break statements.

UNIT- 3

Conditional Branching and Loops (12 lectures)

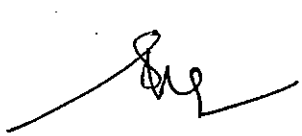
Concept of loops in C using for, while and do-while, Writing and evaluation of conditionals and consequent branching Iteration and loops Arrays Arrays (1-D, 2-D), Character arrays and Strings, example of iterative programs using arrays and use in matrix computations. Functions, parameters and return values, standard library functions, Basic Algorithms Searching, Basic Sorting Algorithms (Bubble, Insertion and Selection).

UNIT- 4


Pointers, Strings and Structure (12 lectures)

Pointers, relationship between arrays and pointers, Call by reference. Array of pointers, passing arrays as arguments. Character strings: processing strings using loops, and string library functions, Structures, Defining structures and Array of Structures.

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Suggested Text Books / Reference Books:

1. Byron Gottfried, Schaum's Outline of Programming with C, McGraw-Hill
2. E. Balaguruswamy, Programming in ANSI C, Tata McGraw-Hill
3. Brian W. Kernighan and Dennis M. Ritchie, The C Programming Language, Prentice Hall of India


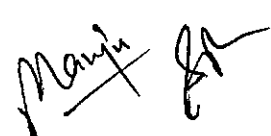
Course Outcomes


1. Explain the basic architecture of computers and various programming language to solve various engineering problem.
2. Apply problem solving skills in programming.
3. Developing logical thinking using C programming.
4. Develop and run computer programs in C language.

The student will learn

1. To formulate simple algorithms for arithmetic and logical problems.
2. To translate the algorithms to programs (in C language).
3. To test and execute the programs and correct syntax and logical errors.
4. To implement conditional branching, iteration and recursion.
5. To decompose a problem into functions and synthesize a complete program using divide and conquer approach.
6. To use arrays, pointers and structures to formulate algorithms and programs.
7. To apply programming to solve matrix addition and multiplication problems and searching and sorting problems.
8. To apply programming to solve simple numerical method problems, namely root finding of function, differentiation of function and simple integration.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

 
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B. Tech. Semester – II (Information Technology)

ENGLISH

CODE: HSMC -101

No of CREDITS: 2

L T P

2 0 0

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

Course objectives:

1. Ability to be comfortable with English in use while reading or listening.
1. Ability to use receptive skills through reading and listening to acquire good exposure to language and literature.
2. Ability to write and speak good English in all situations.
3. Students should develop style in speech and writing and manipulate the tools of language for effective communication.
4. The course should provide exposure to the learners in Good Prose texts and Poems and expose the learners to value based ideas.
5. Students should enhance their language skills especially in the areas of grammar and pronunciation.

UNIT- 1

Vocabulary Building

The concept of Word Formation, Root words from foreign languages and their use in English, Acquaintance with prefixes and suffixes from foreign languages in English to form derivatives. Synonyms, antonyms and standard abbreviations.

Basic Writing Skills

Sentence Structures, Use of phrases and clauses in sentences Importance of proper punctuation Creating coherence, Organizing principles of paragraphs in documents, Techniques for writing precisely

UNIT- 2

Identifying Common Errors in Writing

Subject-verb agreement, Noun-pronoun agreement, Misplaced modifiers, Articles Prepositions 3.6 Redundancies, Clichés

UNIT- 3

Nature and Style of sensible Writing

Describing, Defining, Classifying, Providing examples or evidence, Writing introduction and conclusion

UNIT- 4

Writing Practices

Comprehension ,Précis Writing,Essay Writing

Oral Communication

(This unit involves interactive practice sessions in Language Lab)

Listening Comprehension

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Pronunciation, Intonation, Stress and Rhythm
Common Everyday Situations: Conversations and Dialogues
Communication at Workplace
Interviews
Formal Presentations

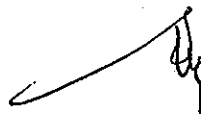


Suggested Readings:


1. Practical English Usage. Michael Swan. OUP. 1995.
2. Remedial English Grammar. F.T. Wood. Macmillan. 2007
3. On Writing Well. William Zinsser. Harper Resource Book. 2001
4. Study Writing. Liz Hamp-Lyons and Ben Heasley. Cambridge University Press. 2006.
5. Communication Skills. Sanjay Kumar and PushpLata. Oxford University Press. 2011.
6. Exercises in Spoken English. Parts. I-III. CIEFL, Hyderabad. Oxford University Press

Course Outcomes

The student will acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

  
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B. Tech. Semester – II (Information Technology)
ENGLISH LANGUAGE LAB
CODE: HSMC -101-P

NO OF CREDITS: 1

L T P

0 0 2

INTERNAL MARKS: 10

PRACTICAL EXAM: 40

TOTAL: 50

Laboratory objectives:

The course will enable the students,

1. To implement English vocabulary at command and ensure language proficiency.
2. To achieve better Technical writing and Presentation skills.
3. Identify the common errors in speaking and writing English.
4. Acquire Employment and Workplace communication skills.

Oral Communication

Interactive practice sessions in Language Lab

Listening Comprehension

Pronunciation, Intonation, Stress and Rhythm

Common Everyday Situations: Conversations and Dialogues

Communication at Workplace

Interviews

Formal Presentations

Course Outcomes:

On completion of the course, students will be able to,

1. Identify common errors in spoken and written communication.
2. Get familiarized with English vocabulary and language proficiency.
3. Improve nature and style of sensible writing; acquire employment and workplace communication skills.
4. Improve their Technical Communication Skills through Technical Reading and Writing practices.
5. Perform well in campus recruitment, engineering and all other general competitive examinations.

B. Tech. Semester – II (Information Technology)
WORKSHOP / MANUFACTURING PRACTICES
CODE: ESC -104-P

NO OF CREDITS: 3

L T P

1 0 4

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. To understand various manufacturing processes.
2. To understand the metal cutting phenomena.
3. To select process parameter and tools for obtaining desired machining characteristic
4. To understand principles of manufacturing processes.

Contents:

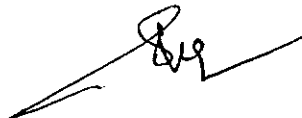
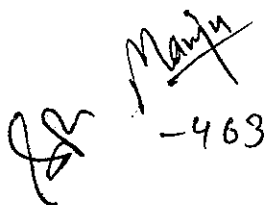
1. Manufacturing Methods- casting, forming, machining, joining, advanced manufacturing Methods (3 lectures)
2. CNC machining, Additive manufacturing (1 lecture)
3. Fitting operations & power tools (1 lecture)
4. Electrical & Electronics (1 lecture)
5. Carpentry (1 lecture)
6. Plastic moulding, glass cutting (1 lecture)
7. Metal casting (1 lecture)
8. Welding (arc welding & gas welding), brazing (1 lecture)


Suggested Text/Reference Books:

1. Hajra Choudhury S.K., Hajra Choudhury A.K. and Nirjhar Roy S.K., "Elements of Workshop Technology", Vol. I 2008 and Vol. II 2010, Media promoters and publishers private limited, Mumbai.
2. Kalpakjian S. And Steven S. Schmid, "Manufacturing Engineering and Technology", 4th edition, Pearson Education India Edition, 2002.
3. Gowri P. Hariharan and A. Suresh Babu, "Manufacturing Technology – I" Pearson Education, 2008.
4. Roy A. Lindberg, "Processes and Materials of Manufacture", 4th edition, Prentice Hall India, 1998.
5. Rao P.N., "Manufacturing Technology", Vol. I and Vol. II, Tata McGrawHill House, 2017.

Course Outcomes:

Upon completion of this course, the students will gain knowledge of the different manufacturing processes which are commonly employed in the industry, to fabricate components using different materials.


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Laboratory Objectives:

1. To impart knowledge and skill to use tools, machines, equipment, and measuring instruments.
2. To educate students of Safe handling of machines and tools.

Workshop Practice:

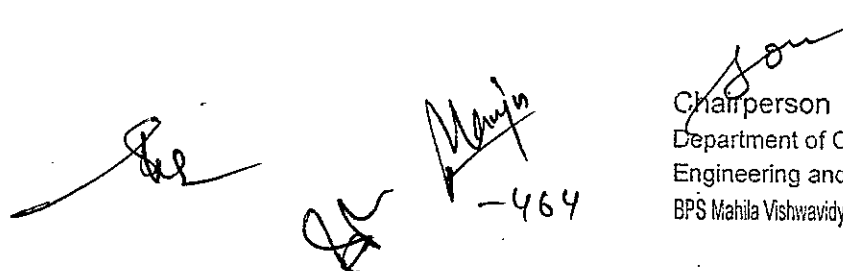
1. Machine shop (10 hours)
2. Fitting shop (8 hours)
3. Carpentry (6 hours)
4. Electrical & Electronics (8 hours)
5. Welding shop (8 hours (Arc welding 4 hrs + gas welding 4 hrs))
6. Casting (8 hours)
7. Smithy (6 hours)
8. Plastic moulding & Glass Cutting (6 hours)

Examinations could involve the actual fabrication of simple components, utilizing one or more of the techniques covered above.

Laboratory Outcomes:

Upon completion of this laboratory course, students will be able to fabricate components with their own hands. They will also get practical knowledge of the dimensional accuracies and dimensional tolerances possible with different manufacturing processes. By assembling different components, they will be able to produce small devices of their interest.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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B. Tech. Semester – II (Information Technology)
PROGRAMMING FOR PROBLEM SOLVING LAB
CODE: ESC -103-P

NO OF CREDITS: 2

L T P
0 0 4

INTERNAL MARKS: 10
PRACTICAL EXAM: 40
TOTAL: 50

Laboratory Objectives:

1. To be familiarize with algorithm to solve simple problems
2. To develop programs to solve basic problems by understanding basic concepts in C like operators, control statements etc.
3. To develop modular, reusable and readable C Programs using the concepts like functions, arrays, strings pointers and structures.

List of Experiments:

The laboratory should be preceded or followed by a tutorial to explain the approach or algorithm to be implemented for the problem given.

Tutorial 1: Problem solving using computers: Lab1: Familiarization with programming environment

Tutorial 2: Variable types and type conversions: Lab 2: Simple computational problems using arithmetic expressions

Tutorial 3: Branching and logical expressions: Lab 3: Problems involving if-then-else structures

Tutorial 4: Loops, while and for loops: Lab 4: Iterative problems e.g., sum of series

Tutorial 5: 1D Arrays: searching, sorting: Lab 5: 1D Array manipulation

Tutorial 6: 2D arrays and Strings Lab 6: Matrix problems, String operations

Tutorial 7: Functions, call by value: Lab 7: Simple functions

Tutorial 8 &9: Numerical methods (Root finding, numerical differentiation, numerical integration):

Lab 8 and 9: Programming for solving Numerical methods problems

Tutorial 10: Recursion, structure of recursive calls Lab 10: Recursive functions

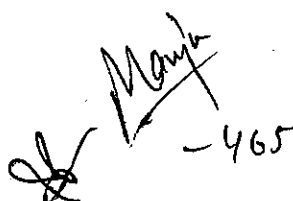
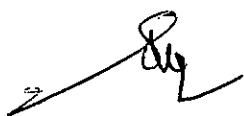
Tutorial 11: Pointers, structures and dynamic memory allocation Lab 11: Pointers and structures


Tutorial 12: File handling: Lab 12: File operations

Laboratory Outcomes:

1. To formulate the algorithms for simple problems
2. To translate given algorithms to a working and correct program
3. To be able to correct syntax errors as reported by the compilers
4. To be able to identify and correct logical errors encountered at run time
5. To be able to write iterative as well as recursive programs
6. To be able to represent data in arrays, strings and structures and manipulate them through a program.
7. To be able to declare pointers of different types and use them in defining self- referential structures.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.




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B. Tech. Semester – II (Information Technology)

CHEMISTRY LAB

CODE: BSC -102 –P

NO OF CREDITS: 1	INTERNAL MARKS: 10
L T P	EXTERNAL MARKS 40
0 0 3	TOTAL: 50

Laboratory Objectives:

1. Incorporates the experiments which involve the volumetric estimation of chemicals and determination of various properties of fuel, water sample and lubricants like calorific value, hardness, viscosity and surface tension.
2. To enable the learners to get hands-on experience on the principles discussed in theory sessions and to understand the applications of these concepts in engineering.
3. Practical awareness is inculcated and students are trained both quantitatively and qualitatively during the lab sessions so that their understanding and problem solving abilities can be enhanced.
4. To provide students with a practical approach towards the various techniques used in engineering application.

List of experiments:

Choice of 10-12 experiments from the following:

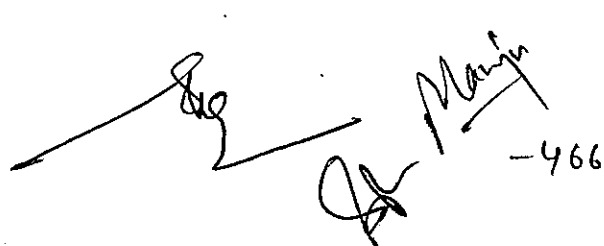
1. Determination of surface tension and viscosity
2. Thin layer chromatography
3. Ion exchange column for removal of hardness of water
4. Determination of chloride content of water
5. Colligative properties using freezing point depression
6. Determination of the rate constant of a reaction
7. Determination of cell constant and conductance of solutions
8. Potentiometry– determination of redox potentials and emfs
9. Synthesis of a polymer/drug
10. Saponification/acid value of an oil
11. Chemical analysis of a salt
12. Lattice structures and packing of spheres
13. Models of potential energy surfaces
14. Chemical oscillations- Iodine clock reaction
15. Determination of the partition coefficient of a substance between two immiscible liquids
16. Adsorption of acetic acid by charcoal
17. Use of the capillary viscosimeters to demonstrate the isoelectric point as the pH of minimum viscosity for gelatin sols and/or coagulation of the white part of egg .

Laboratory Outcomes:

The chemistry laboratory course will consist of experiments illustrating the principles of chemistry relevant to the study of science and engineering.

The students will learn to:

1. Estimate rate constants of reactions from concentration of reactants/products as a function of time



2. Measure molecular/system properties such as surface tension, viscosity, conductance of solutions, redox potentials, chloride content of water, etc
3. Synthesize a small drug molecule and analyses a salt sample.

Note: At least ten experiments are to be performed by students in the semester. Out of which at least eight experiments should be performed from the above list, remaining two experiments may either be performed from the above list or designed and set by the concerned faculty as per the scope of the syllabus.

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Department of Computer Science & Engineering & Information Technology

Course Curriculum & Scheme of Examinations

For

B.Tech Information Technology

(w.e.f Academic Session 2024- 2025)

Semester - 3

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-201	Data Structure & Algorithms	3	0	0	3	20	80	100
2.	PCC	PCC-CS-203	Computer Organization & Architecture	3	0	0	3	20	80	100
3.	PCC	PCC-CS-205	Object Oriented Prog. with C++	3	0	0	3	20	80	100
4.	ESC	ESC-203	Digital Electronics	3	0	0	3	20	80	100
5.	BSC	BSC-201	Mathematics- III (Calculus and Ordinary Differential Equations)	3	1	0	4	20	80	100
6.	HSM C	HSMC-201	Humanities –I (Effective Technical Communication)	3	0	0	3	20	80	100
7.	MC	MC-201	Environmental Science	3	0	0	0	10	40	50
Lab										
8.	ESC	ESC-203-P	Digital Electronics Lab	0	0	2	1	10	40	50
9.	PCC	PCC-CS-201 –P	Data Structure & Algorithms Lab	0	0	4	2	10	40	50
10.	PCC	PCC-CS-205 –P	Object Oriented Programming with C++ Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

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B. Tech. Semester – III (Information Technology)
DATA STRUCTURES & ALGORITHMS
CODE: PCC-CS-201

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To impart the basic concepts of data structures and algorithms.
2. To understand concepts about searching and sorting techniques
3. To understand basic concepts about stacks, queues, lists, trees and graphs.
4. To enable them to write algorithms for solving problems with the help of fundamental data structures

UNIT-1

Introduction

Basic Terminologies: Elementary Data Organizations, Data Structure Operations: insertion, deletion, traversal etc.; Analysis of an Algorithm, Asymptotic Notations.

Searching: Linear Search and Binary Search Techniques and their complexity analysis.

Stacks and Queues

ADT Stack and its operations: Algorithms and their complexity analysis, Applications of Stacks: Expression Conversion and evaluation – corresponding algorithms and complexity analysis. ADT queue, Types of Queue: Simple Queue, Circular Queue, Priority Queue; Operations on each types of Queues: Algorithms and their analysis

UNIT-2

Linked lists

Singly linked lists: Representation in memory, Algorithms of several operations: Traversing, Searching, Insertion into, Deletion from linked list; Linked representation of Stack and Queue, Header nodes, Doubly linked list: operations on it and algorithmic analysis; Circular Linked Lists: all operations their algorithms and the complexity analysis.

UNIT-3



Trees: Basic Tree Terminologies, Different types of Trees: Binary Tree, Threaded Binary Tree, Binary Search Tree, AVL Tree; Tree operations on each of the trees and their algorithms with complexity analysis. Applications of Binary Trees, B Tree, B+ Tree: definitions, algorithms and analysis.


UNIT-4


Sorting and Hashing

Objective and properties of different sorting algorithms: Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort, Heap Sort; Performance and Comparison among all the methods. Hashing and collision resolution.

Graph: Basic Terminologies and Representations, Graph search and traversal algorithms and


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complexity analysis.

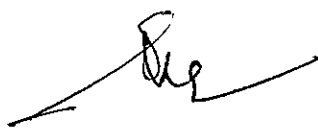
TEXT/ REFERENCE BOOKS

1. M. Tenenbaum, Langsam, Moshe J. Augentem , "Data Structures using C," PHI Pub.
2. K. Sharma, "Data Structures using C" Pearson Pub
3. A.V. Aho, J.E. Hopcroft and T.D. Ullman, "Data Structures and Algorithms" Original edition, Addison-Wesley, 1999, Low Priced Edition.
4. Ellis Horowitz & Sartaj Sahni, "Fundamentals of Data structures" Pub, 1983,AW

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. For a given algorithm student will able to analyze the algorithms to determine the time and computation complexity and justify the correctness.
2. For a given Search problem (Linear Search and Binary Search) student will able to implement it.
3. For a given problem of Stacks, Queues, linked list and Tree, student will able to implement it and analyze the same to determine the time and computation complexity.
4. Student will able to write an algorithm Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort, Heap Sort and compare their performance in term of Space and Time complexity.
5. Student will able to implement Graph search and traversal algorithms and determine the time and computation complexity.







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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – III (Information Technology)
COMPUTER ORGANIZATION AND ARCHITECTURE
CODE: PCC-CS-203

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. How Computer Systems work and the basic principles.
2. Concept of computer architecture and Micro programming.
3. The basic principles for accessing I/O devices and memory unit.
4. Concepts of advanced processors, parallel and pipelining techniques.

UNIT-1

Introduction

Functional blocks of a computer: CPU, memory, input-output subsystems, control unit, control and data path of a typical register based CPU, Bus structures, Register Transfer language, Arithmetic and Logic Unit-Micro operations (Arithmetic, logical and Shift Micro operations), Hardware Implementation. Data Representation: Fixed Point, Floating Point, Stored program control concept

UNIT-2

Control Unit Design

Design of CPU Control Unit- Hardwired :Instruction codes, Computer Registers, Computer instructions, Timing and control, Instruction-reference, Register Reference and Memory reference Instructions; Microprogrammed design: Micro programmed controlled unit, Control memory and address sequencing, Micro instruction Format ,Design of Control Unit.

UNIT-3

Central Processing Unit & Input-Output

General Register Organization, Stack Organization, Instruction Formats, Addressing Modes, RISC vs CISC Architectures, Overlapped register Window , Internal architecture of 8085 microprocessor. I/O Interface: I/O bus and Interface modules, I/O vs memory mapped, Asynchronous Data Transfer— Strobe Control and Handshaking, Asynchronous Serial Transfer, modes of transfer, DMA;

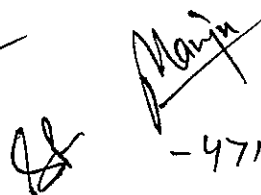
UNIT-4

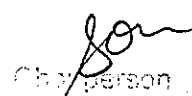
Memory Organization: Memory hierarchy, Memory interleaving, Associative Memory, Cache Memory and its organization (Direct, Associative and Set Associative).

Multiprocessor Systems

Characteristics of Multi Processor Systems, Introduction to parallel processors and pipelined processors, typical example, Amdahl's Law and Flynn's Classification of computers (SISD, MISD, SIMD, and MIMD).

TEXT/ REFERENCE BOOKS:




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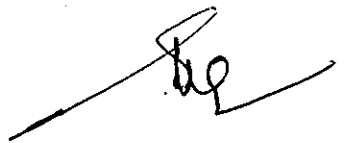
1. Mano, M.M. : Computer System Architecture, Prentice- Hall of India.
2. Stallings, William : Computer Organization & Architecture.
3. Gill, Nasib Singh and Dixit J.B.: Digital Design and Computer Organization, University Science Press (Laxmi Publications), New Delhi.
4. Kai Hwang : Advanced Computer Architecture, McGraw Hill International.
5. John P. Hayes , "Computer Architecture and Organization", Mc-Graw Hill .
6. Carl Hamacher, "Computer Organization and Embedded system ", Mc-Graw Hill


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Course Outcomes:

After completion of this course, the students will be able to perform the following:

1. Draw the functional block diagram of single bus architecture of a computer and describe the function of the instruction execution cycle, RTL interpretation of instructions, addressing modes, instruction set.
2. Write assembly language program for specified microprocessors using different data representations.
3. Design the ALU, Control Unit and CPU of a computer system.
4. Design a memory module and analyze its operation by interfacing with a given CPU organization and instruction
5. Given a CPU organization, assess its performance, and apply design techniques to enhance performance using pipelining, parallelism and RISC methodology.


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BPS Manila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – III (Information Technology)
OBJECT ORIENTED PROGRAMMING WITH C++
CODE: PCC-CS-205

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To familiarize students with basic concepts of object oriented programming
2. To familiarize students with operator overloading, inheritance, virtual functions and friend functions.
3. To familiarize students with advanced concepts of object oriented programming like templates and exception handling

UNIT- 1

Basic Concepts Of Object Oriented Programming:- Procedural Vs. Object oriented Programming, C++ Standard Library, Preprocessor Directives, illustrative Simple C++ Programs. Header Files and Namespaces, library files. Object Oriented Concepts: Introduction to Objects and Classes, Data Abstraction, Encapsulation (Information Hiding), Access Modifiers: Controlling access to a class, method, or variable (public, protected, private), Polymorphism, Inheritance, and Reusability
Classes: - Introduction, Structure Vs. Class, Class Scope and Accessing Class Members, Initializing Class Objects: Constructors.

UNIT- 2

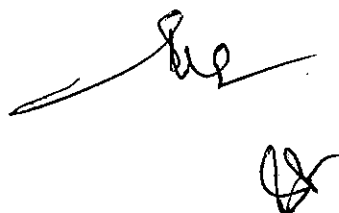
Destructors, Friend Functions And Operator Overloading:- Destructors, Static Class Members, Const(Constant) Object And Const Member Functions, Object as Member of Classes, Friend Function and Friend Classes, Using This Pointer, Dynamic Memory Allocation with New and Delete, Container Classes and Iterators, Function overloading

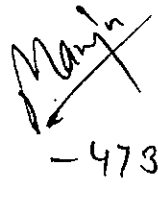
Operator Overloading: - Introduction, Fundamentals of Operator Overloading, Restrictions on Operators Overloading, Operator Functions as Class Members vs. as Friend Functions, Overloading Binary Operators (+,-,*,/,=), Overloading Unary Operators(-,++,--)


UNIT- 3

Inheritance And Virtual Functions:- Introduction, Types of Inheritance, Base Classes And Derived Classes, Virtual Base class, Casting Base Class Pointers to Derived- Class Pointers, Using Member Functions, Overriding Base - Class Members in a Derived Class, Public, Protected and Private Inheritance, Using Constructors and Destructors in derived Classes, Composition Vs. Inheritance, Overloading Vs. Overriding, Run Time Polymorphism, Introduction to Virtual Functions, Pure Virtual Functions, Abstract Base Classes and Concrete Classes, Dynamic Binding, Virtual Destructors, Dynamic Binding.

UNIT-4




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Files, Templates And Exception Handling: - Files and I/O Streams and various operation on files. Stream Input/output Classes and Objects, Stream Output, Stream Input, Unformatted I/O (with read and write), Stream Manipulators, Stream Format States, Stream Error States.

Templates & Exception Handling: - Function Templates, Overloading Template Functions, Class Template, Class Templates and Non-Type Parameters, Templates and Inheritance, Templates and Friends.

Basics of C++ Exception Handling: - Try Throwing, Catch, and Throwing an Exception; - Catching an Exception, Re-throwing an Exception, Processing Unexpected Exceptions, Constructors, Destructors and Exception Handling.

TEXT / REFERENCE BOOKS:




1. Object Oriented Programming in Turbo C++ by Robert Lafore ,1994, The WAITE Group Press.
2. Programming with C++ By D Ravichandran, 2003, T.M.H
3. Object oriented Programming with C++ by E Balagurusamy, 2001, Tata McGraw-Hill.
3. C++ How to Program by H M Deitel and P J Deitel, 1998, Prentice Hall
4. Computing Concepts with C++ Essentials by Horstmann, 2003, John Wiley,
5. The Complete Reference in C++ By Herbert Schildt, 2002, TMH.
6. C++ Programming Fundamentals by Chuck Easttom, Firewall Media.


Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After successful completion of the course, students will be able:

1. To understand the difference between object oriented programming and procedural programming.
2. To understand the basic concepts of object oriented programming
3. To understand and implement C++ features such as Operator overloading, inheritance, virtual functions and friend functions.
4. To understand and apply the concepts of templates and exception handling




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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – III (Information Technology)

DIGITAL ELECTRONICS

CODE: ESC-203

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT-1

Fundamentals of Digital Systems and Logic Families

Digital signals, digital circuits, AND, OR, NOT, NAND, NOR and Exclusive-OR operations, Boolean algebra, examples of IC gates, number systems-binary, signed binary, octal hexadecimal number, binary arithmetic, one's and two's complements arithmetic, codes, error detecting and correcting codes, characteristics of digital ICs, digital logic families, TTL and CMOS logic, interfacing CMOS and TTL, Tri-state logic. Standard representation for logic functions, K-map representation, and simplification of logic functions using K-map, minimization of logical functions. Don't care conditions

UNIT-2

Combinational Digital Circuits

Multiplexer, De-Multiplexer/Decoders, Adders, Subtractors, BCD arithmetic, carry look ahead adder, serial adder, ALU, digital comparator, parity checker/generator, code converters, priority encoders, decoders/drivers for display devices, Q-M method of function realization.

Sequential Circuits and Systems

A 1-bit memory, the circuit properties of Bistable latch, the clocked SR flip flop, J- K-T and D types flip flops, applications of flip flops, shift registers, applications of shift registers, serial to parallel converter, parallel to serial converter, ring counter, sequence generator, ripple (Asynchronous) counters, synchronous counters, counters design using flip flops, applications of counters.

UNIT-3

A/D and D/A Converters

Digital to analog converters: weighted resistor/converter, R-2R Ladder D/A converter, specifications for D/A converters, examples of D/A converter ICs, sample and hold circuit, analog to digital converters: quantization and encoding, parallel comparator A/D converter, successive approximation A/D converter, counting A/D converter, dual slope A/D converter, A/D converter using voltage to frequency and voltage to time conversion, specifications of A/D converters, example of A/D converter ICs

UNIT-4

Semiconductor Memories and Programmable Logic Devices

Memory organization and operation, expanding memory size, classification and characteristics of memories, sequential memory, read only memory (ROM), read and write memory (RAM), content addressable memory (CAM), charge de coupled device memory (CCD), commonly used memory chips, ROM as a PLD, Programmable logic array, Programmable array logic, complex Programmable logic devices (CPLDS), Field Programmable Gate Array (FPGA).

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Department of Computer Science &
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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (H.R.)

TEXT/REFERENCE BOOKS:


1. R. P. Jain, "Modern Digital Electronics", McGraw Hill Education, 2009.
2. M. M. Mano, "Digital logic and Computer design", Pearson Education India, 2016.
3. A. Kumar, "Fundamentals of Digital Circuits", Prentice Hall India, 2016.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


Course Outcomes

At the end of this course, students will demonstrate the ability to

1. Understand working of logic families and logic gates.
2. Design and implement Combinational and Sequential logic circuits.
3. Understand the process of Analog to Digital conversion and Digital to Analog conversion.
4. Be able to use PLDs to implement the given logical problem.



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B. Tech. Semester – III (Information Technology)
MATHEMATICS- III (Calculus and Ordinary Differential Equations)
CODE: BSC-201

NO OF CREDITS: 4

L T P

3 1 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT-1

SEQUENCES AND SERIES

Convergence of sequence and series, tests for convergence, power series, Taylor's series. Series or exponential, trigonometric and logarithmic functions.

MULTIVARIABLE CALCULUS (DIFFERENTIATION)

Limit, continuity and partial derivatives, directional derivatives, total derivative; Tangent plane and normal line; Maxima, minima and saddle points; Method of Lagrange multipliers; Gradient, curl and divergence.

UNIT-2

MULTIVARIABLE CALCULUS (INTEGRATION)

Multiple Integration: double and triple integrals (Cartesian and polar), change of order of integration in double integrals, Change of variables (Cartesian to polar). Theorems of Green, Gauss and Stokes, orthogonal curvilinear coordinates, Simple applications involving cubes, sphere and rectangular parallelepipeds.

UNIT-3

FIRST ORDER ORDINARY DIFFERENTIAL EQUATIONS

Exact, linear and Bernoulli's equations, Euler's equations, Equations not of first degree: equations solvable for p, equations solvable for y, equations solvable for x and Clairaut's type.

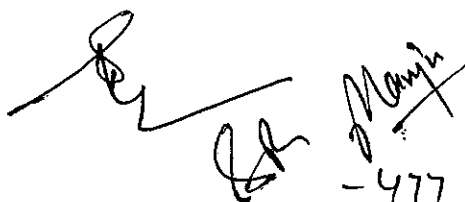
UNIT-4


ORDINARY DIFFERENTIAL EQUATIONS OF HIGHER ORDERS

Second order linear differential equations with variable coefficients, method of variation of parameters, Cauchy-Euler equation; Power series solutions; Legendre polynomials, Bessel functions of the first kind and their properties.

TEXT/REFERENCES BOOKS

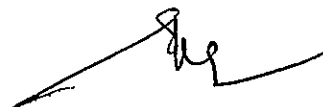

1. G.B. Thomas and R.L. Finney, "Calculus and Analytic geometry", 9th Edition, Pearson, Reprint, 2002.
2. Veerarajan T., "Engineering Mathematics for first year", Tata McGraw-Hill, New Delhi, 2008.
3. Ramana B.V., "Higher Engineering Mathematics", Tata McGraw Hill New Delhi, 11th Reprint, 2010.
4. N.P. Bali and Manish Goyal, "A text book of Engineering Mathematics", Laxmi Publications, Reprint, 2010.
5. B.S. Grewal, "Higher Engineering Mathematics", Khanna Publishers, 35th Edition, 2000.
6. Erwin Kreyszig, "Advanced Engineering Mathematics", 9th Edition, John Wiley & Sons, 2006.



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7. W. E. Boyce and R. C. DiPrima, "Elementary Differential Equations and Boundary Value Problems, 9th Edition, Wiley India, 2009.
8. S. L. Ross, "Differential Equations", 3rd Ed., Wiley India, 1984.
9. E. A. Coddington, "An Introduction to Ordinary Differential Equations", Prentice Hall India, 1995.
10. E. L. Ince, "Ordinary Differential Equations", Dover Publications, 1958.
11. G.F. Simmons and S.G. Krantz, "Differential Equations", Tata McGraw Hill, 2007.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


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B. Tech. Semester – III (Information Technology)
HUMANITIES – I (EFFECTIVE TECHNICAL COMMUNICATION)
CODE: HSMC-201

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT-1

Information Design and Development

Different kinds of technical documents, Information development life cycle, Organization structures, factors affecting information and document design, Strategies for organization, Information design and writing for print and for online media.

Technical writing

Technical writing process, forms of discourse, Writing drafts and revising, Collaborative writing, creating indexes, technical writing style and language.

UNIT-2

Grammar and editing

Basics of grammar, study of advanced grammar, editing strategies to achieve appropriate technical style. Introduction to advanced technical communication, Usability, Human factors, Managing technical communication projects, time estimation, Single sourcing, Localization.

Self Development and Assessment

Self assessment, Awareness, Perception and Attitudes, Values and belief, Personal goal setting, career planning, Self-esteem. Managing Time; Personal memory, Rapid reading, Taking notes; Complex problem solving; Creativity

UNIT-3

Communication and Technical writing

Public speaking, Group discussion, Oral presentation, Interviews, Graphic presentation, Presentation aids, Personality Development. Writing reports, project proposals, brochures, newsletters, technical articles, manuals, official notes, business letters, memos, progress reports, minutes of meetings, event report.

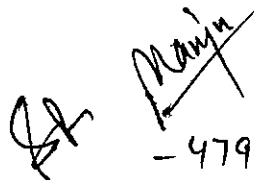
UNIT-4

Ethics


Business ethics, Etiquettes in social and office settings, Email etiquettes, Telephone Etiquettes, Engineering ethics, Managing time, Role and responsibility of engineer, Work culture in jobs, Personal memory, Rapid reading, Taking notes, Complex problem solving, Creativity.

TEXT/REFERENCE BOOKS

1. David F. Beer and David McMurrey, Guide to writing as an Engineer, John Willey. New York, 2004



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Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Serapat (H.R.)

2. Diane Hacker, Pocket Style Manual, Bedford Publication, New York, 2003. (ISBN 0312406843)
3. Shiv Khera, You Can Win, Macmillan Books, New York, 2003.
4. Raman Sharma, Technical Communications, Oxford Publication, London, 2004.
5. Dale Jungk, Applied Writing for Technicians, McGraw Hill, New York, 2004. (ISBN: 07828357-4)
6. Sharma, R. and Mohan, K. Business Correspondence and Report Writing, TMH New Delhi 2002.
7. Xebec, Presentation Book, TMH New Delhi, 2000. (ISBN 0402213)

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B. Tech. Semester – III (Information Technology)
ENVIRONMENTAL SCIENCES
CODE: MC-201

NO OF CREDITS: 0
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

Course Objectives:

The prime objective of the course is to provide the students a detailed knowledge on the threats and challenges to the environment due to developmental activities. The students will be able to identify the natural resources and suitable methods for their conservation and sustainable development. The focus will be on awareness of the students about the importance of ecosystem and biodiversity for maintaining ecological balance. The students will learn about various attributes of pollution management and waste management practices. The course will also describe the social issues both rural and urban environment and environmental legislation

UNIT-1

The Multidisciplinary Nature of Environmental Studies

Definition, scope and importance. Need for public awareness.

Natural Resources: Renewable and Non-Renewable Resources

Natural resources and associated problems:

Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. Mineral resources: Use and exploitation, environmental effects of extracting and mineral resources, case studies. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles.

UNIT-2

Ecosystems


Concept of an ecosystem. Structure and function of an ecosystem. Producers, consumers and decomposers. Energy flow in the ecosystem. Ecological succession. Food chains, food webs and ecological pyramids. Introduction, types, characteristic features, structure and function of the following ecosystem: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

Biodiversity and its Conservation

Introduction – Definition: genetic, species and ecosystem diversity. Biogeographical classification of India. Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values. Biodiversity at global, National and local levels. India as a mega-diversity nation. Hot-spots of

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biodiversity. Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India. Conservation of biodiversity: insitu and ex-situ conservation of biodiversity

UNIT-3

Environmental Pollution Definition

Causes, effects and control measures of: Air pollution b) Water pollution c) Soil pollution d) Marine pollution e) Noise pollution f) Thermal pollution g) Nuclear hazards .Solid waste Management: Causes, effects and control measures of urban and industrial wastes. Role of an individual in prevention of pollution. Pollution case studies. Disaster management: floods, earthquake, cyclone and landslides.

Social Issues and the Environment

From Unsustainable to Sustainable development Urban problems related to energy. Water conservation, rain water harvesting, watershed management. Resettlement and rehabilitation of people; its problems and concerns. Case studies.

Environmental ethics: Issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies. Wasteland reclamation. Consumerism and waste products. Environment Protection Act. Air (Prevention and Control of Pollution) Act. Water (Prevention and Control of Pollution) Act Wildlife Protection Act. Forest Conservation Act. Issues involved in enforcement of environmental legislation Public awareness.

UNIT-4

Human Population and the Environment

Population growth, variation among nations. Population explosion – Family Welfare Programme. Environment and human health. Human Rights. Value Education. HIV/AIDS. Women and Child Welfare. Role of Information Technology in Environment and human health. Case Studies.

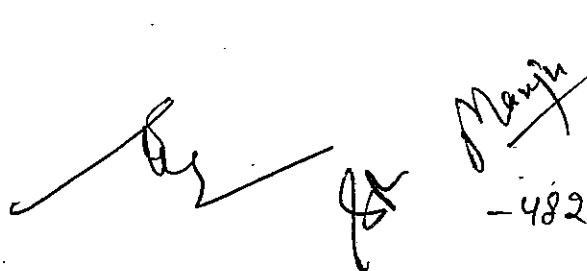
Field Work


Visit to a local area to document environmental assets-river / forest / grassland / hill / mountain. Visit to a local polluted site – Urban / Rural / Industrial / Agricultural. Study of common plants, insects, birds. Study of simple ecosystems – pond, river, hill slopes, etc.

TEXT/REFERENCES BOOKS

1. Environmental Science: towards a sustainable future by Richard T. Wright. 2008 PHL Learning Private Ltd. New Delhi.
2. Environmental Engineering and science by Gilbert M. Masters and Wendell P. Ela 2008 PHI Learning Pvt Ltd.
3. Environmental Science by Daniel B. Botkin & Edwards A. Keller, Wiley INDIA edition.
4. Fundamentals of Ecology by Odum, E.P., Barrick, M. and Barret, G.W. Thomson Brooks/Cole Publisher, California, 2005.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – III (Information Technology)
DIGITAL ELECTRONICS LAB
CODE: ESC-203-P

NO OF CREDITS: 1

L T P

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INTERNAL MARKS: 10


EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments related to the course must be performed.



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B. Tech. Semester – III (Information Technology)
DATA STRUCTURES & ALGORITHMS LAB
CODE: PCC-CS-201-P

NO OF CREDITS: 2

L T P

0 0 4

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

Course Objectives:

1. To impart the basic concepts of data structures and algorithms.
2. To understand concepts about searching and sorting techniques
3. To understand basic concepts about stacks, queues, lists, trees and graphs.
4. To enable them to write algorithms for solving problems with the help of fundamental data structures

S.No.	Experiment
1	Five /six programs on Strings
2	Five/ six programs on Array
3	Programs on Pointer
4	Write a program to search an element from an array using Linear Search
5	Write a program to search an element from an array using Binary Search
6	Write a program to sort elements of an array using selection sort
7	Write a program to sort elements of an array using insertion sort
8	Write a program to sort elements of an array using bubble sort
9	Write a program to sort elements of an array using Quick sort
10	Write a program to sort elements of an array using Merge sort
11	Write a program to push , pop and display the elements in a stack using array
12	Write a program to convert infix into postfix notation using stack using array
13	Write a program to evaluate postfix notation using stack
14	Write a program to insert, delete and display the elements in a queue using array
15	Write a program to insert, delete and display the elements in a circular queue
16	Write a program to insert, delete and display the elements in a one way linked list at beginning, at end and at certain point
17	Write a program to insert, delete and display the elements in a two way linked list at beginning, at end and at certain point
18	Write a program to push , pop and display the elements in a stack using linked list
19	Write a program to convert infix into postfix notation using stack using linked list
20	Write a program to insert, delete and display the elements in a queue using linked list

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 Chairperson
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 Engg.

21	Write a program to insert, delete and display the elements in a binary tree
22	Write a program to insert, delete and display the elements in a binary search tree
23	Write a program to sort elements using heap sort
24	Write a program to insert, delete and display elements in a graph
25	Write a program to insert, delete and display the elements in a B-tree
26	Other programs based on above concepts that teacher finds appropriate

Course Outcomes:

1. For a given Search problem (Linear Search and Binary Search) student will able to implement it.
2. For a given problem of Stacks, Queues, linked list and Tree, student will able to implement it.
3. Student will able to write programs - Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort, Heap Sort.
4. Student will able to implement Graph search and traversal algorithms.

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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – III (Information Technology)
OBJECT ORIENTED PROGRAMMING WITH C++ LAB
CODE: PCC-CS-205-P

NO OF CREDITS: 2

L T P

0 0 4

INTERNAL MARKS: 10

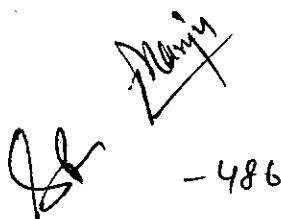
EXTERNAL MARKS: 40

TOTAL : 50

Course Objectives:

1. To apply the basic knowledge of Object and classes.
 2. To implement features of Object oriented programming like inheritance, polymorphism, operator overloading
 3. To apply the concepts of exception handling and templates.
-
1. Raising a number n to a power p is the same as multiplying n by itself p times. Write a function called `power ()` that takes a double value for n and an int value for p , and returns the result as double value Use a default argument of 2 for p . so that if this argument is omitted, the number will be squared. Write a main () function that gets values from the user to test this function.
 2. Create the equivalent of a four function calculator. The program should request the user to enter a number, an operator, and another number. It should then carry out the specified arithmetical operation: adding, subtracting, multiplying, or dividing the two numbers. (It should use a switch statement to select the operation). Finally it should display the result.
 3. When it finishes the calculation, the program should ask if the user wants to do another calculation. The response can be 'Y' or 'N'. Some sample interaction with the program might look like this.
 4. Enter first number. Operator, second number: 10/3 Answer = 3.333333
 5. Do another (YI N)? Y Enter first number. Operator, second number 12 + 100 Answer = 11 Do another (Y I N)? N
 6. Write a program to overload constructors.
 7. Create two classes DM and DB which store the value of distances. DM stores distances in metres and centimeters and DB in feet and inches. Write a program that can read values for the class objects and add one object of DM with another object of DB. Use a friend function to carry out the addition operation. The object that stores the results maybe DM object or DB object, depending on the units in which the results are required. The display should be in the format of feet and inches or metres and centimetres depending on object on display.
 8. Write a Program to overload +,-,*,/,+= on a class of complex numbers.
 9. Write a Program to overload +,= on a class of strings.
 10. Create a class rational which represents a numerical value by NUMERATOR & DENOMINATOR . Write a Program to overload +,- for class of rational .
 11. Make a class Employee with a name and salary. Make a class Manager inherit from Employee. Add an instance variable, named department, of type string. Supply a method to to String that prints the manager's name, department and salary. Make a class Executive inherit from Manager Supply a method to String that prints the string Executive followed by the information stored in the Manager superclass object. Supply a test program that tests these classes and methods.

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12. Imagine a tollbooth with a class called toll Booth. The two data items of a type unsigned int to hold the total number of cars, and a type double to hold the total amount of money collected. A constructor initializes both these to 0. A member function called payingCar () increments the car total and adds 0.50 to the cash total. Another function, called nopayCar (). increments the car.
13. Write a program to create a class template to implement stack operations.
14. Write a program to demonstrate exception handling.

Course Outcomes:

After successful completion of the course, students will be able to:

1. Develop program using the concepts of object oriented programming like class, objects, constructors and destructors.
2. Develop programs using C++ features such as Operator overloading and
3. Develop programs to illustrate virtual functions and friend functions.
4. Develop programs to apply the concepts of templates and exception handling

Dr. Manjiv
Dr. Manjiv
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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech Information Technology
(w.e.f Academic Session 2024- 2025)

Semester - 4

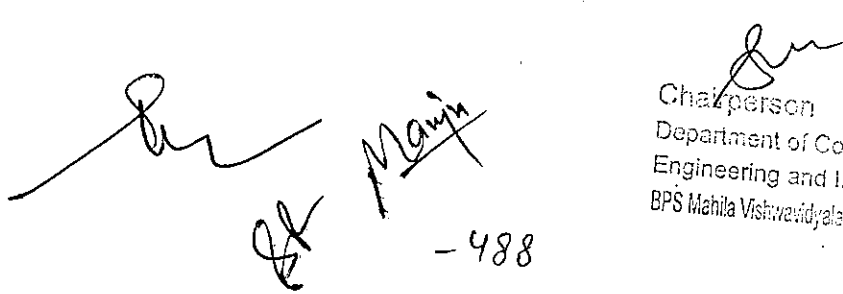
S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-202	Discrete Mathematics	3	1	0	4	20	80	100
2.	PCC	PCC-CS-204	Software Engineering	3	0	0	3	20	80	100
3.	PCC	PCC-CS-206	Operating System	3	0	0	3	20	80	100
4.	PCC	PCC-CS-208	Design & Analysis of Algorithms	3	0	0	3	20	80	100
5.	PCC	PCC-CS-210	Python	3	0	0	3	20	80	100
6.	HSMC	HSMC-202	Management – I (Organizational Behavior)	3	0	0	3	20	80	100
7.	MC	MC- 303	Universal Human Values	3	0	0	0	10	40	50
Lab										
8.	PCC	PCC-CS-206- P	Operating System LAB	0	0	4	2	10	40	50
9.	PCC	PCC-CS-208- P	Hardware Lab/ MATLAB	0	0	2	1	10	40	50
10.	PCC	PCC-CS-210- P	Python Lab	0	0	4	2	10	40	50
Total				21	1	10	24	160	640	800

Total Contact Hours =32

Total Credit= 24

Note: 1). 4-6 weeks training will be held after fourth semester. However, Viva-Voce will be conducted in the fifth semester.

2). Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.



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B. Tech. Semester – IV (Information Technology)

DISCRETE MATHEMATICS

CODE: PCC-CS-202

NO OF CREDITS: 4

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. Throughout the course, students will be expected to demonstrate their understanding of Discrete Mathematics by being able to do each of the following:
2. Use mathematically correct terminology and notation.
3. Construct correct direct and indirect proofs.
4. Use division into cases in a proof.
5. Use counterexamples.
6. Apply logical reasoning to solve a variety of problems.

UNIT-1

Sets, Relation and function: Operations and Laws of Sets, Cartesian Products, Binary Relation, Partial Ordering Relation, Equivalence Relation, Image of a Set, Sum and Product of Functions, Bijective functions, Inverse and Composite Function, Size of a Set, Finite and infinite Sets, Countable and uncountable Sets, Cantor's diagonal argument and The Power Set theorem, Schroeder-Bernstein theorem.

Principles of Mathematical Induction: The Well-Ordering Principle, Recursive definition, The Division algorithm: Prime Numbers, The Greatest Common Divisor: Euclidean Algorithm, The Fundamental Theorem of Arithmetic.

UNIT-2

Basic counting techniques-inclusion and exclusion, pigeon-hole principle, permutation and combination.

Propositional Logic: Syntax, Semantics, Validity and Satisfiability, Basic Connectives and Truth Tables, Logical Equivalence: The Laws of Logic, Logical Implication, Rules of Inference, The use of Quantifiers. Proof Techniques: Some Terminology, Proof Methods and Strategies, Forward Proof, Proof by Contradiction, Proof by Contraposition, Proof of Necessity and Sufficiency.


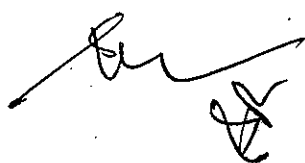
UNIT-3

Algebraic Structures and Morphism: Algebraic Structures with one Binary Operation, Semi Groups, Monoids, Groups, Congruence Relation and Quotient Structures, Free and Cyclic Monoids and Groups, Permutation Groups, Substructures, Normal Subgroups, Algebraic Structures with two Binary Operation, Rings, Integral Domain and Fields. Boolean Algebra and Boolean Ring, Identities of Boolean Algebra, Duality, Representation of Boolean Function, Disjunctive and Conjunctive Normal Form

UNIT-4

Graphs and Trees: Graphs and their properties, Degree, Connectivity, Path, Cycle, Sub Graph, Isomorphism, Eulerian and Hamiltonian Walks, Graph Colouring, Colouring maps and Planar Graphs,

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Colouring Vertices, Colouring Edges, List Colouring, Perfect Graph, definition properties and Example, rooted trees, trees and sorting, weighted trees and prefix codes, Bi-connected component and Articulation Points, Shortest distances.

TEXT/REFERNCE BOOKS

1. Kenneth H. Rosen, Discrete Mathematics and its Applications, Tata McGraw – Hill
2. Susanna S. Epp, Discrete Mathematics with Applications, 4th edition, Wadsworth Publishing Co. Inc.
3. C L Liu and D P Mohapatra, Elements of Discrete Mathematics A Computer Oriented Approach, 3rd Edition by, Tata McGraw – Hill.
4. J.P. Tremblay and R. Manohar, Discrete Mathematical Structure and It's Application to Computer Science", TMG Edition, TataMcgraw-Hill
5. Norman L. Biggs, Discrete Mathematics, 2nd Edition, Oxford University Press. Schaum's Outlines Series, Seymour Lipschutz, Marc Lipson, Discrete Mathematics, Tata McGraw. – Hill

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. For a given logic sentence express it in terms of predicates, quantifiers, and logical connectives
2. For a given a problem, derive the solution using deductive logic and prove the solution based on logical inference
3. For a given a mathematical problem, classify its algebraic structure
4. Evaluate Boolean functions and simplify expressions using the properties of Boolean algebra
5. Develop the given problem as graph networks and solve with techniques of graph theory.

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B. Tech. Semester – IV (Information Technology)
SOFTWARE ENGINEERING
CODE: PCC-CS-204

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To enable the students to apply a systematic application of scientific knowledge in creating and building cost effective software solutions to business and other types of problems.
2. To make the students understand project management concepts & their metrics.
3. To make the students understand requirement engineering and its models (Information, functional, behavioural).

UNIT-1

INTRODUCTION

Evolving role of software, Software Characteristics, Software crisis, Silver bullet, Software myths, Software process, Personal Software Process (PSP), Team Software Process (TSP), emergence of software engineering, Software process, project and product, Software Process Models: Waterfall Model, Prototype Model, Spiral, Model, RAD Model, Iterative Model, Incremental Model, Aspect-oriented Model, Agile Model.

UNIT-2

SOFTWARE PROJECT MANAGEMENT

Project management concepts, Planning the software project, Estimation—LOC based, FP based, Use-case based, empirical estimation COCOMO- A Heuristic estimation techniques, staffing level estimation, team structures, staffing, risk analysis and management.

UNIT-3

REQUIREMENTS, ANALYSIS AND SPECIFICATION

Software Requirements engineering, Requirement engineering process, Requirement Engineering Tasks, Types of requirements, SRS. System modeling: Data Modeling, Functional modeling and information flow: Data flow diagrams, Behavioral Modeling, The mechanics of structured analysis: Creating entity/ relationship diagram, data flow model, control flow model, the data dictionary.

SYSTEM DESIGN

Design principles, the design process; Design concepts: Abstraction, refinement, modularity, software architecture, control hierarchy, structural partitioning, data structure, software procedure, information hiding; Effective modular design: Functional independence, Cohesion, Coupling;

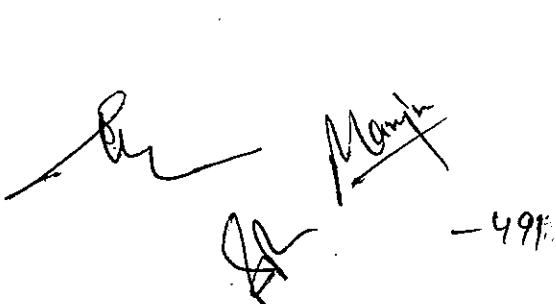
UNIT-4

TESTING AND MAINTENANCE

Testing terminology- error, bug/defect/fault, failure, Verification and validation, Test case design, Static testing ,Dynamic testing--- Black box testing—Boundary value analysis, White box testing--basis path testing, Unit testing, Integration testing, Acceptance Testing

SOFTWARE QUALITY MODELS AND STANDARDS

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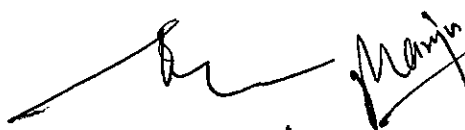
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Quality concepts, Software quality assurance, SQA activities, Formal approaches to SQA; Statistical software quality assurance; CMM, The ISO 9126 Standard

TEXT/REFERENCES BOOKS:

1. Software Engineering – A Practitioner's Approach, Roger S. Pressman, 1996, MGH.
2. Fundamentals of software Engineering, Rajib Mall, PHI
3. Software Engineering by Ian Sommerville, Pearson Edu, 5th edition, 1999, AW,
4. Software Engineering – David Gustafson, 2002, T.M.H

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


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B. Tech. Semester – IV (Information Technology)
OPERATING SYSTEMS
CODE: PCC-CS-206

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn the fundamentals of Operating Systems.
2. To learn the mechanisms of OS to handle processes, threads and their communication.
3. To know the components and management aspects of concurrency management viz. Mutual exclusion algorithms, deadlock detection algorithms and agreement protocols.
4. To learn the mechanisms involved in memory management in contemporary OS.
5. To gain knowledge on Input/Output management aspects of Operating systems.

UNIT-1

Introduction

Concept of Operating Systems, Evolution and Generations of Operating systems, Types of Operating Systems, OS Services, Hardware Support for Operating Systems, Types of Resources, System Calls, Structure of an OS -, Monolithic, Layered, Microkernel and Hybrid Operating Systems; Concept of Virtual Machine

Process Management

Definition of process, Process Relationship, Different states of a Process, Process State transitions, Process Control Block (PCB), Context switching, Thread: Definition, Various states, Benefits of threads, Types of threads, Concept of multithreads; Process Scheduling: Foundation and Scheduling objectives, Types of Schedulers, Scheduling criteria: CPU utilization, Throughput, Turnaround Time, Waiting Time, Response Time; Scheduling algorithms: Pre-emptive and Non pre-emptive, First come first served, Priority and Round Robin scheduling.

UNIT-2

Inter-Process Communication and Synchronization

Critical Section, Race Conditions, Mutual Exclusion, Hardware Solution, Strict Alternation, Peterson's Solution, The Producer-Consumer Problem, Semaphores, Monitors, Message Passing, Classical IPC Problems: Reader's & Writer Problem, Dining Philosopher Problem etc.

Deadlocks

Definition, Necessary and sufficient conditions for Deadlock, Deadlock Prevention, Deadlock Avoidance: Banker's algorithm, Deadlock detection and Recovery.

UNIT-3

Memory Management

Basic concept, Logical and Physical address map, Memory allocation: Contiguous Memory allocation-Fixed and variable partition-Internal and External fragmentation and Compaction; Paging: Principle of

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operation – Page allocation – Hardware support for paging, Protection and sharing, Disadvantages of paging; Virtual Memory: Basics of Virtual Memory – Hardware and control structures – Locality of reference, Page fault, Working Set , Dirty page/Dirty bit – Demand paging, Page Replacement algorithms: Optimal, First in First Out (FIFO), Second Chance (SC), Not recently used (NRU) and Least Recently used (LRU).

UNIT-4

I/O Management

Device independent I/O software, Secondary-Storage Structure: Disk structure, Disk scheduling algorithms; Disk scheduling - FCFS, SSTF, SCAN, C-SCAN File Management: Concept of File, Access methods, File types, File operation, Directory structure, File System structure, Allocation methods (contiguous, linked, indexed), Free-space management (bit vector, linked list, grouping), directory implementation (linear list, hash table), efficiency and performance; Disk Management: Disk structure, , Disk reliability, Disk formatting, Boot-block, Bad blocks
Case Study on Linux/Unix and Windows

TEXT/REFERENCES BOOKS:

1. Abraham Silberschatz, Peter Galvin, Greg Gagne, "Operating System Concepts Essentials", 9th Edition, Wiley Asia Student Edition.
2. William Stallings, "Operating Systems: Internals and Design Principles", 5th Edition, Prentice Hall of India.
3. Naresh Chauhan, "Principles of operating systems". Oxford university Press.
4. Charles Crowley, "Operating System: A Design-oriented Approach", 1st Edition, Irwin Publishing.
5. Gary J. Nutt, "Operating Systems: A Modern Perspective", 2nd Edition, Addison-Wesley
6. Maurice Bach, "Design of the Unix Operating Systems", 8th Edition, PHI
7. Daniel P. Bovet, Marco Cesati, "Understanding the Linux Kernel", 3rd Edition, O'Reilly and Associates

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After the completion of the course, the students will be able to:

1. Create processes and threads.
2. Develop algorithms for process scheduling for a given specification of CPU utilization, Throughput, Turnaround Time, Waiting Time, and Response Time.
3. For a given specification of memory organization, develop the techniques for optimally allocating memory to processes by increasing memory utilization and for improving the access time.
4. Design and implement file management system.
5. For a given I/O device and OS (specify), develop the I/O management functions in OS as part of a uniform device abstraction by performing operations for synchronization between CPU and I/O controllers.

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B. Tech. Semester – IV (Information Technology)
DESIGN AND ANALYSIS OF ALGORITHMS
CODE: PCC-CS-208

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. Analyze the asymptotic performance of algorithms.
2. Write rigorous correctness proofs for algorithms.
3. Demonstrate a familiarity with major algorithms and data structures.
4. Apply important algorithmic design paradigms and methods of analysis.
5. Synthesize efficient algorithms in common engineering design situations.

UNIT-1

Introduction

Characteristics of algorithm, Analysis of algorithm: Asymptotic analysis of complexity bounds – best, average and worst-case behavior; Performance measurements of Algorithm, Time and space trade-offs, Analysis of recursive algorithms through recurrence relations: Substitution method, Recursion tree method and Masters' theorem.

UNIT-2

Fundamental Algorithmic Strategies

Brute-Force, Greedy, Dynamic Programming, Branch and-Bound and backtracking methodologies for the design of algorithms; Illustrations of these techniques for Problem-Solving, Bin Packing, Knapsack, Job sequencing with deadline, Optimal Binary Search tree, N-Queen problem, Hamiltonian Cycle, TSP, Heuristics – characteristics and their application domains.

UNIT-3

Graph and Tree Traversal Algorithms

Depth First Search (DFS) and Breadth First Search (BFS); Shortest path algorithms, Transitive closure, Minimum Spanning Tree, Topological sorting, Network Flow Algorithm.

UNIT-4

Tractable and Intractable Problems

Computability of Algorithms, Computability classes – P, NP, NP-complete and NP-hard, Cook's theorem, Standard NP-complete problems and Reduction techniques.

Advanced Topics

Approximation algorithms, Randomized algorithms, Class of problems beyond NP – P SPACE

TEXT/REFERENCE BOOKS

1. Thomas H Cormen, Charles E Lieserson, Ronald L Rivest and Clifford Stein, "Introduction to Algorithms", MIT Press/McGraw-Hill; 3rd edition, [ISBN: 978-0262533058], 2009.

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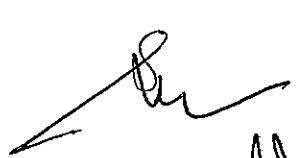


2. Ellis Horowitz, SartajSahni and SanguthevarRajasekaran, "Fundamentals of Algorithms", Universities Press; 2nd edition [ISBN:978-8173716126],2008.
3. Jon Kleinberg and ÉvaTardos, "Algorithm Design", Pearson Publisher; 1st edition [ISBN:978-0321295354],2012.
4. Michael T Goodrich and Roberto Tamassia, "Fundamentals of Algorithms" Wiley Press; 1st edition [ISBN:978-8126509867],2006.

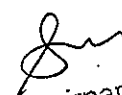
Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After the completion of course, student should be able to:

1. Analyze worst-case running times of algorithms based on asymptotic analysis and justify the correctness of algorithms.
2. Describe the greedy paradigm and explain when an algorithmic design situation calls for it. For a given problem develop the greedy algorithms.
3. Describe the divide-and-conquer paradigm and explain when an algorithmic design situation calls for it. Synthesize divide-and-conquer algorithms. Derive and solve recurrence relation.
4. Describe the dynamic-programming paradigm and explain when an algorithmic design situation calls for it. For a given problems of dynamic-programming and develop the dynamic programming algorithms, and analyze it to determine its computational complexity.
5. Explain the ways to analyze randomized algorithms (expected running time, probability of error).
6. Explain what an approximation algorithm is. Compute the approximation factor of an approximation algorithm (PTAS and FPTAS).




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B. Tech. Semester – IV (Information Technology)

PYTHON

CODE: PCC-CS-210

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course objectives:

1. Fundamentals and Data structures of python's programming language.
2. Object oriented concepts in python programming language.
3. Retrieving, processing, storing and visualization of data using python.

UNIT-1

INTRODUCTION TO PYTHON

Brief history of python, Data types - Built-in, Sequence, Sets, Strings, Literals, constants, keywords, variables, naming convention. Operators – Types, Precedence & Associativity, Input, Output, file handling, Control Statements.

UNIT-2

FUNCTIONS AND DATA STRUCTURES IN PYTHON

Functions – basics of functions, functions as objects, recursive functions, List – methods to process lists, Shallow & Deep copy, Nested lists, lists as matrices, lists as stacks, Queues, - Deques, Tuples - basic operations on tuples, nested tuples, Dictionaries – operations on dictionary, ordered dictionary, iteration on dictionary, conversion of lists & strings into dictionary, Sets & frozen sets, looping techniques on lists & dictionaries, Lamda, filter, reduce, map, list comprehension, iterators and generators.

UNIT-3

OBJECTS IN PYTHON & DATA MANIPULATION AND VISUALIZATION IN PYTHON

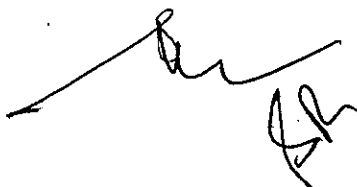
Class and instance attributes, inheritance, multiple inheritance, methods resolution order, magic methods and operator overloading, meta classes, abstract and inner classes, exception handling, modular programs and packages.

Data frames in panda, Creating dataframes from .csv and excel files, Lists of tuples, Dataframes aggregation and concatenation, plotting data using matplotlib & panda


UNIT-4

NUMERICAL ANALYSIS IN PYTHON

Introduction to NumPy, NumPy array object, Creating a multidimensional array, NumPy numerical types - Data type objects, Character codes, dtype constructors. dtype attributes. N-dimensional slicing and indexing. Manipulating array shapes -- Stacking arrays, Splitting NumPy arrays, NumPy array attributes, Converting arrays, Creating array views and copies. Indexing with a list of locations. Indexing NumPy arrays with Booleans. Broadcasting NumPy arrays.



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TEXT/REFERENCE BOOKS:

1. Wesley J Chun, Core Python Programming, Prentice Hall, Second Edition, 2006
2. Ivan Idris, Python Data Analysis, Packt Publishing,UK, 2014 (freely available online)
3. Wes McKinney, Python for Data Analysis, O'Reilly - 2013

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Write programs efficiently in python
2. Effectively use numerical analysis libraries of python
3. Carry out basic data science operations like retrieving, processing and visualizing using python.

Dr. Manish
Dr.
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Dr.
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B. Tech. Semester – IV (Information Technology)
MANAGEMENT –I (ORGANIZATIONAL BEHAVIOUR)
CODE: HSMC-202

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The objective of this course is to expose the students to basic concepts of management and provide insights necessary to understand behavioral processes at individual, team and organizational level.

UNIT-1

Introduction to management: concept, nature; evolution of management thoughts –traditional, behavioural, system, contingency and quality viewpoints; Managerial levels, skills and roles in an organization; Functions of Management: Planning, Organizing, Directing, Controlling, Problem solving and Decision making; Management control; managerial ethics and social responsibility; Management Information System (MIS).

UNIT-2

Fundamentals of Organizational Behavior: Concept, evolution, importance and relationship with other Fields; Contemporary challenges of OB; Individual Processes and Behavior – differences, Personality concept, determinant, theories and applications; Values, Attitudes and Emotions, Perception- concept, process and applications, Learning and Reinforcement; Motivation: concept, theories and applications; Stress management.

UNIT-3

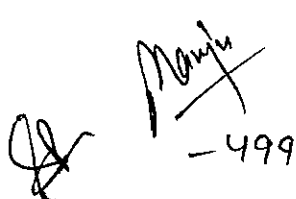
Interpersonal Processes- Work teams and groups- Definition of Group, Stages of group development, Group cohesiveness, Types of groups, Group processes and Decision Making; Team Building; Conflict- concept, sources, types, management of conflict; Power and Political Behavior; Leadership: concept, function and styles.

UNIT-4

Organizational Processes and structure: organizational design: various organizational structures and their effect on human behavior; Organizational climate; Organizational culture; Organizational change: Concept, Nature, Resistance to Change, Change Management, Implementing Change and Organizational Development

TEXT/REFERENCES BOOKS:

1. Robbins, S.P. and Decenzo, D.A. Fundamentals of Management, Pearson Education Asia, New Delhi.
2. Stoner, J et. al, Management, New Delhi, PHI, New Delhi
3. Satya Raju, Management – Text & Cases, PHI, New Delhi
4. Kavita Singh, Organisational Behaviour: Text and cases. New Delhi: Pearson Education.



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Chairperson

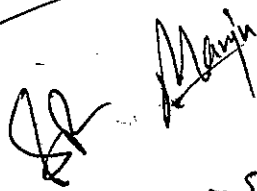
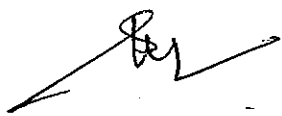
Department of Computer Science &
Engineering and Information Technology
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5. Pareek, Udai, Understanding Organisational Behaviour, Oxford University Press, New Delhi
6. Robbins, S.P. & Judge, T.A., Organisational Behaviour, Prentice Hall of India, New Delhi


Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. The students learn how to influence the human behaviour.
2. Students will be able to understand behavioural dynamics in organizations.
3. Students will be able to apply managerial concepts in practical life.
4. Students will be able to understand organizational culture and change.



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Dr. Anurag
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B. Tech. Semester – IV (Information Technology)

UNIVERSAL HUMAN VALUES

CODE: MC-303

NO OF CREDITS: 0

L T P

3 0 0

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

Course Objectives:

1. To help students distinguish between values and skills, and understand the need, basic guidelines, content and process of value education.
2. To help students initiate a process of dialog within themselves to know what they 'really want to be' in their life and profession
3. To help students understand the meaning of happiness and prosperity for a human being.
4. To facilitate the students to understand harmony at all the levels of human living, and live accordingly.
5. To facilitate the students in applying the understanding of harmony in existence in their profession and lead an ethical life.

UNIT-1

Introduction

Need, Basic Guidelines, Content and Process for Value Education Understanding the need, basic guidelines, content and process for Value Education, Self-Exploration, 'Natural Acceptance' and Experiential Validation- as the mechanism for self exploration, Continuous Happiness and Prosperity, Right understanding, Relationship and Physical Facilities- the basic requirements for fulfillment of aspirations of every human being with their correct priority, Understanding Happiness and Prosperity correctly- A critical appraisal of the current scenario, Method to fulfill the above human aspirations: understanding and living in harmony at various levels.

UNIT-2

Understanding Harmony in the Human Being

Harmony in Myself Understanding human being as a co-existence of the sentient 'I' and the material 'Body', Understanding the needs of Self ('I') and 'Body' - Sukh and Suvidha, Understanding the Body as an instrument of 'I' (I being the doer, seer and enjoyer), Understanding the characteristics and activities of 'I' and harmony in 'I', Understanding the harmony of I with the Body: Sanyam and Swasthya; meaning of Prosperity in detail.

UNIT-3

Understanding Harmony in the Family and Society

Harmony in Human-Human Relationship Understanding harmony in the Family- the basic unit of human interaction , Understanding values in human-human relationship; meaning of Nyaya and program for its fulfillment to ensure Ubhay-tripti; Trust (Vishwas) and Respect (Samman) as the foundational values of relationship, Understanding the meaning of Vishwas; Difference between intention and competence, Understanding the meaning of Samman, Difference between respect and

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differentiation, Understanding the harmony in the society, Visualizing a universal harmonious order in society.

UNIT-4

Understanding Harmony in the Nature and Existence

Whole existence as Co-existence Understanding the harmony in the Nature, Interconnectedness and mutual fulfillment among the four orders of nature- recyclability and self-regulation in nature, Understanding Existence as Co-existence (Sah-astitva) of mutually interacting units in all-pervasive space, Holistic perception of harmony at all levels of existence.

Implications of the above Holistic Understanding of Harmony on Professional Ethics

TEXT/REFERENCE BOOKS


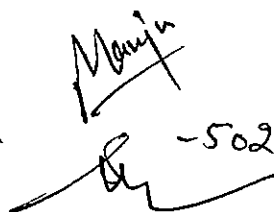
1. R R Gaur, R Sangal, G P Bagaria, 2009, A Foundation Course in Human Values and Professional Ethics.
2. Ivan Illich, 1974, Energy & Equity, The Trinity Press, Worcester, and Harper Collins, USA
3. E.F. Schumacher, 1973, Small is Beautiful: a study of economics as if people mattered, Blond & Briggs, Britain.
4. Sussan George, 1976, How the Other Half Dies, Penguin Press. Reprinted 1986, 1991
5. Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, 1972, Limits to Growth – Club of Rome’s report, Universe Books.
6. A Nagraj, 1998, Jeevan Vidya Ek Parichay, Divya Path Sansthan, Amarkantak.
7. P L Dhar, RR Gaur, 1990, Science and Humanism, Commonwealth Publishers.
8. A N Tripathy, 2003, Human Values, New Age International Publishers.
9. SubhasPalekar, 2000, How to practice Natural Farming, Pracheen (Vaidik) KrishiTantraShodh, Amravati.
10. E G Seebauer & Robert L. Berry, 2000, Fundamentals of Ethics for Scientists & Engineers , Oxford University Press
11. M Govindrajran, S Natrajan & V.S. Senthil Kumar, Engineering Ethics (including Human Values), Eastern Economy Edition, Prentice Hall of India Ltd.
12. B P Banerjee, 2005, Foundations of Ethics and Management, Excel Books.
13. B L Bajpai, 2004, Indian Ethos and Modern Management, New Royal Book Co., Lucknow. Reprinted 2008.


Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

On completion of this course, the students will be able to

1. Understand the significance of value inputs in a classroom, distinguish between values and skills, understand the need, basic guidelines, content and process of value education, explore the meaning of happiness and prosperity and do a correct appraisal of the current scenario in the society

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2. Distinguish between the Self and the Body, understand the meaning of Harmony in the Self the Co-existence of Self and Body.
3. Understand the value of harmonious relationship based on trust, respect and other naturally acceptable feelings in human-human relationships and explore their role in ensuring a harmonious society
4. Understand the harmony in nature and existence, and work out their mutually fulfilling participation in the nature.
5. Distinguish between ethical and unethical practices, and start working out the strategy to actualize a harmonious environment wherever they work.

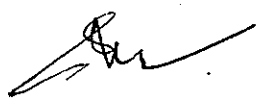


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B. Tech. Semester – IV (Information Technology)
OPERATING SYSTEM LAB
CODE: PCC-CS-206-P

NO OF CREDITS: 2
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

At least 10 to 15 experiments related to the course must be performed.




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B. Tech. Semester – IV (Information Technology)
HARDWARE LAB/MATLAB
CODE: PCC-CS-208-P

NO OF CREDITS: 1

L T P



0 0 2


INTERNAL MARKS: 10


EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments related to the course must be performed.

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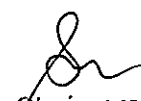
B. Tech. Semester – IV (Information Technology)
PYTHON LAB
CODE: PCC-CS-210-P

NO OF CREDITS: 2
L T P
0 0 4

INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

At least 10 to 15 experiments related to the course must be performed.




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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)
Semester -5

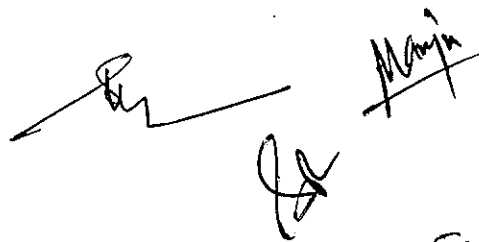
S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-CS-301	Database Management Systems	3	0	0	3	20	80	100
2.	PCC	PCC-IT-303	Multimedia and Technologies	3	0	0	3	20	80	100
3.	PCC	PCC-CS-305	Java Programming	3	0	0	3	20	80	100
4.	PCC	PCC-CS-307	Machine Learning	3	0	0	3	20	80	100
5.	HSMC	HSMC-301	Humanities- II (Economics for Engineers)	3	0	0	3	20	80	100
6.	MC	MC -301	Constitution of India/Essence of Indian Traditional Knowledge	2	0	0	0	10	40	50
Lab										
7.	PCC	PCC-CS-301-P	Database Management Systems LAB	0	0	4	2	10	40	50
8.	PCC	PCC-CS-305- P	Java Programming LAB	0	0	4	2	10	40	50
9.	Project	IPT-IT-301-P	Industrial Practical Training-I	0	0	0	2	-	50	50
Total				17	0	8	21	130	570	700


Total Contact Hours =25

Total Credit= 21

Note: 1. Industrial Practical Training-I was conducted after fourth semester. However, Viva-Voce for evaluation of Practical Training will be conducted in this semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.




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B. Tech. Semester – V (Information Technology)
DATABASE MANAGEMENT SYSTEMS
CODE: PCC-CS-301

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

1. To understand the different issues involved in the design and implementation of a database system.
2. To study the physical and logical database designs, database modeling, relational, hierarchical, and network models
3. To understand and use data manipulation language to query, update, and manage a Database
4. To develop an understanding of essential DBMS concepts such as: database security, integrity, concurrency, distributed database, and intelligent database, Client/Server (Database Server), Data Warehousing.

UNIT-1

Database system architecture: Data Abstraction, Data Independence, Data Definition Language (DDL), Data Manipulation Language (DML).

Data models: Entity-relationship model, network model, relational and object oriented data models, integrity constraints, data manipulation operations.

UNIT-2

Relational query languages: Relational algebra, Tuple and domain relational calculus, SQL3, DDL and DML constructs, Open source and Commercial DBMS - MYSQL, ORACLE, DB2, SQL server.

Relational database design: Domain and data dependency, Armstrong's axiom, Normal forms, Dependency preservation, Lossless design.

Query processing and optimization: Evaluation of relational algebra expressions, Query equivalence, Join strategies, Query optimization algorithms.

UNIT-3

Storage strategies: Indices, B-trees, hashing.


Transaction processing: Concurrency control, ACID property, Serializability of scheduling, Locking and timestamp based schedulers, Multi-version and optimistic Concurrency Control schemes, Database recovery.

UNIT-4

Database Security: Authentication, Authorization and access control, DAC, MAC and RBAC models, Intrusion detection, SQL injection.



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Advanced topics: Object oriented and object relational databases, Logical databases, Web databases, Distributed databases, Data warehousing and data mining.

TEXT/REFERENCES BOOKS:



1. "Database System Concepts", 6th Edition by Abraham Silberschatz, Henry F. Korth, S. Sudarshan, McGraw-Hill.
2. "Principles of Database and Knowledge – Base Systems", Vol 1 by J. D. Ullman, Computer Science Press.
3. "Fundamentals of Database Systems", 5th Edition by R. Elmasri and S. Navathe, Pearson Education
4. "Foundations of Databases", Reprint by Serge Abiteboul, Richard Hull, Victor Vianu, Addison-Wesley


Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After successful completion of the course, students will be able to:

1. Understand basic concepts of database system and data models for relevant problems.
2. Understand the basic elements of a relational database management system.
3. Design entity relationship model and convert entity relationship diagrams into rdbms and formulate SQL queries on the data.
4. Apply normalization for the development of application software.



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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR)

B. Tech. Semester – V (Information Technology)
MULTIMEDIA AND TECHNOLOGIES
CODE: PCC-IT-303

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives

- 1.To understand the characteristics of different multimedia systems.
- 2.To identify the encoding and quantization mechanisms for images.
- 3.To explore the audio and video processing mechanisms.
- 4.To know the practical applications of multimedia systems.

UNIT-1

Basics of Multimedia Technology: Computers, communication and entertainment; multimedia an introduction; framework for multimedia systems; multimedia devices; CD- Audio, CD-ROM, CD-I, presentation devices and the user interface; multimedia presentation and authoring; professional development tools; LANs and multimedia; internet, World Wide Web & multimedia distribution network-ATM & ADSL; multimedia servers & databases; vector graphics; 3D graphics programs; animation techniques; shading; anti aliasing; morphing; video on demand.

UNIT-2

Image Compression & Standards: Making still images; editing and capturing images; scanning images; computer color models; color palettes; vector drawing; 3D drawing and rendering; JPEG-objectives and architecture; JPEG-DCT encoding and quantization, JPEG statistical coding, JPEG predictive lossless coding; JPEG performance; overview of other image file formats as GIF, TIFF, BMP, PNG etc.

UNIT-3

Audio & Video: Digital representation of sound; time domain sampled representation; method of encoding the analog signals; subband coding; fourier method; transmission of digital sound; digital audio signal processing; stereophonic & quadraphonic signal processing; editing sampled sound; MPEG Audio; audio compression & decompression; brief survey of speech recognition and generation; audio synthesis; musical instrument digital interface; digital video and image compression; MPEG motion video compression standard; DVI technology; time base media representation and delivery.

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UNIT-4

Virtual Reality: Applications of multimedia, intelligent multimedia system, desktop virtual reality, VR operating system, virtual environment displays and orientation making; visually coupled system requirements; intelligent VR software systems. Applications of environment in various fields.

TEXT /REFERENCE BOOKS:

1. An introduction, Villamil & Molina, Multimedia Mc Milan, 1997
2. multimedia: Sound & Video, Lozano, 1997, PHI, (Que)
3. Multimedia: Production, planning and delivery, Villamil & Molina, Que, 1997
4. Multimedia on the PC, Sinclair, BPB
5. Multimedia: Making it work, Tay Vaughan, fifth edition, 1994, TMH.
6. Multimedia in Action by James E Shuman, 1997, Wadsworth Publ.,
7. Multimedia in Practice by Jeff coate Judith, 1995, PHI.
8. Multimedia Systems by Koegel, AWL
9. Multimedia Making it Work by Vaughar, etl.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After successful completion of the course, a student should be able to:

1. Get familiar with the characteristics of different multimedia systems.
2. Learn the encoding and quantization mechanisms for images.
3. Understand the audio and video processing mechanisms.
4. Learn the practical applications of multimedia systems.



B. Tech. Semester – V (Information Technology)

JAVA PROGRAMMING

CODE: PCC-CS-305

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course Objectives:

The course will introduce standard tools and techniques for software development, using object oriented approach, use of a version control system, an automated build process, and an appropriate framework for automated unit and integration tests.

UNIT-1

Abstract Data Types: Decomposition & Abstraction, Abstraction Mechanisms – parameterization, specification, Kind of Abstractions – Procedural, Data, Type hierarchies, Iteration. ADT implementation - Concrete state space, concrete invariant, abstraction function, implementing operations, illustrated by the Text example

Features of Object-Oriented Programming, Encapsulation, object identity, polymorphism – Inheritance in OO design. Implementing OO language features, Classes, Objects and variables, Type Checking,

UNIT-2

Procedures - Commands as methods and as objects, Exceptions, Polymorphic procedures, Templates, Memory management

Design Patterns: Introduction and classification. Creational Pattern – Abstract Factory Pattern, Factory Method, Singleton, Structural Pattern – Bridge, Flyweight, Behavioral Pattern - The iterator pattern, Observer pattern, Model-view-controller pattern

UNIT-3

Generic Types and Collections: Simple Generics, Generics and Subtyping, Wildcards, Generic Methods, Set Interface, List Interface, Queue Interface, Deque Interface, Map Interface, Object Ordering, SortedSet Interface, SortedMap Interface

UNIT-4

GUIs. Graphical Programming with Scala And Swing: Swing components, Laying out components in a container, Panels, Look & Feel, Event listener, concurrency in swing.

The Software Development Process: Requirement specification and analysis, Data Model, Design, Implementation, Testing.

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TEXT/REFERENCES BOOKS:

1. Barbara Liskov, Program Development in Java, Addison-Wesley, 2001

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After taking the course, students will be able to:

1. Specify simple abstract data types and design implementations, using abstraction functions to document them.
2. Recognize features of object-oriented design such as encapsulation, polymorphism, inheritance, and composition of systems based on object identity.
3. Name and apply some common object-oriented design patterns and give examples of their use.
4. Design applications with an event-driven graphical user interface.

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B. Tech. Semester – V (Information Technology)

MACHINE LEARNING

CODE: PCC-CS-307

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL: 100

Course objectives:

1. To learn the concept of how to learn patterns and concepts from data without being explicitly programmed in various IOT nodes.
2. To design and analyze various machine learning algorithms and techniques with a modern outlook focusing on recent advances.
3. Explore supervised and unsupervised learning paradigms of machine learning.
4. To explore Deep learning technique and various feature extraction strategies.

UNIT-1

Supervised Learning (Regression/Classification): Basic methods: Distance-based methods, Nearest-Neighbours, Decision Trees, Naive Bayes Linear models: Linear Regression, Logistic Regression, Generalized Linear Models, Support Vector Machines, Nonlinearity and Kernel Methods Beyond Binary Classification: Multi-class/Structured Outputs, Ranking

UNIT-2

Unsupervised Learning: Clustering: K-means/Kernel K-means

Dimensionality Reduction: PCA and kernel PCA, Matrix Factorization and Matrix Completion

Generative Models (mixture models and latent factor models)

UNIT-3

Evaluating Machine Learning algorithms and Model Selection, Introduction to Statistical Learning Theory, Ensemble Methods (Boosting, Bagging, Random Forests)

Sparse Modeling and Estimation, Modeling Sequence/Time-Series Data, Deep Learning and Feature Representation Learning


UNIT-4

Scalable Machine Learning (Online and Distributed Learning), Introduction to Bayesian Learning and Inference, Recent trends in various learning techniques of machine learning and classification methods.


TEXT/REFERENCES BOOKS:

1. Kevin Murphy, Machine Learning: A Probabilistic Perspective, MIT Press, 2012
2. Trevor Hastie, Robert Tibshirani, Jerome Friedman, The Elements of Statistical Learning, Springer 2009 (freely available online)

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Manjiv


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3. Christopher Bishop, Pattern Recognition and Machine Learning, Springer, 2007

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course outcomes:

After completion of course, students would be able to:

1. Extract features that can be used for a particular machine learning approach in various IOT applications.
2. To compare and contrast pros and cons of various machine learning techniques and to get an insight of when to apply a particular machine learning approach.
3. To mathematically analyze various machine learning approaches and paradigms.

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B. Tech. Semester – V (Information Technology)
HUMANITIES- II (ECONOMICS FOR ENGINEERS)
CODE: HSMC -301

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT-1

Introduction to the subject: Micro and Macro Economics, Relationship between Science, Engineering, Technology and Economic Development. Production Possibility Curve, Nature of Economic Laws.

Time Value of Money: concepts and application. Capital budgeting; Traditional and modern methods, Payback period method, IRR, ARR, NPV, PI (with the help of case studies)

UNIT-2

Meaning of Demand, Law of Demand, Elasticity of Demand; meaning, factors effecting it and its practical application and importance. Demand forecasting (a brief explanation), Meaning of Production and factors of production, Law of variable proportions and returns to scale. Internal and external economies and diseconomies of scale, Concepts of cost of production, different types of costs; accounting cost, sunk cost, marginal cost, Opportunity cost.

UNIT-3

Break even analysis, Make or Buy decision (case study), Relevance of Depreciation towards industry. Meaning of market, types of market, perfect competition, Monopoly, Monopolistic, Oligopoly. (main features), Supply and law of supply, Role of demand and supply in price determination.

UNIT-4

Indian Economy, nature and characteristics. Basic concepts; fiscal and monetary policy, LPG, Inflation, Sensex, GATT, WTO and IMF, Difference between Central bank and Commercial banks

TEXT/REFERENCES BOOKS:

1. Jain T.R., Economics for Engineers, VK Publication
2. Chopra P. N., Principle of Economics, Kalyani Publishers
3. Dewett K. K., Modern economic theory, S. Chand
4. H. L. Ahuja., Modern economic theory, S. Chand
5. Dutt Rudar & Sundhram K. P. M., Indian Economy
6. Mishra S. K., Modern Micro Economics, Pragati Publications
7. Pandey I.M., Financial Management; Vikas Publishing House

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B. Tech. Semester – V (Information Technology)
CONSTITUTION OF INDIA/ ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE
CODE: MC-301

NO OF CREDITS: 0
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50


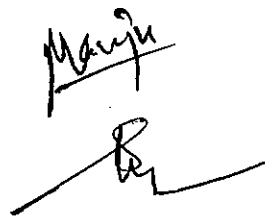
CONSTITUTION OF INDIA– BASIC FEATURES AND FUNDAMENTAL PRINCIPLES


The Constitution of India is the supreme law of India. Parliament of India cannot make any law which violates the Fundamental Rights enumerated under the Part III of the Constitution. The Parliament of India has been empowered to amend the Constitution under Article 368, however, it cannot use this power to change the —basic structure of the constitution, which has been ruled and explained by the Supreme Court of India in its historical judgments. The Constitution of India reflects the idea of —Constitutionalism – a modern and progressive concept historically developed by the thinkers of —liberalism – an ideology which has been recognized as one of the most popular political ideology and result of historical struggles against arbitrary use of sovereign power by state. The historic revolutions in France, England, America and particularly European Renaissance and Reformation movement have resulted into progressive legal reforms in the form of —constitutionalism in many countries. The Constitution of India was made by borrowing models and principles from many countries including United Kingdom and America. The Constitution of India is not only a legal document but it also reflects social, political and economic perspectives of the Indian Society. It reflects India's legacy of —diversity. It has been said that Indian constitution reflects ideals of freedom movement, however, few critics have argued that it does not truly incorporate our own ancient legal heritage and cultural values. No law can be —static and therefore the Constitution of India has also been amended more than one hundred times. These amendments reflect political, social and economic developments since the year 1950. The Indian judiciary and particularly the Supreme Court of India has played an historic role as the guardian of people. It has been protecting not only basic ideals of the Constitution but also strengthened the same through progressive interpretations of the text of the Constitution. The judicial activism of the Supreme Court of India and its historic contributions has been recognized throughout the world and it gradually made it —as one of the strongest court in the world.

COURSE CONTENT

UNIT-1

1. Meaning of the constitution law and constitutionalism.
2. Historical perspective of the Constitution of India.
3. Salient features and characteristics of the Constitution of India.


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UNIT-2

4. Scheme of the fundamental rights.
5. The scheme of the Fundamental Duties and its legal status.
6. The Directive Principles of State Policy – Its importance and implementation.
7. Federal structure and distribution of legislative and financial powers between the Union and the States.

UNIT-3

8. Parliamentary Form of Government in India – The constitution powers and status of the President of India
9. Amendment of the Constitutional Powers and Procedure
10. The historical perspectives of the constitutional amendments in India
11. Emergency Provisions: National Emergency, President Rule, Financial Emergency

UNIT-4

12. Local Self Government – Constitutional Scheme in India
13. Scheme of the Fundamental Right to Equality
14. Scheme of the Fundamental Right to certain Freedom under Article 19
15. Scope of the Right to Life and Personal Liberty under Article 21

REFERENCES:

1. The Constitutional Law Of India 9th Edition, by Pandey. J. N.
2. The Constitution of India by P.M.Bakshi
3. Constitution Law of India by Narender Kumar
4. Bare Act by P. M. Bakshi

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – V (Information Technology)
DATABASE MANAGEMENT SYSTEMS LAB
CODE: PCC-CS-301-P

NO OF CREDITS: 2
L T P
0 0 4

INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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Department of Computer Science &
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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

B. Tech. Semester – V (Information Technology)
JAVA PROGRAMMING LAB
CODE: PCC-CS-305-P

NO OF CREDITS: 2
L T P
0 0 4

INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – V (Information Technology)
INDUSTRIAL PRACTICAL TRAINING- I
CODE: IPT-IT-301-P

NO OF CREDITS: 2

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INTERNAL MARKS: 00

EXTERNAL MARKS: 50

TOTAL: 50

Note: Practical training conducted after fourth semester will be evaluated in the fifth Semester based on Viva-Voce.

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For
B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)

Semester - 6

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PCC	PCC-IT-302	Web and Internet Technology	3	0	0	3	20	80	100
2.	PCC	PCC-CS-304	Computer Networks	3	0	0	3	20	80	100
3.	PEC	PEC	Elective-I	3	0	0	3	20	80	100
4.	PEC	PEC	Elective-II	3	0	0	3	20	80	100
5.	OEC	OEC	Open Elective-I	3	0	0	3	20	80	100
Lab										
6.	Project	PROJ-CS-300-P	Project-I	0	0	4	2	10	40	50
7.	PCC	PCC-IT-302-P	Web and Internet Technology Lab	0	0	4	2	10	40	50
8.	PCC	PCC-CS-304-P	Computer Networking Lab	0	0	4	2	10	40	50
9.	PEC	PEC	Electives-I Course Lab	0	0	2	1	10	40	50
Total				15	0	14	22	140	560	700

Total Contact Hours =29

Total Credit= 22

Note: 1. 4-6 weeks industrial practical training –II training will be held after sixth semester. However, Viva- Voce will be conducted in the seventh semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective – I	Elective – I Lab	Elective –II	Open Elective- I
1.	PEC- CS-306 Digital Image Processing	PEC- CS-306- P Digital Image Processing Lab	PEC- IT-314 Theory of Computation	OE-CS-322 Soft Skills & Interpersonal Communication
2.	PEC-CS-308 Artificial Intelligence	PEC-CS-308-P Artificial Intelligence Lab	PEC-CS-316 High Speed Network	OE-CS-324 Cyber Law and Ethics
3.	PEC-CS-310 Computer Graphics	PEC-CS-310-P Computer Graphics Lab	PEC-CS-318 Soft Computing	OE-CS-326 Data Analytics using R
4.	PEC-CS-312 Cloud Computing	PEC-CS-312-P Cloud Computing Lab	PEC-CS-320 Data Mining	OE-CS-328 Microprocessor and Interfacing

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B. Tech. Semester – VI (Information Technology)
WEB AND INTERNET TECHNOLOGY
CODE: PCC-IT-302

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To understand the role of HTML, CSS, XML, JavaScript and protocols in the workings of web and web applications.
2. To design a responsive web site using HTML5 and CSS.
3. To build Dynamic web site using server side PHP Programming and Database connectivity.
4. To understand the various technologies to build dynamic content of website.

UNIT-1

Introduction to the Internet, The world wide web: The idea of hypertext and hyper media; How the web works-HTTP, HTML and URLs; How the browser works-MIME types, plugins and helper applications; The standards-HTML, XML, XHTML and the W3C.

Hypertext markup language: The anatomy of an HTML document; Marking up for structure and style: basic page markup, absolute and relative links, ordered and unordered lists, embedding images and controlling appearance, table creation and use, frames, nesting and targeting.

Descriptive markup: Meta tags for common tasks, semantic tags for aiding search, the doubling code and RDF.

UNIT-2

Separating style from structure with style sheets: Internal style specifications within HTML, External linked style specification using CSS, page and site design considerations.

Client side programming: Introduction to the JavaScript syntax, the JavaScript object model, Event handling, Output in JavaScript, Forms handling, miscellaneous topics such as cookies, hidden fields, and images; Applications.

UNIT-3

Server side programming: Introduction to Server Side Technologies CGI/ASP/JSP., Programming languages for server Side Scripting, Configuring the server to support CGI, applications; Input/output operations on the WWW, Forms processing, (using PERL/VBSCRIPT/JavaSCRIPT)

UNIT-4

Other dynamic content Technologies: introduction to ASP & JSP, Delivering multimedia over web pages, The VRML idea, The Java phenomenon-applets and servelets, issues and web development. Introduction to Microsoft .NET Technology and its comparison with the competing Technologies.

TEXT/REFERENCE BOOKS:-

1. Beginning XHTML by Frank Boumperry, Cassandra Greer, Dave Raggett, Jenny Raggett, Sebastian Schnitzenbaumer & ted Wugofski, 2000, WROX press (Indian Shroff Publ. SPD) 1st edition
2. Web Technologies By Achyut S Godbole, Atul Kahate, 2003, T.M.H.

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A signature on the left, a signature in the middle with "523" written next to it, and another signature on the right.

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Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)



3. Internet & World Wide Web How to program by P.J Deitel & H.M Deitel, Pearson
4. HTML & XHTML: The Definitive Guide by Chuck Musciano, Bill Kennedy, 2000, 4th Edi.
5. XHTML Black Book by Steven Holzner, 2000
6. CGI Programming on the World Wide Web. O'Reilly Associates.
7. Internet and Web Technologies – Raj Kamal, 2002, T.M.H


Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus

Course Outcomes:

Upon completion of the course the students will be able to

1. Understand, analyze and apply the role of languages like HTML, CSS, XML, JavaScript and protocols in the workings of web and web applications.
2. Create a good, effective and dynamic website using HTML5 and CSS
3. Build Dynamic web site using server side PHP Programming and Database connectivity.
4. Understand the various technologies to build dynamic content of website.

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B. Tech. Semester – VI (Information Technology)
WEB AND INTERNET TECHNOLOGY LAB
CODE: PCC-IT-302-P

NO OF CREDITS:2
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0 0 4

INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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**B. Tech. Semester – VI ((Information Technology)
COMPUTER NETWORKS
CODE: PCC-CS-304**

NO OF CREDITS: 3

**L T P
3 0 0**

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To develop an understanding of modern network architectures from a design and performance perspective.
2. To introduce the student to the major concepts involved in wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs).
3. To provide an opportunity to do network programming
4. To provide a WLAN measurement ideas.

UNIT-1

Data Communication Components: Representation of data and its flow Networks , Various Connection Topology, Protocols and Standards, OSI model, Transmission Media, LAN: Wired LAN, Wireless LANs, Connecting LAN and Virtual LAN, Techniques for Bandwidth utilization: Multiplexing - Frequency division, Time division and Wave division, Concepts on spread spectrum.

UNIT-2

Data Link Layer and Medium Access Sub Layer: Error Detection and Error Correction - Fundamentals, Block coding, Hamming Distance, CRC; Flow Control and Error control protocols - Stop and Wait, Go back – N ARQ, Selective Repeat ARQ, Sliding Window, Piggybacking, Random Access, Multiple access protocols -Pure ALOHA, Slotted ALOHA, CSMA/CD,CDMA/CA

UNIT-3

Network Layer: Switching, Logical addressing – IPV4, IPV6; Address mapping – ARP, RARP, BOOTP and DHCP–Delivery, Forwarding and Unicast Routing protocols.

UNIT-4

Transport Layer: Process to Process Communication, User Datagram Protocol (UDP), Transmission Control Protocol (TCP), SCTP Congestion Control; Quality of Service, QoS improving techniques: Leaky Bucket and Token Bucket algorithm.

Application Layer: Domain Name Space (DNS), DDNS, TELNET, EMAIL, File Transfer Protocol (FTP), WWW, HTTP, SNMP, Bluetooth, Firewalls, Basic concepts of Cryptography

TEXT / REFERENCE BOOKS:

1. Data Communication and Networking, 4th Edition, Behrouz A. Forouzan, McGrawHill.
2. Data and Computer Communication, 8th Edition, William Stallings, Pearson Prentice Hall India.
3. Computer Networks, 8th Edition, Andrew S. Tanenbaum, Pearson New International Edition.
4. Internetworking with TCP/IP, Volume 1, 6th Edition Douglas Comer, Prentice Hall of India.

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5. TCP/IP Illustrated, Volume 1, W. Richard Stevens, Addison-Wesley, United States of America

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After taking the course, students will be able to:

1. Explain the functions of the different layer of the OSI Protocol.
2. Draw the functional block diagram of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) describe the function of each block.
3. For a given requirement (small scale) of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) design it based on the market available component
4. For a given problem related TCP/IP protocol developed the network programming.
5. Configure DNS DDNS, TELNET, EMAIL, File Transfer Protocol (FTP), WWW; HTTP, SNMP, Bluetooth, Firewalls using open source available software and tools.

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B. Tech. Semester – VI (Computer Science and Engineering.)
COMPUTER NETWORKING LAB
CODE: PCC-CS-302-P

NO OF CREDITS:2

L T P
0 0 4

INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

Dr. Manish 528
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B. Tech. Semester – VI (Information Technology)
DIGITAL IMAGE PROCESSING (ELECTIVE-I)
CODE: PEC-CS-306

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn and understand the fundamentals of digital image processing.
2. To learn and understand various image Transforms.
3. To learn and understand Image Enhancement Techniques.
4. To learn image restoration Techniques and methods, image compression and Segmentation used in digital image processing.

UNIT- 1

Digital Image Fundamental: - Elements of visual perception, image sensing and acquisition, image sampling and quantization, basic relationships between pixels – neighborhood, adjacency, connectivity, distance measures.

UNIT- 2

Image Enhancements, Filtering And Restoration:- Enhancement in spatial domain; pixel grey level transformation, image negatives, logarithmic transformation; bit-plane slicing, histogram processing; enhancement in frequency domain; image smoothing (low pass filter), image sharpening (high pass filter), selective filtering (band pass and band reject filters); noise models for images, signal-to-noise ratio, image restoration in the presence of noise using spatial filtering, periodic noise reduction by frequency domain filtering; estimating the degradation function, inverse filtering.

UNIT- 3

Color Image Processing & Image Segmentation:- Color fundamentals, color models, RGB, CMY and CMYK color models, HSI model; pseudocolor image processing, basics of full color processing, color transformations, smoothing and sharpening; noise in color images, grey level to color transformation; Image Segmentation: fundamentals, edge-based segmentation; image thresholding, intensity thresholding; basic global thresholding, multi-variable thresholding.

UNIT- 4

Image Compression:- Redundancy–inter-pixel and psycho-visual; Loss less compression – predictive, entropy; Lossy compression- predictive and transform coding; Discrete Cosine Transform; Still image compression standards – JPEG and JPEG-2000.

TEXT AND REFERENCE BOOKS:

1. R.C. Gonzalez and R.E. Woods, Digital Image Processing, Second Edition, Pearson Education 3rd edition 2008.
2. Anil Kumar Jain, Fundamentals of Digital Image Processing, Prentice Hall of India.2nd edition 2004.
3. Murat Tekalp , Digital Video Processing" Prentice Hall, 2nd edition 2015.

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Chairperson
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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

At the end of the course, students will demonstrate the ability to:

1. Represent various types of images and analyze them.
2. Process these images for the enhancement of certain properties or for optimized use of the resources.
3. Work with colored images and perform image segmentation.
4. Develop algorithms for image compression and coding.

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B. Tech. Semester – VI (Information Technology)
DIGITAL IMAGE PROCESSING LAB (ELECTIVE-I LAB)
CODE: PEC-CS-306-P

NO OF CREDITS:1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Information Technology)
ARTIFICIAL INTELLIGENCE (ELECTIVE-I)
CODE: PEC-CS-308

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To understand the basic concepts of AI and problem solving
2. To analyze and formalize the problem as a state space, graph, design heuristics and select amongst different search techniques to solve them
3. To represent knowledge and draw inferences
4. To explore learning techniques and existing expert systems

UNIT- 1

Introduction: The AI problems; what is an AI technique; Characteristics of AI applications Problem Solving, Search and Control Strategies General Problem solving; Production systems; Control strategies: forward and backward chaining Exhaustive searches: Depth first Breadth first search.

UNIT- 2

Heuristic Search Techniques: Hill climbing; Branch and Bound technique; Best first search and A* algorithm; AND/OR Graphs; Problem reduction and AO* algorithm; Constraint Satisfaction problems Game Playing Minmax search procedure; Alpha-Beta cutoffs; Additional Refinements

UNIT- 3

Knowledge Representation & Reasoning:- Propositional logic, First order predicate logic, Inference in FOPL, Skolemisation; Resolution Principle and Unification; Forward & Backward chaining, Inference Mechanisms Horn's Clauses; Semantic Networks; Frame Systems and Value Inheritance; Conceptual Dependency

UNIT- 4

Learning Techniques: - Supervised and unsupervised learning, Decision trees, Statistical learning models, Reinforcement learning.

Expert Systems: Introduction to Expert Systems, Architecture of Expert Systems; Expert System Shells; Knowledge Acquisition; Case Studies: MYCIN, Learning, Rote Learning; Learning by Induction; Explanation based learning.

TEXT/REFERENCES BOOKS:

1. Elaine Rich and Kevin Knight: Artificial Intelligence- Tata McGraw Hill.
2. Dan W.Patterson, Introduction to Artificial Intelligence and Expert Systems- Prentice Hall of India.
3. Nils J.Nilsson: Principles of Artificial Intelligence- Narosa Publishing house.
4. Artificial Intelligence : A Modern Approach, Stuart Rusell, Peter Norvig, Pearson Education
5. Artificial Intelligence, Winston, Patrick, Henry, Pearson Education

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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Analyze and formalize problem and solve them using AI techniques
2. Use Heuristic search techniques for game playing and other problems
3. Represent diverse knowledge using AI and analyze
4. Understand and design an expert system

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B. Tech. Semester – VI (Information Technology)
ARTIFICIAL INTELLIGENCE LAB (ELECTIVE-I LAB)
CODE: PEC-CS-308-P

NO OF CREDITS:1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Information Technology)
COMPUTER GRAPHICS (ELECTIVE-I)
CODE: PEC-CS-310

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives

1. To list the basics concepts used in computer graphics.
2. To implement various algorithms to scan, convert the basic geometrical primitives, transformations, area filling, clipping.
3. To describe the importance of viewing and projections.
4. To design an application with the principles of virtual reality and understand a typical image processing.

Unit-1

Introduction to Computer Graphics: What is Computer Graphics, Computer Graphics Applications, Computer Graphics Hardware and software, Two dimensional Graphics Primitives: Points and Lines, Line drawing algorithms: DDA, Bresenham's; Circle drawing algorithms: Using polar coordinates, Bresenham's circle drawing, mid point circle drawing algorithm; Filled area algorithms: Scanline: Polygon filling algorithm, boundary filled algorithm.

Unit-2

Two/Three Dimensional Viewing: The 2-D viewing pipeline, windows, viewports, window to view port mapping; Clipping: point, clipping line (algorithms):- 4 bit code algorithm, Sutherland-cohen algorithm, parametric line clipping algorithm (Cyrus Beck).

Polygon clipping algorithm: Sutherland-Hodgeman polygon clipping algorithm. Two dimensional transformations: transformations, translation, scaling, rotation, reflection, composite transformation.

Three dimensional transformations: Three dimensional graphics concept, Matrix representation of 3-D Transformations, Composition of 3-D transformation.

Unit-3

Viewing in 3D: Projections, types of projections, the mathematics of planner geometric projections, coordinate systems.

Hidden surface removal: Introduction to hidden surface removal .Z- buffer algorithm , scanline algorithm, area sub-division algorithm.

Unit-4

Representing Curves and Surfaces: Parametric representation of curves: Bezier curves, B-Spline curves. Parametric representation of surfaces; Interpolation method.

Illumination, shading, image manipulation: Illumination models, shading models for polygons, shadows, transparency. What is an image? Filtering, image processing, geometric transformation of images.

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BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

TEXT/REFERENCE BOOKS:

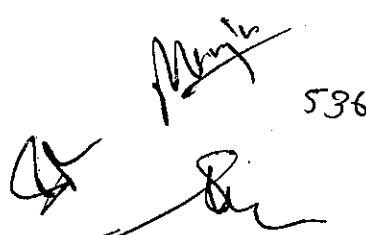
1. Computer Graphics Principles and Practices second edition by James D. Foley, Andeies van Dam, Stevan K. Feiner and Johb F. Hughes, 2000, Addision Wesley.
2. Computer Graphics by Donald Hearn and M.Pauline Baker, 2nd Edition, 1999, PHI.
3. Procedural Elements for Computer Graphics – David F. Rogers, 2001, T.M.H Second Edition
4. Fundamentals of 3Dimensional Computer Graphics by Alan Watt, 1999, Addision Wesley.
5. Computer Graphics: Secrets and Solutions by Corrign John, BPB
6. Graphics, GUI, Games & Multimedia Projects in C by Pilaian & Mahendra, Standard Publ.
7. Computer Graphics Secrets and solutions by Corrign John, 1994, BPV
8. Introduction to Computer Graphics By N. Krishanmurthy T.M.H 2002


Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completing the course the student will be able to:

1. Understand the basics concepts used in computer graphics.
2. Implement various algorithms to scan, convert the basic geometrical primitives, transformations, area filling, clipping.
3. Understand the importance of viewing and projections.
4. Design an application with the principles of virtual reality and understand a typical image processing.

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B. Tech. Semester – VI (Information Technology)
COMPUTER GRAPHICS LAB (ELECTIVE-I LAB)
CODE: PEC-CS-310-P

NO OF CREDITS:1
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VI (Information Technology)
CLOUD COMPUTING (ELECTIVE-I)
CODE: PEC-CS-312

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The objective of the course is to give students a comprehensive view of storage and networking infrastructures for highly virtualized cloud ready deployments. The course discusses the concepts and features related to Virtualized data-centre and cloud, information storage and design of applications.

Unit I

Introduction: Distributed Computing, Cluster Computing, Grid Computing, Overview of Cloud Computing, History of Cloud Computing, Defining a Cloud, Benefits of Cloud Computing, Cloud Computing Architecture, Services Models (XaaS), Infrastructure as a Service, Platform as a Service, Software as a Service.

Unit II

Deployment Models, Public Cloud, Private Cloud, Hybrid Cloud, Community Cloud, Dynamic Provisioning and Resource Management, Virtualization: Characteristics of Virtualized Environment, Taxonomy of Virtualization Techniques, Pros and Cons of Virtualization, Xen, VMware, Hyper-V.

Unit III

Cloud Platform in Industry: Amazon Web Services- Compute Services, Storage Services, Communication Services, Additional Services, Google App Engine- Architecture and Core Concepts, Application Life Cycle, Cost Model, Microsoft Azure – Azure Core Concepts, SQL Azure, Windows Azure Platform Appliance.

Unit IV

Cloud Application: Scientific Applications- ECG Analysis in cloud, Protein Structure Prediction, Gene Expression data analysis for Cancer Diagnosis, Satellite Image Processing, Business and Consumer Applications-CRM and ERP, Productivity, Social Networking, Media Applications, Multiplayer Online gaming, Cloud Security.

TEXT/ REFERENCE BOOKS:

1. Rajkumar Buyya, Christian Vecchiola and S ThamaraiSelvi, Mastering Cloud Computing, Tata McGraw Hill Education Pvt. Ltd., 2013.
2. Kai Hwang, Geofferyu C. Fox and Jack J. Dongarra, Distributed and Cloud Computing, Elsevier, 2012.
3. John W. Ritting and James F. Ransome, Cloud Computing: Implementation Management and Security, CRC press, 2012.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Course Outcomes:

After completion of course, students would be able to:

1. Define concepts related to cloud computing
2. Express deployment models for clouds.
3. Apply cloud computing techniques for various applications.
4. Analyse cloud computing services used at various levels.
5. Assess real time cloud services

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B. Tech. Semester – VI (Information Technology)
CLOUD COMPUTING LAB (ELECTIVE-I LAB)
CODE: PEC-CS-312-P

NO OF CREDITS:1
L T P
0 0 2

INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

At least 10 to 15 experiments to be performed related to the subject.

Manish
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BPS Mahila Vishwavidyalaya, Kharpur Kalan, Sonapat (H.R.)

B. Tech. Semester – VI (Information Technology)
THEORY OF COMPUTATION (ELECTIVE-II)
CODE: PEC-IT-314

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

Formal Languages and Automata theory presents the theoretical aspects of computer science, which lay the foundation for students of Computer Science. The course introduces some fundamental concepts in automata theory and formal languages including grammar, finite automaton, regular expression, formal language, pushdown automaton, and Turing machine.

Unit 1

Finite Automata and Regular Expressions: Finite State Systems, Basic Definitions Non-Deterministic finite automata (NFA), Deterministic finite automata (DFA), Equivalence of DFA and NFA Finite automata with E-moves, Regular Expressions, Equivalence of finite automata and Regular Expressions, Regular expression conversion and vice versa, Conversion of NFA to DFA by Arden's Method.

Unit 2

Introduction to Machines: Concept of basic Machine, Properties and limitations of FSM. Moore and mealy Machines, Equivalence of Moore and Mealy machines. Properties of Regular Sets: The Pumping Lemma for Regular Sets, Applications of the pumping lemma, Closure properties of regular sets, Myhill-Nerode Theorem and minimization of finite Automata, Minimization Algorithm.

Unit 3

Grammars: Definition, Context free and Context sensitive grammar, Ambiguity regular grammar, Reduced forms, Removal of useless Symbols and unit production, Chomsky Normal Form (CNF), Griebach Normal Form (GNF).

Pushdown Automata: Introduction to Pushdown Machines, Application of Pushdown Machines

Unit 4

Turing Machines: Deterministic and Non-Deterministic Turing Machines, Design of T.M, Halting problem of T.M., PCP Problem.

Chomsky Hierarchies: Chomsky hierarchies of grammars, Unrestricted grammars, Context sensitive languages, Relation between languages of classes.

Computability: Basic concepts, Primitive Recursive Functions.

TEXT/REFERENCE BOOKS:

1. Hopcroft & O. D. Ullman, R Mothwani, Introduction to automata theory, language & computations, AW,2001.
2. K. L. P.Mishra & N. Chandrasekaran, Theory of Computer Sc.(Automata, Languages and computation), PHI, 2000.
3. Peter Linz, Introduction to formal Languages & Automata, Narosa, Publication, 2001.
4. Ramond Greenlaw and H. James Hoover, Fundamentals of the Theory of Computation-Principles and Practice, Harcourt India Pvt. Ltd., 1998.

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Engineering and Information Technology
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5. H. R. Lewis & C. H. Papaditriou, Elements of theory of Computation, PHC, 1998.
6. John C. Martin, Introduction to Languages and the Theory of Computation, T.M.H., 2003.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

By the end of the course students will be able to:

1. Define terminology related to theory of computation.
2. Explain the basic concepts and applications of Theory of Computation.
3. Apply the principles of Theory of Computation to solve computational problems.
4. Compare and Contrast the hierarchy of grammars.
5. Design various types of automata for given problems.

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B. Tech. Semester – VI (Information Technology)
HIGH SPEED NETWORK (ELECTIVE-II)
CODE: PEC-CS-316

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

High Speed Network Technologies is a professional core course based around Network Architectures, protocols used across the layers, techniques used in communication and modes of data transfer. The course deals with creating High Speed Networks for any organization/institute with its various phases/life cycles.

Unit-1

High Speed LAN

Gigabit Ethernet: Overview of fast Ethernet, Gigabit Ethernet – overview, specifications, layered protocol architecture, frame format, network design using Gigabit Ethernet, applications, 10GB Ethernet – overview, layered protocol architecture, frame format. Fiber Channel: Fiber channel – overview, topologies, ports, layered protocol architecture, frame structure, class of service.

UNIT -2

High Speed WAN

Frame Relay: Protocol architecture and frame format. ISDN & B-ISDN: Channels, interfaces, addressing, protocol architecture, services. ATM: Virtual circuits, cell switching, reference model, traffic management.

Unit -3

Wireless LAN

Wireless Networks: Existing and emerging standards, Wireless LAN (802.11), Broadband Wireless (802.16), Bluetooth (802.15) their layered protocol architecture and security. Mobile Networks – GSM, CDMA.

Unit -4

Internet Suite of Protocols

Internet Layer: IPV4 and IPV6, IP addressing, IP classes, CIDR. Transport Layer: UDP/TCP protocols & architecture, TCP connection management. Application Layer: DNS, E-Mail, Voice over IP.

TEXT/ REFERENCE BOOKS:

1. Jochen Schiller, Mobile Communication, 2nd Edition, Pearson, 2009.
2. Andrew S Tanenbaum, Computer Networks, 5th Edition, Pearson 2013.
3. William C Y Lee, Mobile Communication Engineering: Theory and Applications, 2nd Edition, McGraw Hill, 1997.

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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

By the end of the course students will be able to:

1. Define different high speed network technologies
2. Explain working of different wired / wireless technologies suitable for LAN and WAN communication.
3. Illustrate the mapping of OSI reference model to different high speed technologies and Internet Suite of Protocols
4. Analyze the performance of different high speed technologies in different scenarios / situations.
5. Design a network for any organization using high speed technologies along with Internet connectivity.

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B. Tech. Semester – VI (Information Technology)
SOFT COMPUTING (ELECTIVE-II)
CODE: PEC-CS-318

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To introduce soft computing concepts and techniques and foster their abilities in designing appropriate technique for a given scenario.
2. To implement soft computing based solutions for real-world problems.
3. To give students knowledge of non-traditional technologies and fundamentals of artificial neural networks, fuzzy sets, fuzzy logic, genetic algorithms.
4. To provide students a hand-on experience on MATLAB to implement various strategies.

UNIT-1

Introduction to soft computing:- Evolution of Computing: Soft Computing Constituents, From Conventional AI to Computational Intelligence: Machine Learning Basics.

UNIT-2

Fuzzy Logic:- Fuzzy Sets, Operations on Fuzzy Sets, Fuzzy Relations, Membership Functions: Fuzzy Rules and Fuzzy Reasoning, Fuzzy Inference Systems, Fuzzy Expert Systems, Fuzzy Decision Making.

UNIT-3

Neural Networks:- Machine Learning Using Neural Network, Adaptive Networks, Feed forward Networks, Supervised Learning Neural Networks, Radial Basis Function Networks: Reinforcement Learning, Unsupervised Learning Neural Networks, Adaptive Resonance architectures, Advances in Neural networks.

UNIT-4

Genetic Algorithms & MATLAB:- Introduction to Genetic Algorithms (GA), Applications of GA in Machine Learning: Machine Learning Approach to Knowledge Acquisition. Study of neural network toolbox and fuzzy logic toolbox, Simple implementation of Artificial Neural Network and Fuzzy Logic

TEXT/REFERENCE BOOKS:

1. George J. Klir and Bo Yuan, "Fuzzy Sets and Fuzzy Logic: Theory and Applications", PHI
2. Satish Kumar, "Neural Networks: A classroom approach" Tata McGrawHill.
3. Haykin S., "Neural Networks-A Comprehensive Foundations", PHI
4. Anderson J.A., "An Introduction to Neural Networks", PHI
5. M.Ganesh, "Introduction to Fuzzy sets and Fuzzy Logic" PHI.
6. N P Padhy and S P Simon, " Soft Computing with MATLAB Programming", Oxford University Press.

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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Identify and describe soft computing techniques and their roles in building intelligent Machines.
2. Apply fuzzy logic and reasoning to handle uncertainty and solve various engineering problems.
3. Apply genetic algorithms to combinatorial optimization problems.
4. Evaluate and compare solutions by various soft computing approaches for a given problem.

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B. Tech. Semester – VI (Information Technology)
DATA MINING (ELECTIVE-II)
CODE: PEC-CS-320

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To learn data mining and Data pre-processing concepts.
2. To know about the association rules in data mining.
3. To perform various Classification and clustering algorithms.
4. To understand the strengths and limitations of various data mining models.

UNIT - 1

Introduction to Data Mining:- Introduction, What is Data Mining, Definition, KDD, Challenges, Data Mining Tasks, Data Preprocessing, Data Cleaning, Missing data, Dimensionality Reduction, Feature Subset Selection, Discretization and Binaryzation, Data Transformation; Measures of Similarity and Dissimilarity- Basics.

UNIT - 2

Association Rules:- Problem Definition, Frequent Item Set Generation, Frequent Itemsets, Closed Itemsets, and Association Rules. Apriori Algorithm: Finding Frequent Itemsets by Confined Candidate Generation, Generating Association Rules from Frequent Itemsets , Improving the Efficiency of Apriori, A Pattern-Growth Approach for Mining Frequent Itemsets ,Mining Frequent Itemsets Using Vertical Data Format, Mining Closed and Max Patterns.

UNIT - 3

Classification:- Problem Definition, General Approaches to solving a classification problem , Evaluation of Classifiers , Classification techniques, Decision Trees-Decision tree Construction ,Naive-Bayes Classifier, Bayesian Belief Networks; K- Nearest neighbor classification-Algorithm and Characteristics.

Clustering:- Problem Definition, Clustering Overview, Evaluation of Clustering Algorithms, Partitioning Clustering-K-Means Algorithm, PAM Algorithm, Hierarchical Clustering - Agglomerative Methods and divisive methods, Strengths and Weakness; Outlier Detection.

UNIT - 4

Web and Text Mining:- Introduction, web mining, web content mining, web structure mining, Text mining –unstructured text, episode rule discovery for texts, hierarchy of categories, text clustering.

TEXT/ REFERENCE BOOKS:

1. Data Mining- Concepts and Techniques- Jiawei Han, Micheline Kamber, Morgan Kaufmann Publishers, Elsevier, 2 Edition,2006.
2. Introduction to Data Mining, Pang-Ning Tan, Vipin Kumar, Michael Steinbach, Pearson Education.

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3. Data mining Techniques and Applications, Hongbo Du Cengage India Publishing
4. Data Mining Techniques, Arun K Pujari, 3rd Edition, Universities Press
5. Data Mining Principles & Applications – T.V Sveresh Kumar, B. Esware Reddy, Jagadish S Kalimani, Elsevier.
6. Data Mining, Vikaram Pudi, P Radha Krishna, Oxford University Press

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completing the course the student will be able to:

1. Perform the pre-processing of data and apply mining techniques on it.
2. Identify the association rule applied on datasets.
3. Perform Classification and clustering algorithms
4. Classify web pages, extract knowledge from the Web.

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B. Tech. Semester – VI (Information Technology)
SOFT SKILLS & INTERPERSONAL COMMUNICATION (OPEN ELECTIVE-I)
CODE: OE-CS-322

NO OF CREDITS: 3
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3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

The course aims at creating awareness among the stock holders of the corporate world in which the role of individuals as team players and also as responsible leaders materializes to a great extent. The course, with its interactive and need based modules, will address various challenges of communication as well as behavioral skills faced by individuals at workplace and organizations in bridging the gaps through effective skills of interviews, group discussions, meeting management, presentations and nuances of drafting various business documents for sustainability in today's global world.

UNIT-1

INTRODUCTION: Introduction to Soft Skills, Aspects of Soft Skills, Effective Communication Skills, Classification of Communication, Personality Development, Positive Thinking, Telephonic Communication Skills, Telephonic Communication Skills, Communicating Without Words, Paralanguage, Proxemics, Haptics: The Language of Touch, Meta-communication, Listening Skills, Types of Listening, Negotiation Skills, Culture as Communication, Communicating across Cultures , Organizational Communication.

UNIT-2

COMMUNICATION BREAKDOWN: Advanced Writing Skills, Principles of Business Writing, Types of Business Writing, Business Letters, Business Letters: Format and Style, Types of Business Letter.

UNIT-3

SKILL DEVELOPMENT: Writing Reports, Types of Report, Strategies for Report Writing, Strategies for Report Writing, Evaluation and Organization of Data, Structure of Report, Report Style, Group Communication Skills, Leadership Skills, Group Discussion, Meeting Management, Adaptability & Work Ethics.

Advanced Speaking Skills, Oral Presentation, Speeches & Debates, Combating Nervousness, Patterns & Methods of Presentation, Oral Presentation: Planning & Preparation

UNIT-4

PRESENTATION AND INTERVIEWS: Making Effective Presentations, Speeches for Various Occasions, Interviews, Planning & Preparing, Effective Résumé, Drafting an Effective Résumé, Facing Job Interviews, Emotional Intelligence & Critical Thinking, Applied Grammar

TEXT/REFERENCES BOOKS:

1. Butterfield, Jeff. Soft Skills for Everyone. New Delhi: Cengage Learning. 2010.
2. Chauhan, G.S. and Sangeeta Sharma. Soft Skills. New Delhi: Wiley. 2016.
3. Goleman, Daniel. Working with Emotional Intelligence. London: Bantam Books.1998.
4. Hall, Calvin S. et al. Theories of Personality. New Delhi: Wiley. rpt. 2011.

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5. Holtz, Shel. Corporate Conversations. New Delhi: PHI. 2007.
6. Kumar, Sanajy and Pushp Lata. Communication Skills. New Delhi: OUP. 2011.
7. Lucas, Stephen E. The Art of Public Speaking. McGraw-Hill Book Co. International Edition, 11th Ed. 2014.
8. Penrose, John M., et al. Business Communication for Managers. New Delhi: Thomson South Western. 2007.
9. Sharma, R.C. and Krishna Mohan. Business Correspondence and Report Writing New Delhi: TMH. 2016.
10. Sharma, Sangeeta and Binod Mishra. Communication Skills for Engineers and Scientists. New Delhi: PHI Learning. 2009, 6th Reprint 2015.
11. Thorpe, Edgar and Showick Thorpe. Winning at Interviews. Pearson Education. 2004.
12. Turk, Christopher. Effective Speaking. South Asia Division: Taylor & Francis. 1985.


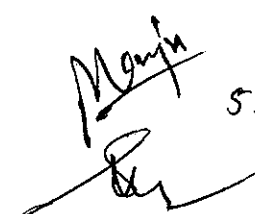
Course Outcomes:

After completion of the course student will be able to:

1. Understand the concept of soft skills including communication skills, listening skills, positive thinking and also will be able to enhance own personality.
2. Able to write business letters.
3. Able to write reports.
4. Able to make effective resume and will also be able to present himself/herself in interview, speeches, presentations, talks etc.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


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B. Tech. Semester – VI (Information Technology)
CYBER LAW AND ETHICS (OPEN ELECTIVE-I)
CODE: OE-CS-324

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT-1

INTRODUCTION: Computers and its Impact in Society, Overview of Computer and Web Technology, Need for Cyber Law, Cyber Jurisprudence at International and Indian Level

CYBER LAW- INTERNATIONAL PERSPECTIVES: UN & International Telecommunication Union (ITU) Initiatives Council of Europe – Budapest Convention on Cybercrime, Asia-Pacific Economic Cooperation (APEC), Organization for Economic Co-operation and Development (OECD), World Bank, Commonwealth of Nations

UNIT-2

CONSTITUTIONAL & HUMAN RIGHTS ISSUES IN CYBERSPACE: Freedom of Speech and Expression in Cyberspace, Right to Access Cyberspace – Access to Internet, Right to Privacy, Right to Data Protection

CYBER CRIMES & LEGAL FRAMEWORK: Cyber Crimes against Individuals, Institution and State, Hacking, Digital Forgery, Cyber Stalking/Harassment, Cyber Pornography, Identity Theft & Fraud, Cyber terrorism, Cyber Defamation, Different offences under IT Act, 2000

UNIT-3

CYBER TORTS: Cyber Defamation, Different Types of Civil Wrongs under the IT Act, 2000

INTELLECTUAL PROPERTY ISSUES IN CYBER SPACE: Interface with Copyright Law, Interface with Patent Law, Trademarks & Domain Names Related issues

UNIT-4

E-COMMERCE CONCEPT: E-commerce-Salient Features, Online approaches like B2B, B2C & C2C Online contracts, Click Wrap Contracts, Applicability of Indian Contract Act, 1872

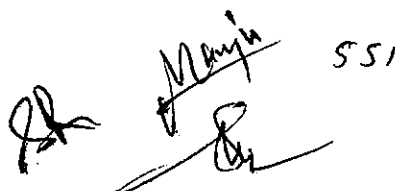
DISPUTE RESOLUTION IN CYBERSPACE: Concept of Jurisdiction, Indian Context of Jurisdiction and IT Act, 2000, International Law and Jurisdictional Issues in Cyberspace, Dispute Resolutions, Information warfare policy and ethical Issues

TEXT/REFERNCE BOOKS

1. Chris Reed & John Angel, Computer Law, OUP, New York, (2007).
2. Justice Yatindra Singh, Cyber Laws, Universal Law Publishing Co, New Delhi, (2012)
3. Verma S, K, Mittal Raman, Legal Dimensions of Cyber Space, Indian Law Institute, NewDelhi, (2004)
4. Jonthan Rosenoer, Cyber Law, Springer, New York, (1997).
5. Sudhir Naib, The Information Technology Act, 2005: A Handbook, OUP, New York, (2011)
6. S. R. Bhansali, Information Technology Act, 2000, University Book House Pvt. Ltd., Jaipur(2003).




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7. Vasu Deva, Cyber Crimes and Law Enforcement, Commonwealth Publishers, New Delhi,(2003).

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VI (Information Technology)
DATA ANAYTICS USING R (OPEN ELECTIVE-I)
CODE: OE-CS-326

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

Data analytics is a growing and stimulating field that turns data into valuable insights. This course includes programming in R for acquiring, cleaning, visualizing and analyzing data. In addition, it also involves predictive modeling. This course will introduce students to the basic principles, tools and the craft for devising solutions for problems that come in the domain of data science. The emphasis of the course is on integration and synthesis of concepts and their applications for effective engineering solutions.

Unit -1

Introduction to R programming: Data types or objects in R, Creating and manipulating objects like factors, vectors, lists and data frames, Subsetting matrices and data frames, Vectorized operations for vectors and matrices and data frames, Getting data in and out of R.

Unit -2

Control structure in R: If-else statements, for and while loops, loop functions like lapply, apply, sapply and mapply etc.; writing user defined functions in R. visualizing data through various plots and charts (bar charts, histogram, frequency polygon, scatter plot, quantile and box plots etc.), basics of ggplot package.

Unit -3

Doing basic descriptive statistics: Data types for data analysis and their mapping to R objects, Mean, Median, Mode, Quantiles, Five-point summary, Variance, Correlation and Covariance, Hypothesis testing, Basic probability, permutation and combination, normal distribution, uniform distribution using R, cleaning, transforming and exploring data, basics of dplyr package.

Unit -4

Predictive modelling: Linear Regression, Classification, Decision tree (ID3 or C5.0), Knn, and Bayesian classification models, Evaluating predictive models, Bias and variance trade off. Text and

TEXT/REFERENCE BOOKS

1. Hadley Wickham and Garrett Golemund., R for Data Science Import, Tidy, Transform and model Data, O'Reilly, 2017.
2. Roger D. Peng, R Programming for Data Science, Lean Publishing, 2015.
3. Paul Teeter, R Cookbook, O'Reilly, 2011.
4. W. N. Venables, D. M. Smith and the R core Team, An introduction to R, Notes on R: A Programming Environment for Data Analysis and Graphics, version 3.3.2, 2016.
5. Michael J. Crawley, Statistics, An introduction using R, Second edition, John Wiley, 2015
6. Han, J., Kamber, M, Pei, J., Data Mining Concepts and Techniques, Third edition, Morgan Kaufmann, 2012.

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7. Trevor Hastie, Robert Tibshirani, Jerome Friedman, The Elements of Statistical Learning: Data Mining, Inference and Prediction, Springer, 2nd edition, 2009.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


Course Outcomes:

By the end of the course students will be able to:

1. Outline concepts related to R programming and data analysis.
2. Explain the basic concepts and tools that are used to solve problems in data analytics.
3. Interpreting results of descriptive and inferential statistics.
4. Apply R programming for reading, cleaning, visualizing and analysing data.
5. Analyse the trends in data through exploratory data analysis.
6. Devise solutions for descriptive and predictive modeling.

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B. Tech. Semester – VI (Information Technology)
MICROPROCESSOR AND INTERFACING (OPEN ELECTIVE-I)
CODE: OE-CS-328

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To become familiar with 8085 & 8086 Microprocessor Architecture, Instructions, Operating Modes and Programming.
2. To use 8086 microprocessor for various applications.
3. To study various peripherals for microprocessor based systems.

UNIT -1

Introduction to 8085 Microprocessor: Development of microprocessors, 8085 Microprocessor - Architecture, Organization, Instruction set, Addressing modes, Basic Timing Diagrams, Interrupts and Simple Programs.

UNIT -2

Introduction to 8086 Microprocessor: 8086 Microprocessor - Architecture, Organization, Instruction set, Addressing modes, Interrupt system. Pin diagram, Minimum mode 8086 system and timings, Maximum mode 8086 system and timings.

UNIT -3

Assembly Language Programming: Assembler directives, Assembly language programs (8086) with Assembler directives for addition, subtraction, multiplication, division etc., sorting and searching, bit manipulation, look-up tables, string manipulations, Macros and Delay subroutines, Debugging.

UNIT -4

Data transfer schemes and Peripheral Interfacing: Synchronous, Asynchronous, Interrupt driven and DMA type schemes, 8255 PPI and its interfacing, Programmable Communication Interface (8251 USART) and its interfacing, Programmable Interval Timer (8254) and its interfacing, Programmable interrupt controller (8259) and its interfacing, Programmable DMA controller (8257) and its interfacing.

Memory and I/O Interfacing to 8086: Address decoding techniques, Interfacing Static RAM and ROM chips, ADC and DAC Interfacing.

Case studies: Traffic light controller, Stepper motor control, Data acquisition, Temperature measurement and control.

TEXT/REFERNCE BOOKS

1. Ramesh S. Gaonkar, "Microprocessor architecture, programming and its applications with 8085", Penram Interantional Publications, 4th Edition.
A. K. Ray and K.M. Bhurchandi, "Advanced Microprocessors and Peripherals", TMH.
2. Douglas V. Hall, "Microprocessors and Interfacing: Programming and Hardware", 2nd Edition, Tata McGraw-Hill.
3. Barry B. Brey, "The Intel Microprocessors-Architecture, Programming and Interfacing", 8th Edition, PHI

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1. Raj Kamal, Microcontrollers Architecture, Programming, Interfacing and System Design , Pearson Education, 2005.
2. Steve Furbur, ARM System onchip Architecture, 2nd Edition, Addison Wesley, 2000.
3. Y. Liu and Glenn A. Gibson, "Microcomputer Systems: 8086/8088 Family Architecture, Programming and Design", 2nd Edition, PHI.
4. Y. Liu and Glenn A. Gibson, "Microcomputer Systems: 8086/8088 Family Architecture, Programming and Design", 2nd Edition, PHI.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

By the end of the course students will be able to:

1. Describe the working of microprocessor kit/ TASM.
2. Apply interfacing of supporting chips with microprocessor.
3. Design assembly language programs for the 8085 and 8086 microprocessors. Analyze the output of assembly language programs.
4. Create lab records for the solutions of assignments.
5. Demonstrate use of ethical practices, independent enquiry and team spirit.

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B. Tech. Semester – VI (Information Technology)
PROJECT-1
CODE: PROJ-IT-300-P

NO OF CREDITS:2
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL: 50

Students may choose a project based on any subject of Computer Science. The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format. The student will have to present the progress of the work through seminars and progress reports.

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations
For

B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)

Semester -7

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-III	3	0	0	3	20	80	100
2.	PEC	PEC	Elective-IV	3	0	0	3	20	80	100
3.	OEC	OEC	Open Elective-II	3	0	0	3	20	80	100
4.	OEC	OEC	Open Elective-III	3	0	0	3	20	80	100
5.	BSC	BSC-401	Bioinformatics	2	1	0	2	20	80	100
Lab										
6.	Project	PROJ-IT-401-P	Project-II	0	0	4	2	10	40	50
7.	Project	PROJ-IT-403-P	Seminar	0	0	2	1	50	-	50
8.	Project	ITP-IT-405-P	Industrial Practical Training- II	0	0	0	2	-	100	100
9	PEC	PEC	Electives-III Course Lab	0	0	2	1	10	40	50
Total				14	1	08	20	170	580	750

Total Contact Hours =23

Total Credit= 20

Note: 1. Practical training was conducted after sixth semester. However, Viva-Vocce for evaluation of Practical Training will be conducted in this semester.

2. Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her

S.No	Elective -III	Elective -III Labs	Elective - IV	Open Elective- II	Open Elective - III
1.	PEC- CS-401 Information Security	PEC- CS-401 -P Information Security Lab	PEC- CS-409 Queuing Theory and Modeling	OE-CS-417 Human Resource Management	OE-CS-425 Financial Management
2.	PEC-CS-403 Wireless and Mobile Communication	PEC-CS-403-P Wireless and Mobile Communication Lab	PEC-CS-411 Internet of Things	OE-CS-419 ICT for Development	OE-CS-427 E-Commerce & Entrepreneurship
3.	PEC-CS-405 Advanced Operating Systems	PEC-CS-405 -P Advanced Operating Systems Lab	PEC-CS-413 Speech and Natural Language Processing	OE-CS-421 Intellectual Property Rights	OE-CS-429 Basics of Operation Research
4.	PEC-IT-407 Principles of Compiler Design	PEC-IT-407-P Principles of Compiler Design Lab	PEC-CS-415 Optimization Techniques	OE-CS-423 International Business Environment	OE-CS-431 Renewable Energy System

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B. Tech. Semester – VII (Information Technology)
INFORMATION SECURITY (ELECTIVE-III)
CODE: PEC-CS-401

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn about data hiding applications and their techniques.
2. To learn about hacking.
3. To learn security based protocols, attacks and intrusions.
4. To work with advance data hiding techniques.

UNIT- 1

Introduction: - The need for security, security approach, principles of security, types of attack, denial of service, IP spoofing, Phishing. Digital signature, Firewall.

UNIT- 2

Hacking:- Basics, Email hacking, computer hacking, types of hacking, practice against hacking, Access Authorization, Compression, LZW Compression and Decompression Method.

UNIT- 3

Data hiding:- Terms related to data hiding, Differences between cryptography, steganography & watermarking, history of steganography. Applications of data hiding.

UNIT- 4

Advance data hiding techniques :- Transform domain, difference between special domains and transform domain, wavelets, advantages of wavelet, and wavelet based techniques for data hidings.

TEXT/ REFERENCE BOOKS:

1. Cryptography and Network Security by Atul Khat e, Mc Graw Hill Publisher
2. E-mail Hacking by Ankit Fadia, Vikash Publishers
3. Data communication and Networking , Behrouz A. Forouzan .

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completing the course the student will be able to:

Explain information security.

1. Give an overview of access control of relational databases.
2. State the basic concept in information systems security, including security technology and principles, software security and trusted systems and IT security management.
3. Learn advance data hiding techniques.

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B. Tech. Semester – VII (Information Technology)
INFORMATION SECURITY LAB (ELECTIVE-III LAB)
CODE: PEC-CS-401

NO OF CREDITS: 1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Information Technology)
WIRELESS AND MOBILE COMMUNICATION (ELECTIVE-III)
CODE: PEC-CS-403

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT -1

Introduction to Wireless Communication Systems , Evolution, Mobile Systems around the World, Example of the mobile radio systems, Recent trends, 2G, 3G , 4G and 5G Cellular networks. The Cellular Concept Frequency reuse, Channel assignment, Hand off process, Types of Interference, Cellular Capacity.

UNIT -2

Mobile Radio Propagation Path loss, Radio wave propagation, Reflection, Diffraction, Scattering, Link budget Design, Outdoor and indoor propagation models

Principle of multi path propagation

Impulse response model of channels, parameters for mobile multi path channels, concept of fading, Rayleigh and Ricean fading, Simulation of fading channels.

UNIT-3

Modulation techniques for mobile communication

Pulse shaping, Linear and non-linear Modulation techniques, constant envelope modulation, QPSK, MSK, GMSK. Spread spectrum modulation techniques - Direct sequence and Frequency Hopping Spread Spectrum and their applications.

UNIT -4

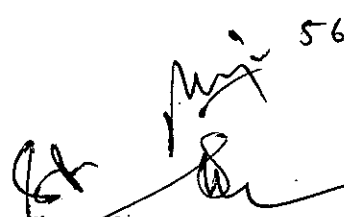
Multiple access techniques [5 hrs.]

Introduction, FDMA, TDMA, CDMA, SDMA, capacity of cellular systems

Introduction to Multicarrier systems [5 hrs.]

OFDM and wireless LAN, WiMAX, GSM, WCDMA, 3GPP LTE and other 4G standards.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VII (Information Technology)
WIRELESS AND MOBILE COMMUNICATION LAB (ELECTIVE-III LAB)
CODE: PEC-CS-403-P

NO OF CREDITS: 1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Information Technology)
ADVANCED OPERATING SYSTEMS (ELECTIVE-III)
CODE: PEC-CS-405

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn the fundamentals of different types of Operating Systems.
2. To learn the mechanisms to handle processes scheduling, synchronization and memory management in Distributed OS.
3. To understand the system architecture of Multiprocessor OS and learn the mechanisms to handle processes scheduling, synchronization, memory management and fault tolerance in Multiprocessor OS.
4. To understand the characteristics and system architecture of Real-Time OS and learn the mechanisms of processes scheduling, real-time OS protocols and Case studies.
5. To learn the mechanisms to design fast OS with proper resource utilization.

UNIT-1

Introduction

Introduction of Operating Systems, Evolution of OS, Types of OS: Batch OS, single user & Multi-user OS, Multiprogramming and Multi-tasking, Multi-threading, Time-sharing, Embedded OS, Distributed Operating Systems, Multi-processor Operating Systems, Real-time Operating Systems, Mobile Operating Systems

UNIT-2

Distributed operating systems

Introduction, Characteristics, Network OS & Distributed OS, Various issues, Communication in Distributed Systems, Clock Synchronization, Mutual Exclusion Algorithms, Deadlock Detection and Prevention, Distributed Process Scheduling Algorithms, Distributed File Systems.

UNIT-3

Multi-processor operating systems

Introduction, System Architecture, Structure of Multi-processor OS, Process Synchronization, Processor Scheduling Algorithms, Memory Sharing, Process Migration, Fault Tolerance

Real-time operating systems

Introduction, Characteristics, Structure of a Real-time System, Scheduling Algorithms, Mutual Exclusion, Priority Inheritance Protocol, Priority Ceiling Protocol, Case Studies

UNIT-4

Mobile operating systems

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Introduction, Mobile Devices, Characteristics of Mobile Devices, Resource management in Mobile OS: Power Management, Battery Management, Thermal Management, Memory Management, Scheduling, File System, Security, Android OS.

TEXT/REFERENCES BOOKS

1. MukeshSinghal, Niranjan G. Shivaratri, "Advanced Concepts In Operating Systems", Tata McGraw-Hill Education; 2nd edition, [ISBN: 007057572X], 2001.
2. Dr. Naresh Chauhan, "Principles of Operating Systems", Oxford University Press; 1st edition, [ISBN: 978-0198082873], 2014.
3. Andrew S. Tanenbaum, Herbert Bos, "Modern Operating Systems", Pearson Prentice Hall™; 4th edition, [ISBN: 9781292061429], 2014.
4. D. M. Dhamdhare, "Operating Systems", Tata McGraw Hill; 1st edition, [ISBN: 9781282187245], 2006.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After the successful completion of the course students will be able to:

1. Understand the characteristics of different OS.
2. Develop algorithms for process scheduling, synchronization for different OS.
3. For a given specification of memory organization develop the techniques for optimally allocating memory to processes by increasing memory utilization and for improving the access time for different OS.
4. Design and implement file management system for different OS.
5. Design and implement security policies in OS.

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B. Tech. Semester – VII (Information Technology)
ADVANCED OPERATING SYSTEMS LAB (ELECTIVE-III LAB)
CODE: PEC-CS-405-P

NO OF CREDITS: 1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Information Technology)
PRINCIPLES OF COMPILER DESIGN (ELECTIVE-III)
CODE: PEC-IT-407

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. Apply the knowledge of lex tool & yacc tool to develop a scanner & parser.
2. Design and conduct experiments for Intermediate Code Generation in compiler.
3. Develop program to solve complex problems in compiler
4. Learn the new code optimization techniques to improve the performance of a program in terms of speed and space.

UNIT-I

Introduction to Compiler: Phases and passes, Bootstrapping, Finite state machines and regular expressions and their applications to lexical analysis, Optimization of DFA-Based Pattern Matchers implementation of lexical analyzers, lexical-analyzer generator, LEX compiler, Formal grammars and their application to syntax analysis, BNF notation, ambiguity, YACC.

The syntactic specification of programming languages: Context free grammars, derivation and parse trees, capabilities of CFG.

UNIT-II

Basic Parsing Techniques: Parsers, Shift reduce parsing, operator precedence parsing, top down parsing, predictive parsers Automatic Construction of efficient Parsers: LR parsers, the canonical Collection of LR(0) items, constructing SLR parsing tables, constructing Canonical LR parsing tables, Constructing LALR parsing tables, using ambiguous grammars; an automatic parser generator, implementation of LR parsing tables.

UNIT-III

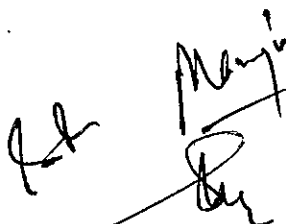
Syntax-directed Translation: Syntax-directed Translation schemes, Implementation of Syntax directed Translators, Intermediate code, postfix notation, Parse trees & syntax trees, three address code, quadruple & triples, translation of assignment statements, Boolean expressions, statements that alter the flow of control, postfix translation, translation with a top down parser. **More about translation:** Array references in arithmetic expressions, procedures call, declarations and case statements.

UNIT-IV

Symbol Tables: Data structure for symbols tables, representing scope information.

Run-Time Administration: Implementation of simple stack allocation scheme, storage allocation in block structured language. **Error Detection & Recovery:** Lexical Phase errors, syntactic phase errors semantic errors.

Code Generation: Design Issues, the Target Language. Addresses in the Target Code, Basic Blocks and Flow Graphs, Optimization of Basic Blocks, Code Generator

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Code optimization: Machine-Independent Optimizations, Loop optimization, DAG representation of basic blocks, value numbers and algebraic laws, Global Data-Flow analysis.

TEXT/REFERNCE BOOKS:

1. Aho, Sethi & Ullman, "Compilers: Principles, Techniques and Tools", Pearson Education
2. K. Muneeswaran, Compiler Design, First Edition, Oxford University Press
3. J.P. Bennet, "Introduction to Compiler Techniques", Second Edition, McGraw-Hill, 2003.
4. Henk Alblas and Albert Nymeyer, "Practice and Principles of Compiler Building with C", PHI, 2001.
5. V Raghvan, "Principles of Compiler Design", McGraw-Hill,
6. Kenneth Loudon, "Compiler Construction", Cengage Learning.
7. Charles Fischer and Ricard LeBlanc, "Crafting a Compiler with C", Pearson Education

Course Outcome:

At the end of course , the student will be able to:

1. Acquire knowledge of different phases and passes of the compiler and also able to use the compiler tools like LEX, YACC, etc. Students will also be able to design different types of compiler tools to meet the requirements of the realistic constraints of compilers.
2. Understand the parser and its types i.e. Top-Down and Bottom-up parsers and construction of LL, SLR, CLR, and LALR parsing table.
3. Implement the compiler using syntax-directed translation method and get knowledge about the synthesized and inherited attributes.
4. Acquire knowledge about run time data structure like symbol table organization and different techniques used in that.
5. Understand the target machine's run time environment, its instruction set for code generation and techniques used for code optimization.

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B. Tech. Semester – VII (Information Technology)
PRINCIPLES OF COMPILER DESIGN LAB (ELECTIVE-III LAB)
CODE: PEC-IT-407-P

NO OF CREDITS: 1

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INTERNAL MARKS: 10

EXTERNAL MARKS: 40

TOTAL : 50

At least 10 to 15 experiments to be performed related to the subject.

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B. Tech. Semester – VII (Information Technology)
QUEUING THEORY AND MODELING (ELECTIVE-IV)
CODE: PEC-CS-409

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. It provides an essential base for mathematical modeling which is normally used to solve the problems of pattern recognition and machine learning.
2. It is used in the research of various science and engineering problem.

UNIT-1

Introduction to Queues and Queueing Theory, Stochastic Processes, Markov Processes and Markov Chains, Birth-Death Process, Basic Queueing Theory (M/M/-/- Type Queues, Departure Process from M/M/-/- Queue, Time Reversibility, Method of Stages, Queues with Bulk Arrivals, Equilibrium Analysis of the M/G/1 Queue

UNIT-2

Analyzing the M/G/1 Queue using the Method of Supplementary Variables, M/G/1 Queue with Vacations, M[x] /G/1 Queue, Priority Operation of the M/G/1 Queue, M/M/n/K Queue with Multiple Priorities

UNIT-3

M/G/1/K Queue, G/M/1, G/G/1 G/G/m, and M/G/m/m Queues, Queueing Networks - Classification and Basic Concepts, Open and Closed Networks of M/M/m Type Queues, Jackson's Theorem

UNIT-4

Analysis of Closed Queueing Networks using Convolution and Mean Value Algorithms, Norton's Theorem for Closed Queueing Networks, Mixed Queueing Networks, Queueing Network Analyzer (QNA) Approach, Simulation Techniques for Queues and Queueing Networks, Discrete Time Queues.

TEXT/REFERENCES BOOKS:

1. Donald Gross, James M. Thompson, John F. Shortle and Carl W. Harris, Fundamentals of Queueing Theory, Wiley 2008.
2. Sanjay K. Bose, An Introduction to Queueing Systems, Springer 2002.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After undergoing the course, students will be able to

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1. Develop an understanding to the basic concepts of Queuing theory and type of queues.
2. Understand and apply the Queuing theory to Science and Engineering problems and applications.
3. Calculate the n-step transition probabilities for any Markov chain and understand about the birth and death of processes.
4. Apply Markov chain & Birth Death process to real life problems.
5. Develop an understanding of various Queuing Systems.

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B. Tech. Semester – VII (Information Technology)
INTERNET OF THINGS (ELECTIVE-IV)
CODE: PEC-CS-411

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. Student will be able to learn the basics of IOT.
2. Student will be able to analyse basic protocols of wireless and MAC.
3. Students will get familiar with web of things.
4. Students will get basic knowledge of resource management.

UNIT-1

Introduction to IOT

Introduction to IoT, Characteristics of IoT, Physical design of IoT, Logical design of IoT, Functional blocks of IoT, Communication models & APIs ,IoT& M2M Machine to Machine, Difference between IoT and M2M, Software define Network, Challenges in IoT(Design ,Development, Security).

UNIT-2

Network and communication aspects

Wireless medium access issues, MAC protocol survey, Survey routing protocols, Sensor deployment & Node discovery, Data aggregation & dissemination.

UNIT-3

Web of things

Web of Things vs Internet of things, two pillars of web, Architecture and standardization of IoT, Unified multitier-WoT architecture, WoT portals and Business intelligence, Cloud of things: Grid/SOA and cloud computing, Cloud middleware, cloud standards

UNIT-4

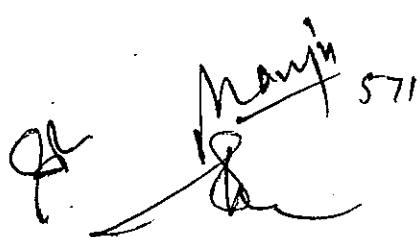
Resource management in iot

Domain specific applications of IoT, Home automation, Industry applications, Surveillance applications, Other IoT applications Clustering, Synchronization, Software agents.

TEXT/ REFERENCE BOOKS:

1. Vijay Madiseti, ArshdeepBahga, "Internet of Things: A Hands-On Approach"
2. WalteneusDargie,ChristianPoellabauer, "Fundamentals of Wireless Sensor Networks: Theory and Practice"

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to


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attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

On successful completion of the course, the student will:

1. Understand the concepts of Internet of Things
2. Analyze basic protocols network
3. Understand the concepts of Web of Things
4. Design IoT applications in different domain and be able to analyze their performance

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B. Tech. Semester – VII (Information Technology)
SPEECH AND NATURAL LANGUAGE PROCESSING (ELECTIVE-IV)
CODE: PEC-CS-413

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To make the students familiar with difference levels/stages of natural language processing and to introduce concept of Formal languages and grammars: Chomsky hierarchy and problems associated (like Left-Associative grammars, ambiguous grammars) with them.
2. To introduce the students with Morphology and Part of Speech Tagging by taking examples from Hindi, English.
3. To introduce the top down and the bottom up parsing approaches and their respective types of parsers.
4. To make the students familiar with grammar types like ATN & RTN.
5. To make the students familiar with the basic techniques of parsing like CKY, Earley & Tomita's algorithms and role Hidden Markov Model in NLP
6. To make the students familiar with Semantics-knowledge and its utilization.

UNIT-1

Automatic speech recognition

Introduction to Automatic Speech Recognition (ASR), Components in ASR, Challenges in ASR, Issues in ASR based Application development.

COMPONENTS OF NATURAL LANGUAGE PROCESSING

Lexicography, syntax, semantics, pragmatics: word level representation of natural languages prosody & natural languages.

UNIT-2

Formal languages and grammars

Chomsky hierarchy, Left-Associative grammars, ambiguous grammars, resolution of ambiguities. Introduction of top down and bottom up parsers.

UNIT-3

Computation linguistics

Morphology of natural languages like Hindi, English etc., Part of Speech Tagging (POS), recognition and parsing of natural language structures: ATN & RTN, General techniques of parsing: CKY, Earley & Tomita's algorithms. Introduction to Hidden Markov Model (HMM)

UNIT-4

Semantics-knowledge representation

Semantic networks logic and inference pragmatics, graph models and optimization, Prolog for natural language semantic (e.g. DCG).

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Application of NLP: Intelligent Work Processors

Machine translation, user interfaces, Man-Machine interfaces, natural language querying, tutoring and authoring systems, speech recognition, commercial use of NLP.

TEXT/REFERENCE BOOKS:

1. "Natural Language Understanding" James Allen, -1995 Benjamin/cummings Pub. Comp. Ltd
2. "Language as a cognitive process", Terry Winograd 1983, AW
3. "Natural Language processing in prolog", G. Gazder, 1989, Addison Wesley.
4. "Introduction of Formal Language Theory", MdljArbib&Kfaury, 1988, Springer Verlog.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course outcomes:

Upon successful completion of the course, the student will be able to understand:

1. Difference levels/stages of natural language processing and the concept of Formal languages and grammars: Chomsky hierarchy and problems associated (like Left Associative grammars, ambiguous grammars) with them.
2. The top down and the bottom up parsing approaches and their respective types of parsers like CKY, Earley & Tomita's
3. The Hidden Markov Model and its application in NLP
4. The student will be able to write small ATN & RTN grammars for simple English sentences.
5. The student will be able to do Morphology of words from natural languages like Hindi, English and Semantics-knowledge and its important to understand the documents.

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B. Tech. Semester – VII (Information Technology)
OPTIMIZATION TECHNIQUES (ELECTIVE-IV)
CODE: PEC-CS-415

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. The objective of this course is to provide insight to the mathematical formulation of real world problems.
2. To optimize these mathematical problems using nature based algorithms. And the solution is useful, especially for NP-Hard problems.

UNIT-1

Engineering applications of optimization, Formulation of design problems as mathematical programming problems. General Structure of Optimization Algorithms, Constraints, The Feasible Region.

UNIT-2

Branches of Mathematical Programming: Optimization using calculus, Graphical Optimization, Linear Programming, Quadratic Programming, Integer Programming, Semi Definite Programming.

UNIT-3

Optimization Algorithms like Genetic Optimization, Particle Swarm Optimization, Ant Colony Optimization etc.

UNIT-4

Real life Problems and their mathematical formulation as standard programming problems.

TEXT/REFERENCE BOOKS:

1. Laurence A. Wolsey (1998), "Integer programming". Wiley. ISBN 978-0-471-28366-9.
2. Andreas Antoniou, "Practical Optimization Algorithms and Engineering Applications".
3. Edwin K., P. Chong & Stanislaw h. Zak, "An Introduction to Optimization".
4. Dimitris Bertsimas; Robert Weismantel (2005), "Optimization over integers. Dynamic Ideas". ISBN 978-0-9759146-2-5.
5. John K. Karlof (2006), "Integer programming: theory and practice" .CRC Press. ISBN 978-0-8493-1914-3.
6. H. Paul Williams (2009), "Logic and Integer Programming". Springer. ISBN 978-0-387-92279-9.
7. Michael Jünger; Thomas M. Lieblich; Denis Naddef; George Nemhauser; William R. Pulleyblank; Gerhard Reinelt; Giovanni Rinaldi; Laurence A. Wolsey, eds. (2009), "50 Years of Integer Programmin". 1958-2008: From the Early Years to the State-of-the- Art. Springer. ISBN 978-3-540-68274-5.

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8. Der-San Chen; Robert G. Batson; Yu Dang (2010), " Applied Integer Programming: Modeling and Solution". John Wiley and Sons. ISBN 978-0-470-37306-4.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of course, students would be able to:

1. Apply basic concepts of mathematics to formulate an optimization problem
2. Understand and apply the concept of optimality criteria for various types of optimization problems.
3. Solve various constrained and unconstrained problems in Single variable as well as multivariable.
4. Apply the methods of optimization in real life situations.

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B. Tech. Semester – VII (Information Technology)
HUMAN RESOURCE MANAGEMENT (OPEN ELECTIVE-II)
CODE: OE-CS-417

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course objectives:

The primary concern of this course is to sensitize students to the various facts of managing people and to create an understanding of the various policies and practices of human resource management.

UNIT-1

Human Resource Management: concept, evolution and scope; Strategic objectives of HR management; Roles, responsibilities and competencies of HR manager; Challenges to HR professionals; Human Resource Planning & Forecasting: significance and process; Human Resource Information System.

UNIT-2

HR Sourcing and Recruitment; Selection: process, Placement; Induction and Socialization. Job Analysis: job Description and job Specification; Job Design: approaches and methods; Job Evaluation-concept & methods; Performance Management System: appraisal and counselling.

UNIT-3

Training: training process, training need analysis (TNA); training methods and techniques; Designing Training programs; Training evaluation; Career planning and Development; Potential Appraisal and Succession planning; Employee Compensation: basic concepts & determinants; New trends in compensation management.

UNIT-4

Industrial Relations and Grievance Handling; Employee welfare; Dispute Resolution; International Human Resource Management; Contemporary Issues in HRM: knowledge Management, HR Audit & Accounting, HR in virtual organizations, ethics & corporate social responsibility.

TEXT/REFERENCE BOOKS:

1. K. Aswathapa Human resource Management: Text and cases, 6th edition, Tata McGraw Hill, New Delhi.
2. Uday Kumar Haldar & Juthika Sarkar Human resource Management New Delhi, Oxford University Press.
3. De Cenzo, Da & Robbins S.P. Fundamentals of Human Resource Management, 9th edition, New York, John Wiley & Sons.
4. Gary Dessler, Human Resource Management, 11th edition New Delhi: Pearson Prentice Hall.
5. Tanuja Agarwala, Strategic Human resource Management, Oxford University Press

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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. The course will help to understand the basics of HRM with roles and responsibilities of a HR manager.
2. This course enables the students to meet HR challenges in present scenario
3. It will facilitate them in employing, maintaining and promoting a motivated force in an organization.
4. Students will be aware about contemporary issues of human resource management.

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B. Tech. Semester – VII (Information Technology)
ICT FOR DEVELOPMENT (OPEN ELECTIVE-II)
CODE: OE-CS-419

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course objectives:

With rising use of Information and Communication technologies available, there is a high potential for these technologies to address sustainability issues. The students must be equipped with the knowledge about their applications in the development field so as to enable them to provide ICT solutions to the target communities. The students will gain knowledge and skills on how ICTs can be best used to overcome sustainability challenges. In order to succeed in the practice of sustainable development, professionals must be trained in a basic set of competencies that integrate cross-disciplinary knowledge for practical problem solving with the use of information and communication technologies.

UNIT-1

Introduction

Introduction to ICTs for sustainable Development Introduction to Information and Communication Technology (ICT); Role of ICTs in Sustainable Development; Current Status of ICTs in Sustainable Development- Global and India Scenario. Potential of ICTs in various fields, impact of information Technologies on GDP growth

Building knowledge societies

The concept of Knowledge Society; identifying stakeholders and target communities; Understanding information needs, Traditional vs. contemporary knowledge systems, information processing and retrieval; Understanding means of communication in different areas, developing an effective communication strategy Case: Warna Unwired

UNIT-2

Information and communication technologies

The hardware and software, the physical infrastructure, satellite, wireless solutions, telecommunication technologies, mobiles, fixed line, internet and world wide web, community radio, technology-user interface, design of relevant ICT products and services.

ICT applications

Applications of ICT in education, Health (telehealth, telemedicine and health Informatics), Gender Equality, Agriculture (e Governance, telecentres, Mobiles for development, climate change and disaster management, ICT Networks for water management (This module will be dealt with the help of country case studies in all the sectors and inputs from ICT4D practitioners Case Studies: eCME, Apollo Telemedicine Network Foundation, Bhoomi, eSewa, Gyandoot, eAgriculture. M-PESA, CYCLETEL)

UNIT-3

ICT for development in India

Policy and Institutional Framework in India, e governance, ICT Models in health, education, agriculture, finance, gender equality, Mobiles for Development Experience sharing by ICT for Development practitioners Case Studies: Reuters Market Light, Iffco Kisaan Sanchar Ltd.

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UNIT-4

ICT 4D implementation

Developing an ICT4D Project, Critical Success factors for technology diffusion and use, Constraints in adoption, The role of national policies, Institutional Policy framework, Multistakeholder partnerships, Role of Private Sector Case Studies: echaupal , Lifelines India.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of the course:

1. Students will be familiarized with main theories and conceptual frameworks in the field of ICT for development
2. Students will learn potential of both information and communication technologies in different areas such as health, education, agriculture, finance, gender equality and climate change.
3. Students will be able to understand the existing innovative business models and other applications in the above mentioned areas with reference to India and other developing countries
4. Students will be able to compare and contrast various business models (public, private sector, PPP, civil society) with respect to technology, infrastructure, capacity building, human resource etc.
5. Students will be able to learn how ICT models can be successfully implemented at the field and understand critical success factors and constraints in adoption.

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B. Tech. Semester – VII (Information Technology)
INTELLECTUAL PROPERTY RIGHTS (OPEN ELECTIVE-II)
CODE: OE-CS-421

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To make the student aware about Intellectual Property and why it is important
2. To study the concept of Patents, history of patent and its categorization.
3. To learn the procedure of obtaining Patents.
4. To make the student learn Assignment and Revocation of Patent
5. To study the concept of infringement and its defence.

UNIT-1

Introduction to Intellectual Property

Concept of Intellectual Property, Kinds of Intellectual Property, Economic Importance of Intellectual Property, Indian Theory on Private Property: Constitutional Aspects of Property, Constitutional Protection of Property and Intellectual Property, Economic Development and Intellectual Property Rights Protection

UNIT-2

Introduction to Patents

Overview, Historical Development, Concepts: Novelty, Utility, Patentable Subject-matter: Patent Act, 1970- Amendments of 1999, 2000, 2002 and 2005, Pharmaceutical Products and Process and Patent, Protection, Software Patents, Business Method, Protection of Plant Varieties and Farmers' Rights Act, 2001, Patenting of Micro-organism

UNIT-3

Procedure of obtaining of Patents

Concepts of a Patent Application,, Specification: Provisional, Complete, Disclosure Aspects, Claims: Principal, Dependant, Omnibus, Examination of Application, Opposition of Application, Sealing of Patents

UNIT-4

Working of Patents – Compulsory License

Commercialization of Inventions: License- Terms of License Agreement, Assignments of Patents, Revocation of Patents

Infringement

What is Infringement?, How is Infringement determined? Who is an Infringer?, Direct, Contributory and Induced, Defences of Infringement: Research Exemption, Invalidity, Misuse, Failure to mark, Laches and Estoppel and first sale doctrine

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TEXT/ REFERENCE BOOKS:

1. W.R. Cornish, Intellectual Property, Sweet & Maxwell, London (2000)
2. P. Narayana, Patent Law, Wadhwa Publication
3. Merges, Patent Law and Policy: Cases and Materials, 1996
4. Brian C. Reid, A Practical Guide to Patent Law, 2nd Edition, 1993
5. Brinkhof (Edited), Patent Cases, Wolters Kluwer.
6. Prof. Willem Hoyng & Frank Eijvogels, Global Patent Litigation, Strategy and Practice, Wolters Kluwer.
7. Gregory Stobbs, Software Patents Worldwide, Wolters Kluwer.
8. Feroz Ali Khader, The Law of Patents- With a special focus on Pharmaceuticals in India, Lexis Nexis Butterworths Wadhwa, Nagpur.
9. Sookman, Computer Law, 1996
10. N.S. Gopalakrishnan & T.G. Agitha, Principles of Intellectual Property (2009). Eastern Book Company, Lucknow

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of the course student will be able to:

1. Understand the concept of Intellectual Property and its importance.
2. Understand Patents, categorization and procedure for obtaining patents.
3. Understand the commercialization of invention
4. Understand the concept of infringement and its defence.

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B. Tech. Semester – VII (Information Technology)
INTERNATIONAL BUSINESS ENVIRONMENT (OPEN ELECTIVE-II)
CODE: OE-CS-423

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

To provide knowledge about International Business Environment. To provide the framework on basis of which business can be run smoothly.

UNIT-1

International business environment; Concept of international business; domestic vs international business, stages of internationalization, tariff and non-tariff barriers, Risks involved in international business

UNIT-2

Theories of international trade: Adam Smith, Ricardo and Ohlin & Heckler theory, Leontif paradox, PLC

UNIT-3

International Monetary Systems: Historical background and structure. International Financial institutions; IMF, World Bank, Euro Currency. International financial markets and instruments.

UNIT-4

Free trade zones. Bilateral and Multilateral Trade Laws – General Agreement on Trade and Tariffs, (GATT), World Trade Organization – IPR, TRIPS, TRIMS, GATS. Regional Economic Integrations: NAFTA, EU. Trade Blocks; ASEAN, SAAARC, BRICS

TEXT/REFERENCE BOOKS:

1. Lasserre, Philippe Global Strategic Management, Palgrave MacMillan.
2. John D Daniels, Lee H Radebaugh Daniel P Sullivan, Prashant Salwan. International Business Environments and Operations, Pearson Education
3. Tamer Cavusgil, Gary Knight International Business: Strategy, Management and the New Realities, 1st Edition, Pearson Education.
4. K Aswathappa, International Business, Tata McGraw Hill.
5. Richard Hodgetts, Fred Luthans, Jonathan Doh. International Management: Culture, Strategy And Behaviour, Pearson Education.
6. Deresky, International Management: Managing across borders and culture. Pearson Education.
7. Nandi : "International Business Environment" McGraw Hill Education.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to

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attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. The student will be aware of the international organizations in which India is a member or otherwise.
2. The students may take opportunity to take their business from domestic to international.
3. International organizations and their links to India will be understood by students in an easy manner.
4. The students will be aware business environment at international level

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B. Tech. Semester – VII (Information Technology)
FINANCIAL MANAGEMENT (OPEN ELECTIVE-III)
CODE: OE-CS-425

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

To develop understanding among the students regarding nature of finance and its interaction with other Management functions and the objectives of Financial Management.

UNIT-1

Financial management-scope finance functions and its organisation, objectives of financial management; time value of money; sources of long term finance.

UNIT-2

Investment decisions importance, difficulties, determining cash flows, methods of capital budgeting with excel; risk analysis (risk adjusted discount rate method and certainty equivalent method); cost of different sources of raising capital; weighted average cost of capital.

UNIT-3

Capital structure decisions-financial and operating leverage; EBIT/EPS Analysis, capital structure theories- NI, NOI, traditional and M-M theories; determinants of dividend policy and dividend models -Walter, Gordon & M.M. models.

UNIT-4

Working Capital- meaning, need, determinants; estimation of working capital need; management of cash, inventory and receivables.

TEXT/REFERENCE BOOKS:

1. Pandey, I.M., "Financial Management", Vikas Publishing House, New Delhi
2. Khan M.Y, and Jain P.K., "Financial Management", Tata McGraw Hill, New Delhi
3. Keown, Arthur J., Martin, John D., Petty, J. William and Scott, David F, "Financial Management", Pearson Education
4. Chandra, Prasanna, "Financial Management", TMH, New Delhi
5. Van Horne, James C., "Financial Management and Policy", Prentice Hall of India
6. Brigham & Houston, "Fundamentals of Financial Management", Thomson Learning, Bombay.
7. Kishore, R., "Financial Management", Taxman's Publishing House, New Delhi

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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

1. It creates understanding among the students regarding the key decisions like Investment, Financing and dividend Decisions of financial Management.
2. They are able to understand the usage and applications of leverages in financial decisions.
3. The students are able to use their best knowledge in finance towards the value creation for the organization.
4. The students will be made aware of working capital management concept.

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B. Tech. Semester – VII (Information Technology)
E-COMMERCE AND ENTERPRNEURSHIP (OPEN ELECTIVE-III)
CODE: OE-CS-427

NO OF CREDITS: 3
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INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To understand the basic concept of electronic transactions, types of business models and about customer relationship management.
2. To study about various legal and ethical issues related to electronic transactions and also understating the concepts of IPR.
3. To understand the skills of Entrepreneurship, to identify the projects and the analysis and report making.

UNIT-1

Introduction To E-Commerce

Need, importance, Business models, revenue models and business processes, economic forces & e-commerce, identifying e-commerce opportunities, international nature of e-commerce, technology infrastructure-internet & WWW; Business strategies for ecommerce: Revenue models in transaction, revenue strategic issues, customer behavior and relationship intensity, advertising on the web, e-mail marketing, technology enabled CRM

UNIT-2

Business To Business Strategies

(Overview strategic methods for Developing E-Commerce) Purchasing, logistics and supply activities, electronic data interchange (EDI), electronic data interchange on the internet, supply chain management using internet technologies, electronic market place & portals (Home shopping, E-marketing, Tele marketing), auctions, online auctions, virtual communicative & web portals; legal, and ethical issues in e-commerce — use and protection of intellectual property in online business, online crime, terrorism & warfare, ethical issues.

UNIT-3

Entrepreneurship

Definition, Concept, Growth and role. The Entrepreneur: types, Characteristics, theories of Entrepreneurial class, Urges and importance of Entrepreneurship Stimulants; Seed-Beds of Entrepreneurship, Influencing Factors; Problems (Operational and Non-Operational) and Obstacles. Entrepreneurial Management. Role of socio-economic environment

UNIT-4

Skills for a New Class of Entrepreneurs, The Ideal Entrepreneurs, The Entrepreneurship Audit, Identification of opportunities by an Entrepreneur, The steps to identify the project /ventures, Process of converting business opportunities into reality. Feasibility Report and analysis, Process of setting up a

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small scale industry / unit Promotion of a venture, External Environment Analysis: Economic, Social, Technological and competition, Legal Framework for establishing and fund raising Venture Capital: Sources and Documents required.

TEXT/REFERENCE BOOKS:

1. Gary P. Schneider, "Electronic Commerce", Seventh Edition, CENGAGE Learning India Pvt. Ltd., New Delhi.
2. K.K.Bajaj, D. Nag "E-Commerce", 2nd Edition, McGraw Hill Education, New Delhi
3. P.T. Joseph, "E-Commerce An Indian Perspective", PHI Publication, NewDelhi.
4. Bhaskar Bharat, "Electronic Commerce-Technology and Application", McGraw Hill Education, New Delhi
5. Mary Sumner, "Enterprise Resource Planning", 2005, PHI Learning India Pvt. Ltd. / Pearson Education, Inc. New Delhi. 6. Chan, " E-Commerce fundamentals and Applications", Wiley India, New Delhi

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Course Outcomes:

After completion of course, students would be able to:

1. The students will be able to understand the basic concepts of electronic transactions.
2. Study of various types of business models and customer relationship management.
3. Students will be able to understand about various business strategies and marketing strategies.
4. Study of various legal and ethical issues related to electronic transactions.
5. Study of intellectual property rights and its importance.
6. Study of Entrepreneurship management
7. Study of analyzing the external environment, the competition and designing the framework for establishing a venture capital.
8. Study of business intelligence and knowledge management tools.

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B. Tech. Semester – VII (Information Technology)
BASIC OF OPERATION RESEARCH (OPEN ELECTIVE-III)
CODE: OE-CS-429

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. Understand what R is and what it can be used for
2. Why would you choose R over another tool
3. Troubleshoot software installs (keep your fingers crossed)
4. Gain familiarity with using R from within the RStudio IDE
5. Get to know the basic syntax of R functions
6. Be able to install and load a package into your R library

UNIT-1

Definition of operations research, models of operations research, scientific methodology of operations research, scope of operations research, importance of operations research in decision making, role of operations management, limitations of OR.

UNIT-2

Linear Programming: Introduction – Mathematical formulation of a problem – Graphical solutions, standard forms the simplex method for maximization and minimization problems. Method application to management decisions.

Transportation problem – Introduction – Initial basic feasible solution - NWC method – Least cost method – Vogel's method – MODI – moving towards optimality – solution procedure without degeneracy

UNIT-3

Sequencing and replacement model: Sequencing problem – processing through 2 machines, 3 machine – s jobs and k machines and traveling salesman problem.

Replacement of items that deteriorate gradually – with time, without time, that fails completely – individual replacement – group replacement

UNIT-4

Network models and simulation. Network models for project analysis CPM; Network construction and time analysis; cost time trade off, PERT – problems

TEXT/REFERENCE BOOKS:

1. Jared P. Lander, R for Everyone: Advanced Analytics and Graphics, Pearson Edu. Inc.
2. Christian Heumann, Michael Schomaker and Shalabh, Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R, Springer, 2016
3. Pierre Lafaye de Micheaux, Rémy Drouilhet, Benoit Liquet, The R Software-

Fundamentals of Programming and Statistical Analysis, Springer 2013

4. By Alain F. Zuur, Elena N. Ieno, Erik H.W.G. Meesters, A Beginner's Guide to R (Use R) Springer 2009


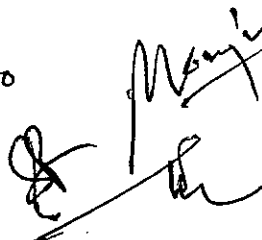
Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

After completion of the course, students will be able to:

1. Familiarize themselves with R and the RStudio IDE
2. Understand and use R functions
3. Install and load a package into your R library
4. Get insight into the capabilities of the language as a productivity tool for data manipulation and statistical analyses.

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B. Tech. Semester – VII (Information Technology)
RENEWABLE ENERGY SYSTEMS (OPEN ELECTIVE-III)
CODE: OE-CS-431

NO OF CREDITS: 3

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To learn various renewable energy sources
2. To gain understanding of integrated operation of renewable energy sources
3. To understand Power Electronics Interface with the Grid

UNIT-1

Introduction, Distributed vs Central Station Generation Sources of Energy such as Micro-turbines Internal Combustion Engines.

UNIT-2

Introduction to Solar Energy, Wind Energy, Combined Heat and Power Hydro Energy, Tidal Energy, Wave Energy Geothermal Energy, Biomass and Fuel Cells.

UNIT-3

Power Electronic Interface with the Grid Impact of Distributed Generation on the Power System Power Quality Disturbances

UNIT-4

Transmission System Operation, Protection of Distributed Generators, Economics of Distributed Generation

TEXT/REFERENCE BOOKS:

1. Ranjan Rakesh, Kothari D.P, Singal K.C, "Renewable Energy Sources and Emerging Technologies", 2nd Ed. Prentice Hall of India ,2011
2. Math H. Bollen, Fainan Hassan, "Integration of Distributed Generation in the Power System", July 2011,Wiley –IEEE Press
3. Loi Lei Lai, Tze Fun Chan, "Distributed Generation: Induction and Permanent Magnet Generators", October 2007, Wiley-IEEE Press.
4. Roger A. Messenger, Jerry Ventre, "Photovoltaic System Engineering", 3rd Ed, 2010
5. James F. Manwell, Jon G.McGowan, Anthony L Rogers, "Wind energy explained: Theory Design and Application", John Wiley and Sons 2nd Ed, 2010

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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Course Outcomes:

After completion of the course, Students will be able to:

1. Gain knowledge about renewable energy
2. Understand the working of distributed generation system in autonomous/grid connected modes
3. Know the Impact of Distributed Generation on Power System

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B. Tech. Semester – VII (Information Technology)
BIOINFORMATICS
CODE: BSC-401

NO OF CREDITS: 2

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT-1

Introduction to bioinformatics and data generation

What is bioinformatics and its relation with molecular biology. Examples of related tools (FASTA, BLAST, BLAT, RASMOL), databases (GENBANK, Pubmed, PDB) and software (RASMOL, Ligand Explorer).

Data generation; Generation of large scale molecular biology data. (Through Genome sequencing, Protein sequencing, Gel electrophoresis, NMR Spectroscopy, X-Ray Diffraction, and microarray). Applications of Bioinformatics.

UNIT-2

Biological Database and its Types

Introduction to data types and Source. Population and sample, Classification and Presentation of Data. Quality of data, private and public data sources. General Introduction of Biological Databases; Nucleic acid databases (NCBI, DDBJ, and EMBL). Protein databases (Primary, Composite, and Secondary). Specialized Genome databases: (SGD, TIGR, and ACeDB). Structure databases (CATH, SCOP, and PDBsum)

UNIT-3

Data storage and retrieval and Interoperability Flat files, relational, object oriented databases and controlled vocabularies. File Format (Genbank, DDBJ, FASTA, PDB, SwissProt).

Introduction to Metadata and search; Indices, Boolean, Fuzzy, Neighboring search. The challenges of data exchange and integration. Ontologies, interchange languages and standardization efforts. General Introduction to XML, UMLS, CORBA, PYTHON and OMG/LIFESCIENCE.

UNIT-4

Sequence Alignments and Visualization

Introduction to Sequences, alignments and Dynamic Programming; Local alignment and Global alignment (algorithm and example), Pairwise alignment (BLAST and FASTA Algorithm) and multiple sequence alignment (Clustal W algorithm).

Methods for presenting large quantities of biological data: sequence viewers (Artemis, SeqVISTA), 3D structure viewers (Rasmol, SPDBv, Chime, Cn3D, PyMol), Anatomical visualization.

TEXT/REFERENCE BOOKS:

1. "Biology: A global approach" Campbell, N. A.; Reece, J. B.; Urry, Lisa; Cain, M, L.; Wasserman, S. A.; Minorsky, P. V.; Jackson, R. B. Pearson Education Ltd
2. "Outlines of Biochemistry", Conn, E.E; Stumpf, P.K; Bruening, G; Doi, R.H.

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4. John Wiley and Sons
5. "Principles of Biochemistry(V Edition)", By Nelson, D. L.; and Cox, M. M.W.H. Freeman and Company
6. "Molecular Genetics (Second edition)", Stent, G. S.; and Calender, R. W.H. Freeman and company, Distributed by Satish Kumar Jain for CBS Publisher
7. "Microbiology" , Prescott, L.M J.P. Harley and C.A. Klein 1995. 2nd edition Wm, C. Brown Publishers

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Course Outcomes:

After studying the course, the student will be able to:

1. Describe how biological observations of 18th Century that lead to major discoveries.
2. Convey that classification per se is not what biology is all about but highlight the underlying criteria, such as morphological, biochemical and ecological
3. Highlight the concepts of recessiveness and dominance during the passage of genetic material from parent to offspring
4. Convey that all forms of life have the same building blocks and yet the manifestations are as diverse as one can imagine
5. Classify enzymes and distinguish between different mechanisms of enzyme action.
6. Identify DNA as a genetic material in the molecular basis of information transfer.
7. Analyse biological processes at the reductionistic level
8. Apply thermodynamic principles to biological systems.
9. Identify and classify microorganisms.

Dr. Manoj

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Chairperson

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B. Tech. Semester – VII (Information Technology)
PROJECT-II
CODE: PROJ-IT-401-P

NO OF CREDITS: 2
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INTERNAL MARKS: 10
EXTERNAL MARKS: 40
TOTAL : 50

Note: Students may choose a project based on any subject of Information Technology. The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format. The student will have to present the progress of the work through seminars and progress reports.

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B. Tech. Semester – VII (Information Technology)
SEMINAR
CODE: PROJ-IT-403-P

NO OF CREDITS: 1
L T P
0 0 2

INTERNAL MARKS: 50
EXTERNAL MARKS: 00
TOTAL : 50

The topic of the seminar will be based on emerging technology or any topic related to the field of Information Technology. An assigned teacher will evaluate the performance of the students & marks will be awarded accordingly.

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B. Tech. Semester – VII (Information Technology)
INDUSTRIAL PRACTICAL TRAINING- II
CODE: ITP-IT-405-P

NO OF CREDITS: 2
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INTERNAL MARKS: 00
EXTERNAL MARKS: 100
TOTAL : 100

Industrial practical training conducted after sixth semester will be evaluated in the Seventh Semester based on Viva-Voce.

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Department of Computer Science & Engineering & Information Technology
Course Curriculum & Scheme of Examinations

For

B.Tech. (Information Technology)
(w.e.f Academic Session 2024- 2025)

Semester -8

S. No.	Category	Course Code	Course Title	Hours per week			Credits	Marks		Total
				L	T	P		Internal Marks	External Marks	
Theory										
1.	PEC	PEC	Elective-V	3	0	0	3	20	80	100
2.	OEC	OEC	Open Elective-IV	3	0	0	3	20	80	100
Lab										
3.	Project	PROJ-IT-402 – P	Project-III	0	0	12	5	40	160	200
4.	Project	PROJ-IT-404-P	Seminar	0	0	2	1	50	0	50
5.	MC	GPP-IT-406-P	General Proficiency	0	0	0	0	0	100	100
Total				6	0	14	12	130	420	550

Total Contact Hours =20

Total Credit= 12

Note: Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examinations of the subject.

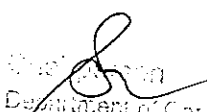
2. General Fitness for Profession: A comprehensive viva-voce of the students will be taken by external examiner and Chairperson of the department (internal examiner) and Class Coordinator at the end of the semester. The evaluation of the student for General Fitness for the Profession will be carried out through viva-voce taken by the committee of examiners.

3. Project coordinator and other assisting co-coordinators will be assigned the load maximum of 02 Hours per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

S.No	Elective – V	Open Elective- IV
1.	PEC- CS-402 Block Chain	OE-CS-410 Economic policies in India
2.	PEC-CS-404 Deep Learning	OE-CS-412 Quality Engineering
3.	PEC-CS-406 Neural Networks	OE-CS-414 Optical Network Design
4.	PEC-CS-408 Software Testing and Quality Assurance	OE-CS-416 Embedded System

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B. Tech. Semester – VIII (Information Technology)
BLOCKCHAIN (ELECTIVE-V)
CODE: PEC-CS-402

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To introduce basic concepts of Blockchain.
2. To understand abstract models for Blockchain technology
3. To learn about usage of Blockchain technology in financial services.
4. To visualize the scope of blockchain & its role in futuristic development.

UNIT- 1

Introduction to Blockchain:- Overview of blockchain, need for blockchain, history of centralized services, trusted third party, Distributed consensus in open environments, Distributed Vs Decentralized Network, 51 % attack theory, Public blockchains, Private blockchains, Blockchain Architecture and working, Mining, Limitations of blockchain, Applications of blockchain

UNIT- 2

Models for blockchain:- GARAY model, RLA Model, Proof of Work (PoW), HashcashPoW, PoW Attacks and the monopoly problem, Proof of Stake(PoS), hybrid models(PoW+PoS), Proof of Burn and Proof of Elapsed Time.

UNIT-3

Permissioned Blockchain:- Permissioned model and use cases, Design issues for Permissioned blockchains, State machine replication, Consensus models for permissioned blockchain, Distributed consensus in closed environment, Paxos, RAFT Consensus, Byzantine general problem, Byzantine fault tolerant system, Lamport-Shostak-Pease BFT Algorithm, BFT over Asynchronous systems.

UNIT- 4

Blockchain in Financial Service:- Digital Currency, Cross border payments, Stellar and Ripple protocols, Project Ubin, Know Your Customer (KYC), Privacy Consents, Mortgage over Blockchain, Blockchain enabled Trade, We Trade – Trade Finance Network, Supply Chain Financing, Insurance.

Blockchain Security: Security properties, Security considerations for Blockchain, Intel SGX, Identities and Policies, Membership and Access Control, Blockchain Crypto Service Providers, Privacy in a Blockchain System, Privacy through Fabric Channels, Smart Contract Confidentiality.

TEXT/REFERENCES BOOKS:

1. Blockchain: Blueprint for a New Economy, by Melanie Swan.
2. Blockchain: The blockchain for beginners guide to blockchain technology and leveraging blockchain programming, by Josh Thompsons
3. Blockchain Basics by Daniel Drescher, Apress

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Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

At the end of the course, students will develop understanding for:

1. Recognizing goals of Blockchain.
2. Smart Contracts, transactions in Blockchain and Permissioned Blockchain.
3. Analyzing usage of Blockchain in finance.
4. Security issues in Blockchain.

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B. Tech. Semester – VIII (Information Technology)
DEEP LEARNING (ELECTIVE-V)
CODE: PEC-CS-404

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

UNIT-1

Mathematical Preliminaries Introduction to Linear Algebra; Principal Component Analysis; Probability and Statistics; Numerical Methods, Gradient and constraint-based optimization

UNIT-2

Machine Learning Basics Learning algorithms; Training, validation and test sets; neural networks, convolution and recurrent networks, back propagation; Performance metrics, hyper parameters and debugging strategies

UNIT-3

Introduction to Deep Networks .Problems with back propagation and modern approaches; Auto encoders, representation learning; Regularization, dropout, optimization strategies
Sequence Learning and LSTMs Deep recurrent networks, bidirectional networks and encoder-decoder architectures; Introduction to LSTM, building an LSTM network

UNIT-4

Applications Deep convolution network for Telugu OCR and performance analysis; LSTM networks for text processing
GANs and Latest Advances Generative adversarial networks (GAN), building and training GANs; GAN variants and current results; limitations and weaknesses of deep learning

TEXT/REFERENCE BOOKS:

1. Ian Goodfellow, Yoshua Bengio, Aaron Courville. Deep Learning, MIT Press, 2015.
2. Technical papers from time-to-time on different topics (some of these will be given at the beginning of the semester and others during the semester).

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VIII (Information Technology)
NEURAL NETWORKS (ELECTIVE-V)
CODE: PEC-CS-406

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objectives:

1. To introduce neural networks concepts and associated techniques
2. To design appropriate neural network based technique for a given scenario.
3. To introduce the concept of associative memories and their capabilities in pattern completion and repair.
4. To introduce the unsupervised learning self organizing maps

UNIT-1

Introduction to neural networks

Artificial neurons, Neural networks and architectures, Feedforward and feedback architectures, Learning types-supervised, unsupervised and reinforced, learning mechanisms-Gradient Descent, Boltzmann, and Hebbian, Single Perceptron as classifier, Multi-layer perceptron model.

UNIT-2

Recurrent networks

Attractor Neural Networks, Associative learning and Memory Model, Discrete Hopfield Network, Condition for Perfect Recall in Associative Memory, Bi-direction Associative memories (BAM)-Auto and Hetro-association, Boltzmann machine, Introduction to Adaptive Resonance Networks.

UNIT-3

Feed forward networks

Gradient Descent and Least Mean Squares Algorithm, Back Propagation Algorithms, Multi-Class Classification Using Multi-layered Perceptrons., Support Vector Machine (SVM), Radial Basis Function Networks: Cover's Theorem, Learning Mechanisms in RBF.

UNIT-4

Principal components and analysis

Introduction to PCA, Dimensionality reduction Using PCA, Hebbian-Based Principal Component Analysis, Introduction to Self Organizing Maps : Cooperative and Adaptive Processes in SOM, and Vector-Quantization Using SOM.

TEXT/REFERENCE BOOKS:

1. Haykin S., "Neural Networks-A Comprehensive Foundations", Prentice-Hall International, New Jersey, 1999.
2. Anderson J.A., "An Introduction to Neural Networks", PHI, 1999.
3. Satish Kumar, "Neural Networks: A Classroom Approach"

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4. Hertz J, Krogh A, R.G. Palmer, "Introduction to the Theory of Neural Computation", Addison-Wesley, California, 1991.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After successful completion of the course, the students will be able to:

1. Use neural networks concepts and associated techniques for solving classification and regression problems.
2. Design and Use neural networks for pattern recall, completion and repair.
3. Design and Use neural networks for self learning and unsupervised classifications.
4. Choose the appropriate classifier.

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B. Tech. Semester – VIII (Information Technology)
SOFTWARE TESTING AND QUALITY ASSURANCE (ELECTIVE-V)
CODE: PEC-CS-408

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20
EXTERNAL MARKS: 80
TOTAL : 100

Course Objective:

The purpose of this course is to presents the knowledge about Testing background such introduction of Bug , cause of Bug, how it effect on cost of project, role of STLC cycle realities of software testing. This subject also gives the knowledge software testing fundamentals, under the study of types of testing this subject enlighten the Configuration testing, Compatibility testing, Foreign language testing, Usability testing, Testing the documentation, Testing for software security, Web site testing and more. At the end this subject focuses on the test planning and quality assurance.

UNIT-1

Introduction to Software Testing

Introduction – s/w testing background - What is a bug? Why do bugs occur? The cost of bugs. Goals of a software tester. Characteristics of s/w tester. Software development process- product component, software project staff, software development lifecycle model. The realities of s/w testing – testing axioms, s/w testing terms and definitions, Software Testing Life Cycle(STLC).

Unit-2

S/w testing fundamentals

S/w testing fundamentals- Examining the specifications - Black box and white box testing, Static and dynamic testing, Static black box testing, Performing a high level review of the specification, low level specification test techniques. Testing the s/w with blinders on – Dynamic black box testing, Test to pass and test to fail, Equivalence partitioning, data testing, State testing, Other black box test techniques. Examining the code – Static white box testing, Formal review, Coding standards and guidelines, Generic code review checklist. Testing the software with X-ray glasses – Dynamic white box testing, Dynamic white box testing, verses debugging testing the pieces

UNIT-3

Types of testing

Configuration testing, Compatibility testing, Foreign language testing, Usability testing, Testing the documentation, Testing for software security. Web site testing, Automated testing and test tools- Benefits of automation and tools, various test tools; Software test automation, Random testing. Bug bashes and beta testing – Having other people test your s/w, Test sharing, Beta testing, Outsourcing your testing. Performance Testing – Introduction, Benefits of performance testing. Types of performance testing Tools for performance Testing, Process for performance testing, challenges.

UNIT-4

Test planning and quality assurance

604 ~~Marks~~ ~~8~~ ~~2~~

Planning the test – Goal of test planning, Various test planning topics, Writing and tracking test cases- Goal of test case planning, Test case planning overview, Test case organization and tracking, Reporting what you find - Getting the bug fixed, Isolating and replacing bugs, Bug's lifecycle, Bug tracking system, Measuring the success, Software quality assurance- Quality is free, Testing and quality assurance in the work place, Test management and organizational structures, capability maturity model (CMM), ISO 9000 Test Metrics and Measurement – Test Defect Metrics.

TEXT/ REFERENCE BOOKS:

1. Ron Patton, "Software Testing" SAMS Publishing
2. Marnei L. Hutcheson – "Software Testing Fundamentals: Methods and Metrics" WILEY Pub.
3. Pressman "Software Engineering" McGraw-Hill publications.
4. Strinivasan Desikan and Gopal swami Ramesh, Software Testing – Principles and Practices, Pearsons.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes

After completion of course students will be able to

1. To discuss software testing background
2. To introduce software testing techniques
3. To explain different types of testing to understand realistic problem
4. To create awareness about the process part as per as software testing is concern

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B. Tech. Semester – VIII (Information Technology)
ECONOMIC POLICIES IN INDIA (OPEN ELECTIVE-IV)
CODE: OE-CS-410

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

The candidates at the post-graduate level are expected to analyze various issues pertaining to India's economic development. The performance of the economy is to be assessed on the backdrop of various Five Year Plans implemented in the economy. Wherever possible, critical appraisal is expected by taking cognizance of the contemporary developments in the economy.

UNIT-1

Framework of Indian Economy

National Income: Trends and Structure of National Income, Demographic Features and Indicators of Economic Growth and Development Rural-Urban Migration and issues related to Urbanization, Poverty debate and Inequality, Nature, Policy and Implications, Unemployment-Nature, Central and State Government's policies, policy implications, Employment trends in Organized and Unorganized Sector

UNIT-2

Development Strategies In India

Agricultural- Pricing, Marketing and Financing of Primary Sector, Economic Reforms- Rationale of Economic Reforms, Liberalization, Privatization and Globalization of the Economy, Changing structure of India's Foreign Trade, Role of Public Sector- Redefining the role of Public Sector, Government Policy towards Public Sector, problems associated with Privatization, issues regarding Deregulation- Disinvestment and future of Economic Reforms

UNIT-3

The Economic Policy And Infrastructure Development

Energy and Transport, Social Infrastructure- Education, Health and Gender related issues, Social Inclusion, Issues and policies in Financing Infrastructure Development, Indian Financial System- issues of Financial Inclusion, Financial Sector Reforms-review of Monetary Policy of R.B.I. Capital Market in India.

UNIT-4

The Economic Policy And Industrial Sector

Industrial Sector in Pre-reforms period, Growth and Pattern of Industrialization, Industrial Sector in Post-reform period- growth and pattern of Micro, Small, Medium Enterprises, problems of India's Industrial Exports, Labour Market- issues in Labour Market Reforms and approaches to Employment Generation Basic.

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TEXT/REFERENCE BOOKS

1. Brahmananda, P.R. and V.A. Panchmukhi.[2001], Ed. 'Development Experience in Indian Economy, Inter-state Perspective,' Bookwell, New Delhi.
2. Gupta,S.P.[1989], 'Planning and Development in India: A Critique,' Allied Publishers Private Limited, New Delhi.
3. Bhagwati, Jagdish.[2004], 'In Defense of Globalization,' Oxford University
4. Dhingra, Ishwar //C.[2006], 'Indian Economy,' Sultan Chand and Sons, New Delhi.
5. Datt, Rudder and Sundaram, K.P.M.[Latest edition] , 'Indian Economy,' S. Chand and Co, New Delhi.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VIII (Information Technology)
QUALITY ENGINEERING (OPEN ELECTIVE-IV)
CODE: OE-CS-412

NO OF CREDITS: 3

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3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

UNIT -1

Basic Concept Quality Costs: Fitness for Use, Quality Characteristics, and Parameters of Fitness for use, Definition of quality and its meaning and importance in industry, Control and Quality control, Quality Tasks, Quality functions, The system Concept, Quality systems, quality assurance and ISO 9000 quality system standards, Quality costs concept, Quality cost categories, Examples of Quality cost studies, Securing the Cost figures, Pareto Analysis, Cost reduction Programs and economics of quality.

UNIT-2

Control charts: Statistical Tools in Quality control, The concept of variation, Tabular Summarization of Data, Frequency distribution, Graphical Summarization of Data: The Histogram, Quantitative methods of summarizing data: Numerical Indices, Probability distributions : General, The normal Probability distribution, The normal curve and Histogram Analysis, The causes of variation, statistical aspect of control charting, concept of rational sub-grouping and detecting patterns on the control charts, for variables and attributes: X and R, X and S, p, np, c and u charts; specification and tolerances, natural tolerance limits, specification limits, process capability ratio analysis and narrow limit gauging

UNIT-3



Basic statistical concepts: Descriptions of Binomial, Poisson and Normal distribution with practical examples basics of sampling distribution. Acceptance Sampling: Principle of acceptance sampling, Acceptance sampling by attributes: single multiple and sequential sampling plans, lot quality protection and average outgoing quality protection, Acceptance sampling by variables sampling plans of process parameters,


UNIT-4

Total quality Management: Basic concepts of TQM, historical review, leadership, concepts, role of senior management, quality statements, plans for process parameters, Modern Quality Management Techniques: TQM tools: Benchmarking, QFD, Taguchi quality loss function TPM, FMEA. Lean Manufacturing continuous improvement techniques, JIT systems, pareto diagrams, cause and effect diagrams, scatter diagram, run charts, affinity diagrams, inter-relationship diagram, process decision program charts

TEXT/ REFERENCE BOOKS:

1. Quality planning and Analysis, Juran and Gryna, TMH, New Delhi
2. Quality Management, Kanishka Bed, Oxford University Press, New Delhi
3. Introduction to SQC, Montgomery DC, 3e, Wiley, New Delhi

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4. Fundamentals of quality control and improvement, A Mitra, Mcmillan pub. Company, NY
5. Fundamentals of Applied Statistics, Gupta and Kapoor, Sultan Chand and Sons, New Delhi.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

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B. Tech. Semester – VIII (Information Technology)
OPTICAL NETWORK DESIGN (OPEN ELECTIVE-IV)
CODE: OE-CS-414

NO OF CREDITS: 3

L T P

3 0 0

INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objectives:

1. To make students familiar with SONET and SDH Architecture and add Drop Multiplexer.
2. To make students aware of wavelength division multiplexing techniques.
3. To introduce T-Carrier multiplexed hierarchy.
4. To introduce features of SONET and SDH.
4. To study about LDP protocol in detail

UNIT-1

Introduction To Optical Networking

Introduction SONET/SDH and dense wavelength-division multiplexing (DWDM) , Add/drop multiplexers (ADMs), DWDM, CWDM, Time-Division Multiplexing, Synchronous TDMs, Statistical TDMs, Circuit Switched Networks, T-Carrier multiplexed Hierarchy, DS framing, DS multiframing formats, D4 Superframe, D5 extended superframe, E-Carrier multiplexed Hierarchy, TDM network elements, and Ethernet switching.

Sonet Architectures

SONET integration of TDM signals, SONET electrical and optical signals, SONET Layers, SONET framing, SONET transport overhead, SONET alarms, multiplexing, virtual tributaries, SONET network elements, SONET topologies, SONET protection mechanisms, APS, two-fiber UPSR, DRI, and two-fiber and four-fiber BLSR rings. SPR,RPR

UNIT-2

SDH Architectures

SDH integration of TDM signals, SDH electrical and optical signals, SDH Layers, SDH framing, SDH higher layer framing, SDH transport overhead, SDH alarms, multiplexing, virtual containers, SDH network elements, SDH topologies, SDH protection mechanisms, APS, 1+1 protection, 1:1 protection, 1:N protection, Unidirection v/s bidirectional rings, Path and multiplex section switching, Subnetwork Connection protection rings, DRI, and two-fiber and four-fiber Multiplex section-shared protection rings,

UNIT-3

Wavelength-Division Multiplexing

Wavelength-division multiplexing principles, coarse wavelength-division multiplexing, dense wavelength-division multiplexing, WDM systems, WDM characteristics, impairments to transmission, and dispersion and compensation in WDM systems. Optical link design, factors affecting system design, point-to-point link based on Q-factor and OSNR, OSNR calculations for fiber amplifiers.

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UNIT-4

LABEL DISTRIBUTION PROTOCOLS

The Label Distribution Protocol (LDP), Label Spaces, LDP Sessions, and Hello Adjacencies , The LDP PDU Format, The LDP Message Format, The LDP Messages, The Multi-Protocol Label Switching (MPLS) Architecture, Label Allocation Schemes, The Next Hop Label Forwarding Entry (NHLFE), Explicit Routing, An Example of the Use of the Label Stack, Schemes for Setting up an LSP

TEXT/REFERENCE BOOKS

1. "Optical Network Design and Implementation (Networking Technology)", by Vivek Alwayn, Cisco press
2. "Handbook of Fiber Optic Data Communication", Third Edition: A Practical Guide to Optical Networking by Casimer De Cusatis

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

Upon successful completion of the course, the student will be able to understand

1. SONET and SDH Architecture.
2. Wavelength and time division multiplexing techniques.
3. SONET and SDH frames and their architectures
4. LDP protocol in detail

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B. Tech. Semester – VIII (Information Technology)
EMBEDDED SYSTEM (OPEN ELECTIVE-IV)
CODE: OE-CS-416

NO OF CREDITS: 3

L T P

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INTERNAL MARKS: 20

EXTERNAL MARKS: 80

TOTAL : 100

Course Objective:

An embedded system is a self-contained unit that have a dedicated purpose within a device. We come across a variety of applications of embedded systems in navigation tools, telecom applications, and networking equipment to name just a few. An Embedded System's Architecture begins with a view of embedded development and how it differs from the other systems. Students learn about setting up a development environment and then move on to the core system architectural concepts, exploring pragmatic designs, boot-up mechanisms, and memory management. They are also explored to programming interface and device drivers to establish communication via TCP/IP and take measures to increase the security of IoT solutions.

UNIT-1

Embedded Systems: A Pragmatic Approach-Domain definitions, Embedded Linux systems, Low-end 8-bit microcontrollers, Hardware architecture, Understanding the challenge, Multithreading, RAM, Flash memory, Interfaces and peripherals, Asynchronous UART-based serial communication:-SPI -I2C -USB, Connected systems, The reference platform, ARM reference design, The Cortex-M microprocessor

Work Environment and Workflow Optimization: Workflow overview, C compiler, Linker, Build automation, Debugger, Embedded workflow, The GCC toolchain, The cross-compiler, Compiling the compiler, Linking the executable, Binary format conversion, Interacting with the target, The GDB session, Validation, Functional tests, Hardware tools, Testing off-target, Emulators.

UNIT-2

Architectural Patterns: Configuration management, Revision control, Tracking activities, Code reviews, Continuous integration, Source code organization, Hardware abstraction, Middleware Application code, The life cycle of an embedded project, Defining project steps, Prototyping Refactoring, API and documentation,

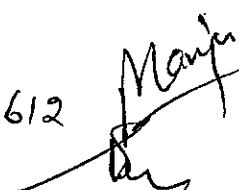
The Boot-Up Procedure: The interrupt vector table, Startup code, Reset handler, Allocating the stack, Fault handlers, Memory layout, Building and running the boot code, The makefile, Running the application, Multiple boot stages, Bootloader, Building the image, Debugging a multi-stage system, Shared libraries

UNIT-3

Distributed Systems and IoT Architecture: Network interfaces, Media Access Control, Ethernet, Wi-Fi, Low-Rate Wireless Personal Area Networks (LR-WPAN), LR-WPAN industrial link-layer extensions, 6LoWPAN, Bluetooth, Mobile networks, Low-power Wide Area Networks (LPWANs), Selecting the appropriate network interfaces, The Internet Protocols, TCP/IP implementations, Network device drivers, Running the TCP/IP stack, Socket communication, Mesh networks and dynamic

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routing, Transport Layer Security, Securing socket communication, Application protocols, Message protocols, REST architectural pattern, Distributed systems; single points of failure, Summary

UNIT- 4

Low-Power Optimizations: System configuration, Hardware design, Clock management, Voltage control, Low-power operating modes, Deep-sleep configuration, Stop mode, Standby mode, Wake-up intervals, Measuring power, Development boards, Designing low-power embedded applications, Replacing busy loops with sleep mode, Deep sleep during longer inactivity periods, Choosing the clock speed, Power state transitions

Embedded Operating Systems: Real-time application platforms, FreeRTOS, ChibiOS, Low-power IoT systems, Contiki OS, Riot OS, POSIX-compliant systems, NuttX, Frosted, The future of safe embedded systems, Process isolation; Tock, Summary.

TEXT AND REFERENCE BOOKS:

1. Daniele Lacamera, Embedded Systems Architecture, Packt Publishing, May 2018, ISBN: 9781788832502.
2. Raj Kamal, Embedded Systems, TMH, 2004.
3. M.A. Mazidi and J. G. Mazidi, The 8051 Microcontroller and Embedded Systems, PHI, 2004.
4. David E. Simon, An Embedded Software Primer, Pearson Education, 1999.
5. K.J. Ayala, , The 8051 Microcontroller, Penram International, 1991.
6. Rajiv Kapadia, 8051 Microcontroller & Embedded Systems, Jaico Press, 2004.
7. Prasad, Embedded Real Time System, Wiley Dreamtech, 2004.
8. John B. Peatman, Design with PIC Microcontrollers, Pearson Education Asia, 2002.
9. Wayne Wolf, Computers as components: Principles of Embedded Computing System Design, Morgan Kaufman Publication, 2000.
10. Tim Wilmshurst, The Design of Small-Scale embedded systems, Palgrave, 2003.
11. Marwedel, Peter, Embedded System Design, Kluwer Publishers, 2004.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Course Outcomes:

By the end of the course students will be able to:

1. State the concepts related to embedded system design.
2. Discuss the principles of embedded systems and their applications
3. Apply the principles of embedded design for problem solving.
4. Analyze architectural design patterns and engineering tradeoffs.
5. Design architectural patterns for connected and distributed devices in the IoT

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B. Tech. Semester – VIII (Information Technology)
PROJECT-III
CODE: PROJ-IT-402-P

NO OF CREDITS: 5
L T P
0 0 12

INTERNAL MARKS: 40
EXTERNAL MARKS: 160
TOTAL : 200

Note: Students may choose a project based on any subject of Information Technology. The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format. The student will have to present the progress of the work through seminars and progress reports.

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B. Tech. Semester – VIII (Information Technology)
SEMINAR
CODE: PROJ-IT-404-P

NO OF CREDITS: 1
L T P
0 0 2

INTERNAL MARKS: 50
EXTERNAL MARKS: 00
TOTAL : 50

The topic of the seminar will be based on emerging technology or any topic related to the field of Information Technology. An assigned teacher will evaluate the performance of the students & marks will be awarded accordingly.

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B. Tech. Semester – VIII (Information Technology)

GENERAL PROFICIENCY

CODE: GPP-IT-406-P

NO OF CREDITS: 0

L T P

0 0 0

INTERNAL MARKS: 00

EXTERNAL MARKS: 100

TOTAL : 100

General Fitness for Profession: A comprehensive viva-voce of the students will be taken by external examiner and Chairperson of the department (internal examiner) and Class Coordinator at the end of the semester. The evaluation of the student for General Fitness for the Profession will be carried out through viva-voce taken by the committee of examiners

Mangla
[Signature]

Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomenuniversity.ac.in

Ref. No. BPSMV/Dean, FET/24/ 04

Date:-18/01/2024

Proceeding of the meeting of Faculty of Engineering and Technology held on 18.01.2024 at 2:00 pm. in the office of Dean, Faculty of Engineering and Technology, BPSMV, Khanpur Kalan.

The following members were present:-

1. Dr. Sangeeta Sapra, Principal, Tau Dev Lal, Govt. College for Women, Murthal, Sonipat
2. Dr. Sandeep Khandhwai, Principal, Govt. College for Women, Sonipat
3. Dr. Priyanka, Associate Professor, Chairperson, ECE BPSMV, Khanpur Kalan, Sonipat
4. Dr. Sonal Chairperson, CSE&IT, BPSMV, Khanpur Kalan, Sonipat
5. Dr. Harinder Pal, In-Charge, Deptt of FT, BPSMV, Khanpur Kalan, Sonipat
6. Mrs. Sudesh Nandal, Associate Professor, Deptt of ECE, BPSMV, Khanpur Kalan, Sonipat
7. Dr. Manju Saroha, Assistant Professor. Department of CSE &IT, BPSMV, Khanpur Kalan, Sonipat
8. AR, Secretary, BPSMV, Khanpur Kalan

After detailed discussion and deliberation, the following decisions were taken:-

Agenda No 1:- To consider the case of proceeding of the UG Board of Studies of Computer Science & Engineering and Information Technology.

Resolved and Approved: Considered and approved the case of proceeding of the UG Board of Studies of Computer Science & Engineering and Information Technology regarding Revision of Scheme and Syllabi of B.Tech (CSE) and B.Tech (IT) to be effective from academic session 2024-25.

Prof. (Dr) Vijay Nath
Dean, FET

Dr. Sandeep Khandhwai
Outside expert

Dr. Sangeeta Sapra
Outside expert

Dr. Priyanka
Chairperson, ECE

Dr. Sonal
Chairperson, CSE&IT

Dr. Harinder Pal
In-Charge, FT

Mrs. Sudesh Nandal
Member

Dr. Manju Saroha
Member

Assistant Registrar
(Academic Branch)

Minutes of the meeting of the UGBOS of Computer Science & Engineering of Department of Computer Science & Engineering and Information Technology, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), held on 16.01.2024 at 12:30 pm. The following were present:

1. Ms. Sonal Chairperson, Dept. of CSE&IT, BPSMV, Khanpur Kalan Chairman
2. Prof. Nasib Singh Gill Dept. of CSA, MDU, Rohtak
3. Prof. Vikram Singh, Dept. of CSA, CDLU, Sirsa
4. Dr. Sunita Rani, Assistant Professor, Dept. of CSE/IT
5. Ms. Pooja Sarin IIT Delhi (online)

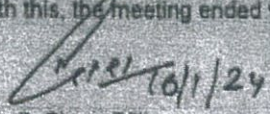
The aforesaid meeting was convened in the office of Chairman, Department of Computer Science & Engineering and Information Technology, BPSMV, Khanpur Kalan, Sonapat. The agenda items were discussed and after detailed deliberations, the following were resolved:


1. The panel of examiners for credit examinations for B. Tech (CSE) & B. Tech (IT) for the academic session 2023-24 for even and for 2016-17 for 8th semester were drawn and recommended


Further, the Board authorised the Chairperson to supply additional panels, if need be.

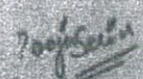
2. The Board finalized and recommended the revised B. Tech (CSE) & B. Tech (IT) to be effective w.e.f academic session 2024-25.

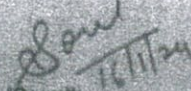
With this, the meeting ended with a vote of thanks to the chair.


(Nasib Singh Gill)
(Outside expert)


(Vikram Singh)
(Outside expert)

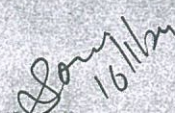

(Sunita Rani)
(Member)


(Pooja Sarin)
(Alumni Representative)


(Sonal)
(Chairman, BOS)

A copy of the above is forwarded to the following for information:-

1. PA to Hon'ble Vice-Chancellor (for kind information of Hon'ble Vice-Chancellor).
2. PA to Registrar (for kind information of Worthy Registrar).
3. Assistant Registrar (Academic), for information.
4. Controller of Examinations for information and necessary action.


(Sonal)
Chairman, BOS

B.P.S. Mahila Vishwavidyalaya Khanpur Kalan (Sonipat)
Faculty of Law

MINUTES OF THE MEETING OF FACULTY OF LAW HELD ON 10-01-2024

The Meeting of Faculty of Law, held in the office of the Dean Faculty of Law on 10-1-2024 at 2:30 P.M. The following were present:-

- | | |
|--|-----------|
| 1. Prof. (Dr.) Vijay Nehra, Dean, faculty of Law | Dean |
| 2. Dr. Sandeep Khandhwal, | Member |
| 3. Dr. Seema Dahiya, Incharge | Member |
| 4. Dr. Anu Bala Assf., Prof. BPSMV | Member |
| 5. Mr. Rajesh Narwal, A.R.,
Incharge Academic, Registrar's nominee. | Secretary |

Agenda 1:- To Consider the case of Ph.D registration of research scholar of Department of Laws.

Resolved and Approved:-

Considered and approved the topics of research and name of supervisors as amended and approved by DRC held on 4-9-2023 and PGBOS in its meeting held on 15-9-2023 of Department of Laws.

(Copy attached)

Sr. No.	Candidate	Approved Research Topic	Supervisor
1	Akansha Sangwan	CYBER CRIME AGAINST WOMEN AND CHILDREN : A COMPARATIVE STUDY OF INDIA ,USA AND UK	Dr. Kritika
2	Rashmi Rashmi	CYBER CRIMES IN INDIA : JUDICIAL AND LEGISLATIVE APPORACH	Dr. Seema Dahiya
3	Vanika	ANTI-DEFECTION LAWS IN INDIA : A CRITICAL STUDY	Dr. Anil Balhera
4	Parul	STATUS OF REFUGEES IN STATE OF ASSAM : A SOCIO LEGAL CRITIQUE	Dr. Pawan
5	Manu Kadiyan	EMERGING TRENDS IN ALTERNATIVE DISPUTE RESOLUTION MECHANISM: A CRITICAL ANALYSIS	1. Dr. Rajesh Hooda 2. Dr. Anu Bala
6	Shushila Sharma	LAW RELATING TO BANKING FRAUDS IN INDIA : AN ANALYTICAL STUDY	1. Dr. Rajesh Hooda 2. Dr. Anu Bala

Agenda 2:-To consider the case of change of credit system for PG(LLM two year course) & UG (BA/BBA.LLB 5 year course) Courses in Department Laws.

Resolved and Approved:-

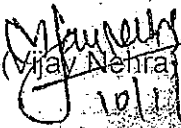
Considered and Approved the case for change of Credit system for PG & UG Courses w.e.f. session 2023-24 for entire scheme and defined as 3:1 instead of 4:1 (as per UGC Guidelines) for LLM two year course by PGBOS in its meeting held on 15-9-2023 & 4:1 instead of 5:1(as per BCI guidelines) for BA/BBA.LLB. 5year course by UGBOS in its meeting held on 15-9-2023 of Department of Laws. (Copy attached)

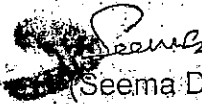
Agenda 3:-To Consider the case of shifting of Dissertation Paper of LLM from 3rd to 4th semester.

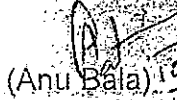
Resolved and Approved:-

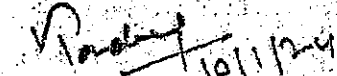
Considered and approved the shifting of Dissertation Paper of LLM from 3rd to 4th semester. The Dissertation Paper IV (304A & 304 B) of 3rd semester with Paper IV (404 A(Socio-economic offences) & 404 B(Constitutionalism, Federalism and Pluralism) of LLM 4th Semester by PGBOS in its meeting held on 15-9-2023 of Department of Laws. (Copy attached)

Meeting ended with a vote of thanks to the chair.


(Vijay Nehra)
10/1/24


(Seema Dahiya) 10/1/24


(Anu Bala) 10/1/24


(Sandeep Khandwal)

Assistant Registrar,
(Academic Branch)
Dated :10-1-2024

Endst.No/BPSMV/Laws/24/

Copy to

1. Office Record, Dean Faculty of Law for information.
2. All members of Faculty of Law for information.



B.P.S. Mahila Vishwavidyalya Khanpur Kalan (Sonipat)

Department of Law

Minutes of P.G./U.G BOS 2023 (held on 15-9-2023)

To

1. Prof. Vijay Nehra
Dean Faculty of Law,
B.P.S.M.V. Khanpur Kalan
2. Prof. (Dr.) (Dr.) Naresh Vats,
Outside experts, Deptt. of Law, Punjab University Chandigarh
3. Prof. (Dr.) Jaswant Saini,
Outside experts,
Deptt. of Law, MDU, Rohtak
4. Dr. Seema Dahiya,
Asstt. Prof./Incharge
Deptt. of Laws, BPSMVKK
5. Dr. Rajesh Hooda,
Asstt. Prof. Deptt. of Laws,
BPSMVKK
6. Dr. Alka Bharti (UG, BOS)
Asstt. Prof. Deptt. of Laws,
BPSMVKK

Special Invitee

1. Dr. Purnima (Alumnus)
Sr. Assistant Professor
Maharaja Agrasen Institute of Management Studies,
Rohini Delhi, GGSIPU
2. Mr. Amit Manchanda (Industry person)
Founder & Managing Partner
Ab Initio India LLP, New Delhi

Sub:- Minutes of P.G./U.G Board of Studies in Law.

Agendas :-

Agenda 1. Proceedings of DRC for consideration & approval.

Agenda no. 1 considered and approved.

Agenda 2:- To approve the registration of Pre. Ph.D. Course work students in Ph.D.
(Law) Programme.

Agenda no. 2 considered and approved.

Sr. No.	Candidate	Approved Research Topic	Supervisor
1	Akansha Sangwan	CYBER CRIME AGAINST WOMEN AND CHILDREN: A COMPARATIVE STUDY OF INDIA, USA AND UK	Dr. Kritika
2	Rishabh Kumar Radhmi	CYBER CRIMES IN INDIA: JUDICIAL AND LEGISLATIVE APPROACH	Dr. Seema Dahiya
3	Vanika	ANTI-DEFECTION LAWS IN INDIA: A CRITICAL STUDY	Dr. Anil Balhera
4	Parul	STATUS OF REFUGEES IN STATE OF ASSAM. A SOCIO LEGAL CRITIQUE	Dr. Pawan
5	Manu Kadiyan	EMERGING TRENDS IN ALTERNATIVE DISPUTE RESOLUTION MECHANISM: A CRITICAL ANALYSIS	1. Dr. Rajesh Hooda 2. Dr. Anu Bala

6	Nancy Dhillon	RIGHT TO PRIVACY WITH SPECIAL REFERENCE TO SOCIAL MEDIA: ISSUES AND CHALLENGES	Dr.Sandhya Rohal
7	Shushila Sharma	LAW RELATING TO BANKING FRAUDS IN INDIA . AN ANALYTICAL STUDY	1 .Dr. Rajesh Hooda 2.Dr. Anu Bala

Agenda 3:-Approval of Examiners panel for PhD, LLM and BA/BB.A. LL.B course.

Agenda no.3 considered and approved. List of examiners is attached herewith.

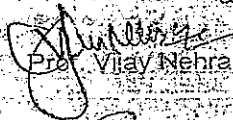
Agenda-4 :-Approval for change of Credit system for PG & UG Courses w.e.f. session 2023-24 and defined as:3:1 (as.per UGC Guidelines) & 4:1 (as per BCI guidelines) respectively

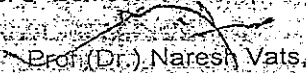
Agenda no.4 considered and approved.

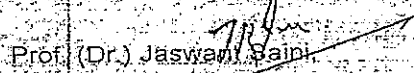
Agenda 5:- Approval of shifting of Dissertation Paper of LLM from 3rd to 4th semester.

The interchange is as follows:- Paper IV (304 A & 304 B) of 3rd semester with Paper IV (404 A & 404 B) of LLM 4th Semester

Agenda no.5 is considered and approved and there is interchange of Paper IV (304 A & 304 B) of 3rd semester with Paper IV (404 A & 404 B) of LLM 4th Semester.


Prof. Vijay Nehra



Prof. (Dr.) Naresh Vats

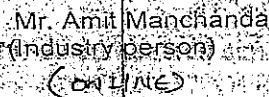

Prof. (Dr.) Jaswant Saini


Dr. Seema Dahiya


Dr. Rajesh Hooda
(ONLINE)


Dr. Alka Bhatt (UG BOS)


Dr. Purnima (Alumnus)
(ONLINE)


Mr. Amit Manchanda
(Industry person)
(ONLINE)

- 699 ✓

Department of Laws

B.P.S. Mahila Vishwavidyalya Khanpur Kalan

Minutes of Departmental Research Committee (DRC)

The minutes of the DRC – Deptt. of Laws meeting held on 4.9.2023 at 11.00 a.m. via blended mode.

Following were present:-

1. Prof. Vijay Nehra Dean DOL
2. Prof. (Dr.) Supinder Kaur- Subject Expert
3. Prof. (Dr.) Sushila Chohan Subject Expert
4. Dr. Seema Dahiya In-Charge DOL & Member
5. Dr. Alka Bharati Member

The DRC considered the following agendas and recommendations are mentioned below:-

Agenda 1: To approve the registration of Pre- Ph.D. Course work students in Ph.D. (Law) Programme.

Resolution: After detailed deliberation and discussion in DRC the DRC considered and approved the research proposal of the following students who have successfully completed their pre Ph.D. course Work as detailed :

Sr. No.	Candidate	Research Topic	Supervisor
1	Akansha Sangwan	CYBER CRIME AGAINST WOMEN AND CHILDREN : A COMPARATIVE STUDY OF INDIA ,USA,UK	Dr. Kritika
2	^{Kumari} Rashmi	CRIMES IN CYBERSPACE: A SOCIO-LEGAL STUDY IN INDIA	Dr. Seema Dahiya
3	Vanika	A COMPARATIVE STUDY OF ANTI-DEFECTION LAWS WITH SPECIAL REFERENCE TO ASIAN COUNTRIES	Dr. Anil Balhera
4	Parul	REFUGEES VIS-A-VIS CITIZENSHIP IN POST-INDEPENDENCE INDIA : A SOCIO-LEGAL STUDY OF ASSAM AND PUNJAB	Dr. Pawan

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5	Manu Kadiyan	ALTERNATIVE DISPUTE RESOLUTION MECHANISM: NATIONAL AND INTERNATIONAL PERSPECTIVE	1 .Dr. Rajesh Hooda 2. Dr. Anu Bala
6	Nancy Dhillon	RIGHT TO ONLINE PRIVACY: AN EMPIRICAL STUDY	Dr. Sandhya Rohal
7	Shushila Sharma	LAW RELATING TO BANKING FRAUDS IN INDIA : AN ANALYTICAL STUDY	1 .Dr. Rajesh Hooda 2. Dr. Anu Bala

Agenda. 2 : The respective supervisors of following students submitted their panel of examiners for approval in sealed envelopes.

Sr No	Name of student	Registration No	Supervisor
1	Ms. Pooja		Dr. Rajesh Hooda
2	Ms. Kavita	2018041100040415	Dr. Anand Kumar <i>Anand Kumar</i>
3	Ms. Tanu	2018041100040431	Dr Sandhya Rohal
4	Ms. Kavita Devi	2017041100022842	Dr. Sandhya Rohal
5	Ms. Purnima Gupta	2018041100040423	Dr. Kritika
6	Ms. Monika	2017041100022834	Dr. Parmod Malik
7	Ms. Indu Yadav	2017041100022826	Dr. Kritika
8	Ms. Pooja	2019041100040513	Dr. Alka

Prof. (Dr.) Supinder Kaur

Dr. Sushila Chuhan

Dr. Seema Dahiya

Prof. (Dr.) Vijay Nehra

Dr. Alka Bharti

Department of Economics

Meeting of Minutes Staff Council

A meeting of Departmental staff council held on the office of chairperson on January 13, 2024 at 11:30 am to discuss the following agendas.

Agendas

1. To consider and approve the research synopsis of Ms. Hema entitled Why do Women Leave Their Right in Parental Property? A Study of Haryana for registration of PhD topic.
2. To consider and approve the scheme and syllabus of pre- PhD Economics for session 2023-24.
3. To consider and approve the half yearly progress of research Scholars.

Following were present in the meeting

1. Dr. Anju rani (Incharge)
2. Prof. Surender Mor

Agenda 1. (Discussion)

The DSC examined the research synopsis of Ms. Hema enrolled in session 2022-23 for registration of topic for PhD programme and recommended the same with minor modification. Following is the detail.

Sr.No.	Name of Scholar	supervisor	Topic
1.	Hema	Prof. Surender Mor	Why Do Women Leave Their Right in Parental Property? : A Study of Haryana.

Agend 2. (Discussion)

The committee discussed the matter at length and approved the scheme and syllabus of pre- PhD economics for session 2023-24 it is further pertinent to mentioned here that committee approved the contribution of faculty in course development of PhD as follow:-

Sr.No.	Name of Course	Course Developer Name
1.	Methodology of Economics	Prof. Surender Mor
2.	Seminar and Review of Literature	Prof. Surender Mor
3.	Research and Publication Ethics	Prof. Surender Mor
4.	Dynamics Macroeconomics	Prof. Surender Mor
5.	Development Economics	Prof. Surender Mor
6.	International Trade and Development	Prof. Surender Mor
7.	Environment and Sustainable Development	Prof. Surender Mor
8.	Contemporary Issues in Indian Economy	Prof. Surender Mor

9.	Selected Issues in Indian Agriculture	Prof. Surender Mor
10.	Advanced Economic Theory	Prof. Surender Mor
11.	Gender and Development	Prof. Surender Mor
12.	Economics of Innovation	Prof. Surender Mor
13.	Economics of Entrepreneurship	Prof. Surender Mor
14.	Database for Research in Economics	Prof. Surender Mor
15.	Artificial Intelligence in Economic Analysis	Prof. Surender Mor
16.	Research Methodology	Dr. Anju
17.	Applied Econometrics	Dr. Anju

Agenda 3. (Discussion)

The committee also assessed the half yearly progress report of 06 scholars for period 20th Nov. 2022 to 19th May 2023 and 20th May 2023 to 19th Nov. 2023 and approved of following research scholars.

Sr.No.	Name of Research Scholars	supervisor
1.	Ms. Deepika	Dr. Anju
2.	Ms. Jyoti	Dr. Anju
3.	Ms. Vidhi Jain	Dr. Anju
4.	Ms. Deepika Gupta	Dr. Anju
5.	Ms. Mamta	Dr. Kiran Lamba
6.	Ms. Swati	Dr. Kiran Lamba

[Handwritten Signature]
Dr. Anju Ram
13/01/2024

[Handwritten Signature]
Prof. Surender Mor
18/1/24

B.P.S. Mahila Vishwavidyalaya Khanpur Kalan, Sonipat

DEPARTMENT OF ECONOMICS

Minutes of the Meeting of Department Research Committee (DRC) in Economics

A meeting of Department Research Committee in Economics held on 17th January 2024 at 4.00 pm (online mode) to discuss the following agenda items:

Agenda Items:

1. To consider and approve the research synopsis of PhD student admitted in session 2022-23
2. To consider and approve the half yearly progress report of 6 scholars from 20th Nov. 2022 to 19th May 2023 and 20th May 2023 to 19 Nov. 2023 respectively.
3. Any other items with the permission of chair.

The Following were present in the meeting:

Prof. Ravi Bhushan
Prof. Lakhwinder Singh
Prof. Surender Kumar
Prof. Surender Singh
Dr. Anju Rani

Convener (Dean)
External Member
External Member
Supervisor.
Incharge

Meeting was also attended by scholars and faculty of Department.

The committee discussed the aforesaid agenda items and at approved the followings:

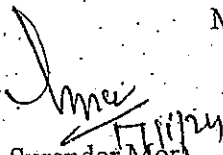
Item 1: The committee discussed the research synopsis submitted by Ms. Hema, who was admitted in 2022-23. The research synopsis, "*Why Women Leave their Right in Parental Property: A Study of Haryana*" has already been recommended by Departmental Staff Council in its meeting held on 14 January, 2024. The DRC approved the research synopsis with minor modification in title and further suggested an addition of conceptual framework in the research synopsis. The details are given below:

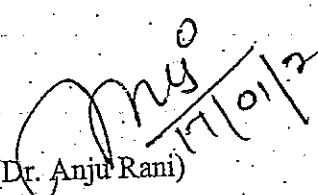
Name	Approved Title of the synopsis	Supervisor
Ms. Hema	Institutions, Property Rights and Economic Development: A Study of Women in Haryana	Prof. Surender Singh

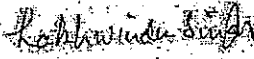
Item 2: The committee approved the half yearly progress reports of 6 scholars for period 20th November 2022 to 19th May 2023 and 20th May 2023 to 19 November respectively (softcopy of progress report attached).

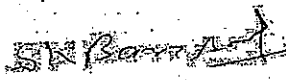
Name of Scholar	Registration No	Supervisor
Ms. Deepika Chahal	2020041100040704	Dr. Anju Rani
Ms. Deepika Gupta	2020041100040662	Dr. Anju Rani
Ms. Vidhi Jain	2020041100040693	Dr. Anju Rani
Ms. Jyoti	2020041100040654	Dr. Anju Rani
Ms. Mamta	2020041100040685	Dr. Kiran Lamba
Ms. Swati	2020041100040677	Dr. Kiran Lamba


Meeting ended with the vote of thanks to the chair.


(Prof. Surender Mor)


(Dr. Anju Rani)
17/01/2024


(Prof. Lakhwinder Singh)


(Prof. Surender Kumar)


(Prof. Ravi Bhushan)

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B.P.S. Mahila Vishwavidyalaya Khanpur Kalan, Sonipat

DEPARTMENT OF ECONOMICS

Minutes of the Meeting of post Graduate Board of Studies in Economics

A meeting of post Graduate Board of Studies in Economics held on 20th January 2024, at 11.00 am in the Department of Economics to discuss the following agenda item:

Agenda Items:

1. To Consider and approve scheme and syllabus of Pre Ph.D. Economics w.e.f. session 2023-24.
2. To approve the minutes of DRC for registration of Ms Hema in economics
3. Any other time with the permission of the chair.

The Following were present in the meeting:


Dr. Anju Rani	In-charge
Prof. Manoj Siwach	External Member
Prof Surender Mor	Member
Dr Priyanka	Member (Alumni)

The board discussed the aforesaid agenda at length and approved the following:

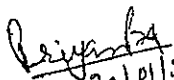
Item1: The Board approved the scheme and syllabus of Pre PhD Economics with minor modification for the session 2023-24.


Item 2: The Post Graduate Board approved the synopsis for the registration of Ms Hema in Ph.D. economics approved by the DRC in its meeting held on 17 January 2024.

Meeting ended with vote of thanks to chair.


(Dr. Anju Rani) 20/01/2024


(Prof. Manoj Siwach)


(Dr Priyanka) 20/01/2024


(Prof Surender Mor) 20/01/24

DEPARTMENT OF COMMERCE

Minutes of the Meeting of Post Graduation Board of Studies (PGBoS-Commerce) held on 10/02/2024

Meeting of the PGBoS-Commerce was held on 10/02/2024 at 11.05 a.m. (Blended Mode) in the room of Chairperson. (315) of Department of Commerce, Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan, Sonapat.

The following members were present:-

• Dr. Bhavna Sharma	Chairperson
• Prof. Luxmi Malodia	Outside Expert
• Prof. Hawa Singh	Outside Expert
• Dr. Seema Malik	Member
• Dr. Ishani Patharia	Member
• Dr. Satish Kumar	Member
• Dr. Vandana Nasa	Member

The following decisions were taken:-

- 1) The committee evaluated research proposal of Ms. Mahak Jain D/o Sh. Ajay Kumar Jain Ph.D. Scholar Roll No. 22161001, PRN-2022041100030712 and after detail discussion and recommended that revised synopsis after incorporation of suggestions provided by external experts will be submitted in the next meeting of PGBoS for evaluation and approval.
- 2) The committee evaluated research proposal of Ms. Kirti D/o Sh. Parveen Kumar Vasuja, Ph.D. Scholar Roll No. 22161003, PRN-2017041100012503 and after detail with the candidate on relative research proposal, the committee approved the title "Factors Affecting Adoption of Fintech Services in Haryana" and synopsis of Ms. Kirti and recommended for the same may be placed to upcoming meeting of the Academic Council.
- 3) The Committee members discussed the agenda to start the New PG Course (M.Com in Regional Centre, Krishna Nagar, Rewari and recommended to initiate the proposal of Four (04) Year UG Programme (NEP-2020) instead of New PG Course.

Meeting ended with a vote of thanks.

Dr. Vandana Nasa

Dr. Satish Kumar

Dr. Ishani Patharia

Dr. Seema Malik

Prof. Luxmi Malodia

Prof. Hawa Singh

Dr. Bhavna Sharma

Minutes of the Meeting of Post Graduation Board of Studies (PGBoS-Commerce)

Meeting of the PGBoS-Commerce was held on 10/02/2024 at 11.05 a.m. (Blended Mode) in the room of Chairperson, (315) of Department of Commerce, Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kanan, Sonapat.

The following members were present:-

- Dr. Bhavna Sharma
- Prof. Luxmi Malodia
- Prof. Hawa Singh
- Dr. Seema Malik
- Dr. Ishani Patharia
- Dr. Satish Kumar
- Dr. Vandana Nasa

- Chairperson
- Outside Expert
- Outside Expert
- Member
- Member
- Member
- Member

The Following decision were taken:-

- 1) The committee evaluated research proposal of Ms. Mahak Jain D/o Sh. Ajay Kumar Jain Ph.D Scholar. Roll No. 22161001, PRN-2022041100030712 and after detail discussion and recommended that, revised synopsis after incorporation of suggestions provided by external experts will be submitted in the next meeting of PGBoS for evaluation and approval.
- 2) The committee evaluated research proposal of Ms. Kirti D/o Sh. Parveen Kumar Vasuja, Ph.D relative research proposal, the committee approved, the title "Factors Affecting Adoption of Fintech Services in Haryana" and synopsis of Ms. Kirti and recommended for the same may be placed to upcoming meeting of the Academic Council.
- 3) The Committee members discussed the agenda to start the New PG Course (M.Com in Region Centre, Krishna Nagar, Rewari and recommended to initiate the proposal of Four (04) Year U Programme (NEP-2020) instead of New PG Course.

Meeting ended with a vote of thanks.

through email approved
Dr. Vandana Nasa

through email approved
Prof. Luxmi Malodia

Dr. Satish Kumar

[Signature]
Prof. Hawa Singh

Dr. Ishani Patharia

[Signature]
Dr. Seema Malik
[Signature]
Dr. Bhavna Sharma

DEPARTMENT OF COMMERCE

Minutes of the Meeting of Departmental Research Committee (DRC) held on 09/02/2024

Meeting of the Departmental Research Committee (DRC-Commerce) was held on 09/02/2024 at

12.05 p.m. (Online) in the room of Chairperson, (315) of Department of Commerce, Bhagai Phool Singh Mahila Vishwavidyalaya Khanpur Kalan, Sonapat.

The following members were present:-

- Dr. Bhavna Sharma : Chairperson
- Prof. Ritu Lehal : Outside Expert
- Dr. Ishani Patharia : Member
- Dr. Seema Malik : Supervisor

Following decision were taken:-

- 1) The committee evaluated draft research proposal of Ms. Mahak Jain D/o Sh. Ajay Kumar Jain Ph.D. Scholar, Roll No. 22161001, PRN-2022041100030712 and after detail with the candidate on relative draft research proposal, the committee approved the title "What entices people to buy branded watches? Investigating through the lens of masstige marketing" and synopsis of Ms. Mahak Jain.
 - 2) The committee evaluated draft research proposal of Ms. Kirti D/o Sh. Parveen Kumar Vasuja Ph.D. Scholar, Roll No. 22161003, PRN-20170411000125 and after detail with the candidate on relative draft research proposal, the committee approved the title "Fintech Frontier in India: Unraveling Users' Preferences, Adoption Drivers, Usage Trends, and Performance Implications" and synopsis of Ms. Kirti.
 - 3) The case of Ms. Anshu Research Scholar was also discussed in the meeting. The members discussed the case in detail and looking at her family/health and personal problem. It was recommended to give her extension after approval of competent authority.
- Meeting ended with a vote of thanks

through email approved
Prof. Ritu Lehal
Expert
Attached with soft proc.

Seema
9/2/24
Dr. Seema Malik
Special Invitee

Dr. Ishani Patharia
Member

Bhavna
09/2/2024
Dr. Bhavna Sharma
Chairperson, Commerce

BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA

(State University Established Under the Legislative Act No 31/2006)



SCHEME AND SYLLABUS

for

Ph.D Course Work

Under

FACULTY OF ENGINEERING & TECHNOLOGY

(w.e.f Session 2023-2024)

- 633 -

Jyansingh

Priyanka



Faculty of Engineering and Technology
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
Office No. 01263-283124, www.bpsmv.ac.in

Scheme and syllabi Ph.D Course work
for
Faculty of Engineering and Technology

S. No	Code	Course Title	Hrs/Week			Total Credit	Marks		Total Marks
			L	T	P		Internal Marks	External Marks	
1.	PHE-301	Research Methodology	4	0	0	4	20	80	100
2.	CPERP E-2203	Research and Publication Ethics	2	0	0	2	10	40	50
3	*	Department Specific Domain Core Course	4	0	0	4	20	80	100
4	PHE-302	Literature Survey and Seminar	2	0	0	2	50	--	50
Total			12	0	0	12	100	200	300

Note:-

- The duration of the Pre-Ph.D. course will be of one semester.
- Each student will have to opt one Departmental Elective Course out of the list of Department Electives as per suitability related to the topic and area of research and domain of the study as suggested by supervisor. Moreover, the Supervisor in consultation with Chairperson and DRC may offer other Departmental Elective Course not included in the list of Department Electives as per suitability related to the area of research chosen by students and domain of the study as approved by DRC & PGBOS. The students will be allowed to use non-programmable scientific calculator. However, sharing/exchange of calculator is prohibited in the examination.
- Electronic gadgets including cellular phones are not allowed in the examination
- After successful completion of pre- Ph. D course works, the Department will conduct the DRC for the registration of respective candidate with next six months.
- The Minimum passing marks for Ph.D Course work will be applicable as per Ph.D Ordinance

-634-

Soni
Prjanta
Prjanta

Research Methodology

PHE-301
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective:

1. To understand the role of research methodology in engineering.
2. To develop understanding of the basic framework of research in process, publication and patent scopes.
3. To develop an understanding of various research design and techniques.
4. Appreciate the components of scholarly writing and evaluate its quality.

Course Outcomes: The course will enable the student to:

1. Explain key research concepts and issues
2. Read, Comprehend, and explain research articles in their academic discipline.

Content

UNIT- I	
Methods and Types of Research, Research Methods vs Methodology, Types of research- Descriptive vs Analytical, Applied vs Fundamental, Quantitative vs Qualitative, Conceptual vs Empirical, Research Proposals – design and components.	
UNIT- II	
Meaning of Research problem, Sources of research problem, Criteria Characteristics of a good research problem, Errors in selecting a research problem, Scope and Objectives of research problem, Approaches of investigations of solutions for research problem, data collection, analysis, interpretation, Necessary Instrumentations	
UNIT- III	
Nature of Intellectual Property: Patents, Designs, Trade and Copyright, Process of Patenting and Development: Technological research, innovation, patenting, development, International Scenario: International cooperation on Intellectual Property, Procedure for grants of Patents, Patenting under PCT.	
UNIT- IV	
Reporting, Documentation & Presentation: Scientific Document: Organization and writing of Research Papers, Short Communications, Review articles, monographs, technical and survey reports, authored books and edited books, format of research proposal.	
Suggested Text Books	
1.	Stuart Melville and Wayne Goddard, " Research Methodolgy: An introduction for Science & Engineering Students".
2.	Ranjit Kumar, 2 nd Edition, "Research Methodolgy: A step by step Guide for Beginners"

Soni

Vijayalakshmi

Jm

Priya

3.	T. Ramappa, " Intellectual Property Rights Under WTO", S. Chand, Latest Edition
4.	C.R. Kothari, "Research Methodolgy: Methods and Trends", New Age International, Latest Edition.

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

Ju
Lowal Gyanesh
Pijar

Research and Publication Ethics

CPERPE-2203

L T P

2 0 0

Total Credits: 2

Internal Marks: 10

External Marks: 40

Total Marks: 50

Course Objective:

1. Produce competent scholar for doing original and independent research.
2. To increase knowledge about the laws, regulations, and policies—government and institutional—and professional guidelines that govern the conduct of research.
3. To describe possible threats to research integrity in your work (what might tempt you to engage in misconduct?).
4. To familiarize the scholar with the professional and University resources for addressing ethical issues.

Course outcomes:

1. Understanding of publication ethics and knowledge of identifying research misconduct and predatory publications.
2. Knowledge of indexing and citation databases.
3. Knowledge of open access publications and research metrics.
4. Knowledge of various plagiarism tools.

Content

UNIT- I
<p>Philosophy and Ethics: Introduction to philosophy: definition, nature and scope, concept, branches; Ethics: definition, moral philosophy, nature of moral judgments and reactions Scientific Conduct: Ethics with respect to science and research, Intellectual honesty and research integrity 3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP), Redundant publications: duplicate and overlapping publications, salami slicing, Selective reporting and misrepresentation of data</p>
UNIT- II
<p>Publication Ethics: Publication ethics: definition, introduction and importance; Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.; Conflicts of interest;</p> <p>Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types; Violation of publication ethics, authorship and contributorship; Identification of publication misconduct, complaints and appeals; Predatory publishers and journals</p>
UNIT- III
<p>Open Access Publishing: Open access publications and initiatives ; SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies; Software tool to identify predatory publications developed by SPPU ; Journal finder/journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggested, etc.</p>

Sumit

Manish

Piyush

74 - 637 -

Publication Misconduct: Subject specific ethical issues, FFP, authorship ; Conflicts of interest ; Complaints and appeals: examples and fraud from India and abroad; Use of plagiarism software like Tumitin, Urkund and other open source software tools	
UNIT- IV	
Databases and Research Metrics: Databases- Indexing databases; Citation databases- Web of Science, Scopus, etc.; Research Metrics - Impact Factor of journal as per Journal Citation Report, SNIP, SIR, IPP, Cite Score; Metrics: h-index, g index, i10 index, altmetrics journal database	
Suggested Text Books	
1.	Bird, A. (2006). Philosophy of Science, Routledge
2.	MacIntyre, Alasdair (17) A short History of Ethics, London
3.	P. Chaddah (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarised, ISBN: 978-937480865
4.	National Academy of Sciences, National Academy of Engineering and Institute of Medicine (2009). On being a Scientist: A guide to Responsible Conduct in Research, Third Edition, national Academic press
5.	Resnik, D.B (2011), What is Ethics in Research & why is it important, National Institute of Environmental Health Sciences, 1-10, Retrieved from https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cm
6.	Becall, J (2012), Predatory publishers are corrupting open access. Nature, 489(7415),179.
7.	Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance (2019).

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

Jh

Soni

Gyanesh

Piyas

Literature Survey and Seminar

PHE-302
L T P
2 0 0

Total Credits: 2
Internal Marks: 50

Total Marks: 50

Course Objectives:

1. Literature Survey and Seminar is preliminary steps towards research problem formulation, developing a research plan and preparation of draft synopsis. Each student will carry out the exhaustive literature survey and the review of the work done earlier on the topic of research under the guidance of supervisor/Faculty. It also focuses on important steps in research methods and developing a research plan.

Course outcome:-

The students will be able to do original research work and will learn the basic step of Review of Literature. They will be able to formulate research problem, developing a research plan and preparation of draft synopsis.

Literature Survey

Overview – What is literature survey, Functions of literature survey, sources of literature, various referencing procedures, developing a Bibliography, maintain literature data using Endnote, Identifying the gap areas from the literature review and research database, Searching for publications – Publication databases, search engines and patent databases, Find some/all of the references for a given paper, including those that are not on the web Online tools – google, CiteSeer, ACM Digital Library, IEEE, The on-line Computer Science bibliography, Survey papers, Searching patents

Formulating Problem Statement

1. Overview of research process: Formulating the Research Problem, Extensive Literature Review, Developing the objectives, preparing the Research Design Problem Formulation, Identifying variables to be studied, determine the scope, objectives, limitations and or assumptions of the identified research problem, Justify basis for assumption, Formulate time plan for achieving targeted problem solution including Sample Design, Collecting the Data, Analysis of Data, Generalization and Interpretation, preparation of the Report or Presentation of Results-Formal write-ups of conclusions reached.
2. Problem statement – Conditions and steps in selecting a research problem, Understanding the Key research area of interest, How to get new ideas (Criticizing a paper), Finding a good problem: Top-down and Bottom-up approach, Creative thinking techniques, Coming up with a problem statement
3. Defining objectives – How to find objectives, characteristics of objectives.

Soni

Gyanesh

Piyush

Jh - 639 -

Developing a research plan: Exploration, Description, Diagnosis and Experimentation.

1. Developing a Research Proposal: Format of research proposal, Individual research proposal, Institutional proposal, Proposal of a student

Note:-

Internal assessment will be carried out by the involved respective faculty members on the basis of student's progress in literature review and problem formulation. Internal Assessment/ evaluation of the candidate will be carried out by internal board of examiner on the basis of literature review, proposal, presentation and viva voce. Candidates have to give presentation based on the literature survey, which will carry 50 marks each. The candidate shall submit the three copies of presentation to the office of department through the respective supervisor. The presentation having drafted synopsis involving problem formulation; literature review, research gap, plan of the research work related to the topic of research and will be conducted in the presence of Supervisor, Chairperson & Faculty Coordinator and open to all students of the department. Other faculty members may attend and give suggestions relevant to topic of research. The student will submit review of literature as well as drafted synopsis at the end of semester in a specified format duly signed by supervisor/Faculty.

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-2-

Departmental subjects in Computer Science & Engineering
Department Specific Domain Core Course

S.No.	Course Code	Course Title
1	PIIE-401	IOT and Cloud Computing
2	PIIE-402	Optimization Techniques
3	PIIE-403	Artificial Intelligence and Machine learning
4	PIIE-404	Security in Computing
5	PIIE-405	Data Analytics
6	PIIE-406	Advances in Network Technologies

Soul

Murugan

Swathi

Jayal

Ains
03/10/2024

IoT and Cloud Computing

PHE-401
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The objective of this course is:

- To learn core issues of Internet of Things, IOT communication protocols and security concerns.
- To study the fundamental concepts of cloud computing, enabling technologies, cloud service models and security concerns.

Pre-requisite: None.

Course Outcomes: At the end of the course, students will be able to:

- understand concepts, architecture, applications and design principles for connected devices in IoT;
- explain, analyze and design IoT-oriented communication protocols and security concerns
- understand core issues of cloud computing and enabling technologies;
- design services based on cloud computing platforms;

Content

Unit –I	08 Hours
Internet of Thing (IoT): overview, conceptual framework, architecture, major components, common applications Design principles for connected devices: Modified OSI Model for IoT/M2M systems, ETSI M2M Domains and High-level capabilities, wireless communication technologies - NFC, RFID, Bluetooth BR/EDR and Bluetooth low energy, ZigBee, WiFi, RF transceiver and RF modules. Data enrichment, data consolidation & device management at gateway.	
Unit –II	10 Hours
Design principles for web connectivity: web communication protocols for connected devices: constrained application protocol, CoAP Client web connectivity, client authentication, lightweight M2M communication protocol. Message communication protocols for connected devices - CoAP-SMS, CoAP-MQ, MQTT, XMPP. IoT privacy, security and vulnerabilities and their solutions.	
Unit –III	10 Hours
Cloud Computing: Definition, roots of cloud computing, characteristics, cloud architecture, deployment models, service models. Virtualization: Benefits & drawbacks of virtualization, server virtualization, virtualization of - operating system, platform, CPU, network, application, memory and I/O devices etc.	
Unit –IV	10 Hours
Cloud Computing Service Platforms – Compute services, storage services, database services, application services, queuing services, e-mail services, notification services, media services, content delivery services, analytics services, deployment & management services, identity & access management services and their case studies. Security in cloud computing: issues, threats, data security and information security	
Suggested Text Books	
1.	Dimitrios Serpnos, Marilyn Wolf, Internet of Things (IoT) Systems, Architecture, Algorithms, Methodologies, Springer
2.	Madisetti and Arshdeep Bahga, Internet of Things (A Hands-on Approach), VPT
3.	Francis daCosta, Rethinking the Internet of Things: A Scalable Approach to Connecting Everything, Apress Publications
4.	Arshdeep Bahga, Vijay Madisetti, Cloud Computing - A Hands-on Approach, University Press.
5.	Rajkumar Buyya, James Broberg, Andrzej Goscinski, Cloud Computing - Principles and Paradigms, Wiley India Pvt. Ltd.

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[Signature]
Chairperson

Department of Computer Science &
Engineering and Information Technology
EPG Maada Vishwavidya, Jyoti Baapuri Road, Sarjapura, (K.)

6.	Raj Kamal, Internet of Things - Architecture and Design Principles, McGraw Hills
7.	Kai Hwang, Geoffrey C.Fox, and Jack J. Dongarra, Distributed and Cloud Computing, Elsevier India Private Limited
8.	Saurabh Kumar, Cloud Computing, Wiley India Pvt. Ltd.
9.	Shailendra Singh, Cloud Computing, Oxford
10.	Coulouris, Dollimore and Kindber, Distributed System: Concept and Design, Addison Wesley
11.	Michael Miller, Cloud Computing, Dorling Kindersley India
12.	Anthony T. Velte, Toby J. Velte and Robert Elsenpeter, Cloud computing: A practical Approach, McGraw Hill

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


 Chairperson
 Department of Computer Science &
 Engineering and Information Technology
 BPS Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (HR.)

Optimization Techniques

PHE-402
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The objective of this course is:

- Learn the aspects of optimization.
- Learn different biological optimization techniques.
- Learn the applications of Genetic Algorithms.

Pre-requisite: None.

Course Outcomes: At the end of the course, students will be able to:

- understand the role and principles of optimization techniques using LPP;
- solve problems based on artificial intelligence, fuzzy logic and fuzzy sets
- understand the basics and theorem of genetic algorithm
- able to implement genetic algorithms in different data structures

Content

Unit –I	08 Hours
Introduction: Goal of optimization, local and global optima, Multi-objective optimization, Problems in global optimization, Need of evolution, Biological terminology, Search spaces and fitness landscapes, Conventional Optimization and Search Techniques - Gradient-Based Local Optimization Method.	
Unit –II	10 Hours
Basic concepts of neuro-computing: Artificial Neural Network (ANN) and their biological roots and motivations, Learning Paradigms, ANN training Algorithms - perceptions, Training rules, Delta, Back Propagation Algorithm. Fuzzy Logic: Overview of Classical Sets & Fuzzy Sets, Membership Function, Fuzzy rule generation. Operations on Fuzzy Sets, Fuzzy Arithmetic: Fuzzy Numbers, Linguistic Variables, Fuzzy Equations.	
Unit –III	10 Hours
Genetic Algorithm(GA): Difference between Genetic Algorithm and traditional methods. Encoding, Initialization, Selection – elitism, rank selection, tournament selection, Boltzmann selection, steady state selection etc.; Crossover, mutation, Replacement; Schema theorem – schemata and masks, Wildcards, Holland's schema theorem and criticism; convergence.	
Unit –IV	10 Hours
Computer Implementation of Genetic Algorithm: Data Structures, Mapping objective functions to fitness form, Fitness scaling, Random Optimization: Simulated Annealing, Tabu Search, Ant Colony Optimization, Particle Swarm Optimization, Memetic Algorithms	
Suggested Text Books	
1.	S. N. Sivanandam & S. N. Deepa, Principles of Soft Computing, Wiley - India, 2007.
2.	Goldberg D. E., Genetic Algorithms in Search, Optimization, and Machine Learning, Addison-Wesley, 1989.
3.	Mitchell M., An Introduction to Genetic Algorithms, Prentice-Hall, 1998.
4.	Weise Thomas, Global Optimization Algorithms – Theory and Application, http://www.it-weise.de/projects/book.pdf

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Son
Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Manila Vishwavidyalaya, Khanpur Kaian, Sonepat (HR.)

Page 3 of 10

Artificial Intelligence and Machine Learning

PHF-403
L T P
3 0 0

Total Credits: 3
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objectives:

The objectives of this course are:

- To introduce students to the basic principles and approaches of Machine Learning.
- To become familiar with regression methods and classification techniques.
- To understand a range of machine learning algorithms along their strengths
- To be able to apply machine learning algorithms to solve simple modern day problems.

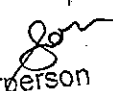
Pre-requisite: None.

Course Outcomes: At the end of the course, students will be able to:

- Gain information regarding fundamental features of Machine Learning.
- Identify various machine learning mechanisms suitable for solution of given problem.
- Solve the required queries pertaining to AI using ML.
- Implement different machine learning techniques for the optimal solution.
- Develop application programming interface using machine learning.

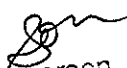
Contents

Unit –I	11 Hours
Introduction to AI - Intelligent Agents, Problem-Solving Agents, Searching for Solutions - Breadth-first search, Depth-first search, Hill-climbing search; Games - Optimal Decisions in Games, Alpha-Beta Pruning, Defining Constraint Satisfaction Problems, Constraint Propagation, Backtracking Search for CSPs, Knowledge-Based Agents, Propositional Logic, Propositional Theorem Proving: Inference and proofs, Proof by resolution; Knowledge Engineering in First-Order Logic, Inference in First-Order Logic: Propositional vs. First-Order Inference.	
Unit –II	10 Hours
Machine Learning Fundamentals: Types; Supervised Learning (Regression/Classification) Unsupervised, Semi supervised, Reinforcement learning, Batch and Online Learning, Instance-Based Versus Model-Based Learning, Main Challenges of Machine Learning, Non-representative Training Data, Poor-Quality Data, Over fitting and Under fitting the Training Data, Testing and Validating, Hyper parameter Tuning and Model Selection, Data Mismatch.	
Unit –III	9 Hours
End-to-End Machine Learning Project and Classification: Look at the big picture. Get the data, Discover and visualize the data to gain insights, Prepare the data for Machine Learning algorithms, Select a model and train it, present the solution, Launch, monitor, and maintain your system, Training a Binary Classifier, Performance Measures, Multiclass Classification, Error Analysis, Multi label Classification, Multi output Classification.	
Unit –IV	9 Hours
Training Models and Support Vector Machines: Linear Regression, Gradient Descent and its types, Polynomial Regression, Learning Curves, Regularized Linear Models, Logistic Regression, Linear SVM Classification, Nonlinear SVM Classification (Polynomial Kernel, Adding Similarity Features, Gaussian RBF Kernel, Computational Complexity), SVM Regression, Decision Function and Predictions, Quadratic Programming, The Dual Problem.	
Suggested Text Books	
1.	Scikit-Learn, Keras, and Tensor Flow: Hands-On Machine Learning with Concepts, Tools, and Techniques to Build Intelligent Systems; 3 rd edition, O'Reilly Publishers, 2022
2.	Artificial Intelligence: A Modern Approach, Third Edition, Stuart Russell and Peter Norvig, Pearson Education.


 Chairperson
 Department of Computer Science &
 Engineering and Information Technology
 Anna University, Chennai, India

3.	Machine Learning For Absolute Beginners; Oliver Theobald, 2 nd Edition, 2017
4.	Artificial Intelligence, 3rd Edn., E. Rich and K. Knight (TMH).
5.	Kevin Murphy, Machine Learning: A Probabilistic Perspective, MIT Press, 2012.
6.	Trevor Hastie, Robert Tibshirani, Jerome Friedman, The Elements of Statistical Learning, Springer 2009 (free online)

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


 Chairperson
 Department of Computer Science &
 Engineering and Information Technology
 BPS Mittal Vistara, Sector 14, Gurgaon, Haryana

Security in Computing

PHE-404
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The objective of this course is:

- To understand the basics of Cryptography and Network Security.
- To be able to secure a message over insecure channel by various means
- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.
- To understand various protocols for network security to protect against the threats in the networks.

Pre-requisite: Basics of Computer Networks.

Course Outcomes: At the end of the course, students will be able to:

- Describe network security services and mechanisms.
- Symmetrical and Asymmetrical cryptography
- Data Integrity, Authentication, Digital signatures
- Various Network Security applications, Firewall, Web Security, Email Security, Etc.

Content

Unit –I	10 Hours
<p>Basic Encryption and Decryption: Terminology And Background: Encryption, Decryption and Cryptosystems, Plain Text and Cipher Text, Encryption Algorithms, Cryptanalysis. Introduction to Ciphers: Monoalphabetic Substitutions such as Caesar Cipher, Cryptanalysis of Monoalphabetic Ciphers. Polyalphabetic Ciphers. Perfect Substitution Cipher such as the Vemam Cipher. Stream and block Ciphers, Characteristics of Good Ciphers: Shannon Characteristics Secure Encryption Systems Public Key (Asymmetric Key) Encryption System: Concept and Characteristics of Public key Encryption System, Introduction to Merkle- Hellman Knapsacks, RSA Encryption in detail, Introduction to Digital signature Algorithms, The Digital Signature Standard (DSA) Secure Secret Key (Symmetric) Systems: The Data Encryption Standard (DES), Analyzing and Strengthening of DES, Key Escrow and Clipper, Introduction to Advance Encryption Standard (AES).</p>	
Unit –II	7 Hours
<p>Applied Cryptography, Protocols and Practice Key Management Protocols: Solving Key Distribution Problem, Diffie- Hellman Algorithm, Key Exchange with Public Key Cryptography. Public Key Infrastructure (PKI): Concept of Digital Certificate, Certificate Authorities and its roles Legal Issues: Copyrights, Patents, Trade Secrets, Computer Crime, Cryptography and the Law</p>	
Unit –III	10 Hours
<p>Operating system, Database and Program Security Operating System Security: Security Policies, Models of Security, Security Features of Ordinary Operating System, Security Features of Trusted Operating System Database Security: Security Requirements of Databases, Reliability and Integrity, Protection of Sensitive Data Program Security: Kinds of Malicious Code, How Viruses Attach and Gain Control, Home for Viruses, Virus Signatures, Preventing Virus Infection, Trapdoors, Convert Channels.</p>	
Unit –IV	8 Hours
<p>Network Security Network Security Issues Such as Impersonation, Message Confidentiality, Message Integrity, Message Integrity, Code Integrity, Denial of Service, Secure Communication Mechanisms Such as IPSec, PKI based Authentication and Kerberos Authentication</p>	

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Chairperson

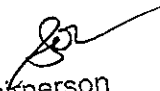
Department of Computer Science &
Engineering and Information Technology
GPS Mahila Vishwavidyalaya, Khandwa Kalan, Sonapat (M.R.)

Web Security: Solving Privacy Problems, Solving Authentication Problems, Secure Software Layer (SSL) Protocol, Secure Electronic Transaction (SET) Protocol
Secure Electronic Mail: Privacy Enhanced Email (PEM), Pretty Good Privacy (PGP), Public Key Cryptography Standards- PKCS # 7

Suggested Text Books

1.	Charles P Pfleeger, " Security in Computing"
2.	Bruce Schneier, " Applied Cryptography Protocols"
3.	Lincoln d Stein, " World Wide Web security FAQ"
4.	RSA Laboratories, " Cryptographic Message Syntax standards"
5.	William Stallings, " Network Security Principles", Pearson Education
6.	William Stallings, " Cryptographic Essentials", Pearson Education

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khatappur Kaan, Sonapat (HR.)

Data Analytics

PHE-405
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The objective of this course is:

To provide foundation for data analytics and application area related to it and understand the core concepts and emerging technologies.

Pre-requisite: None

Course Outcomes: At the end of the course, students will be able to:

- To explore the fundamental concepts of data analytics
- Understand the data analysis techniques for application handling large data.
- Visualize and present the inference using various tools
- Understand various machine learning algorithms used in data analytics process.

Content

Unit –I	10 Hours
Data Analytics - Types – Phases - Quality and Quantity of data – Measurement - Exploratory data analysis - Business Intelligence. BIG DATA Big Data and Cloud technologies - Introduction to HADOOP: Big Data. Apache Hadoop, MapReduce - Data Serialization - Data Extraction - Stacking Data - Dealing with data.	
Unit –II	7 Hours
Data Visualization Introduction to data visualization – Data visualization options – Filters – Dashboard development tools – Creating an interactive dashboard with dc.js - summary.	
Unit –III	10 Hours
Machine learning – Modeling Process – Training model – Validating model – Predicting new observations –Supervised learning algorithms – Unsupervised learning algorithms. The Evolution of Analytic Processes. The Evolution of Analytic. Processes The Evolution of Analytic Tools and Methods. Legacy Data, Hypothesis Testing, Prediction, Software. Complexity, Business problems suited to big data analytics.	
Unit –IV	8 Hours
Ethics And Recent Trends Data Science Ethics – Doing good data science – Owners of the data - Valuing different aspects of privacy - Getting informed consent - The Five Cs – Diversity – Inclusion – Future Trends.	
Suggested Text Books	
1.	Data Warehousing in the Age of Big Data by Krish Krishnan, Morgan Kaufmann.
2.	Big Data Analytics with R and Hadoop by Vignesh Prajapati
3.	Principles of Big Data Preparing, Sharing, and Analyzing Complex Information, 1 st Edition, by J Berman. published by Morgan Kaufmann
4.	“Big Data Analytics - From Strategic Planning to Enterprise Integration with Tools, Techniques, NoSQL, and Graph” By David Loshin, Morgan Kaufmann
5.	Big Data Analytics Using Splunk By Peter Zadrozny , Raghu Kodali, Apress 2013
6.	Franks, Bill, “Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics”, Wiley, 1st Edition, 2012.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.


Chairperson

Department of Computer Science &
Engineering and Information Technology
K. J. Somaiya Institute of Engineering & Information Technology
Sion, Mumbai - 400 072

- 649 -

Page 8 of 10

Advances in Network Technologies

PHE-406
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The objective of this course is:

- Understand the concepts of networking, layered structure and protocols thoroughly.
- Understand the role of air interface for 5G technology
- Proficient about designing a 5G networking application.
- Learn and conceptualize low delay service, broadband, security in 5G network.


Pre-requisite: None.

Course Outcomes: At the end of the course, students will be able to:

- Understand and explain the channel models of 5G and the use cases for 5G.
- Analyze use of MIMO in 5G and its techniques.
- Draw and explain 5G architecture, its components and functional criteria.
- Understand device to device (D2D) communication and standardization.
- Study the in-depth functioning of 5G radio access technologies.

Contents

Unit –I	08 Hours
<p>Introduction to computer networks: Reference Models: The OSI Reference Model, Example Networks: The Internet, Connection-Oriented Networks (X.25, Frame Relay & ATM), Ethernet. Network Layer: Network Layer Design Issues: Store-and-Forward Packet Switching, Services Provided to the Transport Layer, Implementation of Connectionless Service, Implementation of Connection-Oriented Service, Comparison of Virtual-Circuit & Datagram Subnets. Internetworking: Networks Differences, Connecting Networks, Concatenated Virtual Circuits, Connection less Internetworking, Tunneling, Fragmentation.</p>	
Unit –II	08Hours
<p>Wireless Internet Networks access: Fiber optic network access technologies (FTTH, WDM-PON and EP2P); IP Addressing, 5G channel modeling and use cases: Modeling requirements and scenarios, Channel model, requirements, Propagation scenarios, Relaying multi-hop and cooperative communications: Principles of relaying, fundamentals of relaying, Cognitive radio: Architecture, spectrum sensing, Software Defined Radio (SDR).</p>	
Unit –III	11 Hours
<p>Multiple-input multiple-output (MIMO) systems: Introduction to Multi-antenna Systems, Motivation, Types of multi-antenna systems, MIMO vs. multi-antenna systems; Diversity, Exploiting multipath diversity, Transmit diversity, Space-time codes, The Alamouti scheme, Delay diversity, Cyclic delay diversity, Space-frequency codes, Spatial Multiplexing; The 5G architecture: Introduction, NFV and SDN. Basics about RAN architecture, High-level requirements for the 5G architecture, Functional architecture and 5G flexibility, Functional split criteria, Functional split alternatives, Integration of LTE and new air interface to fulfill 5G Requirements, Enhanced Multi-RAT coordination features</p>	
Unit –IV	11 Hours
<p>Device-to-device (D2D) communications: D2D: from 4G to 5G, D2D standardization: 4G LTE D2D, D2D in 5G: research challenges, Radio resource management for mobile broadband D2D, RRM techniques for mobile broadband D2D, RRM and system design for D2D. 5G D2D RRM concept, services, National security and public safety requirements in 3GPP and METIS. The 5G radio-access technologies: Access design principles for multi-user communications, Orthogonal multiple-access systems, Spread spectrum multiple access systems, Capacity limits of multiple-access methods, Sparse code multiple access (SCMA), Interleave division multiple access (IDMA), Radio access for dense deployments, OFDM numerology for small-cell deployments, Radio access for V2X communication</p>	


 Chairperson
 Department of Computer Science &
 Engineering and Information Technology
 O.P.S. Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat (H.R.)

Suggested Text Books

1.	Data and computer communications - Stallings, W, Pearson/Prentice Hall, 2014. ISBN: 9780133506488
2.	5G Mobile and Wireless Communications Technology by Afif Osseiran, Jose F. Monserrat, Patrick Marsch, Cambridge University press, 2 nd Edition, 2011
3.	Computer networks - Tanenbaum, A.S.; Feamster, N.; Wetherall, D.J, Pearson, 2021. ISBN: 9781292374062
4.	5G NR: The Next Generation Wireless Access Technology by Erik Dahlman, Stefan Parkvall, Johan Skold; Elsevier Publications, 1 st Edition, 2016
5.	Fundamentals of 5G Mobile Networks by Jonathan Rodriguez, Wiley Publications, 1 st Edition 2010
6.	Data Communications and Networking with TCP/IP Protocol Suite, by Behrouz A. Forozoun, TMH, 6th Edition, 2022

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Chairperson
Department of Computer Science &
Engineering and Information Technology
BPS Mahila Vishwavidyalaya, Khenpat Kalan, Sonapat (HR.)

List of Courses offered by Department of Fashion Technology for Ph.D Course work

S.No	Course Code	Course Title
1	PHE-601	Evaluation of Textile Materials
2	PHE-602	Recent Developments in Apparel Technology
3	PHE-603	Textile Material & Process
4	PHE-604	Functional Textiles & Garments
5	PHE-605	Fashion Supply Chain

-652-

Handwritten signatures and initials:
A signature on the left, initials "JH" in the middle, and a signature "J. K. Kelly" on the right.

Designing a Transport Layer Protocol for Ad Hoc Wireless Networks, Design Goals of a Transport Layer Protocol for Ad Hoc Wireless Networks, Classification of Transport Layer Solutions, TCP Over Ad Hoc Wireless Networks, Other Transport Layer Protocol for Ad Hoc Wireless Networks, Security in Ad Hoc Wireless Networks, Network Security Requirements, Issues and Challenges in Security Provisioning, Network Security Attacks, Key Management, Secure Routing in Ad Hoc Wireless Networks.

UNIT- IV

QUALITY OF SERVICE: Introduction, Issues and Challenges in Providing QoS in Ad Hoc Wireless Networks, Classification of QoS Solutions, MAC Layer Solutions, Network Layer Solutions, QoS Frameworks for Ad Hoc Wireless Networks.

ENERGY MANAGEMENT: Introduction, Need for Energy Management in Ad Hoc Wireless Networks, Classification of Ad Hoc Wireless Networks, Battery Management Schemes, Transmission Power Management Schemes, System Power Management Schemes. **WIRELESS SENSOR NETWORKS:** Introduction, Sensor Network Architecture, Data Dissemination, Data Gathering, MAC Protocols for Sensor Networks, Location Discovery, Quality of a Sensor Network, Evolving Standards, Other Issues.

Suggested Text Books

- | | |
|----|---|
| 1. | Ad Hoc Wireless Networks: Architectures and Protocols - C. Siva Ram Murthy and B.S.Manoj, 2004, PHI. |
| 2. | Wireless Ad- hoc and Sensor Networks: Protocols, Performance and Control - Jagannathan Sarangapani, CRC Press |

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

Department of Electronics and
Communication Engineering
Dr. Pradeep Singh
Dr. Anil Kumar

Adhoc Wireless & Sensor Networks

PHE-511
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course objective:-


1. To understand the basics of Ad-hoc & Sensor Networks.
2. To study about the issues pertaining to major obstacles in establishment and efficient management of Ad-hoc and sensor networks.
3. To understand the nature and applications of Ad-hoc and sensor networks.
4. To understand various security practices and protocols of Ad-hoc and Sensor Networks.

Course Outcomes: At the end of the course, students will demonstrate the ability:

1. To identify different issues in wireless ad hoc and sensor networks.
2. To analyze protocols developed for ad hoc and sensor networks.
3. To identify and address the security threats in ad hoc and sensor networks.
Establish a Sensor network environment for different type of applications.
4. Appreciate the importance of Adhoc and sensor networks for applications like environment monitoring, habitat monitoring, health care and data acquisition systems.
5. Understanding of data transmission technologies of the Adhoc and sensor devices with focus on channel access routing and security.
6. Appreciate the need and importance of converged networks, ubiquitous environment and Internet of things in the context of Adhoc and sensor networks.

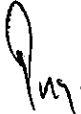
Content

UNIT-I	
Wireless LANS and PANS: Introduction, Fundamentals of WLANS, IEEE 802.11 Standard, HIPERLAN Standard, Bluetooth, Home RF. Wireless Internet: Wireless Internet, Mobile IP, TCP in Wireless Domain, WAP, Optimizing Web Over Wireless.	
UNIT-II	
AD HOC Wireless Networks: Introduction, Issues in Ad Hoc Wireless Networks, AD Hoc Wireless Internet. MAC Protocols for Ad Hoc Wireless Networks: Introduction, Issues in Designing a MAC protocol for Ad Hoc Wireless Networks, Design goals of a MAC Protocol for Ad Hoc Wireless Networks, Classifications of MAC Protocols, Contention - Based Protocols, Contention - Based Protocols with reservation Mechanisms, Contention – Based MAC Protocols with Scheduling Mechanisms, MAC Protocols that use Directional Antennas, Other MAC Protocols.	
UNIT- III	
ROUTING PROTOCOLS: Introduction, Issues in Designing a Routing Protocol for Ad Hoc Wireless Networks, Classification of Routing Protocols, Table –Driven Routing Protocols, On – Demand Routing Protocols, Hybrid Routing Protocols, Routing Protocols with Efficient Flooding Mechanisms, Hierarchical Routing Protocols, Power – Aware Routing Protocols. TRANSPORT LAYER AND SECURITY PROTOCOLS: Introduction, Issues in	


 Department of Electronics &
 Communication Engineering
 P. O. Box 110, Anna University,
 Chennai 600 025.

1.	Digital Signal Processing: Principles, algorithms and applications-J.G. Proakis & D.G.Monolokis, 4 th ed.,PHI
2.	Discrete Time signal processing - Alan V Oppenheim & Ronald W Schaffer, PHI.
3.	DSP – A Pratical Approach – Emmanuel C.Ifeacher, Barrie. W. Jervis, 2 ed., Pearson Education.

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

 Department of Electronics and
Communication Engineering
Gurpat Phool Singh
Jabla Vishwavidyalaya
2000

Advanced Digital Signal Processing

PHE-510
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course objective:-

1. To study about discrete time systems and to learn about FFT algorithms.
2. To study the design techniques for FIR and IIR digital filters
3. To study the finite word length effects in signal processing
4. To study the properties of random signal, Multirate digital signal processing and about QMF filters


Course Outcomes: At the end of the course, students will demonstrate the ability to:

1. To have a deep understanding on basics of digital signal processing which can be applied to communication systems.
2. To design the Multirate Filters
3. Know the analysis of discrete time signals
4. To study the modern digital signal processing algorithms and applications.
5. Have an in-depth knowledge of use of digital systems in real time applications

Content

UNIT-I	
Review of DFT, FFT, IIR Filters, FIR Filters, Multirate Signal Processing: Introduction, Decimation by a factor D, Interpolation by a factor I, Sampling rate conversion by a rational factor I/D, Multistage Implementation of Sampling Rate Conversion, Filter design & Implementation for sampling rate conversion, Applications of Multirate Signal Processing	
UNIT-II	
Non-Parametric methods of Power Spectral Estimation: Estimation of spectra from finite duration observation of signals, Non-parametric Methods: Bartlett, Welch & Blackman & Tukey methods, Comparison of all Non-Parametric methods	
UNIT- III	
Parametric Methods of Power Spectrum Estimation: Autocorrelation & Its Properties, Relation between auto correlation & model parameters, AR Models - Yule-Waker & Burg Methods, MA & ARMA models for power spectrum estimation.	
UNIT- IV	
Linear Prediction : Forward and Backward Linear Prediction – Forward Linear Prediction, Backward Linear Prediction, Optimum reflection coefficients for the Lattice Forward and Backward Predictors. Solution of the Normal Equations: Levinson Durbin Algorithm, Schur Algorithm. Properties of Linear Prediction Filters, Finite Word Length Effects: Analysis of finite word length effects in Fixed-point DSP systems – Fixed, Floating Point Arithmetic	
Suggested Text Books	

- 656 -

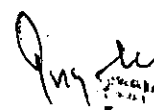

Department of Electronics &
Communication Engineering
Dr. Rajat Phool Singh
Mahila Vishwavidyalaya

TDM Bus- Space and Time Division Switching Combinations- Public Switched Telephone Network, Packet Switching- Datagram Approach- Virtual Circuit Approach- Circuit Switched Connection Versus Virtual Circuit Connection, Message Switching. Multiplexing: Time Division Multiplexing (TDM), Synchronous Time Division Multiplexing, Digital Hierarchy, Statistical Time Division Multiplexing. Multiple Access: Random Access, Aloha- Carrier Sense Multiple Access (CSMA)- Carrier Sense Multiple Access with Collision Detection (CSMA)- Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA), Controlled Access- Reservation- Polling- Token Passing, Channelization- Frequency- Division Multiple Access (FDMA), Time - Division Multiple Access (TDMA), - Code - Division Multiple Access (CDMA).

Suggested Text Books

1.	Data Communication and Computer Networking - B. A.Forouzan, 3rd ed., 2008, TMH.
2.	Advanced Electronic Communication Systems - W. Tomasi, 5 ed., 2008, PEI.
3.	Data Communications and Computer Networks – Prakash C. Gupta, 2006, PHI.
4.	Data and Computer Communications - William Stallings, 8th ed., 2007, PHI.
5.	Data Communication and Tele Processing Systems – T. Housely, 2 nd Edition, 2008, BSP.
6.	Data Communications and Computer Networks- Brijendra Singh, 2nd ed., 2005, PHI.

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.


 Department of Electronics and
 Communication Engineering
 Praveen Phool Singh
 Jabala Vishwavidyalaya,
 Jabalpur

Advanced Data Communications

PHE-509
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course objective:-

1. To learn different types of digital modulation techniques.
2. To learn the basic concepts of data communication.
3. To learn the various error detection and correction codes and different types of protocols.
4. To learn the different types of switching and multiplexing techniques.
5. To learn the various multiple access techniques.
6. To develop an understanding of complete data communication and networking

Course Outcomes: At the end of the course, students will demonstrate the ability to:

1. Understand different modulation schemes and concepts of data communication.
2. Understand various error detection and correction schemes, network topologies and protocols.
3. Understand various types of switching, multiplexing and access techniques.

Content

UNIT-I	
Digital Modulation: Introduction, Information Capacity Bits, Bit Rate, Baud, and M-ARY Coding, ASK, FSK, PSK, QAM, BPSK, QPSK, 8PSK, 16PSK, 8QAM, 16QAM, DPSK – Methods, Band Width Efficiency, Carrier Recovery, Clock Recovery.	
UNIT-II	
Basic Concepts of Data Communications, Interfaces and Modems: Data Communication- Components, Networks, Distributed Processing, Network Criteria- Applications, Protocols and Standards, Standards Organizations- Regulatory Agencies, Line Configuration- Point-to-point- Multipoint, Topology- Mesh- Star- Tree- Bus- Ring- Hybrid Topologies, Transmission Modes- Simplex- Half duplex- Full Duplex, Categories of Networks- LAN, MAN, WAN and Internetworking, Digital Data Transmission- Parallel and Serial, DTE- DCE Interface- Data Terminal Equipment, Data Circuit- Terminating Equipment, Standards EIA 232 Interface, Other Interface Standards, Modems- Transmission Rates.	
UNIT-III	
Error Detection and Correction: Types of Errors- Single- Bit Error, CRC (Cyclic Redundancy Check)- Performance, Checksum, Error Correction- Single-Bit Error Correction, Hamming Code. Data link Control: Stop and Wait, Sliding Window Protocols. Data Link Protocols: Asynchronous Protocols, Synchronous Protocols, Character Oriented Protocol- Binary Synchronous Communication (BSC) - BSC Frames- Data Transparency, Bit Oriented Protocols – HDLC, Link Access Protocols.	
UNIT-IV	
Switching: Circuit Switching- Space Division Switches- Time Division Switches-	

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

CMOS Analog & Mixed Signal Design

PHE-508
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course objective:-

1. To cover the fundamentals and mathematical models in digital image and video processing.
2. To develop time and frequency domain techniques for image enhancement.
3. To expose the students to current technologies and issues in image and video processing.
4. To develop image and video processing applications in practice.

Pre requisites: Signals and Systems, Digital Signal Processing

Course Outcomes:


At the end of the course, students will demonstrate the ability to:

1. Mathematically represent the various types of images and analyze them.
2. Process these images for the enhancement of certain properties or for optimized use of the resources.
3. Develop algorithms for image and video compression.

Content

UNIT-I	
Current Sources & Sinks: The cascade connection, sensitivity and temperature analysis, transient response, layout of simple Current Mirror, matching in MOSFET mirrors, other Current Sources/Sinks. Voltage dividers, current source self-biasing, band gap voltage references, Beta-Multiplier Referenced Self-biasing.	
UNIT-II	
Amplifiers: Gate Drain connected loads, Current Source Loads, Noise and Distortion, Class AB Amplifier. Feedback Amplifiers: Feedback Equation, properties of negative feedback and amplifier design, feedback topologies, amplifiers employing the four types of feedback, Stability.	
UNIT- III	
Differential Amplifiers: The Source Coupled pair, the Source Cross-Coupled pair, cascode loads, Wide-Swing Differential Amplifiers, Operational Amplifiers: Basic CMOS Op-Amp Design, Operational Trans conductance Amplifiers, Differential Output Op-Amp.	
UNIT- IV	
Non-Linear & Dynamic Analog Circuits: Basic CMOS Comparator Design, Adaptive Biasing, Analog Multipliers, MOSFET Switch, Switched Capacitor circuits: Switched Capacitor Integrator, dynamic circuits. Data Converter Architectures: Data Converter Fundamentals, DAC & ADC specifications, Mixed Signal Layout issues, DAC architectures, ADC architectures	
Suggested Text Books	
1.	CMOS Circuit Design, Layout and Simulation - Baker, Li, Boyce, 1st ed., TMH
2.	Analog Integrated Circuit Design – David A.Johns, Ken Martin, 1997, John-Wiley & Sons.
3.	Design of Analog CMOS Circuits – B. Razavi, MGH, 2003, TMH
4.	Analog MOS ICs for Signal Processing – R.Gregorian, Gabor. C. Temes, John Wiley & Sons.

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 Head of Department
 Department of Electronics & Communication Engineering
 Government Engineering College
 Mubli, Vishakhapatnam
 Andhra Pradesh

Suggested Text Books	
1.	Digital Image Processing – Gonzalez and Woods, 3rd ed., Pearson
2.	Video processing and communication – Yao Wang, Joem Ostermann and Ya-quin Zhang. 1st Ed., PH Int.
3.	Digital Video Processing – M. Tekalp, Prentice Hall International

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

Image & Video Processing

PHE-507
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective:-

1. To cover the fundamentals and mathematical models in digital image and video processing.
2. To develop time and frequency domain techniques for image enhancement.
3. To expose the students to current technologies and issues in image and video processing.
4. To develop image and video processing applications in practice.

Pre requisites: Signals and Systems, Digital Signal Processing

Course Outcomes: At the end of the course, students will demonstrate the ability to:

1. Mathematically represent the various types of images and analyze them.
2. Process these images for the enhancement of certain properties or for optimized use of the resources.
3. Develop algorithms for image and video compression.

Content

Unit -I	
Basic steps of Image Processing System Sampling and Quantization of an image – Basic relationship between pixels Image Transforms: 2 D- Discrete Fourier Transform, Discrete Cosine Transform (DCT), Wavelet Transforms: Continuous Wavelet Transform, Discrete Wavelet Transforms.	
Unit -II	
Spatial domain methods: Histogram processing, Fundamentals of Spatial filtering, Smoothing spatial filters, Sharpening spatial filters. Frequency domain methods: Basics of filtering in frequency domain, image smoothing, image sharpening, Selective filtering. Image Segmentation Segmentation concepts, Point, Line and Edge Detection, Thresholding, Region Based segmentation.	
Unit -III	
Image compression fundamentals - Coding Redundancy, Spatial and Temporal redundancy, Compression models: Lossy & Lossless, Huffman coding, Arithmetic coding, LZW coding, Run length coding, Bit plane coding, Transform coding, Predictive coding, Wavelet coding, JPEG Standards. Basic steps of Video Processing Analog Video, Digital Video. Time-Varying Image Formation models: Three-Dimensional Motion Models, Geometric Image Formation, Photometric Image Formation, Sampling of Video signals, Filtering operations.	
Unit -IV	
Optical flow, General Methodologies, Pixel Based Motion Estimation, Block- Matching Algorithm, Mesh based Motion Estimation, Global Motion Estimation, Region based Motion Estimation, Multi resolution motion estimation, Waveform based coding, Block based transform coding, Predictive coding, Application of motion estimation in Video coding.	

— 662 —

Person
 Department of Electronics and
 Communication Engg. - 109
 Shreegat Phool Bag
 Mahila Vishwavidyalaya
 ...

Optimization & Heuristic Search Techniques

PHE-506
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The objective of this course is:

1. To learn about optimization problem and basic optimization issues.
2. To understand the concept of linear programming.
3. To understand various heuristic optimization techniques

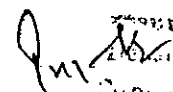
Course Outcomes: At the end of the course, students will be able:

1. To know the concept of optimization problem and its issues.
2. To acquire the knowledge of heuristic optimization techniques.

Content

Unit –I	
INTRODUCTION: Historical Development, Engineering application of Optimization, Formulation of design problems as mathematical programming problems, classification of optimization problems.	
Unit –II	
LINEAR PROGRAMMING: Graphical method, Simplex method, Revised simplex method, Duality in linear programming (LP), Sensitivity analysis, other algorithms for solving LP problems, Transportation, assignment and other applications.	
Unit –III	
NON LINEAR PROGRAMMING: Unconstrained optimization techniques, Direct search methods, Descent methods, Constrained optimization, Direct and indirect methods, Optimization with calculus, Khun-Tucker conditions.	
Unit –IV	
DYNAMIC PROGRAMMING: Introduction, Sequential optimization, computational procedure, curse of dimensionality. HEURISTIC OPTIMIZATION TECHNIQUES: Meta heuristic search methods: Genetic Algorithm based optimization, Simulated Annealing Techniques, Swarm Intelligent Algorithms, PSO, etc.	
Suggested Text Books	
1.	S.S. Rao, "Engineering Optimization: Theory and Practice", New Age International (P) Ltd., New Delhi, 2000.
2.	K. Deb, "Optimization for Engineering Design - Algorithms and Examples", PrenticeHall of India Pvt. Ltd., New Delhi, 1995.
3.	H.A. Taha, "Operations Research: An Introduction", 5th Edition, Macmillan, New York, 1992. • G. Hadley, "Linear programming", Narosa Publishing House, New Delhi, 1990.
4.	Modern Heuristic Optimization Techniques" by Kwang Y. Lee, Mohamed A. El-Sharkawi, 2008

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.


 DEPARTMENT OF ELECTRONICS AND
 COMMUNICATION ENGINEERING
 GITANJALI P. S. COLLEGE
 MAHESHWAR, RAIPUR
 JHARKHAND

1.	Optical Networks: A Practical Perspective - Rajiv Ramaswami and Kumar N. Sivarajan, ed., 2004, Elsevier Morgan Kaufmann Publishers (An Imprint of Elsevier).
2.	Optical Fiber Communications – Gerd Keiser, 3 ed., 2000, McGraw Hill.
3.	Optical Fiber Communications: Principles and Practice – John.M.Senior, 2 ed., 2000, PE.
4.	Fiber Optics Communication – Harold Kolimbris, 2 ed., 2004, PEI
5.	Optical Networks: Third Generation Transport Systems – Uyles Black, 2 ed., 2009, PEI
6.	Optical Fiber Communications – Govind Agarwal, 2 ed., 2004, TMH
7.	Optical Fiber Communications and Its Applications – S.C.Gupta, 2004, PHI

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

PHI
 Department of Electronics and
 Communication Engineering
 Dr. Jai Prakash Singh
 Head, Department

Optical Communications Technology

PHE-505
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objectives:

1. To understand the basics of optics including light propagation and reflection.
2. To understand the different optical sources and detectors.
3. To explore the optical amplifiers for amplifying the signal


Pre-requisite: Electronics Devices and Circuits

Course Outcome: After studying this course, students will be able to:

1. Acquire the deep understanding of optical communication system.
2. Familiarize with various optical components and devices.

Content

Unit –I	
Signal propagation in Optical Fibers Geometrical Optics approach and Wave Theory approach, Loss and Bandwidth, Chromatic Dispersion, Non Linear effects- Stimulated Brillouin and Stimulated Raman Scattering, Propagation in a Non-Linear Medium, Self Phase Modulation and Cross Phase Modulation, Four Wave Mixing, Principle of Solitons.	
Unit –II	
Fiber Optic Components for Communication & Networking Couplers, Isolators and Circulators, Multiplexers, Bragg Gratings, Fabry-Perot Filters, Mach Zender Interferometers, Arrayed Waveguide Grating, Tunable Filters, High Channel Count Multiplexer Architectures, Optical Amplifiers, Direct and External Modulation Transmitters, Pump Sources for Amplifiers, Optical Switches and Wavelength Converters.	
Unit –III	
Modulation and Demodulation Signal formats for Modulation, Subcarrier Modulation and Multiplexing, Optical Modulations – Duobinary, Single Side Band and Multilevel Schemes, Ideal and Practical receivers for Demodulation, Bit Error Rates, Timing Recovery and Equalization, Reed-Solomon Codes for Error Detection and Correction.	
Unit –IV	
Transmission System Engineering System Model, Power Penalty in Transmitter and Receiver, Optical Amplifiers, Crosstalk and Reduction of Crosstalk, Cascaded Filters, Dispersion Limitations and Compensation Techniques. n Fiber Non-linearities and System Design Considerations Limitation in High Speed and WDM Systems due to Non-linearities in Fibers, Wavelength Stabilization against Temperature Variations, Overall System Design considerations – Fiber Dispersion, Modulation, Non-Linear Effects, Wavelengths, All Optical Networks.	
Suggested Text Books	


 Department of Electronics and
 Communication Engineering
 P. O. Box No. 110
 Anna University,
 Chennai - 600 025

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

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Department of Electronics
Communication Engineering
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VLSI Technology and Design

PHE-504
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objectives:


1. To learn digital CMOS logic design.
2. To nurture students with CMOS circuit designs.
3. To realize importance of testability in logic circuit design.
4. To overview SOC issues and understand PLD architectures with advanced features.

Course Outcome: After studying this course students will be able to:

1. Model digital circuit with HDL, simulate, synthesis and prototype in PLDs.
2. Understand chip level issues and need of testability
3. Design analog & digital CMOS circuits for specified application

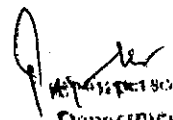
Content

Unit -I	
Review of Microelectronics and Introduction to MOS Technologies: MOS, CMOS, BiCMOS Technology, Trends And Projections. Basic Electrical Properties of MOS, CMOS & BiCMOS Circuits: Ids-Vds relationships, Threshold Voltage Vt, Gm, Gds and o, Pass Transistor, MOS, CMOS & Bi CMOS Inverters, Zpu/Zpd, MOS Transistor circuit model, Latch-up in CMOS circuits.	
Unit -II	10 Hours
LAYOUT DESIGN AND TOOLS: Transistor structures, Wires and Vias, Scalable Design rules, Layout Design tools. LOGIC GATES & LAYOUTS: Static Complementary Gates, Switch Logic, Alternative Gate circuits, Low power gates, Resistive and Inductive interconnect delays.	
Unit -III	10 Hours
COMBINATIONAL LOGIC NETWORKS: Layouts, Simulation, Network delay, Interconnect design, Power optimization, Switch logic networks, Gate and Network testing.	
Unit -IV	10 Hours
SEQUENTIAL SYSTEMS: Memory cells and Arrays, Clocking disciplines, Design, Power optimization, Design validation and testing. FLOOR PLANNING & ARCHITECTURE DESIGN: Floor planning methods, off-chip connections, High-level synthesis, Architecture for low power, SOCs and Embedded CPUs, Architecture testing.	
Suggested Text Books	
1.	Essentials of VLSI Circuits and Systems, K. Eshraghian Eshraghian. D, A.Pucknell, 2005, PHI.
2.	Modern VLSI Design - Wayne Wolf, 3rd ed., 1997, Pearson Education.
3.	Principals of CMOS VLSI Design – N.H.E Weste, K.Eshraghian, 2nd ed., Adisson Wesley.


 Department of Electronics and
 Communication Engineering
 Bhagat Phool Singh
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	and Applications, Mc - Graw Hill, Inc. 1996.
6.	N.K.Sinha and Madan M Gupta, Soft computing & Intelligent Systems - Theory & Applications, Indian Edition, Elsevier, 2007.
7.	John Yen and Reza Langari, Fuzzy logic Intelligence, Control, and Information, Pearson Education, Indian Edition, 2003.
8.	Witold Pedrycz, Fuzzy Control and Fuzzy Systms, Overseas Press, Indian Edition, 2008.

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.


 Department of Electronics and
 Communication Engineering
 Dr. Pooj Singh
 Mahila Vishwavidyalaya
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Intelligent Techniques

PHE-503
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The objective of this course is:

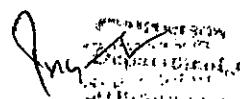
1. To learn about basic concepts of AI.
2. To understand the concepts of ANN and various learning algorithms
3. To learn about the concepts of fuzzy logic and fuzzy logic tool box in MATLAB.

Course Outcomes: At the end of the course, students will be able to:

1. To acquire the knowledge of AI
2. To learn about ANN, fuzzy logic and its tool box in MATLAB.

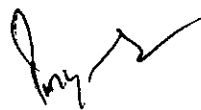
Content

Unit –I	
Introduction: Approaches to intelligent control. Architecture for intelligent control. Symbolic reasoning system, rule-based systems, the AI approach. Knowledge representation. Expert systems.	
Unit –II	
Artificial Neural Networks: Concept of artificial neural networks and its basic mathematical model, McCulloch-Pitts neuron model, simple perceptron, Adaline and Madaline, Feed-forward Multilayer Perceptron. Learning and Training the neural network. Data Processing: Scaling, Fourier transformation, principal-component analysis and wavelet transformations. Hopfield network, Self-organizing network and Recurrent network. Neural Network based controller. Case studies using Matlab- Neural Network toolbox.	
Unit –III	
Fuzzy Logic System: Introduction to crisp sets and fuzzy sets, basic fuzzy set operation and approximate reasoning. Introduction to fuzzy logic modeling and control. Fuzzification, inferencing and defuzzification. Fuzzy knowledge and rule bases. Fuzzy modeling and control schemes for nonlinear systems. Self-organizing fuzzy logic control. Fuzzy logic control for nonlinear time-delay system. Case studies using Matlab fuzzy-logic toolbox	
Unit –IV	
GENETIC ALGORITHM: Basic concept of Genetic algorithm and detail algorithmic steps, adjustment of free parameters. Solution of typical control problems using genetic algorithm. Concept on some other search techniques like tabu search and ant-colony search techniques for solving optimization problems.	
Suggested Text Books	
1.	Oscar Castillo, Patricia Melin, Soft Computing For Hybrid Intelligent Systems, Wiltold Pedrycz, 2008
2.	Madan M. Gupta, Naresh K Sinha, "Soft computing and intelligent systems: Theory and applications, 2000.
3.	J. Jacek. M. Zurada, "Introduction to Artificial Neural Systems", Jaico Publishing House, 1999.
4.	M.T. Hagan, H. B. Demuth and M. Beale, Neural Network Design, Indian reprint, 2008.
5.	N.K. Bose and P. Liang, Neural Network Fundamentals with Graphs, Algorithms


 Head of Department
 Department of Electrical Engineering
 Anna University, Chennai
 Chennai, Tamil Nadu, India

3.	Logic Design Theory – N. N. Biswas
4.	Switching and Finite Automata Theory – Z. Kohavi
5.	Digital Design – Morris Mano
6.	Digital Circuits and Logic Design – Samuel C. Lee

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.



Department
Department of Electronics &
Communication Engineering
Bhagar Phool Singh
Mabika Vistwaia
Bangalore

Digital System Design

PHE-502

L T P

4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective:

1. To implement digital logic circuits on FPGA
2. To synthesize complex digital circuits at several levels
3. To simulate and debug digital systems described in VHDL
4. To learn the Hardware Description Language

Pre-requisite: Digital Electronics

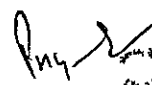
Course Outcome: After completion of the course, student will be able to:

1. Apply Boolean algebra in reduction, expansion, factoring
2. Synthesize and analyze digital circuits through VHDL
3. Create complex digital circuits at several levels of abstractions
4. Understand and analyse logic on FPGA

Content

UNIT- I	
Designing with Read only memories – Programmable Logic Arrays – Programmable Array logic– Sequential Programmable Logic Devices – Design with FPGA's– Using a One-hot state assignment, State transition table- State assignment for FPGA's - Problem of Initial state assignment for One –Hot encoding - State Machine charts – Derivation of SM Charts – Realization of SM charts – Design Examples –Serial adder with Accumulator - Binary Multiplier – Signed Binary number multiplier (2's Complement multiplier) – Binary Divider – Control logic for Sequence detector – Realization with Multiplexer – PLA – PAL.	
UNIT-II	
Logic Fault model – Fault detection & Redundancy- Fault equivalence and fault location – Fault dominance – Single stuck at fault model – Multiple stuck at fault models –Bridging fault model Fault diagnosis of combinational circuits by conventional methods – Path sensitization techniques, Boolean Difference method – Kohavi algorithm – Test algorithms – D algorithm, PODEM, Random testing, Transition count testing, Signature analysis and test bridging faults.	
UNIT- III	
Circuit Test Approach, Transition Check Approach - State identification and fault detection experiment, Machine identification, Design of fault detection experiment. PLA Minimization and Testing PLA Minimization – PLA folding, Fault model in PLA, Test generation and Testable PLA Design.	
UNIT- IV	
The Finite state Model – Capabilities and limitations of FSM – State equivalence and machine minimization – Simplification of incompletely specified machines. Fundamental mode model – Flow table – State reduction – Minimal closed covers – Races, Cycles and Hazards.	
Suggested Text Books	
1.	Fundamentals of Logic Design – Charles H. Roth
2.	Digital Systems Testing and Testable Design – Miron Abramovici

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 Department of Electronics & Communication Engineering
 Brijgopal Singh
 Nehru Institute of Technology
 Coimbatore, India

Suggested Text Books	
1.	Chetan Singh Solanki., Solar Photovoltaic: Fundamentals, Technologies and Application, PHI Learning Pvt., Ltd.; 2009.
2.	Jha A.R., Solar Cell Technology and Applications, CRC Press, 2010.
3.	John R. Balfour, Michael L. Shaw, Sharlave Jarosek., Introduction to Photovoltaics, Jones & Bartlett Publishers, Burlington, 2011.
4.	Luque A. L. and Andreev V.M., Concentrator Photovoltaic, Springer, 2007.
5.	Partain L.D., Fraas L.M., Solar Cells and Their Applications, 2 nd edition. Wiley, 2010.
6.	S.P. Sukhatme, J.K.Nayak., Solar Energy, Tata McGraw Hill, New Delhi, 2010.

Note: There will be nine questions in total from all four units. Question number one is compulsory and set from all four units. Students have to attempt five questions in all selecting at least one question from each four units.

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Dr. P. S. Chatterjee
 Department of Electronics and
 Communication Engineering
 J. J. Somaiya Institute of
 Technology and Research
 Wagle, Mumbai - 400 066

Solar Photovoltaic System and Technology

PHE-501
L T P
4 0 0

Total Credits: 4
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The basic objective of this course is to:

1. Understand the fundamentals of solar energy conversion and familiarize with solar geometry.
2. Design PV system and analysis of its performance.
3. Familiarize with solar energy policies.

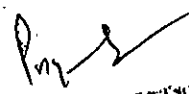
Course Outcomes: At the end of the course, students will be able to:

1. Understand the properties of solar energy resource, PV system operation and component specifications
2. Compute circuit parameters, solar cell/array performance parameters
3. Understand PV installations, government policies and costing
4. Design of PV systems for domestic, commercial and industrial applications.

Content

UNIT-I
Photovoltaic effect-Principle of direct solar energy conversion into electricity in a solar cell. Semiconductor properties, energy levels, basic equations. Solar cell, p-n junction, structure. PV Module, PV Array. Equivalent Circuit Model of Solar cell, Modeling and Simulation of solar cell, module and array, I-V characteristics of a PV module, maximum power point, cell efficiency, fill factor, effect of irradiation and temperature.
UNIT-II
Commercial solar cells – Production process of single crystalline silicon cells, multi crystalline silicon cells, amorphous silicon, cadmium telluride, copper indium gallium di selenide cells. Design of solar PV systems and cost estimation. Case study of design of solar PV lantern, stand alone PV system – Home lighting and other appliances, solar water pumping systems
UNIT- III
Classification – Central Power Station System, Distributed PV System, Stand alone PV system, grid Interactive PV System, small system for consumer applications, hybrid solar PV system, concentrator solar photovoltaic. System components – PV arrays, inverters, batteries, charge controls, net power meters. PV array installation, operation, costs, reliability.
UNIT- IV
Building-integrated photovoltaic units, grid-interacting central power stations, stand-alone devices for distributed power supply in remote and rural areas, solar cars, aircraft, space solar power satellites. Socio-economic and environmental merits of photovoltaic systems, Issues and barriers in implementing Solar PV system. Application of Solar Photovoltaic system in digital India, Government Initiatives and polices.

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 Department of Electronics and
 Communication Engineering
 Pooj Singh
 Vishwavidyalaya
 Kolar, Karnataka

Department of Electronics and Communication Engineering

*List of Department Specific Domain Core Course

Sr. No.	Course Code	Course Title
1	PHE-501	Solar Photovoltaic System And Technology
2	PHE-502	Digital System Design
3	PHE-503	Intelligent Techniques
4	PHE-504	VLSI Technology And Design
5	PHE-505	Optical Communications Technology
6	PHE-506	Optimization & Heuristic Search Techniques
7	PHE-507	Image & Video Processing
8	PHE-508	CMOS Analog & Mixed Signal Design
9	PHE-509	Advanced Data Communications
10	PHE-510	Advanced Digital Signal Processing
11	PHE-511	Adhoc Wireless & Sensor Networks



Department of Electronics and
Communication Engineering
Bongat Patel Singh
Mahila Vidyalaya
Champur, Dist. Sonbhadra

Evaluation of Textile Material

PHE-601

L T P

4 0 0

Total Credits: 4

Internal Marks: 20

External Marks: 80

Total Marks: 100

Course Objectives:

The course is designed to make the students:

- To understand in depth concepts of fibre, yarn, fabric and apparel testing and instruments.
- To acquire the knowledge about mechanism of working and designing of instruments.
- To understand sampling techniques and statistical applications in textile testing.
- To learn and understand evaluation of specially designed functional textiles.
- To understand the concept of low stress mechanical properties and fabric comfort analysis.

UNIT- I
Introduction to textile testing; Sampling and basic statistics: Selection of samples for testing; Random and biased samples; Different types of sampling of textile materials; Testing methods: Measurement of length, fineness and crimp of fibres; Determination of maturity, moisture content of cotton, Measurement of twist, linear density and hairiness of yarn, Yarn numbering and conversion system,
UNIT- II
Tensile testing of fabrics; Tearing, bursting and abrasion resistance tests for fabrics; Pilling and Snagging resistance of fabrics; Crease and wrinkle behavior; fabric drape and handle, Wicking & Wetting properties, Water repellency, water proofness
UNIT- III
Fabric comfort; Air and water-vapour transmission through fabrics; Thermal resistance of fabrics; Fastness characteristics of textiles (light, washing, perspiration, sublimation, chlorine etc.) and their evaluation, Computer colour matching
UNIT- IV
Flame resistance, Limited Oxygen Index of Fabrics, Overview of low stress mechanical properties, FAST, Kawabata Evaluation System,

Course Outcomes:

After completion of the course, students will be able to:

- Relate the importance of concepts, techniques and analysis in research areas.
- Perform proper sampling techniques and procedures for testing and in research.
- Evaluate the influence of fibre, yarn and fabric properties on apparel quality/functionality.

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- Use analytical skills to assess performance and to develop insight into developing innovative quality product.

Books Recommended:

1. Physical Testing of Textiles, Wood head Publishing Ltd, Cambridge, 2002. Saville B P
2. Testing and Quality Management, Ed. V. K. Kothari, IAFL Publications, New Delhi, 1999, V. K. Kothari.
3. Principles of Textile Testing", CBS Publishers and Distributors, New Delhi, 1999, Booth J E.
4. Textile Testing, SSM Institute of Textile Technology, Angappan P &Gopalakrishnan, R,Komarapalayam, 2002.
5. Apparel quality Control, V.K. Mehta
6. Basu A, "Textile Testing", SITRA Coimbatore, 2002.

Note: There will be nine questions in theory paper in total from all four units of syllabus. First question is compulsory and set from all four units. Students will have to attempt any five questions in all selecting at least one question from each unit.

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Recent Developments in Apparel Technology

PHE-602

L T P

4 0 0

Total Credits: 4

Internal Marks: 20

External Marks: 80

Total Marks: 100

Course Objectives:

The course is designed to make the students understand about:

- Innovation and advancement in stitching technology
- Various kinds of machines and their utility and their developments.
- Automation and applications of programmable machines in garment industries.
- Ergonomic concepts and applications

UNIT-I
Detailed study of different seam and stitches used in Apparel Industries. Latest Innovation in seams, stitches, sewing thread, needles. Role of marker, planning in increasing the efficiency of garment production, latest cutting room tools and technologies.
UNIT- II
Understanding the need and use of various construction types for sewing machinery in regards to quality and performance improvement and ease to operate, Advancement in sewing Machinery: Directive for operating special purpose sewing machinery. Various bed types of machine and their applications in manufacturing processes: Flat Bed, large area Raised Bed, DNLS m/c, Over Lock m/c, Flat Lock m/c, Multi thread Chain Stitch m/c, Blind stitch machine and their developments.
UNIT- III
Various types of feed mechanisms, their suitability for different fabrics and construction of components and their contribution towards quality and productivity. Application of programmable machines in garment industries. Developments and automation in garment manufacturing machines and industries.
UNIT- IV
Scientific approach in sewing techniques. Ergonomic concepts and application in the sewing room, Introduction of time targets and quality aspects, Practical approach to achieve targets, Understanding of different shaped sewing lines in actual garments, Material Handling, Postural Techniques, Work Study, Working Time Arrangement, Shift Work, Motion Economy.

Course Outcomes:

After completion of the course, students will be able to:

- Gain insight of innovations and advancements in stitching technology

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- Develop understanding and functionality of various kinds of machines and their utility.
- Get exposure about automation and applications of programmable machines in garment industries.
- Apply Ergonomic concepts and applications in time studies.

Suggested Text Books & References:

1. The Technology of Clothing Manufacture, Harold Carr, Barbara Latham
2. Introduction to Clothing Manufacture, Gerry Cooklin
3. Knitted Clothing Technology, Bracken burry

Note: There will be nine questions in theory paper in total from all four units of syllabus. First question is compulsory and set from all four units. Students will have to attempt any five questions in all selecting at least one question from each unit.

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Course Outcome:

After completion of the course, students will be able to:

- Understand deep insight of fibre, yarn and fabric formation and key concepts of technology involved.
- Develop understanding of use of various kinds of machines and their utility in their research areas.
- Apply technical knowledge in developing new products as per the required functionality and performance.

Suggested Text Books & References:

1. Gohl E P G and Vilensky LD, "Textile Science", CBS Publishers, Delhi, 1983.
2. Cook Gordon J, "Hand Book of textile fibre", Vol. I and II, Woodhead Fibre Science Series, UK, 1984.
3. Gupta V B and Kothari V K, "Manufactured Fibre Technology", 1st Ed., Chapman and Hall, London, 1997.
4. Kothari V K Ed. "Textile Fibers: Developments and Innovations, IAFL Publications, New Delhi, 2000.
5. Salhotra K R, "Spinning of Man Made Fibres and Blends on Cotton Spinning System", The Textile Association, Mumbai, 1989
6. Bernard P. Corbman, "Textile Fibres to Fabric" McGrawhill Publications, 6th Edition 1983
7. Penny Walsh, "The yarn book", A & C black publisher
8. Eric Oxtoby, "Spun Yarn Technology"
9. Gokaineshan N., Fabric structure and design, New Age Publishers
10. Adanur Sabit, Handbook of weaving; Technomic Publishing Company, Inc, U.S.A
11. Lord P.R. & Mohamed M.H., Weaving: Conversion of Yarn to Fabric, Watford : Merrow,
12. Marks & Robinson, "Principles of Weaving"
13. Chakarverty J N, "Fundamental and practices in colouration of textiles", Woodhead Publishing India Pvt Ltd, 2008
14. Shenai VA, "Technology of Bleaching & Mercerising", Sevak Pub., Mumbai.
15. Shenai V A, "Technology of Dyeing", Sevak Pub., Mumbai.
16. Trotman E R, "Dyeing and Chemical Technology of Textile Fibres", B.I. Publications Pvt. Ltd.
17. Hall David M, Chemical testing of textiles: a laboratory manual, Dept of Textile Engineering, Auburn University, 1981

Note: There will be nine questions in theory paper in total from all four units of syllabus. First question is compulsory and set from all four units. Students will have to attempt any five questions in all selecting at least one question from each unit.

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Functional Textiles and Garments

PHE-604

L T P

4 0 0

Total Credits: 4

Internal Marks: 20

External Marks: 80

Total Marks: 100

Course Objectives:

The students will be able to:

- Gain understanding about properties and uses of speciality fibres
- Know about various functional garments, their requirements and applications.
- Have understanding about principle and mechanisms of smart garments.
- Gain adequate knowledge about medical textile, sportswear, defence textiles etc

UNIT- I
Functional Garments and their application, Classifications of functional garments, Properties and uses of speciality fibres like Nomex, Kevlar, Glass fibres used in functional garments. Breathable textiles and garments: Introduction, Principle, classification and use. Moisture management in fabrics. Sports Textile: requirement, Different fibre used, their application in sports.
UNIT- II
Protective clothing: Different types of protective clothing, General requirement of protective clothing. Overview and application of Cut resistant fabric, Chemical protective clothing (CPC), Ballistic protective clothing – different fibres and fabrics, Foul weather clothing, Phase change material and its uses.
UNIT- III
Antimicrobial clothing and Medical Clothing, their importance and applications, Thermal protective clothing (Fire retardant fabrics): combustion mechanism, fire governing parameters, requirements, construction, various affecting flame retardancy, performance evaluation. Smart and intelligent textiles-Passive and Active functionality, Smart Electronic clothing – requirements, processing of conductive yarn, application in defense, Multifunctional textiles with incorporated electronics for integrated communications.
UNIT- IV
Environmentally sensitive textiles – overview of photochromic, thermochromic, (Chameleonic), etc fabrics and their applications to textiles. Nanotechnology in apparels – introduction and definition of nanotechnology, Applications of High performance fibres in Functional Textiles.

Course Outcomes:

After completion of the course, students will be able to:

- Apply their knowledge of high performance fibre properties in smart textiles.
- Evaluate the influence of fibre and yarn parameters on Functional garments.

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- Develop skills to design and develop functional clothing for various end use applications like sports wear, protective clothing, medical textiles etc.

References:

1. Textile in sport, Edited by R. Shishoo, Woodhead Publisher.
2. Wearable electronics and photonics, Edited by X M Tao, woodhead Publisher.
3. Welington Sears Handbook of Industrial textiles, S Adanur, Woodhead publisher.
4. Handbook of Technical Textiles, edited by A R Horrocks and S C Anand, UK.
5. Nanofibres and nanotechnology in textiles, Edited by P Brown and K Stevens, Woodhead Publisher.
6. Nanofunctional Textiles and their application, Edited by Y Li, woodhead Publisher.
7. Smart textiles for medical and healthcare, Edited by L Van Langenhove, Woodhead publisher.

Note: There will be nine questions in theory paper in total from all four units of syllabus. First question is compulsory and set from all four units. Students will have to attempt any five questions in all selecting at least one question from each unit.

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Fashion Supply Chain

PHE-605

L T P

4 0 0

Total Credits: 4

Internal Marks: 20

External Marks: 80

Total Marks: 100

Course Objectives:

The course is designed to make the students understand about:

- To Familiarize with the concepts of Supply chain
- Latest techniques and processes in increasing Supply chain efficiency
- Innovations in planning and managing the inventories of Supply chains
- Innovations in Reverse Supply chain process

UNIT- I
Supply Chain, Supply Chain Concepts: flow of materials, Wastes in the pipeline, flow of Information, Supply Chain Drivers, Supply chain Management: Concept, frame work and need for study
UNIT- II
Planning ; Managing Inventories in a Supply Chain: Safety Inventory, Benchmarking The supply chain Quick Response, Vendor Managed Inventory(VMI), Postponement, Just in Time; QR Logistics, Introduction to Apparel / Textile Supply Chain, Distribution; Procurement and various Procurement Channels in Supply Chain.
UNIT- III
Reverse supply chain (RSC), difference with forward supply chain, cost considerations Involved, industries participation, factors leading to application of concept of RSC in Specific industries and its restricted application, benefits, cost effectiveness of RSC.
UNIT- IV
Supply chain in apparels, Introduction to sampling, Understanding quality procedures in Sampling and sample development, different stages of samples and their requirements From Proto to Shipment sample Proto, fit, Size set, Pre production, TOP, Sealer, Important Industry Inputs.

Course Outcomes:

After completion of the course, students will be able to:

- Gain insight of innovations and advancements in supply chain Management.
- Develop understanding of inventory planning and Management.
- Get exposure about automation and applications of Reverse supply chain process
- Learn and implement different techniques of Supply Chain leading to overall process

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Suggested Text Books & References:

1. Logistics & supply Chain Management: Strategies for Reducing Cost and Improving service –Martin Christopher
2. Supply Chain Management: Strategy, Planning and Operation - Sunil Chopra.
3. Partnership Sourcing: An Integrated Supply Chain Management Approach - Douglas Macbeth

Note: There will be nine questions in theory paper in total from all four units of syllabus. First question is compulsory and set from all four units. Students will have to attempt any five questions in all selecting at least one question from each unit.

J. K. Gnanapavan
—683—



**Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomenuniversity.ac.in**

Ref. No. BPSMV/ FET/24/13

Date:-12/02/2024

Proceeding of the meeting of Faculty of Engineering and Technology held on 12.02.2024 at 10.00 am. in the office of Dean, Faculty of Engineering and Technology, BPSMV, Khanpur Kalan.
The following members were present:-

1. Dr. Sandeep Khandhwal, Principal, Govt. College for Women, Sonipat (Online)
2. Dr. Priyanka, Chairperson, ECE, BPSMV, Khanpur Kalan, Sonipat
3. Mrs. Sonal, Chairperson, CSE&IT, BPSMV, Khanpur Kalan, Sonipat
4. Dr. Harinder Pal, In-Charge, Deptt of FT, BPSMV, Khanpur Kalan, Sonipat
5. Mrs. Sudesh Nandal, Associate Professor, Deptt of ECE, BPSMV, Khanpur Kalan, Sonipat
6. Dr. Manju Saroha, Assistant Professor. Department of CSE &IT, BPSMV, Khanpur Kalan, Sonipat
7. AR, Secretary, BPSMV, Khanpur Kalan

After detailed discussion and deliberation, the following decisions were taken:-

1. Agenda No.1: To consider the scheme and syllabai of Ph.D Course work under Faculty of Engineering and Technology.

Considered and approved the common scheme and syllabi of Ph.D Course work offered in Department of Computer Science Engineering & Information Technology, Department of Electronics and Communication Engineering and Department of Fashion Technology under Faculty of Engineering and Technology as approved by PG BOS held on 03/02/2024 at 11:30 am and 06/02/2024 at 12:00 pm and 05/02/2024 at 3:30 pm respectively.

The house resolved that same be implemented in anticipation of approval of forthcoming meeting of academic council w.e.f a academic session 2023-24 (on going even winter session).

2. Agenda No.2: To consider the Introduction of new programme of Master of Computer of Applications (MCA) in the Department of CSE&IT.

Considered and approved the introduction of new course of Master of Computer of Applications (MCA) in the Department of CSE&IT as approved in PG BOS meeting in held on 24/04/2023 (Copy attached).

Vijay Nehra
Prof. (Dr) Vijay Nehra
Dean, FET

Dr. Sandeep Khandhwal
Outside expert

Dr. Sangeeta Sapra
Outside expert

Priyanka
Dr. Priyanka
Chairperson, ECE

Sonal
Mrs. Sonal
Chairperson, CSE&IT

H.P.
Dr. Harinder Pal
In-Charge, FT

Sudesh
Mrs. Sudesh Nandal
Member

Manju
Dr. Manju Saroha
Member

attended meeting on behalf of Dept
Cop
Assistant Registrar
(Academic Branch)



Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomenuniversity.ac.in

Proceeding of the meeting of all chairpersons in Faculty of Engineering and Technology held on 23.01.2024 at 02.00 p.m. in the office of Dean, Faculty of Engineering and Technology, BPSMV, Khanpur Kalan.

The following were present:-

- | | |
|--|---------------------|
| 1. Prof. Vijay Nehra, Professor | Dean, FET |
| 2. Mrs. Sonal, Associate Professor | Chairperson, CSE&IT |
| 3. Dr. Priyanka, Associate Professor | Chairperson ECE |
| 4. Dr. Harinder Pal, Assistant Professor | In-Charge, FT |

After detailed discussion and deliberation, the following decisions were taken:-

1. The structure of Ph.D Course work should be common across all departments in Faculty of Engineering and Technology.
2. The Ph.D Course work of 12 credits shall be offered across the Faculty of Engineering and Technology.
3. The course on "Research Methodology" as well as "Literature Survey and Seminar" having common scheme and syllabi shall be offered across the Faculty of Engineering and Technology.
4. The Course on "Research Publications and Ethics" as offered across the university shall be followed.
5. One departmental domain course shall be offered across each department and among floated list of domain core courses by the department. The student may opt any domain course as per her area of interest. Further, the department may also offer core course of any other specialized area not offered in main domain core course.

Sonal
Mrs. Sonal
Chairperson, CSE&IT

Priyanka
Dr. Priyanka
Chairperson ECE

Harinder Pal
Dr. Harinder Pal
In-Charge, FT

Endst No.: BPSMV/ECE/24/07

Dean, FET
Date:- 23/01/24

A copy of above is forwarded to the following for information and necessary action

1. Chairperson, Department of CSE & IT, BPSMV Khanpur
2. Chairperson, Department of Electronics and Communication Engineering, BPSMV, Khanpur
3. In-Charge, Department of Fashion Technology, BPSMV, Khanpur
4. Office record file, Faculty of Engineering and Technology

Harinder Pal
Dean, FET
23/01/2024

Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonepat), Haryana-131305

Office No. 01263-283124, www.bpswomenuniversity.ac.in

Proceedings of the meeting of PG Board of Studies of Electronics and Communication Engineering:
 A meeting of the PG BOS of Electronics and Communication Engineering was held on 06/02/2024 at 12:00 pm in the office of chairperson, Department of Electronics and Communication Engineering.

The following members were present:-

- | | |
|--|--------------------------------|
| 1. Prof. Priyanka | Outside expert (Online Joined) |
| Department of Electronics and Communication Engineering | |
| DCRUS&T, Murthal | |
| 2. Prof. Sanjeev Dhull | Outside expert (Online Joined) |
| Department of Electronics and Communication Engineering | |
| CJG&ST, Hissar | |
| 3. Prof. Vijay Nehra | Dean, PET |
| Department of Electronics and Communication Engineering | |
| Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan | |
| 4. Dr. Priyanka, Associate Professor | Chairperson, BCE |
| Department of Electronics and Communication Engineering | |
| Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan | |
| 5. Mrs. Sudesh Nandal, Associate Professor | Member |
| Department of Electronics and Communication Engineering | |
| Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan | |
| 6. Dr. Sandeep Dahiya, Associate Professor | Member |
| Department of Electronics and Communication Engineering | |
| Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan | |
| 7. Dr. Krishan Kumar, Associate Professor | Member |
| Department of Electronics and Communication Engineering | |
| Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan | |

The members of PG BOS deliberated & discussed at length the proposed agenda item and resolved the following:

Agenda 1:- Considered and Approved:

The PG BOS considered and approved the scheme and syllabus of M.D. (Electronics and Communication Engineering) course work.

Prof. Priyanka, Prof. Sanjeev Dhull, Prof. Vijay Nehra, Mrs. Sudesh Nandal, Dr. Sandeep Dahiya
 Outside expert, Outside expert, Member, Member, Member

Chairperson

Chairperson

Date: 06/02/24

Khanpur Kalan

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110K

Syllabus phd COURSE WORK.pdf
728K

Minutes of the meeting 06.02.2024.docx
36K

riyanka <priyankait@yahoo.co.in>
To: "Chairperson, ECE" <doece@bpswomenuniversity.ac.in>

Fri, Feb 9, 2024 at 5:28 PM

minutes approved from my side

Dr. Priyanka
Professor
Electronics & Communication Engineering Deptt.
DCR University of Science & Technology, Murthal
Sonapat, Haryana-131039

[quoted text hidden]



Department of Computer Science & Engineering and Information Technology
BPS Mahila Vishwavidyalaya Khanpur Kalan Sonipat
 (A State University Established under the Legislative Act No. 31/2006)
Accredited with 'B++' grade by NAAC

Ref. No BPSMV/CSE/IT/24/.....

Dated

Minutes of the meeting of the PGBOS

The meeting of the PGBOS in Computer Science & Engineering of Department of Computer Science & Engineering and Information Technology, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan (Sonipat) was held on 03.02.2024 at 11:30 AM in the office of the Chairperson, Dept of CSE & IT. The following were present:

- | | |
|---|--|
| 1. Ms. Sonal, Chairperson, Dept. of CSE&IT, BPSMV, Khanpur Kalan | Chairman |
| 2. Dr. Ajit Singh, Prof. Dept. of CSE/IT | Member |
| 3. Prof. Dilbag Singh, CDLU, Sirsa | Outside expert |
| 4. Prof. Shuchita Upadhyaya, KUK, Kurukshetra | Outside expert |
| 5. Mr. Vikas Malik, Assistant Professor, Dept. of CSE/IT | Member |
| 6. Dr. Sunita Rani, Assistant Professor, Dept. of CSE/IT | Member |
| 7. Ms. Sonia Dhull, Ericsson (Security Lead) | Alumni Representative |
| 8. Ms. Meenu Dhania, Senior Associate Consultant
BOSCH Bengaluru | Profession Trade & Industry
Representative (Online) |

The agenda was discussed at length and resolved as under:

- The recommendation of Staff Council held on 02.02.2024 in the Department of CSE/IT has been considered and approved in regard to scheme and syllabus of PhD Course Work of 12 Credits with minor changes.

Meeting ended with a vote of thanks to the chair.

[Signature]
 (Dilbag Singh)
 Outside expert

[Signature]
 (Shuchita Upadhyaya)
 Outside expert

(Ajit Singh)
 Member

(Meenu)
 Member

[Signature]
 (Vikas Malik)
 Member

[Signature]
 (Sunita Rani)
 Member

[Signature]
 (Sonia Dhull)
 Member

[Signature]
 (Sonal)
 Chairman

A copy of the above is forwarded to the following for information:-

- PA to Hon'ble Vice-Chancellor (for kind information of Hon'ble Vice-Chancellor).
- PA to Registrar (for kind information of Worthy Registrar).
- Assistant Registrar (Academic), for information.
- Controller of Examinations for information and necessary action.
- All Members of the PGBOS

Pre-Ph.D course work of the students admitted during academic session 2023-24 has already been started.

[Signature]
 Ms. Sonal
 Chairman, BOS

Therefore, above scheme and syllabus can not be started to the student who have already started their pre-Ph.D course work. The above scheme and syllabus is recommended with academic session 2023-24.

-608-



Department of Fashion Technology
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
Office No. 01263-283126, www.bpsmv.ac.in

BPSMV/FT/24/.....Dated

Proceeding of the meeting of PGBOS of the Department of Fashion Technology held on 05/02/2024 at 3:30 p.m. held on in hybrid mode (online & offline) in the office of Chairperson, FT:

1. Dr. Amandeep Singh Grover, Director (Outside Expert)
NIFT, Sector-23, Panchkula
2. Prof. (Dr.) A.Chatterjee, (Outside Expert)
Department of Textile Technology, NIT, Jalandhar, Punjab
3. Dr. Vijay Yadav, Executive Director (Outside Expert)
Textile Sector Skill Council, Delhi
4. Prof. Vijay Nehra
Dean, Faculty of Engineering & Technology, BPSMV Khanpur Kalan
5. Dr. Harinder Pal,
In-Charge, Department of Fashion Technology, BPSMV, Khanpur Kalan
6. Mr. Ashish Hooda,
Assistant Professor, Department of Fashion Technology, BPSMV, Khanpur Kalan
7. Ms. Pratibha Malik, Assistant Professor, (Alumni)
Department of Design, Amity, Noida

All agenda items were discussed in details in PGBOS of Department of Fashion Technology and resolved the following points:-

1. The Ph.D scheme and syllabus of Department of Fashion Technology was discussed in details to maintain uniformity in structure of Ph.D course work across Faculty of Engineering and Technology and was approved in PGBOS.
2. It was resolved and approved to offer Ph.D Course work of 12 credits across the Faculty of Engineering and Technology in view of the recommendation of Chairpersons of Faculty of Engineering & Technology.
3. The course on "Research Methodology" as well as "Literature Survey and Seminar" having common scheme and syllabi across the Faculty of Engineering and Technology was approved.
4. The Course on "Research Publications and Ethics" as offered across the University shall be followed as per approval of PGBOS.
5. The PGBOS approved list of departmental domain courses along with scheme and syllabi as attached. The students may opt any domain course as per their area of interest. Further, the department may also offer core course of any other specialized area not offered in main domain core course in due course of time.

Consent attached
Prof. Dr. A. Chatterjee
(Attended online)

Consent attached
Dr. Amandeep Singh Grover
(Attended online)

Consent attached
Dr. Vijay Yadav
(Attended online)

Consent attached
Prof. Vijay Nehra
5/2/24

Consent attached
Dr. Harinder Pal
5/2/24

Consent attached
Mr. Ashish Hooda

Consent attached
Ms. Pratibha Malik
(Attended online)

Dean, FET

Copy of the above is forwarded to the following for information and further necessary action:

1. Ps to Hon'ble Vice-Chancellor (for kind information of Hon'ble Vice-Chancellor).
2. PA to Registrar (for kind information of Worthy Registrar).
3. COE for information
4. Assistant Registrar (Academic) for information and necessary action.
5. Office of Dean, FET for record & information
6. Concerned person

Consent attached
Dean, FET

- 689 -



Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
Office No. 01263-283124, www.bpswomenuniversity.ac.in

Proceedings of the meeting of PG Board of Studies of Electronics and Communication Engineering:-

A meeting of the PGBOS of Electronics and Communication Engineering was held on 06/02/2024 at 12:00 pm in the office of chairperson, Department of Electronics and Communication Engineering.

The following members were present:-

- | | |
|---|--------------------------------|
| 1. Prof. Priyanka
Department of Electronics and Communication Engineering
DCRUS&T, Murthal | Outside expert (Online Joined) |
| 2. Prof. Sanjeev Dhull
Department of Electronics and Communication Engineering
GJU&ST, Hissar | Outside expert (Online Joined) |
| 3. Prof. Vijay Nehra,
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan | Dean, FET |
| 4. Dr. Priyanka , Associate Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Chairperson, ECE |
| 5. Mrs. Sudesh Nandal, Associate Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Member |
| 6. Dr. Sandeep Dahiya, Associate Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Member |
| 7. Dr. Krishan Kumar, Assistant Professor
Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur kalan | Member |

The members of PGBOS deliberated & discussed at length the proposed agenda item and resolved the following:

Agenda 1: - Considered and Approved.

The PGBOS considered and approved the scheme and syllabus of Ph.D (Electronics and Communication Engineering) course work.

Prof. Priyanka
Outside expert

Prof. Sanjeev Dhull
Outside expert

Vijay Nehra
Prof. Vijay Nehra
Dean, FET

Sudesh
Mrs. Sudesh Nandal
Member

Sandeep
Dr. Sandeep Dahiya
Member

Kumar
Dr. Krishan Kumar
Member

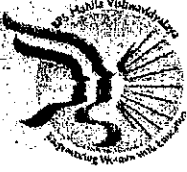
Priyanka
Chairperson

Endst. No BPSMV/ECE/24/61
Copy to:-

Dated:- 06/02/2024

- 1 P.S to VC for kind information of the Vice-Chancellor, BPSMV, Khanpur Kalan.
- 2 All members of PG BOS for information.

- 690 -

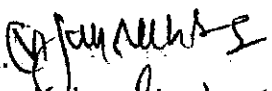
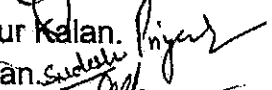
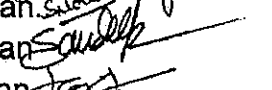





Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

Office No. 01263-283124, www.bpswomenuniversity.ac.in

Minutes of Meeting


A meeting of Staff Council was held on 29/01/2024 at 12:30 pm in the office of the Chairperson, Department of Electronics and Communication Engineering. The following members were present in the meeting.

1. Dr. Vijay Nehra, Professor & Dean, FET, BPSMV, Khanpur Kalan. 
2. Dr. Priyanka, Associate Prof & Chairperson, ECE, BPSMV, Khanpur Kalan. 
3. Mrs. Sudesh Nandal, Associate Prof., ECE, BPSMV, Khanpur Kalan. 
4. Dr. Sandeep Dahiya, Associate Prof., ECE, BPSMV, Khanpur Kalan. 
5. Dr. Rajender Kumar, Associate Prof., ECE, BPSMV, Khanpur Kalan. 
6. Dr. Krishan Kumar, Asstt. Prof., ECE, BPSMV, Khanpur Kalan. 

The following matter was discussed and resolved:-

Agenda 1:- To Finalize the Scheme and Syllabus of the Pre-Ph.D course work.

Considered and Resolved: - A draft of scheme and syllabus of Pre-Ph.D course work was put up before the staff council. The Members of staff Council deliberated and discussed the matter at length and the same is considered and approved. A copy of the scheme and syllabus is attached herewith.


Secretary
Departmental Committee

Ref No. BPSMV/ECE/23/

Dated:-

Copy to:-

1. All members of the staff council, Dept. of ECE, for information.
2. Office Record file, Dept. of ECE


Chairperson

- 691 -

MINUTES

An urgent meeting of Departmental Staff Council was held on 02.02.2024 at 03:00 PM in the office of Chairperson. The following agenda items were discussed and resolved unanimously by the members of DSC:

1. The structure of the Ph.D course work would be common across all departments of FET carrying credit score of 12.
Further, the scheme & syllabus of Pre-Ph.D course work proposed as per UGC guidelines would be implemented henceforth.
2. The DSC resolved that our department be part of conducting CUET-PG-2024 to facilitate the uniform admissions for better outreach of students. Hence, it was recommended by DSC to register our department (University) with National Testing Agency (NTA) to enable admissions in PG courses for forthcoming 2024 admissions.

Not attended
Prof. Ajit Singh

Soni
Ms. Soni
2/2/24

Vikas Malik
Mr. Vikas Malik

Saroha
Dr. Vinod Saroha
2/2/24

Mamta
Dr. Mamta Saroha
2/2/24

Sunita Rani
Dr. Sunita Rani
02/02/24



Department of Fashion Technology
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonepat), Haryana-131305

Office No. 01263-283126, www.bpsmv.ac.in

Proceeding of the meeting of Staff Council of Department of Fashion Technology held on 02/02/2024 at 11:00 a.m. in the office of Chairperson, FT:

After detailed discussion and deliberation, staff council of Department of Fashion Technology resolved the following points in reference to letter no. BPSMV/ECE/24/07 received from office of Dean, FET:-

1. The Draft of Ph.D scheme and syllabus of Department of Fashion Technology is designed to maintain uniformity in structure of Ph.D course work across Faculty of Engineering and Technology and to be put up for PGBOS for suggestion and approval of the same.
2. It is recommended to have common Pre-Ph.D scheme framework of 12 credits across the Faculty of Engineering and Technology in view of the recommendation of Chairpersons of Faculty of Engineering & Technology. Same will be put forward to PGBOS for approval.
3. The course on "**Research Methodology**" as well as "**Literature Survey and Seminar**" having common scheme and syllabi across the Faculty of Engineering and Technology is considered and to be implemented after approval from PGBOS, FET and Academic Council.
4. The Course on "**Research Publications and Ethics**" as offered across the University shall be followed as per resolution of Academic Council.
5. The list of departmental domain courses along with scheme and syllabi as attached will be submitted for approval from PGBOS. The students may opt any domain course as per their area of interest. Further, the department may also offer core course of any other specialized area not offered in main domain core course in due course of time.

July 2/2/24
Dr. Harinder Pal
Assistant Professor

Ashish
Mr. Ashish Hooda
Assistant Professor

July 2/2/2024
In-Charge, FT

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Department of Education

B.P.S.MAHILA VISHWAVIDYALAYA, KHANPUR KALAN, SONEPAT-131305
(A State University Established under the Legislative Act No. 31/2006)

01263-283627

Fax: 01263-283627

Ref. No. I.T.T.R./staff Council/2023/

Dated: 24.07.2023

Minutes of the meeting of the Staff Council held on 24.07.2023 at 12:30 am under the Chairmanship of Dr. Suman Dalal, Chairperson, Department of Education, BPSMV, Khanpur Kalan, Sonapat.

The Following were present:

1.	Dr. Suman Dalal, Chairperson	In Chair
2.	Dr. Priya, Associate Professor	Member
3.	Dr. Sushil Kumar, Assistant Professor	Member
4.	Dr. Anu Balhara, Associate Professor	Member Secretary
5.	Dr. Sarla, Associate Professor	Member
6.	Dr. Monika, Associate Professor	Member
7.	Dr. Anju Bala, Assistant Professor (T)	Member
8.	Dr. Indu Bala, Assistant Professor (T)	Member

At the beginning the Chairperson of the Department (in Chair) welcomed the staff members and briefed them regarding the agenda items of the meeting. All the staff members were actively involved in the deliberations and discussions.

Agenda Item 1: Consideration and approval of the progress report for Ph. D. (Education) submitted by Ms. Manju Phor, Ph.D Scholar period of progress report from 06.01.2023 to 06.07.2023.

Approved

Agenda Item 2: -To consider the synopsis of following Ph.D Scholar (2021-22) for DRC:-

Sr. No.	Name of the Scholar	Name of the Father	Decision by the Staff Council
1.	Ms. Seema Devi	Sh. Ramesh Kumar	Recommended for DRC
2.	Ms. Ritu Bala	Sh. Lakshman Dass	Absent
3.	Ms. Reena Devi	Sh. Raghibir	Recommended for DRC
4.	Ms. Vandana	Sh. Mahender	Absent

Table Agenda Item 3: Consideration and approval of the progress report for Ph. D. (Education) submitted by Ms. Indu Bala, Ph.D Scholar period of progress report from 06.07.2021 to 05.01.2022, 07.07.2022 to 08.01.2023 and 06.01.2022 to 06.07.2022

Approved

Dr. Priya

Dr. Sushil Kumar

Dr. Anu Balhara

Dr. Reena

Dr. Sarla

Dr. Monika

Dr. Anju Bala

Dr. Indu Bala

Chairperson



Department of Education

B.P.S.MAHILA VISHWAVIDYALAYA, KHANPUR KALAN, SONEPAT-131305
(A State University Established under the Legislative Act No. 31/2006)

01263-283627

Fax: 01263-283627

Ref. No. I.T.T.R./staff Council/2022/

Dated: 21.11.2022

Minutes of the meeting of the Staff Council held on 21.11.2022 at 1:00 pm under the Chairmanship of Dr. Suman Dalal, Chairperson, Department of Education, BPSMV, Khanpur Kalan, Sonipat.

The Following were present:

1.	Dr. Suman Dalal, Chairperson	In Chair
2.	Dr. Priya	Member
3.	Dr. Anu Balhara,	Member Secretary
4.	Dr. Reena Rani	Member
5.	Dr. Sarla	Member
6.	Dr. Monika	Member
7.	Dr. Anju Bala	Member
8.	Dr. Sunita	Member
9.	Dr. Anisha	Member
10.	Dr. Sushila	Member
11.	Dr. Goldy Gupta	Member
12.	Dr. Manjeet	Member
13.	Mr. Manoj	Member
14.	Dr. Rajkumari	Member
15.	Ms. Nidhi Yadav	Member
16.	Ms. Suman Sheoran	Member
17.	Dr. Suman Ranga	Member


At the beginning the Chairperson of the Department (in Chair) welcomed the staff members and briefed them regarding the agenda items of the meeting. All the staff members were actively involved in the deliberations and discussions.


1. Consideration and approval of synopsis presentation for registration in Ph.D. programme of those research scholars whose synopsis was rejected or modified by the staff council on 06.09.2022 for session 2020-21. The list of students is given below:

Sr.No.	RollNo.	Name of the Scholar	Name of the Father	Decision by the Staff Council
1.	20061009	Seema Rani	Mr. Ramesh Kumar	Rejected and Revised Synopsis to be submitted and presented for next DSC
2.	20061007	Reena Devi	Mr. Ragbir	Rejected and Revised Synopsis to be submitted and presented for next DSC
3.	20061012	Poonam Devi	Mr. Manphool Singh	Recommended for DRC
4.	20061010	Ritu Bala	Mr. Lakshman Dass	Rejected and Revised Synopsis to be submitted and presented for next DSC
5.	20061005	Vandana	Mr. Mahender	Rejected and Revised Synopsis to be submitted and presented for next DSC


(21)

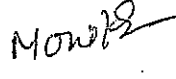
6.	20061011	Vimal	Mr. Ghasi Ram	Recommended for DRC
7.	20061001	Kusum	Mr. Jaibhagwan	Recommended for DRC
8.	20061003	Neelam	Sh. Satyanarain	Recommended for DRC

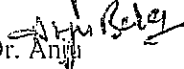

Dr. Priya

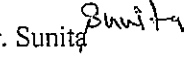

Dr. Anu Balhara


Dr. Reena



Dr. Sarfa



Dr. Monika

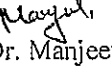

Dr. Anjali

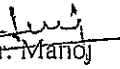

Dr. Sunita

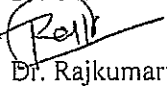
Dr. Sushila

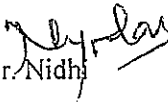

Dr. Anisha

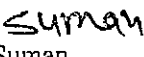

Dr. Gordy Gupta

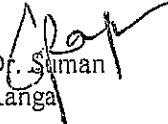

Dr. Manjeet


Mr. Ivanoj


Dr. Rajkumari


Dr. Nidhi


Ms. Suman


Dr. Suman
Ranga

Dr. Suman Dalal
Chairperson

DEPARTMENT OF EDUCATION

B.P.S.MAHILA VISHWAVIDYALAYA, KHANPUR KALAN, SONEPAT-131305
(A State University Established under the Legislative Act No. 31/2006)

☎01263-283627

Fax: 01263-283627

Ref. No.DOE/24/2882 A)

Dated:4/1/2024

Minutes of Meeting

Minutes of Meeting of the staff Council held on Jan 4, 2024 through online mode at 1:00 Pm under the Chairmanship of Dr Anu Balhara (Chairperson of Department of Education).

Agenda item : To reconsider the synopsis titled 'Study Habits and General Well -Being in relation to mobile phone addiction among Undergraduate Students' of Vandana (PRN - 2020041100041127) for presentation .

Resolution: The agenda item was approved and recommended for DRC.

The following are the members who have attended the meeting through online mode.

1. Dr Varuna Tehlan Dahiya *Varuna*
2. Dr Sarla *Sarla*
3. Dr Sushil Kumar *Sushil*
4. Dr Poonam Poonia
5. Dr Suman Ranga *Suman*
6. Dr Jyotika *Jyotika*
7. Ms Manoj *Manoj*
8. Dr Nidhi Yadav *Nidhi*
9. Dr Goldy Gupta *Goldy*

4/1/2024
Chairperson
Department of Education
BPSMV



Department of Education

B.P.S.MAHILA VISHWAVIDYALAYA, KHANPUR KALAN, SONEPAT-131305
(A State University Established under the Legislative Act No. 31/2006)

01263-283627

Fax: 01263-283627

Ref. No. I.T.T.R./staff Council/2023/

Dated:

Minutes of the meeting of the Staff Council held on 11.07.2023 at 11:30 am under the Chairmanship of Dr. Suman Dalal, Chairperson, Department of Education, BPSMV, Khanpur Kalan, Sonapat.

The Following were present:

1.	Dr. Suman Dalal, Chairperson	In Chair
2.	Dr. Priya, Associate Professor	Member
3.	Dr. Sushil Kumar, Assistant Professor	Member
4.	Dr. Anu Balhara, Associate Professor	Member Secretary
5.	Dr. Varuna, Associate Professor	Member
6.	Dr. Sarla Rani, Associate Professor	Member
7.	Dr. Monika, Associate Professor	Member
8.	Dr. Poonam, Assistant Professor	Member
9.	Dr. Anju Bala, Assistant Professor (T)	Member
10.	Dr. Sunita Devi, Assistant Professor (T)	Member
11.	Dr. Anisha, Assistant Professor (T)	Member
12.	Dr. Jyotika, Assistant Professor (T)	Member
13.	Dr. Sushila, Assistant Professor (T)	Member
14.	Dr. Goldy Gupta, Assistant Professor (T)	Member
15.	Dr. Manjeet, Assistant Professor (T)	Member
16.	Dr. Rajkumari, Assistant Professor (T)	Member
17.	Ms. Nidhi Yadav, Assistant Professor (T)	Member
18.	Dr. Suman Sheoran, Assistant Professor (T)	Member
19.	Dr. Suman Ranga, Assistant Professor (T)	Member

At the beginning the Chairperson of the Department (in Chair) welcomed the staff members and briefed them regarding the agenda items of the meeting. All the staff members were actively involved in the deliberations and discussions.

Agenda Item 1. To Consider the Progress Report of Ph.d. submitted by the following Ph.D Scholars

Sr. No	Name of Ph.D Scholar	Name of Supervisor	Period of Progress Report
1.	Monika Malik	Dr. Reena Rani	29.12.2022 to 29.06.2023
2.	Nidhi Yadav	Dr. Poonam Punia	06.07.2022 to 05.01.2023
3.	Manju Phor	Dr. Poonam Punia	06.07.2022 to 05.01.2023
4.	Jyoti Singh	Dr. Poonam Punia	08.10.2022 to 21.05.2023

Approved

[Handwritten signatures and initials]

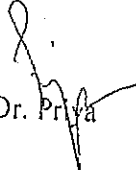




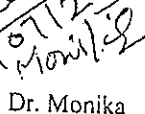
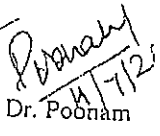
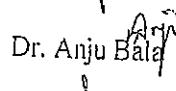
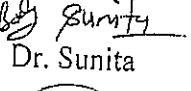
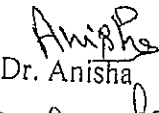
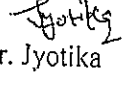
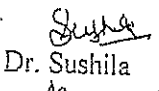
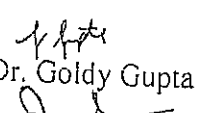
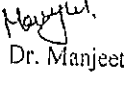
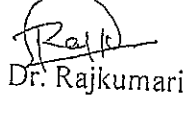
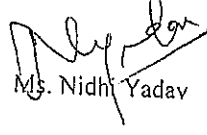
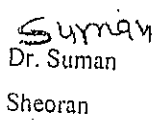
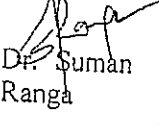
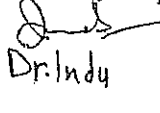
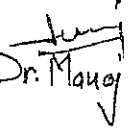
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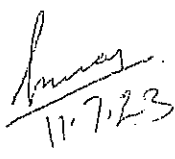
Agenda Item 2. To discuss the starting of the certificate course and diploma course both in Early Childhood Care and Education from the current session i.e. 2023-24 as Add on Course.

The Agenda was approved by all the faculty members present in the staff council held on 02.05.2023 in the office of the Chairperson and Dean, Faculty of Education Dr. Suman Dalal that the certificate course and diploma course both in Early childhood Care and Education may be started in the Department of Education from the current session i.e. 2023-24.

Agenda item 3. To give the consent to Dr. Sushil Kumar, Assistant Professor, Department of Education, BPSMV, KK to act as the Research Co-Supervisor along with Dr. Poonam Punia, Assistant Professor, Department of Education, on the request of Ms. Nidhi, Research Scholar, Registration No. 20105041100010943 with immediate effect, with the consent of both Dr. Poonam Punia and Dr. Sushil Kumar.

All the faculty members approved the agenda.

 Dr. Priya	 Dr. Sushil Kumar	 Dr. Anu Balhara	 Dr. Varuna	 Dr. Sarla	 Dr. Monika	 Dr. Poonam
 Dr. Anju Bala	 Dr. Sunita	 Dr. Anisha	 Dr. Jyotika	 Dr. Sushila	 Dr. Goldy Gupta	
 Dr. Manjeet	 Dr. Rajkumari	 Ms. Nidhi Yadav	 Dr. Suman Sheoran	 Dr. Suman Ranga	 Dr. Indu	 Dr. Manoj


11.7.23

Department of Education

BPS Mahila Vishwavidyalaya Khanpur Kalan Sonipat -131305
(A State University Established under the legislative Act No. 31/2006)

Ph No. 01263 -283627

Fax: 01263-283627

Minutes/Proceedings of Faculty of Education Meeting

The Faculty of Education meeting was held on Feb,20, 2024 . The following members were present in the meeting.

Sr. No.	Name of the Member of Faculty of Education	
1.	Dr Suman Dalal, Associate Professor, DOE	Dean Faculty of Education, Chairperson
2.	Dr Anu Balhara, Associate Professor, DOE	Internal Member
3.	Dr Varuna, Associate Professor, DOE (online)	Internal Member
4.	Dr Reena, Assistant Professor, DOE	Internal Member
5.	Ms Sangeeta Sapra, Principal (online) Tau Devi Lal Government College for Women ,Murthal Sonipat	Outside Member
6.	Dr Sandeep Khandhwal, Principal Government College for Women Madlauda Panipat	Outside Member
7.	Registrar	Secretary

The following are the resolutions pertaining to the various agendas outlined in Faculty of Education meeting.

AGENDA-1 : Registration of the PhD scholars for batch 20-21 after successful completion of their Course Work.

Resolution: This agenda item is considered and approved

Serial No.	Name of the Student	PRN no/Enrol/ Admission No.	Name of the supervisor allocated	Title of the Proposed PhD Work	JRF/ SRF	Modified Title of the Research Proposal
1.	Kusum	201504110 0012756	Dr Suman Dalal	EFFECT OF COGNITIVE DISSONANCE AND TOKEN ECONOMY ON LEARNER AUTONOMY OF SECONDARY SCHOOL STUDENTS	No	Effect of Token Economy on Cognitive Dissonance and Learning Autonomy among Secondary School Students
2.	Neelam	201704110 0013127	Dr Yogesh Chander	EFFECTIVENESS OF EXPERIENTIAL LEARNING PROGRAMME ON TECHNOLOGY ACCEPTANCE AND ACADEMIC ACHIEVEMENT IN COMPUTER SCIENCE AMONG SECONDARY SCHOOL STUDENTS IN HARYANA	No	Effectiveness of Experiential Learning Programme on the Academic Achievement in Computer Science among Secondary School Students in Haryana .

[Handwritten signatures and marks]

Department of Education

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Fax: 01263-283627

3.	Neelam Rani	201904110 0001546	Dr Suman Dalal	EFFECTIVENESS OF MINDFULNESS BASED COGNITIVE THERAPY ON IMPULSIVE BEHAVIOR, ROLE CONFLICT, SOCIAL ACCEPTABILITY OF UNDER GRADUATE STUDENTS	Yes	Effectiveness of Mindfulness based Cognitive Therapy on Impulsive Behaviour, Role Conflict and Social Acceptability of under graduate students.
4.	Jyoti	201904110 0001682	Dr Poonam Punia	RESILIENCE, DECISION MAKING ABILITY AND ACADEMIC PERFORMANCE AMONG ADOLESCENTS EXPLORING THE ROLE OF PARENTING PRACTICES, INTERNAL AND EXTERNAL FACTOR	No	Exploring the Role of Parenting Practices: Internal and External factors with respect to Resilience, Decision Making Ability and Academic Performance among Adolescents
5.	Vandana	202004110 0041127	Dr Anu Balhara	STUDY HABITS AND GENERAL WELL-BEING IN RELATION TO MOBILE PHONE ADDICTION AMONG UNDERGRADUATE STUDENTS	No	Study Habits and General Well-Being in Relation to Mobile Phone Addiction Among Undergraduate Students
6.	Tapasya Gehlawat	202004110 0041135	Dr. Suman Dalal	TO STUDY THE EFFECT OF THINKING MAPS AND EMBODIED LEARNING ON CRITICAL THINKING AND SCHOLASTIC ACHIEVEMENT OF 9 TH GRADE STUDENTS.	Yes, but not available	Effect of Thinking Maps and Embodied Learning on Critical Thinking and Scholastic Achievement of Ninth Grade Students.
7.	Reena Devi		Dr Anu Balhara	A STUDY OF THE EDUCATIONAL THOUGHTS OF DR. SARVEPALLI RADHA KRISHNAN AND THEIR RELEVANCE IN THE PRESENT SYSTEM OF EDUCATION IN CONTEXT NEP-2020 IN INDIA	No	Study of the Educational Thoughts of Dr Sarvepalli Radha Krishnan and their Relevance in the Present System of Education.
8.	Seema Rani	202004110 0041166	Dr. Monika	A STUDY OF PARENTAL ENCOURAGEMENT IN RELATION TO MENTAL HEALTH, STUDY HABITS AND CAREER ASPIRATION OF SENIOR SECONDARY SCHOOL STUDENTS.	No	Mental Health, Study Habits and Career Aspiration of Senior Secondary School Students in relation to their Parental Encouragement.
9.	Ritu Rani	202004110 0041151	Dr Varuna	IMPACT OF LANGUAGE ACQUISITION THROUGH MOTOR PLANNING (LAMP) APPROACH ON	No	Impact of Language Acquisition through Motor Planning (Lamp) Approach of Language & Communication Development

70/

21/12/2021

Department of Education

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Fax: 01263-283627

				LANGUAGE & COMMUNICATION DEVELOPMENT AMONG STUDENTS WITH AUTISM SPECTRUM DISORDER.		Among Students with Autism Spectrum Disorder.
10.	Vimal Sharma	202004110 0041182	Dr Reena Rani	RAMIFICATION OF HELICOPTER PARENTING ON PERSONALITY REASONING ABILITY AND PSYCHOLOGICAL CAPITAL AMONG SECONDARY SCHOOL STUDENTS	No	Personality Reasoning Ability and Psychological Capital Among Secondary School Students in relation to Helicopter Parenting.
11.	Poonam Devi	202004110 0041197	Dr Varuna	समकालीन वैश्विक चुनौतियों के समाधान में शिक्षा के वैदिक दर्शन की प्रसिगिता	No	आधुनिक समाज में सतत विकासी लक्ष्य प्राप्ति में वैदिक शिक्षा-दर्शन का महत्व।
12.	Soniya Dahiya	202004110 0041201	Dr Varuna	EFFECT OF AN INTERVENTION PROGRAMME IN DEVELOPING RESILIENT BEHAVIOUR IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER	No	Effect of an Intervention Programme in Developing Resilient Behaviour in Children with Attention Deficit Hyperactivity Disorder

AGENDA-2 : Consideration and approval of the request of the research scholar Ms. Nidhi Yadav (Supervisor: Dr Poonam Poonia) to appoint Dr Sushil Kumar as Co-Supervisor .

Resolution: This agenda item is considered and approved.

APD
20/02/2024
Dr Anu Balhara
Member
Dept. of Education

Dr Varuna Tehlan
Dahiya
DOE (Member)

Rupa
Dr Reena
(Member)

Ms Sangeeta Sapra
(Member)

Randhawa
24/1/24
Dr Sandeep
Khandhwal
(Member)

M. Malik
20/2/24
Registrar
(Secretary)

Suman Dalal
Dr. Suman Dalal
Chairperson, Faculty
of Education

DEPARTMENT OF COMMERCE

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
(Sonapat) Haryana-131305

Minutes of Meeting

A meeting of the Research Advisory Committee (RAC) of Department of Commerce was held on 02/11/2023 at 11.00 a.m in office of the Chairperson, Department of Commerce.

The following members were present :-

- | | |
|------------------------|---------------------|
| 1) Dr. Seema Malik | Supervisor |
| 2) Dr. Bhavna Sharma | Chairperson, Member |
| 3) Dr. Ishani Patharia | Member |

Following Decisions were taken:-

The RAC unanimously evaluated the synopsis report of Ph.D Scholar named Ms. Mahak Jari (PRN 20222041100030712) and directed the concern student regarding some minor changes in the report.

Seema Malik
2/11/23
Dr. Seema Malik
Supervisor

Ishani Patharia
Dr. Ishani Patharia
Member

Bhavna Sharma
23/11/2023
Dr. Bhavna Sharma
Chairperson

Department of Commerce
Minutes of Meeting of Departmental Staff Committee

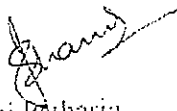
The meeting of DSC was held on 03-11-2023 at 1:00 p.m. in room no. 312, Conference Hall of the Department of Commerce.

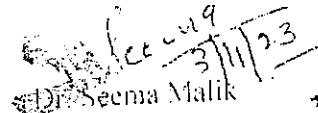
The following members attended the meeting:

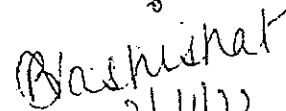
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|------------------------|---|------------------------------|
| 1. Dr. Bhavna Sharma | : | Chairperson, Commerce |
| 2. Dr. Seema Malik | : | Assistant Professor, DOC |
| 3. Dr. Ishani Patharia | : | Assistant Professor, DOC |
| 4. Dr. Anjana | : | Assistant Professor (T), DOC |
| 5. Ms. Ankita | : | Assistant Professor (T), DOC |
| 6. Ms. Neha | : | Assistant Professor (T), DOC |
| 7. Ms. Swati | : | Assistant Professor (T), DOC |

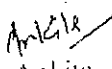
The following decisions were taken:


The Departmental Staff Council unanimously evaluated the synopsis entitled "What entices people to buy branded watches? Investigating through the lens of masstige marketing" of Ph.D Scholar named Ms. Mahak Jam (PRN 20222041100030712) and approved the same.

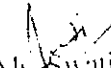

Dr. Ishani Patharia
Assistant Prof.

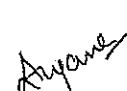

Dr. Seema Malik
Assistant Prof.


Dr. Bhavna Sharma
Chairperson, Commerce


Ms. Ankita
AP(T)


Ms. Neha
AP(T)


Ms. Swati
AP(T)


Dr. Anjana
AP(T)

Special Invitees:

- 1) Ms. Meenakshi
- 2) Ms. Nancy
- 3) Ms. Seema
- 4) Ms. Ashu
- 5) Ms. Lakshaya

DEPARTMENT OF COMMERCE

Minutes of the Meeting of Departmental Research Committee(DRC) held on 09/02/2024

Meeting of the Departmental Research Committee (DRC-Commerce) was held on 09/02/2024 at 12.05 p.m.(Online) in the room of Chairperson, (315) of Department of Commerce, Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan, Sonapat.

The following members were present:-

- | | |
|-----------------------|----------------|
| • Dr. Bhavna Sharma | Chairperson |
| • Prof. Ritu Jechal | Outside Expert |
| • Dr. Ishani Patharia | Member |
| • Dr. Seema Malik | Supervisor |

The following decision were taken:-

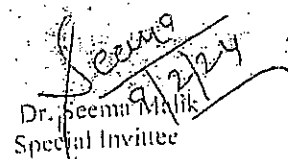
1) The committee evaluated draft research proposal of Ms. Mahak Jain D/o Sh. Ajay Kumar Jain Ph.D. Scholar, Roll No. 22161001, PRN-2022041100030712 and after detail with the candidate on relative draft research proposal, the committee approved the title "What entices people to buy branded watches? Investigating through the lens of masstige marketing" and synopsis of Ms. Mahak Jain.

2) The committee evaluated draft research proposal of Ms. Kirti D/o Sh. Parveen Kumar Vasuja Ph.D. Scholar, Roll No. 22161003, PRN-2017041100012503 and after detail with the candidate on relative draft research proposal, the committee approved the title "Fintech Frontier in India: Unraveling Users' Preferences, Adoption Drivers, Usage Trends, and Performance Implications" and synopsis of Ms. Kirti.

The case of Ms. Anshu Research Scholar was also discussed in the meeting. The members discussed the case in detail and looking at her family health and personal problem, it was recommended to give her extension after approval of competent authority.

Meeting ended with a vote of thanks.


Prof. Ritu Jechal


Dr. Seema Malik
Special Invitee

Dr. Ishani Patharia
Member


Dr. Bhavna Sharma
Chairperson-Commerce

DEPARTMENT OF COMMERCE

Minutes of the Meeting of Post Graduation Board of Studies (PGBoS-Commerce) held on 19/02/2024

Meeting of the PGBoS-Commerce was held on 19/02/2024 at 09.30 a.m. (Blended Mode) in the room of Chairperson, (315) of Department of Commerce, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat.

The following members were present:-

• Dr. Bhavna Sharma	:	Chairperson
• Prof. Luxmi Malodia	:	Outside Expert
• Prof. Hawa Singh	:	Outside Expert
• Dr. Seema Malik	:	Member
• Dr. Ishani Patharia	:	Member
• Dr. Satish Kumar	:	Member

The Following decision was taken:-

- 1) The committee evaluated research proposal of Ms. Mahak Jain D/o. Sh. Ajay Kumar Jain Ph.D Scholar. Roll No. 22161001, PRN-2022041100030712 and after detail with the candidate on relative research proposal, the committee approved the title "A comparative study of purchase behaviour of customers towards traditional watches and smart watches with reference to masstige marketing in Haryana" and synopsis of Ms. Mahak Jain and recommended for the same may be placed to upcoming meeting of Faculty of Commerce and Management. Meeting ended with a vote of thanks.

Dr. Satish Kumar

Dr. Ishani Patharia

Dr. Seema Malik

Prof. Luxmi Malodia

Prof. Hawa Singh

Dr. Bhavna Sharma

Information regarding academic council meeting

10 messages

Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in> Tue, Feb 20, 2024 at 2:31 PM
To: doms@bpswomenuniversity.ac.in, officehospitality@gmail.com, officecommerce49@gmail.com, anshudhansoia@gmail.com, lpshita Bansal <lbansalindia@gmail.com>, gcwmadlauda@gmail.com, GCWMURTHAL@gmail.com, seema.malik2306@gmail.com

Respected members of Faculty of Commerce & Management

Keeping in view the shortage of time due to upcoming Academic Council meeting on 26-02-2024, the agenda received from the Chairperson, Department of Commerce is forwarded to all members of the Faculty of Commerce & Management for consideration and approved via circulation, please.

All the members are requested to send their views in item of approval/disapproval latest by 20-02-2024 upto 10:00 pm positively.

Thanks & regards

O/o Dean
FCM

Anshu Dhansoia <anshudhansoia@gmail.com> Tue, Feb 20, 2024 at 3:21 PM
To: Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>

Respected Ma'am


Kindly share the agenda.

Thanks and Regards.

Dr. Anshu Bhardwaj,
Associate Professor,
Department of Management Studies,
BPS Mahila Vishwavidyalaya,
Khanpur Kalan,
Sonipat
9255261003
[Quoted text hidden]

Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in> Tue, Feb 20, 2024 at 4:04 PM
To: doms@bpswomenuniversity.ac.in, officehospitality@gmail.com, officecommerce49@gmail.com, anshudhansoia@gmail.com, lpshita Bansal <lbansalindia@gmail.com>, gcwmadlauda@gmail.com, GCWMURTHAL@gmail.com, seema.malik2306@gmail.com

[Quoted text hidden]

 fwdtoarrangethemeetingoffacultyofcommerceandmanag.zip
2843K

Anshu Dhansoia <anshudhansoia@gmail.com> Tue, Feb 20, 2024 at 4:14 PM
To: Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>
Cc: DOMS@bpswomenuniversity.ac.in, GCWMURTHAL@gmail.com, lpshita Bansal <lbansalindia@gmail.com>, gcwmadlauda@gmail.com, officecommerce49@gmail.com, officehospitality@gmail.com, seema.malik2306@gmail.com

Respected Sir/Ma'am

The agenda received from Department of Commerce is approved.

Thanks and Regards.

Dr. Anshu Bhardwaj,
Associate Professor,
Department of Management Studies,
BPS Mahila Vishwavidyalaya,
Khanpur Kalan,
Sonipat
9255261003
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TDLGCW-MURTHAL <gcwmurthal@gmail.com> Wed, Feb 21, 2024 at 10:11 AM
To: Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>

Respected Sir/Madam,

The minutes are approved as proposed.

Principal
Tau Devi Lal Govt. College for Women,
Murthal (Sonapat)

[Quoted text hidden]

department of management studies <doms@bpswomenuniversity.ac.in> Wed, Feb 21, 2024 at 10:32 AM
To: Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>

Respected madam
Approved.


[Quoted text hidden]

707

Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>
To: Bhavna Sharma <bhavnasharma.univ@gmail.com>, pankaj misra <pankajchefbpsmv@gmail.com>

Wed, Feb 21, 2024 at 10:37 AM

[Quoted text hidden]

 fwdtoarrangethemeetingoffacultyofcommerceandmanag.zip
2843K

pankaj misra <pankajchefbpsmv@gmail.com>
To: Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>

Wed, Feb 21, 2024 at 10:55 AM

Respected Madam, approved as proposed.

Furthermore, this is humbly submitted that this email I'd i.e., office hospitality@ gmail.com is not in use. Now, the official email of the department is-
dohm@bpswomenuniversity.ac.in

With Regards

Dr. Pankaj Misra

With Regards

Dr. Pankaj Misra

[Quoted text hidden]

Bhavna Sharma <bhavnasharma.univ@gmail.com>
To: Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>
Cc: pankaj misra <pankajchefbpsmv@gmail.com>

Wed, Feb 21, 2024 at 10:56 AM

Approved.

[Quoted text hidden]

Seema Malik <seema.malik2306@gmail.com>
To: Dean Faculty of Commerce & Management <dfcm@bpswomenuniversity.ac.in>
Cc: doms@bpswomenuniversity.ac.in, officehospitality@gmail.com, officecommerce49@gmail.com, anshudhansoia@gmail.com, lpshita Bansal <lbansalindia@gmail.com>, gcwmadlauda@gmail.com, GCWWMURTHAL@gmail.com

Wed, Feb 21, 2024 at 11:36 AM

Respected madam
Agenda item is approved.
Regards

Dr. Seema Malik
Assistant Professor
Department of Commerce,
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana.

[Quoted text hidden]



Subject: Establishment of the Department of Psychology

Consequent to the communication received from the Department of Higher Education, Government of Haryana and discussion with the Honourable Vice Chancellor, the proposal for establishment of the Department of Psychology at BPSMV is made as follows:

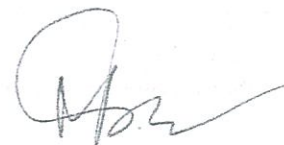
The Proposal**Objectives**

The proposed 'Department of Psychology' is being instituted with the following objectives:

- ⊕ to offer Graduation, Post-Graduation and Doctoral programmes to the prospective students
- ⊕ to offer consultancy services to the students, staff and people from neighboring adopted villages situated in the vicinity of BPSMV
- ⊕ to offer counseling (both career and life) services to the school and university students
- ⊕ to support and strengthen ongoing social sciences academic programmes through interdisciplinary approach
- ⊕ to facilitate better career opportunities in both clinical and theoretical psychology for the female students of BPSMV

Rationale

- ⊕ The rationale for establishing the Department of Psychology at BPSMV lies in the genesis of the University itself. Today's BPSMV is the manifestation of the seminal idea conceived by Bhagat Phool Singh ji on empowerment of women and girls through education. The empowerment desired was not only physical, economical and social in nature but psychological as well. The erstwhile Gurukul founded by Bhagat ji and carried further by Behan Subhashini Devi ji trained its students to be psychologically empowered and emancipated. In fact psychological emancipation and empowerment preceded their all other forms of empowerment. The context of modernity demands our students to be in tune with the newer dimensions of progress and growth in terms of career. BPSMV intends its students to be guided by a judicious mix of tradition and modernity. The University wants to produce students modern in thoughts and actions but rooted in Indian traditions and value system. We believe that the intended objective would be better accomplished with the help of exposure of our students to psychological dimensions of human behavior and



experiences. Hence the proposed Department of Psychology would prove to be a milestone in achieving the stated objectives of BPSMV.

- ‡ Since BPSMV offers academic programmes in majority of social sciences subjects at graduation and school level, the proposed Department of Psychology would strengthen better understanding of social sciences and humanities and also will broaden the job prospects of potential students.
- ‡ There has been a constant demand from the general public and students' community for introduction of psychology as the subject of study at BPSMV.
- ‡ Since the affiliated colleges of BPSMV offer psychology as one of the subjects, it is incumbent on part of the University to have a Department of Psychology under the aegis of its faculty of social sciences.

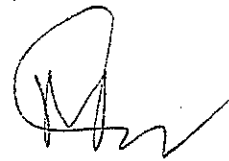
Teaching Staff Required

- ‡ Professor 01
- ‡ Associate Professor 02
- ‡ Assistant Professor 04

Infrastructure and Support Staff Required

The Department of Psychology shall require the following to start its operations:

- ‡ Classrooms 02
- ‡ Laboratory 01
- ‡ Office Assistant cum Typist 01
- ‡ Peon 01
- ‡ Computer Set 01
- ‡ Printer 01
- ‡ Office Tables 03
- ‡ Executive Chairs 02
- ‡ Office Chairs 10
- ‡ Sofa Set 01
- ‡ center Tea Table 01
- ‡ Book Racks 02
- ‡ Incumbency Board 01



Financial Implications

The tentative financial implications in terms of expenditure listed below shall be borne out of the budget allocated by the University and sanctioned by the State Government. The details shall be furnished by the University's Establishment Teaching branch.

Sr. No.	Name of the Department/ Institute	Name of Post	No. of Posts	Pay Scale/ Pay level of Post	Total Annual Financial implication
1	Psychology	Professor	01	144200- 218200/- Level- 14	223068 x 12 = 2676816
		Associate Professor	02	131400- 217100/- Level- 13A	203356 x12 x2 = 4880544/-
		Assistant Professor	04	57700- 182400/- Level- 10	89858 x12 x4 = 4313184/-
			GRAND TOTAL		11870544/-

Conclusion

The Honourable Vice Chancellor is requested to consider the aforesaid proposal and approve (if deemed to be appropriate) the same for further action on the plan stated.



Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan (Sonapat), Haryana-131305

Office No. 01263-282333, www.bpsmv.ac.in

Ref. No. BPSMV/ET-I/24/ 1102

Dated:- 12/2/24

To,

The Additional Chief Secretary,
Department of Higher Education,
Haryana Civil Secretariat, Room No. 46, 9th Floor,
Sector-1, Chandigarh (Haryana)

Sub:- Regarding permission for starting Department of Psychology and creation of new teaching posts thereof.

Sir,

This is with reference to instructions received from your good self during the discussion with the Vice-Chancellor, BPSMV in the meeting held on 08.02.2024, desired to establish the Department of Psychology in the University and directed the University to submit the proposal for the same at the earliest. The detailed proposal for the same is enclosed for your kind consideration.

In view of the same, I am directed to provide the annual financial liability of teaching posts required for establishing the Department of Psychology and the same is as under:


Sr. No.	Name of the Department/ Institute	Name of Post	No. of Posts	Pay Scale/ Pay level of Post	Total Annual Financial implication
1	Psychology	Professor	01	144200-218200/- Level-14	223068 x 12 = 2676816
		Associate Professor	02	131400-217100/- Level-13A	203356 x 12 x 2 = 4880544/-
		Assistant Professor	04	57700-182400/- Level-10	89858 x 12 x 4 = 4313184/-
				GRAND TOTAL	11870544/-

It is very kindly requested to arrange to convey the sanction of State Govt. for creation of the aforesaid posts alongwith the permission to establish the Department of Psychology.

It may kindly be treated most urgent.

Yours sincerely,


DA/3 Pages AS above


Registrar
12/2/24

Endst. No. BPSMV/ET-1/24/ 1103

Dated:- 12/2/24

A copy of above is forwarded to the Director General, Higher Education, Haryana Shiksha Sadan, Ground Floor, Sector-5, Panchkula (HARYANA) for information and necessary action with the request to kindly arrange to convey the approval of the State Government for the purpose as referred in the letter.


REGISTRAR
12/2/24

MINUTES OF the PGBOS MEETING

Minutes of meeting of the PGBOS (Post Graduate Board of Studies) held on 10-02-2024 at 11:00 am in the office of Chairperson, Department of Management Studies.

The following were present in the meeting:-

- | | |
|----------------------------|--------------------------------|
| 1. Dr. Krishan Kumar | Chairperson |
| 2. Prof. Shweta Singh | Dean |
| 3. Prof. Nirmala Chaudhary | Outside expert (joined online) |
| 4. Prof. Ritu Sapra | Outside expert |
| 5. Prof. Ipshita Bansal | Member |
| 6. Prof. Sanket Vij | Member |
| 7. Dr. Anshu Bhardwaj | Member |
| 8. Dr. Meenakshi Katyal | Member |
| 9. Dr. Kapil Kumar | Member |

The following agendas were discussed and resolved:-

1. The PGBOS approved the recommendation made by the Departmental Research Committee (DRC) regarding synopsis of seven Ph.D. Scholars (session 2022-23) for registration in Ph.D. programme. The detail of the same is as below:-

Name	Roll No.	Supervisor name	Approved title
Ms. Savita	22021001	Dr. Anshu Bhardwaj	Role of Circular Economy and Supply Chain Management towards Sustainability in MSME Sector in Haryana
Ms. Sakshi	22021002	Dr. Krishan Kumar	Consumer Adoption, Barriers and Policy Intervention towards Electric Vehicles
Ms. Veenu Gupta	22021003	Prof. (Dr. Sanket Vij)	Role of Digital Transformation in Enhancing Environmental Sustainability and Consciousness
Ms. Jhanvi Khurana	22021004	Prof. (Dr. Sanket Vij)	Role of Artificial Intelligence Enables Digital Marketing Tools on Consumer Decision Making Process'
Ms. Uma Devi	22021005	Dr. Krishan Kumar	Role of Digitalization in the Restructuring and Sustainability of MSME Sector
Ms. Monika	22021007	Prof. (Dr.) Shweta Singh	Carbon Footprints in Higher Education Institutions in Haryana
Ms. Sweety	22021008	Dr. Anshu Bhardwaj	Role of Environmental, Social, and Governance (ESG) Factors and Firm Performance in Sustainable Development

2. The PGBOS approved the panel of examiners for evaluation of thesis of research scholars of the Department of Management Studies. The details of the same are as below:-
- Ms. Varuni Sharma under supervision of Dr. Krishan Kumar
 - Ms. Sunny Atora under supervision of Dr. Anshu Bhardwaj
 - Ms. Komal Sehrawat under supervision of Dr. Krishan Kumar
 - Ms. Savita Latwal under supervision of Dr. Krishan Kumar
 - Ms. Neetu Malhan under supervision of Prof. Sanket Vij and her extention.
 - Ms. Vandana under supervision of Dr. Kapil Kumar
 - Ms. Kirti Malik under supervision of Dr. Shweta Singh
 - Ms. Parul Mehta under supervision of Dr. Anshu Bhardwaj

The meeting was ended with vote of thanks to chair.

(Prof. Nirmala Chaudhary)
Outside expert
(Joined online)

(Prof. Ritu Sapra)
Outside expert

(Dr. Kapil Kumar)
Member

(Dr. Meenakshi Katyal)
Member

(Dr. Anshu Bhardwaj)
Member

(Prof. Sanket Vij)
Member

(Prof. Ipshita Bansal)
Member

(Prof. Shweta Singh)

(Dr. Anshu Bhardwaj)

(Prof. Sanket Vij)

MINUTES OF THE MEETING OF DEPARTMENTAL RESEARCH COMMITTEE (DRC) HELD ON 06-01-2024 AT 11:00 AM IN THE OFFICE OF CHAIRPERSON, DEPARTMENT OF MANAGEMENT STUDIES.

The following were present in the meeting:-

- | | |
|--------------------------------------|------------------------|
| 1. Dr. Krishan Kumar | Chairperson |
| 2. Prof. Shweta Singh, Dean - FCM | Member |
| 3. Prof. Anil Mittal | Outside expert |
| 4. Prof. Karam Pal (attended online) | Outside expert |
| 5. Prof. Ipshita Bansal | Member |
| 6. Prof. Sanket Vij | Member |
| 7. Dr. Kapil Kumar | Member |
| 8. Dr. Anshu Bhardwaj | Special Invitee Member |
| 9. Dr. Meenakshi Katyal | Special Invitee Member |

The following decisions were taken in the meeting:-

- Reference to BPSMV Ph.D. Clause No. 15.11, the DRC approved the increase in seats from 10 to 13 for the admission to the Ph.D. Programme for the academic session 2023-24.
- Reference to BPSMV Ph.D. Clause No. 3.8, it was approved that 8 seats shall be filled by the candidates who applied under exempted category and 05 seats shall be filled by the candidates through entrance test.
- The DRC evaluated 19 draft research proposals of 21 eligible applicants (10 candidates who qualified the entrance test, 09 JRF candidates and 02 NET/Ent Candidates).
- The DRC recommended following candidates for admission in Ph.D. Programme and allocated supervisors :

Exempted Category :

Sr. No.	Form No.	Candidate Name	Supervisor	Category	Adm. Cate.	Total	Name of the Supervisor
1.	21790	SONIA	RISHI RAM	General	AIOCC	77.91	Dr. Meenakshi Katyal
2.	21844	PINKI	KAILASH	General	HOGG (Conversion of reservation)	72.60	Dr. Meenakshi Katyal
3.	21962	PREETY DEVI	JITENDER SINGH	General	HOGG	73.39	Dr. Anshu Bhardwaj
4.	22002	POOJA	KRISHAN	General	HOGG	73.96	Prof. Ipshita Bansal
5.	22017	RACHNA	SATISH KUMAR	General	HOGG (Conversion of reservation)	70.11	Dr. Anshu Bhardwaj
6.	22047	TAMANNA	MANJEET SINGH	General	HOGG (Conversion of reservation)	73.09	Dr. Shweta Singh
7.	22073	AARTI DAGAR	OP DAGAR	General	HOGG	75.75	Dr. Krishan Kumar
8.	22314	MANISHA DEVI	SURENDER SINGH	General	HOGG (Conversion of reservation)	68.92	Dr. Krishan Kumar

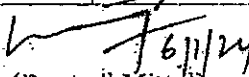
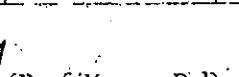
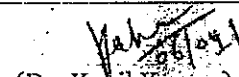
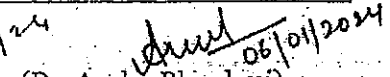
Shweta Singh 06-01-24
Meenakshi Katyal 6-01-24
Kapil Kumar 06/01/24
Ipshita Bansal 06/01/24
Anshu Bhardwaj 06/1/24
Dr. Krishan Kumar 06/1/24

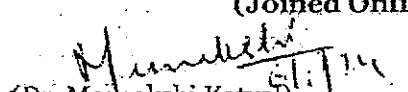
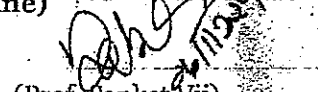
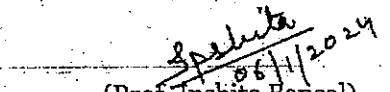
Entrance Test Category:

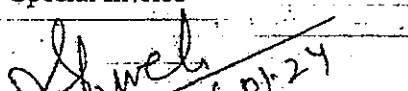
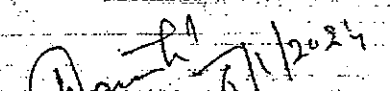
Sr. No.	Roll No.	Candidate Name	Father's Name	Category	Admission Category	Total marks	Name of the Research Supervisor
1.	20233107	HIMANSHI	SURENDER	General	HOGC	67.8	Dr. Kapil Kumar
2.	20233109	SUNITA	RAMESH	General	AIOC	81	Prof. Shweta Singh
3.	20233111	RIMPY	SHALLENDER KUMAR	BC-A	BC-A	64.8	Prof. Ipshita Bansal
4.	20233118	PRACHI NIRWAL		General	HOGC	73.8	Dr. Anshu Bhardwaj
5.	20233120	RITU	SATBIR SINGH	General	HOGC (Conversion from SC category)	66.3	Dr. Krishan Kumar

5. The DRC discussed and approved the title and synopsis of following students for registration in Ph.D. Programme:

Name	Roll No.	Supervisor name	Title
Ms. Savita	22021001	Dr. Anshu Bhardwaj	Role of Circular Economy and Supply Chain Management towards Sustainability in MSME Sector in Haryana
Ms. Sakshi	22021002	Dr. Krishan Kumar	Consumer Adoption, Barriers and Policy Intervention towards Electric Vehicles
Ms. Veenu Gupta	22021003	Prof. (Dr. Sanket Vij)	Role of Digital Transformation in Enhancing Environmental Sustainability and Consciousness
Ms. Jhanvi Khurana	22021004	Prof. (Dr. Sanket Vij)	Role of Artificial Intelligence Enables Digital Marketing Tools on Consumer Decision Making Process.
Ms. Uma Devi	22021005	Dr. Krishan Kumar	Role of Digitalization in the Restructuring and Sustainability of MSME Sector
Ms. Monika	22021007	Prof. (Dr.) Shweta Singh	Carbon Footprints in Higher Education Institutions in Haryana
Ms. Sweety	22021008	Dr. Anshu Bhardwaj	Role of Environmental, Social, and Governance (ESG) Factors and Firm Performance in Sustainable Development

 (Dr. Anil Mittal) Outside expert
 (Prof. Karam Pal) Outside expert
 (Dr. Kapil Kumar) Member
 (Dr. Anshu Bhardwaj) Special invitee member
 (Joined Online)

 (Dr. Meenakshi Katyal) Special Invitee
 (Prof. Sanket Vij) Member
 (Prof. Ipshita Bansal) Member

 (Prof. Shweta Singh) Dean (FCM)
 (Dr. Krishan Kumar) Chairperson



Unregistered Students Registered Students Resolve Provisional Eligibility View Status Configure Rights Download Photo Sign Data Reports
 Paper Exemptions Cancel Admission Delete Deregister Students Match Profile Paper Change Request Configure Subject In Registration
 Not Available for Eligibility Processing Define Admission Eligibility

Student Eligibility Status Report for Department of Management Studies, Khanpur (02) - Faculty of Commerce & Management - Pre Ph.D. Management (with Credits)-Regular-15 [80+20] Pattern - No Branch Available - PrePhDMgn - Sem I [Academic Year 2022-2023]

Reports Dashboard

Reports

- Registration Statistics
- Paper Exemptions
- Eligibility Status Report
- Student Details with Paper Change
- Cancel Admission Report

Export to Excel Export to PDF

Sr.No.	Student Name as appeared on Statement of Marks	Eligibility Form No.	PRN Number	Eligibility Status	Reason	Result Status of previous Course Year/Semester	User Name	Date & Time Stamp
1.	SWEETY - VAZIR SINGH (AMAR VATI)	411-19-2022-23611	2022041100043086	Eligible		Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:27PM
2.	MONIKA - JASHMER (SUNITA)	411-19-2022-23496	2022041100043071	Eligible		Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:27PM
3.	NIKU - JASBIR SINGH (JASVINDER KAUR)	411-19-2022-23489	2022041100043063	Eligible		Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:27PM
4.	UMA DEVI - CHANDER PAL (SUBHDRA DEVI)	411-19-2022-23326	2022041100043055	Eligible		Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:27PM
5.	JHANVI KHURANA HARISH KUMAR KHURANA (RENU KHURANA)	411-19-2022-23263	2022041100043047	Provisionally Eligible	exam purpose===02/20/24 12:26===Migration Cert.Pending	Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:26PM
6.	VEENU - KRISHAN KUMAR GOEL (KANTA GOEL)	411-19-2022-23165	2022041100043032	Provisionally Eligible	exam purpose===02/20/24 12:26===Migration Cert Pending	Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:26PM
7.	SAKSHI - JAIKARAN (SUMAN)	411-19-2022-23063	2022041100043024	Eligible		Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:27PM
8.	SAVITA - RAM KUMAR SINDHU (SUNITA)	411-19-2022-23054	2022041100043016	Eligible		Previous Result Record Does Not Exist	Registration Branch	Feb 20 2024 12:27PM

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The website can be best viewed in 1024 * 768 resolution and required version of Internet explorer is IE 7.0, Firefox 3.0 and above

5717

To consider and approve the recommendations made by the PGBoS, Department of Management Studies in its meeting held on 10-02-2024 regarding synopsis for registration in Ph.D. programme.

Statement of the case:-

The Chairperson, Department of Management Studies has submitted a proposal duly recommended by the Departmental Research Committee and PGBoS of the Department of Management Studies to consider and approval the title of synopsis for registration in Ph.D. programme. The detail of the same is as below:-

Sr. No.	Name	Title of Synopsis
1.	Ms. Savita	Role of Circular Economy and Supply Chain Management towards Sustainability in MSME Sector in Haryana
2.	Ms. Sakhsi	Consumer Adoption, Barriers and Policy Intervention towards Electric Vehicles
3.	Ms. Veenu Gupta	Role of Digital Transformation in Enhancing Environmental Sustainability and Consciousness
4.	Ms. Jhanvi Khurana	Role of Artificial Intelligence Enables Digital Marketing Tools on Consumer Decision Making Process
5.	Ms. Uma Devi	Role of Digitalization in the Restructuring and Sustainability of MSME Sector
6.	Ms. Monika	Carbon Footprints in Higher Education Institutions in Haryana
7.	Ms. Sweety	Role of Environmental, Social, and Governance (ESG) Factors and Firm Performance in Sustainable Development

The minutes of the Departmental Research Committee and PGBoS of the Department of Management Studies are placed at (annexure-I).

The case was put up to the Hon'ble Vice-Chancellor who after due consideration has desired to place the same before the Academic Council for consideration and approval.

DEPARTMENT OF GEOGRAPHY

B.P.S.M.V. Khanpur Kalan

Course Structure for M. Sc. Geography (CBCS) w.e.f. July 2024

Semester I

Sr. No	Course Code	Exam Course Code	Nomenclature of the Course	Contact Hours			Credits	Max. Marks		
				L	T	P		Th	IA	Total
1	16GEOG101CC	1061	Climatology	3	1	0	4	80	20	100
2	16GEOG102CC	1062	Geography of India	3	1	0	4	80	20	100
3	16GEOG103CC	1063	Economic Geography	3	1	0	4	80	20	100
4.	16GEOG104CC	1064	Statistical Methods in Geography	3	1	0	4	80	20	100
5	16GEOG105CC	1065	Cartographic Methods in Geography (Theory)	2	0	0	2	40	10	50
6	16GEOG106CC	1066	Practical Geography: Cartographic Methods in Geography	0	0	8	4	Practical Total Marks : 100 Distribution of Marks: Lab Work Test: 60 Record on Lab Work: 20 Viva-Voce: 20		100
			Total Credits:				22			550

Note:L – Lecture
Th – Theory;P – Practical;
IA – Internal Assessment

T - Tutorial

Shalini
 Chairperson
 Department of Geography
 B.P.S.M.V. Khanpur Kalan, Sonapat)

Department of Geography

B.P.S.M.V. Khanpur Kalan

Course Structure for M. Sc. Geography (CBCS) w.e.f. July 2024

Semester - II

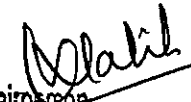
Sr. No	Course Code	Exam Course Code	Nomenclature of the Course	Contact Hours			Credits	Max. Marks		
				L	T	P		Th	IA	Total
1	16GEOG201CC	2061	Geomorphology	3	1	0	4	80	20	100
2	16GEOG202CC	2062	Population Geography	3	1	0	4	80	20	100
3	16GEOG203CC	2063	Oceanography	3	1	0	4	80	20	100
4.	16GEOG204CC	2064	Agricultural Geography	3	1	0	4	80	20	100
5	16GEOG205CC	2065	Morphometric and Hypsometric Analysis (Theory)	2	0	0	2	40	10	50
6	16GEOG206CC	2066	Practical Geography: Morphometric and Hypsometric Analysis	0	0	8	4	Practical Total Marks: 100 Distribution of Marks: Lab Work Test: 60 Record on Lab Work: 20 Viva-Voce: 20		100
			Total Credits:				22			550

Note:

L – Lecture
Th – Theory;

P – Practical;
IA – Internal Assessment

T - Tutorial


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan, (Jalpaiguri)

DEPARTMENT OF GEOGRAPHY

B.P.S.M.V. Khanpur Kalan

Course Structure for M. Sc. Geography (CBCS) w.e.f. July 2024

Semester III

Sr. No	Course Code	Exam Course Code	Nomenclature of the Course	Contact Hours			Credits	Max. Marks		
				L	T	P		Th	IA	Total
1	16GEOG-301CC	3061	Regional Planning and Development	3	1	0	4	80	20	100
2	16GEOG-302CC	3062	Introduction to Remote Sensing and Research Methodology (Theory)	3	1	0	4	80	20	100
Select one course from Below mentioned courses:										
3	16GEOG303DCEC (i)	3063	Fluvial Geomorphology	3	1	0	4	80	20	100
4	16GEOG303 DCEC (ii)	3064	Urban Geography	3	1	0	4	80	20	100
5	16GEOG303 DCEC (iii)	3065	Resource Geography	3	1	0	4	80	20	100
6	16GEOG303DCEC (iv)	3066	Rural Settlement Geography	3	1	0	4	80	20	100
Select one course from Below mentioned courses:										
7	16GEOG304 DCEC (i)	3067	Geography and Disaster Management	3	1	0	4	80	20	100
8	16GEOG304 DCEC (ii)	3068	Soil Geography	3	1	0	4	80	20	100
9	16GEOG304 DCEC (iii)	3069	Political Geography	3	1	0	4	80	20	100
10	16GEOG304 DCEC (iv)	3070	Bio Geography	3	1	0	4	80	20	100
Compulsory Courses										
11	16GEOG-305CC	3071	Practical of Remote Sensing Techniques and Report writing of socio-economic data	0	0	8	4	Practical Total Marks: 100 Distribution of Marks: RS Techniques: 50 Record on Field Work: 50		100
12	16GEOG306 CC	3072	Environmental Geography	3	1	0	4	80	20	100
13.	Open Elective Course (OEC)*		Open Elective Course (OEC)	3	1	0	4	80	20	100
			Total Credits:				28			700

Note: *The student of M. Sc Geography shall fill one open elective course from common pool.

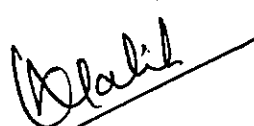
❖ **Fundamentals of Geography:** Open Elective Courses as offered by the Department of Geography for the students of the other Department.

L – Lecture
Th – Theory;

P – Practical;
IA – Internal Assessment

T - Tutorial

- 3 -


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B.P.S.M.V. Khanpur Kalan (Sonapat)

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DEPARTMENT OF GEOGRAPHY

B.P.S.M.V. Khanpur Kalan

Course Structure for M. Sc. Geography (CBCS) w.e.f. July 2024

Semester IV

Sr. No	Course Code	Exam Course Code	Nomenclature of the Course	Contact Hours			Credits	Max. Marks		
				L	T	P		Th	IA	Total
1	16GEOG401CC	4061	Geographical Thought	3	1	0	4	80	20	100
2	16GEOG402CC	4062	Fundamentals of Geographical Information System (Theory)	2	0	0	2	40	10	50
Select one course from Below mentioned courses:										
3	16GEOG403 DCEC (i)	4063	Geography of Tourism	3	1	0	4	80	20	100
4	16GEOG403 DCEC (ii)	4064	Tropical Climatology	3	1	0	4	80	20	100
5	16GEOG403 DCEC (iii)	4065	Geography of Health and Well-being	3	1	0	4	80	20	100
6	16GEOG403 DCEC (iv)	4066	Cultural Geography	3	1	0	4	80	20	100
Select one course from Below mentioned courses:										
7	16GEOG404 DCEC (i)	4067	Social Geography	3	1	0	4	80	20	100
8	16GEOG404 DCEC (ii)	4068	Gender Geography	3	1	0	4	80	20	100
9	16GEOG404 DCEC (iii)	4069	Geography of Haryana	3	1	0	4	80	20	100
10	16GEOG404 DCEC (iv)	4070	Urbanization in India	3	1	0	4	80	20	100
Compulsory Courses										
11	16GEOG405CC	4071	Fundamentals of Geographical Information Systems (Practical)	0	0	8	4	Practical Total Marks: 100 Distribution of Marks: Lab Work Test: 60 Record on Lab Work: 20 Viva-Voce: 20		100
12	16GEOG406CC	4072	Geography of Water Resource	3	1	0	4	80	20	100
13.	Open Elective Course (OEC)*		Open Elective Course (OEC)	3	1	0	4	80	20	100
			Total Credits:				26			650

Note: *The student of M. Sc Geography shall fill one open elective course from common pool.

❖ **Geography of India:** Open Elective Courses as offered by the Department of Geography for the students of the other Department.


L – Lecture
Th – Theory;

P – Practical;
IA – Internal Assessment

T - Tutorial

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Total Credits (Semester: I+II+III+IV): 22+22+28+26=98

Total Marks (Semester: I+II+III+IV): 550+550+700+650 = 2450

DEFINITIONS OF COURSES

1. CORE COURSE(CC)


- Core Course (CC): Compulsory Course for the students of Geography.

2. DISCIPLINE CENTRIC ELECTIVE COURSES (DCEC):

- Discipline Centric Elective Courses (DCEC): Optional Courses within the Department.

3. OPEN ELECTIVE COURSES(OEC):

- Open Elective Courses (OEC): Optional Courses which are to be opted out of a pool of Courses from all departments as decided by the University.


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16GEOG101CC
Climatology
Exam course Code - 1061

L T P

3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100

External Assessment Marks: 80

Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: It is an introductory course of climatology which is aimed at providing knowledge about the elements and processes of climates, different climatic types and climate change. Climate is one of the basic elements of physical environment which is a core area of interest for the students of geography.

Course Outcomes (COs): This course on climatology shall sharpen the understanding of students about different climatic systems found in the world. It shall develop scientific understanding about climates and their characteristics.

UNIT-I

1. Definition of weather and climate; Climatology and Meteorology.
2. Origin, composition and structure of atmosphere.
3. Solar radiation, greenhouse effect, heat budget and temperature distribution.

UNIT-II

4. Atmospheric pressure and its distribution pattern.
5. Theories of general circulation and planetary winds.
6. Walker circulation- ENSO and La Nina, origin of monsoons and jet streams.

UNIT-III


7. Atmospheric Moisture: humidity, evaporation, condensation; precipitation formation theories and types of precipitation, acid rain.
8. Stability and instability of atmosphere, air masses and fronts.
9. Weather systems: Origin and characteristics of extra tropical and tropical cyclones.

UNIT-IV

10. Climatic classification: Bases of climatic classification by Koeppen, Trewartha and Thornthwaite.
11. Climatic change: pattern, evidences and theories of climate change.
12. Global warming and its impacts on earth systems.

w.e.f. – 2024-25


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B.P.S.M.V. Khanpur Kalan, Sonipet

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Suggested Readings:

1. Trewartha G. T., An Introduction to Climate, McGraw Hill Company, New York, 1980.
2. Chritchfield, H J, General Climatology, Printice Hall of India, New Delhi, 1987.
3. Barry R. G. and Chorley, R. J, Atmosphere, Weather and Climate, Marthren , 2010.
4. Lal, DS, Climatology, Chetanya Publishing House, Allahabad, 1966
5. Das, PK, The Monsoons, National Book Trust, New Delhi, 1984
6. Ramasastry, AA, Weather and Weather Forecasting, Publication Division, New Delhi.
7. JM Collins, Climatology, Oxford, 2014.
8. Athrens, C D Meteorology Today: An Introduction to Weather, Climate and Environment, West Publishing Co., 1994.


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16GEOG102CC
Geography of India
Exam course Code - 1062

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: India is a country with diversity in landscape, vegetation, soils, drainage network, economy, population characteristics and culture. It is rich in resources and has got many minerals and power resources, which are the main assets of the country and are also exported. Therefore it becomes immense important to make the students know about their country.

Course Outcomes (COs): After studying Advanced Geography of India, students will become aware about the country's beautiful and diverse landscapes. They will acquire knowledge about the economy and valuable resources. This would also sharpen their understanding about the unity in diversity in India.

Unit-I

Physical Setting:

1. Physiography: Relief characteristics and physiographic divisions
2. Drainage systems and their functional significance.
3. Climate: characteristics, seasons and climatic regions of India as given by Trewartha and Koppen
4. Soil and vegetation types - distribution, characteristics and conservation.

Unit-II

Agriculture and Resources:

5. Agriculture: Characteristics of Indian agriculture, agricultural development in India
6. Problems of Indian agriculture.
7. Irrigation: Types of irrigation, Major irrigation projects: BhakraNangal, Narmada and Damodar Valley Projects
8. Green revolution and its impact on Indian agriculture

UNIT-III

Industry, Transport, Communication and Trade:

9. Production, distribution, status of use and conservation of metallic resources: iron ore and bauxite

w.e.f. – 2024-25


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10. Production, distribution, status of use and conservation of non-metallic resources: mica and manganese
11. Production, distribution, status of use and conservation of power resources: Coal, Petroleum, Hydropower

Unit-IV


1. Production and distribution, status, use and conservation of (a) Iron and steel (b) Cotton textile and (c) Automobile industry (d) Sugar industry
2. Major industrial regions and their characteristics.
3. International trade: Major exports and imports.

Suggested Readings:

1. Centre for Science & Environment (1988). *State of India's Environment*. New Delhi.
2. Desphande, C.D (1992). *India: A Regional Interpretation*. ICSSR & Northern Book Centre, New Delhi.
3. Dreza Jean & Amartya Sen(ed.)(1996). *India Economic Development and Social Opportunity*, Oxford University Press. New Delhi.
4. Dubey. R.N. (1974). *Economic Geography of India*. Kitab Mahal, Allahabad.
5. Gautam, Alka (2014). *Advanced Geography of India*, 4th ED. Sharda Pustak Bhawan. Allahabad.
6. Hussain Majid (2015). *Geography of India*. Mc Graw Hill Education.
7. Joshi. H.L.(1990). *Industrial Geography of India*. Rawat Publications, Jaipur.
8. Khullar, D R. (2014). *India: A Comprehensive Geography*, 3rd ED. Kalyani Publishers. New Delhi
9. Kundu A and Raza, Moonis (1992). *Indian Economy: The Regional Dimension*, Speclaum Publishers. New Delhi 1992.
10. Nag. P. and Sengupta. S (1992). *Geography of India*. Concept publications. Co. New Delhi.
11. Rautray. J.K.(1993). *Geography of Regional Disparity*. Asian Institute of Technology, Bankok.
12. Robinson. Franes (1989). *The Cambridge Encyclopedia of India . Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan & Maldives*. Cambridge. University Press. London.
13. Sharma .T.C and Coutinno, O. (1988). *Economic and Commercial Geography of India*, Vikas Publishing House Pvt. LTD. New Delhi.
14. Singh R.L. (ed). (1971). *India – A Regional Geography*, National Geographical Society, India Varanasi.
15. Saroha Jitender & Singh Surender , *Geography of India*, 3rd edition, Pearson Publication.
16. Singh Surender , *Geography of India*, 2rd edition, GKP Access Publishing.
17. Spate OKH & ATA Learnont (1967). *India & Pakistan*, Methuen. London.
18. Tirtha, R. and Gopal Krishan (1996). *Emerging India*. Reprinted by Rawat Publications, Jaipur.
19. Tirtha. R and Krishan G. (1996). *Geography of India*, Rawat Publications, Jaipur & New Delhi.
20. Tiwari, R.C (2010). *Geography of India*, 6th Ed. Prayag Pustak Bhawan, Allahabad.

w.e.f. – 2024-25

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 Chairperson
 Department of Geography
 B.P.S.M.V. Khanpur Kalan, Unipat

16GEOG103CC
Economic Geography
Exam course Code - 1063

L T P
3 1 0

Credit - 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The economy of the world has been changing fast in recent times. This has also led to drastic change in the spatial structure of economies world over. Therefore the objective of this course is to integrate the various factors of economic development to acquaint the students about dynamic aspects of economic geography.

Course Outcomes (COs): After completion of the course the students will be able to understand the spatial organization of economies in the world in relation to human activities, location theories of various activities, transport functions, trends of trade and processes of globalization.

UNIT-I

1. Definition, nature, scope, importance, recent trends and approaches in economic geography.
2. Relationship of economic geography with other social sciences.
3. Economic activities and their classification.

UNIT-II

4. Network structure and economic activities, impact of transport on economic activities, spatial variation in production and transport cost.
5. Location theories of Weber, Losch, Christaller, Edward Ullman's spatial interaction model.

UNIT-III

6. World Economies: bases of classification, patterns and characteristics of developed and developing economies of the world.
7. Economic development: meaning, evolution, goals, measures, patterns, problems and theories.

UNIT-IV

8. Globalization and recent trends in pattern of international trade.
9. Emergence of a new global economy-transnational integration and its spatial outcomes.
10. Major regional trade blocks of the world, free trade initiatives (GATT, UNCTAD, WTO).

w.e.f. - 2024-25

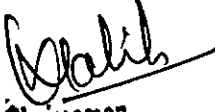
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Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Sonapat)

Suggested Readings:

1. Gautam, A. 2010. Advanced Economic Geography. Sharda Pustak Bhawan, Allhabad.
2. Hartshorne, T. A. and Alexander, J. W. 2001. Economic Geography. Prentice Hall of India. New Delhi.
3. Hudson, R. 2005. Economic Geography. Sage Publication, New Delhi.
4. Jones, C. F. and Darkenwarld, G. G. Economic Geography. The Macmillan and Company. New York.
5. Knowled, R. and Wareing, J. 1992. Economic and Social Geography. Rupa and Company, Calcutta.
6. Knox, P. 2003. The Geography of World Economy. Arnold, London.
7. Saxena, H.M. 2013. Economic Geography. Rawat Publications, Jaipur.
8. Wheeler, J.O. and Muller, P.O. 1985. Economic Geography. John Wiley and Sons. New York.
9. Singh Surender & Saroha Jitender, Human & Economic Geography, Pearson Publication.


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16GEOG104CC
Statistical Methods in Geography
Exam course Code - 1064

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of the course is to introduce the students to statistical tools for summarizing and analyzing quantitative information and data. The course includes various tools and techniques used in the analysis of geographical data.

Course Outcomes (COs): The course shall equip the students with statistical tools for summering, analyzing and finding spatial pattern from the geographical and other time series data.

UNIT-I

1. Descriptive Statistics : Histogram and Frequency Curve
2. Measures of Central Tendency: Mean, median, mode, Partitioned values: Quartiles and deciles, Comparing the mean, median and mode

UNIT-II

3. Normal curve as a probability distribution: characteristics and area under curve
4. Measures of Dispersion: Absolute measures: Range, Quartile Deviation, Mean deviation, Standard deviation, Relative measure of dispersion: Coefficient of variation
5. Measures of Inequality: (i) Location quotient (ii) Lorenz curve.

UNIT-III

6. Sampling: Theory of sampling, Methods of sampling, Sampling distribution and chance errors in sampling
7. Bivariate Analysis: Scatter diagram, correlation analysis, Spearman's rank correlation and Karl Pearson's correlation coefficient, Regression equations and Regression lines.

UNIT-IV

8. Residuals and their mapping
9. Basics of multivariate analysis: Correlation matrix, partial and multiple correlations.

w.e.f. – 2024-25


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(Signature)
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kaler, Jhansi

Suggested Readings:

- 1 S. Gregory : Statistical Methods and the Geographers, Longman, London, 1964.
- 2 C. B. Gupta : An Introduction to Statistical Methods, Vikas Publishing House, Delhi, 1974.
- 3 R. J. Johnston : Multivariate Statistical Analysis in Geography, Longman Scientific and Technical, John Wiley & Sons, 1989 (4th edition).
- 4 Aslam Mahmood : Statistical Methods in Geographical Studies, Rajesh Publications, New Delhi, 1993.
- 5 Saroj K. Paul : Statistics for Geoscientists : Techniques and Applications, Concept Publishing Company, New Delhi, 1998.
- 6 Reza Hoshmand (second edition), : Statistical Methods for Environmental and Agricultural Sciences, CRC Press, New York, 1998.
- 7 Jack Levin and J.A. Fox (2006), Elementary Statistics in Social Research, 10th edition, Peason Education, New Delhi.
- 8 Rogerson. P.A. (2010), Statistical Methods for Geography, (A Student's Guide), 3rd Edition, Sage Publication, New Delhi
- 9 Ashis Sarkar (2013), Quantitative Geography: Techniques and Presentations
- 10 Orient Blackswan, Quantitative Methods in Human Geography.


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16GEOG105CC
Cartographic Methods in Geography (Theory)
Exam course Code - 1065

L T P
2 0 0

Credit – 2, Time: 2.5 Hrs.

Total Marks: 50
External Assessment Marks: 40
Internal Assessment Marks: 10

Note: Question 1 is compulsory comprising of four sub parts (two marks for each sub part), to be answered in 25-30 words. There will be six long questions, three from each unit. The candidate has to answer three long questions, at least one question from each unit. Question 1 carries ten marks. Long questions carry ten marks each.

Objective: The objective of this course is to give the students assignments for making maps, graphs and diagrams to represent climatic and socio-economic data.

Course Outcomes (COs): 1. Provides understanding about the basic concepts of cartography. 2. Enhancement of skills to prepare thematic maps and diagrams. 3. Acquaintance with representation of statistical data in the form of diagrams. 4. Ability to represent and interpret climatic data using diagrams.

UNIT-I

1. Nature and scope of Cartography.
2. Recent advancements in cartography.
3. Types and characteristics of distribution maps: (i) Chorochromatic (ii) Choroschematic (iii) Isopleths (iv) Choropleth (v) Dot and (vi) Diagrammatic.
4. Types and characteristics of statistical diagrams: (i) One dimensional (bar, line), (ii) Two dimensional (circular, rectangular, square), (iii) Three dimensional (block, sphere, cube) and (iv) Other diagrams (Snail, pyramid, flow diagram/cartogram).
5. Characteristics of graph/diagrams/maps representing climatic data: (i) Rainfall deviation, (ii) Climograph (Taylor and Foster), (iii) Hythergraph, (iv) Star/Wind rose diagram (v) Isopleths (vi) Line and bar (vii) polygraph.

UNIT-II


6. Introduction to Computer: Components of Computer-Hardware and Software; Use of Computers in Geography.
7. Introduction to Microsoft Excel, Microsoft Word, MS PowerPoint: Placement of heading and sub-heading, legend, Font size, Style, Bold, Italics, Changes from colour to different shade pattern. Different weight, colour and pattern to X and Y coordinates. Page layout. Ascending and Descending order.

w.e.f. – 2024-25

(K. Lalit)
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kaler (Dipat)

Suggested Readings:

1. Misra, R.P. and Ramesh, A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi
2. Monkhouse, F.J. and Wilkinson, H.R. 1980. Maps and Diagrams. B. I. Publications, New Delhi.
3. Singh, R. L. 1986. Elements of Practical Geography. Kalyani Publishers, New Delhi.


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w.e.f. - 2024-25

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16GEOG106CC
Cartographic Methods in Geography (Practical)
Exam course Code - 1066

L T P
0 0 08
Credit – 04
Time: - 04 Hrs.

Max. Marks: 100
Distributions of Marks:
Lab Work Test: 60
Record on Lab Work: 20
Viva-Voce: 20

Note: The examiner shall set four questions, two from each unit. The candidate shall attempt three questions in all, selecting at least one question/exercise from each unit.

Objective: The objective of this course is to give the students assignments for making maps, graphs and diagrams to represent climatic and socio-economic data.

Course Outcome: The students will learn the art of cartography and methods of interpretation of maps and diagrams.

UNIT-I

1. Characteristics graph/diagrams and maps representation of Climate data:
 - Rainfall deviation diagram (1)
 - Climograph (Taylor and Foster's) (2)
 - Hythergraph (1)
 - Isopleth (1)
2. Diagrams: Types and properties of diagrams representing socio-economic data:
 - One dimensional diagrams-Bar diagram and line diagram: Simple (1), Comparative (1), Compound (1), Trend graph (1)
 - Two dimensional diagrams- pie diagram (1), proportional circle (1).
 - Three dimensional diagrams- Sphere, block, cube (1)
3. Type and Characteristics of Distribution maps: Chorochromatic, Choroschematic, diagrammatic
 - Dot method (1)
 - Choropleth: Monovariate (1), Bivariate (1)
4. Characteristics of Miscellaneous diagrams and graphs:
 - Age and Sex pyramid (1)

UNIT-II


5. Input of data: Bar Diagram (4), Pie Diagram (2), Scatter Diagram (1), Line Graph (3), Poly graph (1)

Figures in parenthesis represent number of practical exercises.

w.e.f. – 2024-25

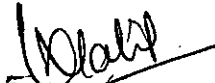
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Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Distt)

Suggested Reading:

1. Misra, R.P and Ramesh, A. (1999) Fundamentals of Cartography, Concepts Publishing Company. New Delhi.
2. Monkhouse, F.J and Wilkinson, H.R. (1980). Maps and Diagrams, B.I. Publications New Delhi.
3. Punmia. B.C. (1981). Surveying. Standard Book House. New Delhi.
4. Sharma. J.P (1961) Prayogik Bhoogol. Restogi Publications, Meerut.
5. Singh, R. L. 1986. Elements of Practical Geography. Kalyani Publishers, New Delhi.


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Department of Geography
B.P.S.M.V. Khanpur K. (31)

16GEOG201CC
Geomorphology
Exam course Code - 2061

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100

External Assessment Marks: 80

Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: Geomorphological knowledge helps in identifying the problems faced by human society, arising due to the interaction of human being with landscape and natural environment. The present course is aimed at providing the knowledge to students about the processes and patterns involved in shaping the features on land surface.

Course Outcome (CO's): Through the study of geomorphology, students shall get to know about formation of the earth's surface features, the role played by the humans in changing the landscape and the significance of landforms in shaping the physical environment in an area

UNIT-I

- 1: Introduction to geomorphology as a science: definition, nature, scope and recent developments.
2. Fundamental concepts:
 - (i) Geological structure and landforms
 - (ii) Uniformitarianism
 - (iii) Multi-cycle and polygenetic evolution of landscape
 - (iv) Climatogenetic geomorphology
 - (v) Peneplain and Pediplain


UNIT-II

3. Continental drift theory and its basic considerations; Plate tectonics-meaning and concept, margins and boundaries, plate motion and cycle; Tectonic activities along boundaries and distribution of plates.
4. Hill slope-definition and forms of slope, geomorphic processes and slope forms, slope evolution: down wearing, parallel retreat and slope replacement models.
5. Indogenetic Process: Faulting, Folding and their geomorphic expression.

UNIT-III

6. Exogenetic Process: Weathering:- Causes, types of weathering(physical, chemical and biological).

w.e.f. 2024-25


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7. Mass movement, causes, classification and types of mass movements- slow and rapid mass movements.

UNIT-IV

8. Geomorphic processes and resulting land forms: Fluvial, Glacial, Periglacial, Aeolian and Karst
9. Applied geomorphology: Meaning and concept, role of geomorphology in environmental management of the following: (i) Accelerated erosion and sedimentation, (ii) Construction of large dams (iii) Urban floods and Geomorphology

Suggested Readings:

1. Bloom AL. 2002. Geomorphology: A systematic Analysis of late Canozic landforms. Prentice – Hall Private Limited, New Delhi.
2. Embleton, C. Thornme. J. (eds) 1979. Process in Geomorphology. London, Edward Arnold.
3. Fourbridge, R. W. (Ed) 1968 Encyclopedia of Geomorphology, New York, John Wiley & Sons.
4. Kale VS and Gupta A.2001. Introduction to Geomorphology orient –Longman, Hyderabad.
5. Ritten D. F. Kochel, R. C. and Miller J. R., 1995, Process Geomorphology. Dubuque, Win C. Brown Publishers (3rdEdn).
6. Sharma H.S and Kale V.S(2009): Geomorphology in India, Prayag pustak Bhawan, Allahabad.
7. Sharma, V.K. (2010): Introduction to process Geomorphology. Tayler and Francs'S, London.
8. Sharma, V.K. (1992): Earth's surface, processes and forms. Tata Mc. Grawhill Publications, New Delhi.
9. Saroha Jitender & Singh Surender , Physical Geography, Pearson Publication.
10. Singh Surender: Geography, Mc. Grawhill Publications, New Delhi.
11. Singh S. (2002): Geomorphology, Prayag pustak Bhawan, Allahabad.
12. Strahler A.H (2013): Introducing physical geography, Wiley and sons, New York.
13. Tasbuck, E.J and Lutgers, F.K. (2009): Earth science, Prentice hall, New Jersey.
14. Thornburry, W.D (2004): Principles of Geomorphology, John Wileys Sons, New York.


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B.P.S.M.V. Khanpur Kal

w.e.f. 2024-25

16GEOG202CC
Population Geography
Exam course Code - 2062

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of the course is to acquaint the students with the sources of population data, dynamics of population and their determinants and assessment of the impact of policy interventions

Course Outcome (CO's): The students shall learn about the population data sources and various theories models and measures of population dynamics and international community efforts to improve quality of human resource.

UNIT-I

1. Nature and scope of population geography.
2. Sources of population data, quality and reliability of data, problems of mapping population data.

UNIT-II

3. Concept, determinants and world pattern of the following attributes of population:
 - (i) Distribution and density
 - (ii) Vital rates: birth and death rates
 - (iii) Migration (including laws of migration)
 - (iv) Growth
 - (v) Age and Sex Composition
 - (vi) Occupation
 - (vii) Literacy.
5. Quality of human resource: human development index and its components.


UNIT-III

6. Limits to growth: Concepts of over population, under population and optimum population
7. Demographic Transition Model
8. Population Resource Regions
9. Theories of population: Malthus, Ricardo and Marx

UNIT-IV

10. Population problems and Population policy of India

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11. Comparative study of population problems and policies of developed and less developed countries. Case study of U.S.A., Japan, China and Brazil

Suggested Readings:

1. Beaujeu, Garnier, J. (1966) Geography of Population, Longman, London.
2. Brooks, S. (1977): The World Population Today (Ethno demographic Process), USSR Academy of Sciences, Moscow.
3. Cassen, Robert & Bates, Lisa M. (1994): Population Policy : A New Consensus Overseas Development Council, Washington, D.C.
4. Chandna, R. C. (1997): Jansankhya Bhugol, Kalyani Publishers, New Delhi.
5. Chandna, R. C. (1998): Population, Publishers, New Delhi.
6. Chandna, R. C. (1998): Environmental awareness, Publishers, New Delhi.
7. Chandna, R. C. (1998): Geography of Population: Concepts, Determinants and Patterns, Publishers, New Delhi.
8. Clarks, John, I. (1971): Population Geography and the Developing Countries, Pergamon Press, New York.
9. Demko, G. J. and others (Eds.) (1971) : Population Geography, Reader, McGraw-Hill Books Co., New York
10. Hassan, I.(2010):Population Geography,
11. Jones, Huw, R. (1981) : A Population Geography, Harper and Row Publishers, London.
12. Mahajan,N (2014) Population Geography, R.K. publishers, Delhi
13. Newbold, K Bruce (2016) Population geography: Tools and Issues,
14. Petrov, V. (1985): India: Spotlight of Population, Progress Publishers, Moscow.
15. Qazi, S.A (2010). Population Geography, APH publishers.
16. Trewartha, G. T. (1972): The Less Developed Realm-A Geography of its Population, John Wiley & Sons, Inc., New York.
17. Trewartha, G. T. (1978): The More Developed Realm- A Geography of its Population Pergamon Press, New York.
18. Woods, R. (1979): Population Analysis in Geography, Longman, London.


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16GEOG203CC
Oceanography
Exam course Code - 2063

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective is to introduce the students the basic concepts of oceanography such as movement of oceanic water, temperature and salinity distribution etc.

Course Outcome (CO's): It will acquaint the students with the basic concepts of oceanography.

Unit -I

1. Definition, nature and scope of oceanography, oceanography and other sciences.
2. Wegner's drift hypothesis and sea floor spreading and plate tectonics.

Unit – II

3. Major topographic features of ocean basins, bottom relief of Atlantic, Pacific and Indian oceans.
4. Sources, classification and distribution of ocean deposits, corals-origin, types and conditions for development. Theories of the origin of coral reefs (Subsidence and standstill).

Unit – III

5. Oceanic Temperature and Density: distribution and causes of variation.
6. Composition of oceanic water and distribution of salinity.
7. Origin, causes, types and effects of the ocean currents, currents of the Atlantic, Pacific and Indian oceans.

Unit – IV


8. Oceans as source of food, mineral and energy resources – evidences, mechanism and impact.
9. Global warming and sea level changes: Impact of Humans on the Marine Environment.

Suggested Reading:


1. Davis Richard. J.A. (1986). Oceanography – An Introduction to the Marine Environment, Wm. C. Brown. Iowa.
2. Denny. M. (2008): How the Ocean Works: An introduction to Oceanography, Princeton University Press, New Jersey.

w.e.f. – 2024-25

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3. Duxbury, C.A and Duxbury B. (1996). An introduction to the World's Oceans, 2nd C. Brown, Iowa
4. Garrison, T. (1995): Essentials of Oceanography, Wards worth Pub. Co., London.
5. Garrison, T. (2001): Oceanography – An introduction to Marine Science, Books/ Cole, Pacific Grove, USA.
6. Gross, M. Grant (1987). Oceanography: A view of the Earth, Prentice – Hall Inc., New Jersey.
7. Kennel, J.P. (1982): Marine Geology, Prentice hall, Englewood Cliff, New Jersey.
8. Kerhsaw, S. (2004): Oceanography: An Earth Science Perspective, Routledge, UK.
9. King, C.A.M. (1962): Oceanography for Geographers.
10. Lal, D.S. (2007). Oceanography. Sharda Pustak Bhawan, Allahabad.
11. Sharma, R.C.(1985): The Oceans, Rajesh Publication, New Delhi.
12. Sharma, R.C. and Vatal M. (1993). Oceanography for Geographers, Chaitanya Publishing House, Allahabad.
13. Shepart, F. (1969): The Earth Beneath the sea, Athneum, Rev. Ed., New York.
14. Sieboldt, E., and W.H. Berger (1994): The Sea Floor, 2nd Ed., Freeman, New York.
15. Siddhartha, K.1999. Oceanography-A Brief Introduction, Kisalaya Publications, New Delhi.
16. Singh. Savinder. (2008). Oceanography. Prayag Pustak Bhawan, Allahabad Singh


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16GEOG204DCEC
Agricultural Geography
Exam course Code - 2064

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of this course is to acquaint the students with the spatial organization of agriculture and processes determining the agricultural pattern and processes. The students will develop an in-depth knowledge about the dynamics of land use, cropping pattern and the factors involved in change of agricultural landscape.

Course Outcome (CO's): The students shall get to know about the spatial organization of agricultural activities in world and India. Their knowledge about the origin, location, distribution of the agricultural activities shall be enriched. They would also get the knowledge about the modern agriculture, its dynamics and impact of climate change and economic liberalization on agricultural pattern and processes.

UNIT-I

1. Nature, scope and significance of agricultural geography.
2. Origin and dispersal of agriculture in the World.
3. Determinants of agricultural patterns: physical, technological and cultural factors


UNIT-II

4. Concepts of land capability survey, land use and cropping pattern.
5. Agricultural Concepts: (i) Intensity of Cropping (ii) Degree of Commercialization (iii) Crop diversification and concentration (iv) Crop combination (v) Contract farming (vi) Agri-business.
6. Approaches in agricultural regionalization: Von Thunen Model of agricultural land use, Agro-climatic zonation: Concept and Indian experience.

UNIT-III

7. Bases of identification of agricultural systems by Whittlesey and agricultural typology by Kostrowiki.
8. Measurements of agricultural efficiency and productivity.
9. Green revolution: Its impacts and consequences in India.

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UNIT-IV

10. Food production and security in India.
11. Neo-liberalization and Indian agriculture.
12. Agriculture and climate change: Impacts and adaptation.

Suggested Readings:

1. Symons, Leslic (1967): Agricultural Geography, G. Bell and Sons, London.
2. Geoffrey, H.F.: (1970) Geography of Agriculture: Themes in Research, Practice Hall, N.J.
3. Morgon, W.B. and Munton, R.J.C.: (1971) Agricultural Geography Methuen, London.
4. Singh Jasbir and Dhillon S.S. (1994) Agricultural Geography, Tata Mc Graw Hill, New Delhi.
5. Husain, Majid (1996), Systemic Agricultural Geography Rawat Publications, Jaipur.
6. Tarrant, J.R. (1974) Agricultural Geography, Willey, New York.
7. Safi, Mohammad (2007) Agricultural Geography.
8. Singh Jasbir (1989) Agricultural Geography.
9. Bowler TR (1992): The Geography of Agriculture in Developed Market Economics, Longman.
10. Grigg D (1995) Introduction to Agricultural Geography, Routledge, London.


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16GEOG205CC
Morphometric and Hypsometric Analysis (Theory)
Exam course Code - 2065

L T P
2 0 0

Credit – 2, Time: 2.5 Hrs.

Total Marks: 50
External Assessment Marks: 40
Internal Assessment Marks: 10

Note: Question 1 is compulsory comprising of four sub parts (two marks for each sub part), to be answered in 25-30 words. There will be six long questions, three from each unit. The candidate has to answer three long questions, at least one question from each unit. Question 1 carries ten marks. Long questions carry ten marks each.

Objective: The objective of this course is to make the students learn the morphometric tools by applying them in the analysis of relief, drainage pattern and slope.

Course Outcome (COs): Familiarization with arrangement, identification and interpretation of topographical sheets. Acquaintance with the concept of drainage basin and its linear and areal properties. Provides understanding about relief aspects of drainage basin. Development of understanding about slope and various methods of its analysis.

UNIT-I

1. Morphometric Analysis of Drainage Basin: Types and its geographical significance;
2. Arrangement, identification and interpretation of topographical sheets of India.
3. Delineation of drainage basin and its geographical significance.
4. Profile: Transverse and longitudinal.
5. Drainage network analysis: Linear and areal properties.
6. Relationship between stream order, number and length.

UNIT-II

7. Relief aspect of drainage basin: (i) Area-height curve, (ii) Altimetric frequency curve, (iii) Hypsographic curve, (iv) Hypsometric integral curve (v) Clinographic curve.
8. Development of slope and various methods of its analysis (Wentworth and Smith's method).


Suggested Readings:

1. Dury, G.H. 1966. Essays in Geomorphology, Heinmann, London.
2. Misra, R.P. and Ramesh, A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi.
3. Miller, A. 1964. The Skin of the Earth. Methuen, London
4. Monkhouse, F. J. and Wilkinson, H.R. 1980. Maps and Diagrams. B.I. Publications, New Delhi.
5. Singh, R. L. 1986. Elements of Practical Geography, Kalyani Publications, New Delhi.

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16GEOG206CC

Morphometric and Hypsometric Analysis (Practical)

Exam course Code - 2066

L T P

0 0 08

Credit – 04

Time: - 04 Hrs.

Max. Marks: 100

Distributions of Marks:

Lab Work Test: 60

Record on Lab Work: 20

Viva-Voce: 20

Note: The examiner shall set four questions, two from each unit. The candidate shall attempt three questions in all, selecting at least one question/exercise from each unit.

Objective: The objective of this course is to make the students learn the morphometric tools by applying them in the analysis of relief, drainage pattern and slope.

Course Outcome (CO's): The course shall provide the students an opportunity to practice the use of tools and methods applied in morphometric analysis.

Unit –I


1. **Interpretation of toposheets :** (a) Physical features and (b) Cultural features (2)
2. **Delineation of Watershed** (All the exercises of morphometry shall be based on delineated watershed) (1)
3. **Profile Analysis – Transverse and Longitudinal Profile**
 - a) Serial Profile (1)
 - b) Superimposed Profile (1)
 - c) Composite Profile (1)
 - d) Projected Profile (1)
 - e) Longitudinal Profile (1)
4. **Linear Aspects:**
 - a) Relationship between Stream ordering and Stream number based on Horton and Strahler (2)
 - b) Relationship between Stream ordering and Average Stream Length (1)
 - c) Bifurcation ration (1)
5. **Areal Aspects:**
 - a) Stream frequency (1)
 - b) Drainage density (1)

Unit –II

6. **Relief Aspects:**
 - a) Area Height Curve (1)
 - b) Hypsometric curve (1)
 - c) Integral Hypsometric curve (1)
 - d) Clinographic or Clinometric Curve (1)
 - e) Altimetric frequency curve. (1)

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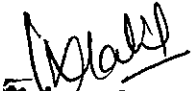
7. Slope Analysis:

- a) Wentworth's method of Average Slope (1)
- b) G. H. Smith's Method of Relative Relief (1)

Figures in parenthesis represent number of practical exercises

Suggested Readings:

1. Dury, G.H. (1966), Essays in Geomorphology, Heinmann, London.
2. Misra, R.P. and Ramesh. A. (1999): Fundamentals of Cartography, Concept Publishing Company, New Delhi.
3. Dury, G.H. (1966). Essays in Geomorphology. Heinmann, London.
4. Misra, R.P. and Ramesh, A. (1999). Fundamentals of Cartography, Concept Publishing Company, New Delhi.
5. Monkhouse, F. J. and Wilkinson, H.R. (1980). Maps and Diagrams. B.I. Publications, New Delhi.
6. Singh, R. L. (1986). Elements of Practical Geography, Kalyani Publications, New Delhi.


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16GEOG301CC
Regional Planning and Development
Exam course Code - 3061

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of the course is to develop an understanding of the processes, pattern and practice of regional development in India. This will expose students to development theories and strategies and planning concepts and broaden their perspective regarding regional disparities in India and the need of regional planning to overcome it.

Course Outcomes (COs): Students shall develop understanding about regional development processes, models adopted for development, regional disparities, challenges and strategies to overcome the disparities.

UNIT-I

1. Concept of Regional Development:, Regional disparities, Balanced Regional development
2. Region and its typology,
3. Basis of regionalization in India and their characteristics.

UNIT-II

4. Theories of Regional Development:
 - (i) Trickle Down Theory
 - (ii) Growth Pole Theory
 - (iii) Cumulative causation Model
 - (iv) Core-Periphery Theory

UNIT-III

5. Development and Regional Disparities in India since Independence
 - (i) Disparities in Agricultural Development
 - (ii) Disparities in Industrial Development.
6. Disparities in Human Resource Development in terms of poverty, education and health


UNIT-IV

7. India through Planned Era with special reference to
 - (i) Tribal area development plan
 - (ii) Hill Area development plan
 - (iii) Desert, drought prone and backward area development plan
8. Niti Ayog : Aims and objectives
9. Urban Planning in India with special reference to National Capital Region

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Suggested Readings:

1. Chandna, R.C. (2000): Regional Planning: A Comprehensive Text. Kalyani Publishers., New Delhi.
2. Chaudhuri, J.R. (2001) : An Introduction to Development and Regional Planning with special reference to India. Orient Longman, Hyderabad.
3. Friedmann, J. and Alonso, W. (ed.) (1973) : Regional Development and Planning. The MIT Press, Mass.
4. Hettne, B.; Inotai, A. and Sunkel, O.(eds.) (1999-2000): Studies in the New Regionalism. Vol. I-V. Macmillan Press, London.
5. Kuklinski, A.R. (1972): Growth Poles and Growth Centres in Regional Planning. Mouton and Co., Paris.
6. Kuklinski, A.R. (ed.) (1975): Regional Development and Planning: International Perspective, Sijthoff-Leydor.
7. Leys, C. (1996): The Rise and Fall of Development Theory. Indian University Press, Bloomington, and James Curry, Oxford.
8. Mahapatra, A.C. and Pathak, C.R. (eds.) (2003): Economic liberalization and Regional Disparities in India. Special Focus on the North Eastern Region. Star Publishing House, Shillong.
9. Mahesh Chand and V. K. Puri ; Regional Planning in India, Allied Publishers, New Delhi, 1983.
10. Misra, R.P. (ed.) (1992): Regional Planning: Concepts, Techniques, Policies and Case Studies. 2nd edition. Concept Publishing Company. New Delhi.
11. Misra, R.P. and Natraj, V.K. (1978): Regional Planning and National Development. Vikas, New Delhi.
12. Planning Commission of India: Eighth Five Year Plan (1992-97) Vol. I, Govt. of India, New Delhi.
13. Sundaram K V (1986) : Urban and Regional Planning in India, Vikas Publishing House, 1986, New Delhi
14. Raza Moonis (ed) (1988) Regional Development Vol. 10, Contribution to Indian Geography Heritage Publishers, New Delhi.
15. Kundu and Moonis Raza (1988): Indian Economy: The Regional Dimension, CSRD/SSS, JNU. New Delhi.
16. Patnaik, C S (1981), Economics of Regional Development and Planning in Third World Countries, Associate Publishing House, New Delhi.


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16GEOG302CC

Introduction to Remote Sensing and Research Methodology (Theory)

Exam course Code –3062

L T P

3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100

External Assessment Marks: 80

Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective is to provide exposure to students regarding use of new techniques in obtaining geographical data. It shall introduce the students to the processes of satellite remote sensing data acquisition and the application of digital information in real time mapping. The objective of the course to make students develop an understanding of the concept of Research in geography, Research Problems, Research Design, Data Collection and Sampling Design.

Course Outcomes (COs): The course will equip the students with state of art concepts and methodologies of remote sensing technology. The course shall equip the students with the understanding of different aspects of research. The students will learn about the significance of Research in Geography.

Unit -1

1. Aerial Photographs: History, definition and advantages and limitations. Types of aerial photographs and resolution. Mirror Stereoscope. Elements of aerial photo interpretation.
2. Remote Sensing, definition and scope, EMR and spectrum. Interaction of EMR with atmosphere and earth surface features. Atmospheric window. Remote Sensing Platforms and Sensors. Orbits, Resolution and types of remote sensing.

Unit- II

3. Concept of Multispectral and Thermal remote sensing. Major earth resource Satellites of India.. Indian Space Program and characteristics of Indian remote sensing satellite and data.
4. Digital Image processing and application: Image classification: supervised and unsupervised. Applications in resource mapping and monitoring.

Unit-III

5. Introduction to Research in Geography: meaning, objectives, types and significance of field work.

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6. Defining Research Problems: Meaning of Research problem; Selection of Research problem; Need for defining a research problem; Techniques involved in defining a problem; Limitations of the Research problem

Unit-IV

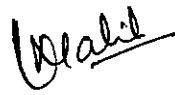
7. Research Design: Important concepts related to Research design; Types of Research design- exploratory, descriptive and experimental. Formulation of Hypothesis.

8. Data sources and Data Collection: types of data- primary and secondary; Sources of data, methods of collecting primary data- observation method, interview method, Questionnaire and Schedule; difference between questionnaire and Schedule

Suggested Readings:

1. Avery T.E. and G.L. Berlin (1992): Fundamentals of Remote Sensing and Air Photo Interpretation, 514 Ed. Macmillan, New York, USA.
2. Aggarwal C.S. and P.K. Garg (2000). Remote Sensing, A.H. Wheeler & Co. Ltd, New Delhi.
3. Bhattacharya, B (Campbell, J.B. (2002) Introduction to Remote Sensing, 3rd ed., Taylor & Francis, New York, USA.
4. Jensen, J.R. (2000), Remote Sensing of the Environment: An earth Resource Perspectives, Pearson Education Inc. India.
5. Lillesand, Thomas M. and R. Kiffer (1994), Remote Sensing and Image Interpretation, 3rd edition, John Willy & sons, Inc New York, USA.
6. Nag and Kudrat (2002), Remote Sensing and Image Interpretation, Concept Publishers, Delhi.
7. Meenakhi Kumar (2000), Text book on Remote Sensing; NCERT, New Delhi.
8. Reddy, Anji (2000) Remote Sensing and Geographical Information System (An Introduction), Hyderabad.
9. Sabins, F (1982): Remote Sensing Principles and Application, Freeman and Compare, New York, USA.
10. Burrough, P.A. and McDonnell, R. (1998): Principles of Geographic Information Systems. Oxford University Press, Oxford.
11. Chang, K.T. (2003): Introduction to Geographic Information Systems. Tata McGraw Hill Publications Company, New Delhi.
12. Ahmed El-Rabbany: Introduction to GPS, 2nd ed., Artech House, Boston
13. Chauniyal, D. D. (2004): Remote Sensing and Geographic Information Systems. (in Hindi). Sharda Pustak Bhawan, Allahabad.
14. Demers, M. N. (2000): Fundamentals of Geographic Information Systems. John Wiley and Sons, Singapore.
15. Prithvish Nag and Samita Sengupta
16. Har Prasad (1992): Research Methods and Techniques in Geography, Rawat Publishers, Jaipur.
17. Mishra, H.N. and Singh V.P. (ed.) (1998): Research Methodology: Social, Spatial and Policy Dimensions, Rawat Publishers, Jaipur.

18. Goode and Hat, Research Methodology in Social Sciences, Oxford University Press, New Delhi.
19. Johnson, R.J. (1978): Multivariate statistics in Geography, Longman, London.
20. Black James A and D.J. champion (1976): Methods and Issues in social Research, New York, John Wiley and Sons, Inc.
21. Kothari, C.R. (2004). Research Methodology: Methods and Techniques, 2nd Ed., New Age International Publishers, New Delhi.
22. Kumar, R. (2005): Research Methodology: Step by Step Guide for Beginners, 2nd Pearson, Australia, p-7.
23. Mishra, H.N. and Singh, V.P.(2002), Research Methodology in Geography: Social, Spatial and Policy Dimensions, Rawat Publication, Jaipur.
24. Dey, I. (1993), Quantitative Data Analysis, Routledge, London.
25. Somekh, B. and Cathy, L. (2005). Research Methods in the Social Sciences, Vistaar Publications, New Delhi.


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Distt. Jalandhar)

16GEOG303DCEC (i)
Fluvial Geomorphology
Exam course Code - 3063

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: Fluvial geomorphological knowledge helps in identifying the problems faced by human society, arising due to the interaction of human being with landscape and natural environment. The present course is aimed at providing the knowledge to students about fluvial system, sediment transfer processes and major types of channels, the processes, awareness and management flood plain management.

Course Outcomes (COs): 1. Acquaintance with the basic concepts of fluvial system. 2. Familiarization with sediment transfer processes and major types of channels. 3. Cognizance of flood forecasting and management techniques. 4. Awareness about flood plain management using geospatial technology.

UNIT-I

1. Fluvial System: types, variables, feedbacks, thresholds, responses and scales in fluvial geomorphology.
2. Water erosion: types of water erosion and erosive processes, monitoring of water erosion (field measurements and models) management problems associated with erosion.


UNIT-II

3. Sediment transfer: sources, modes, storage, movement and measurement of sediment load and yield, controls as sediment yield, human activity and sediment yield.
4. Channel forms and processes: channel types, geometry, size, shape, channel pattern, bedrock channels and associated land forms.

UNIT-III

5. Floods: Flood frequency, magnitude, forecasting and structural and non-structural adjustment to floods, catastrophic and paleo floods.

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6. Impact of construction activities on fluvial systems.
7. Human adjustment in floodplains.

UNIT-IV

8. Managing River channels: channelization and flow regulation; impacts of water management on the physical, chemical and ecological condition of channels and floodplains, river restoration.
9. Remote sensing and GIS applications in mapping, monitoring and management of fluvial environments.

Suggested Readings:

1. Charlton, R. 2008. Fundamentals of Fluvial Geomorphology, Routledge, London
2. Chorley R.J. 1973. Introduction of Fluvial Processes. Methuen and Company, London.
3. Fryirs, K.A. and Brierley G.J. 2013. Geomorphologic Analysis of River Systems, Wiley Blackwell, Chichester.
4. Gregory K.J. 1977. River Channel Changes. John Wiley and Sons, New York.
5. Gregory K.J. and Walling, D.E. 1985. Drainage Basin: Forms and Process-A Geomorphological Approach. John Wiley and Sons, New York.
6. Kingston D. 1984. Fluvial Forms and Processes. Edward Arnold, London.
7. Kondelf, G.M. and Piegay, H. 2003. Tools in Fluvial Geomorphology. Wiley, Chichester.
8. Leopold C.B. 1964. Fluvial Processes in Geomorphology. Freeman, London.
9. Morisawa. 1981. Fluvial Geomorphology. George Allen and Unwin, London.
10. Robert, A. 2003. River Processes-An Introduction to Fluvial Dynamics, Hodder Education.

W. S. Patil
Chairperson
Department of Geography
B.P.S.M.V. Khanpur (pat)

16GEOG303DCEC (ii)
Urban Geography
Exam course Code - 3064

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective is to enlighten the students about the basics of urban geography, world urbanization pattern, morphology and land use of cities, social- economic, functional and spatial dimensions of urban centers and their various theoretical conjectures.

Course Outcomes (COs): The students shall be acquainted with various urban concepts, urban economic base, urban functions, urban core- periphery interaction and various theories and models.

UNIT-I

1. Urban Geography: nature, scope, approaches and concepts.
2. Origin and evolution of towns and factors of urban growth: theories of urban origins.
3. The global context of urbanization and cycle of urbanization.

UNIT-II

4. Economic base of cities: concept and employment ratio.
5. Functional classification of cities: concepts and scheme of classification.
6. Rural Urban Fringe: structural characteristics and its development.

UNIT-III

7. City and region: concepts of influence and dominance, methods of delimitation of area of influence and area of dominance.
8. Urban morphology and land use structure: city core, commercial, industrial and residential areas.
9. Models of city structure: concentric zone model by E.W. Burgess, sector model by Homer Hoyt, multiple nuclei model by Harris and Ullman.


UNIT-IV

10. Social area analysis; Bases of residential segregation.

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11. Rank size rule
12. Law of primate city.

Suggested Readings:

1. Mayer H.M. and Kohn, C.F. (1968), Readings in Urt. The University of Chicago Press, Chicago.
2. Berry, J.E. & et al. (Eds.), 1970, Geography Perspective on Urban System, Prentice Hall, New Jersey.
3. Cater, Herald (1972), The study of Urban Geography, Edward Arnold, London.
4. Johnson, J (1974), Suburban Growth, John Wiley and sons, London.
5. Kaplan, Wheeler and Holloway(2007) Urban geography, John Wiley, USA
6. Clark, D (1982), Urban Geography, Croom Halm, London and Cambridge.
7. Northern, R.M.(1979) Urban Geography, john Wiley, Toronto.
8. Michanel Pacione (2004) Urban Geography: a global Perspective, Routledge, USA.
9. Ramachandra,R(1992) Urbanization and Urban System in India, Oxford, London.
10. Raymond and Murphy (1960) The American cities: An urban geography, McGraw hills, NewYork.
11. Sinha, S.P. (1984), Processes and Pattern of Urban Development in India: A.C. study of Haryana, The associated Publishers, Ambala Caltt.
12. Singh Surender & Saroha Jitender , Urban Geography, Pearson Publication.


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16GEOG303DCEC (iii)
Resource Geography
Exam course Code - 3065

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective is to create awareness among the students about resource availability, accessibility, distribution and its use or misuse. It also enlightened them to theoretical evaluation and conservation and management of resources for sustainable development.

Course Outcomes (COs): Students will become sensitized to resource their types, availability and use or misuse, its impact on environment and will learn conservation methods and techniques. They shall become aware about the ongoing international efforts to mitigate environment problems and legal provisions.

UNIT-I

Concept and Scope of Resource Geography; Resource and ecosystem services: concept and types of resources: classification of resources- changing profile and concerns; understanding relationship between natural resources and development process, and livelihoods with special reference to poor in the developing world.


UNIT-II

Natural resource: Soil resources, Water Resource, Forest Resource and Mineral Resources. Future Prospects of Natural resources.

UNIT-III

Models of Natural Resources Process: Zimmermann's Primitive and Advance Models of natural resource process- population, resources and carrying capacity, Kirk's Decision Model, Brookfield System Model.

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UNIT-IV

Conservation and Management of Natural Resources: Meaning and Concept of conservation of Natural Resources, Conservation and Management Methods of Natural resources: Soil Resource, Water Resource, Forest Resource and Mineral Resources, Problems of Natural Resource Management in India. Policies for sustainable resource - based development.


Suggested Readings:

1. Barbier, Edward B (2005) Natural Resources and Economic Development, Cambridge University Press.
2. Borton, I and R W Kates (1984) Readings in Resource Management and Conservation, University of Chicago Press, Chicago.
3. Bruce, Mitchell (1989) Geography and Resource Analysis, John Wiley and Son, New York.
4. Fabricius, C & Eddie Koch Eds. (2004) Rights, Resources and Rural Development: Community based Natural Resource Management in Southern Africa, Earthscan, London Sterling.
5. Das Gupta, Biplab (1979) the Environmental Debate, Economic and Political Weekly, Vol.13, No. 6/7, Annual Number (Feb., 1978), pp. 385-387+389+391+393+395+397-400.
6. Eliot Hurst, M E (1972) A Geography of Economic Behaviour: An Introduction, Duxbury Press, California.
7. Guha, J L and P R Chattroj (1994) Economic Geography- A Study of Resources, The World Press Pvt. Ltd. Calcutta
8. Kates, R.W. & Burton, I (eds): Geography, Resources and Environment, Vol I & II, University of Chicago Press, Chicago, 1986.
9. M Laren, D.J. and Skinnnet, B.J.(eds.): Resources and World Development, John Wiley & Sons, New York, 1986.
10. Martino, R L (1969) Resource Management. Mc Graw Hill Book Co., London.
11. Negi, B S (2000) Geography of Resources, Kedar Nath and Ram Nath, Meerut.
12. Owen, Oliver, S (1971) Natural Resource Conservation: A Ecological Approach, McMillion, New Delhi.
13. Raja, M (1989) Renewable Resources, Development, Concept Pub. New Delhi.
14. Ramesh, A (1984) Resource Geography (Ed.) R P Misra, Contribution to Indian Geography, Heritage Publishers, New Delhi.
15. UNDP & World Resource Institute (2005) The Wealth of the Poor—Managing Ecosystems to Fight Poverty, World Resources Institute, Washington, DC 20002
16. Zimmermann, E. W. (1951) World Resources and Industries, Harper and Brothers, New Delhi.

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16GEOG303DCEC (iv)
Rural Settlement Geography
Exam course Code - 3066

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Course Outcomes (COs): 1. Understanding about the fundamental concepts of settlement geography. 2. Enhancement of knowledge about types and patterns of rural settlements 3. Acquaintance with various social issues in rural settlements. 4. Knowledge about environmental issues and rural development planning in India.

UNIT-I

Rural Geography: Meaning, Nature and Scope. Types of Community Facilities and services- water sanitation, electricity.

Provider of community facilities- governmental, Non-governmental and philanthropic originations: Community facilities and services programs.

UNIT-II

Rural House Type: House Types based on Building Materials. Size and Shape as basic for classification: House Type based on Socio-Economic Status: Regional Patterns of House in India.

UNIT-III


Rural Development in India: Determinants of rural development: Approaches in rural development: Community development approaches. Target approaches, integrated approach, participatory development approaches: Sustainable rural development.

Issues of Rural Development in India: Land Reforms, Agricultural Land use. Rural Poverty, Rural Unemployment. Rural educations, health and health care delivery systems.

UNIT-IV

Rural Planning: District and Block level planning: Area specification projects/programs-Tribal Area Development and Integrated Wasteland Development program: Agricultural specific Programs: High Yielding Variety program. Integrated Rural Development Programs (IRDP)

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Suggested Reading:

1. Alam. S. Mel at. (1982). *Settlement System of India*. Oxford and IBH Publication Co. New Delhi.
2. Armendera (1998). *Poverty, Rural Development and public Policy*: Deep and Deep Publishers, New Delhi.
3. Chisholm, M. (1967): *Rural Settlements and Land Use*. John Willey, New Delhi.
4. Clout .H.D (1977): *Rural Settlements and Land Use*. John Willey, New Delhi.
5. Das. K.D. (2007). *Dynamics of Rural Development*. Deep and Deep Publishers, New Delhi.
6. Garg. A. (1992): *Working and Impact of Integrated Rural Development Programme*. Deep and Deep Publishers. New Delhi.
7. Hudson, F.S. (1976) *A Geography of Settlements*. Mac Donald & Evans, New York.
8. Jha. U.M. (1995) *Rural Development in India: Problems and Prospects*.
9. Madan, G.R (2010): *Indian Rural Problems*, Radha Publications. New Delhi.
10. Mandal. R.B (1988) *Systems of Rural settlements in Developing Countries*, Concept Publication, New Delhi.
11. Mandal, R.B (2001). *Introduction to Rural Settlements*, Concept Publication, New Delhi.
12. Misra. H.N. (1987) *Rural Geography*. Vol. IX Contributions to Indian Geography, Heritage Publishers New Delhi.
13. Mishra. S.K. and Puri. V.K. (2009). *Indian Economy*. Himalaya Publishing house, New Delhi.
14. Nath. V. (2010). *Rural Development and Planning in India*. Concept Publication, New Delhi.
15. Nikkiran. S. and Ramesh G. (2010) *Research methods in Rural Development*, Deep and Deep Publication, New Delhi.
16. Rai. S. (2005) *Kurukshetra*, Ank, 12. October, Gramin Vikas Mantralaya, New Delhi
17. Sahu. B.K. (2003). *Rural Development in India*, Anmol Publishers, Delhi.
18. Satendra and Sharma, V.K (2004). *Sustainable Rural Development for Disaster Mitigation*, Concept. New Delhi.
19. Shah. G. Thorat S. et al. (2006) *Untouchability in Rural India*. Sage Publication, New Delhi.
20. Singh. R.L (1976). *Geographic Dimensions of Rural Settlements*, NGSI, Varanasi.
21. Singh. R.L (1976). And K.N Singh Ed (1975). *Readings in Rural Settlements Geography*, NGSI, Varanasi.
22. Singh. R.Y. (1994): *Geography of settlements*. Rawat Publication, New Delhi.
23. Singh. R.Y. (2005). *Adhiwas Bhugol*. (in Hindi) Rawat Publication, New Delhi.
24. Sinha, R.N.P., *Geography and Rural Development*: Manohar Publisher and Distributions, New Delhi.
25. Sinha S.P & Singh .S. (2007). *Strategies for Sustainable Rural Development*, Deep and Deep Publishers, New Delhi.

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16GEOG304DCEC (i)
Geography and Disasters Management
Exam course Code - 3067

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of this course to develop among the students an understanding about the geographical dimensions of different types of disasters. It also introduces the students to concepts and practices of disaster mitigation and recovery, impacts of disasters and role of RS and GIS in disaster prevention.

Course Outcomes (COs): The course shall make the students aware about the risk of occurrence of different types of disasters in various parts of world. It will also appraise them about the mitigation and recovery mechanisms of disasters.

UNIT-I

1. Disasters and Hazards: Definition, nature and classification.
2. Geography and disasters: major disasters of world, disaster profile of India
3. Tectonic Disasters: Volcanoes, Earthquakes, Tsunamis, Landslides.

UNIT-II

4. Hydrological Disasters: Floods and Droughts
5. Climatic Disasters: Cyclones and Heavy Precipitation events
6. Human Induced Disasters: Epidemics, Industrial and Transport Disasters; Wars and Terrorism induced Disasters

UNIT-III

7. Disaster Management in India: Policy and Organizational Structure setup.
8. Disaster Vulnerability and Affecting Factors.
9. Planning for Disaster Mitigation Measures and Preparedness.

UNIT-IV

10. Post Disaster Recovery and Rehabilitation
11. Impacts of Disaster on Society and Economy

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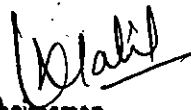
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12. Remote Sensing and GIS Applications in Disaster Prevention and Monitoring.

Suggested Readings:

1. laikie, P and other (1994) At Risk: Natural Hazards, People's Vulnerability and Disasters, Routledge, London.
2. Carter, NW (1991), Disaster Management: A Disaster Manager's Handbook, ADB, Manila.
3. Cuny, FC (1983) Disasters and Development, Oxford University Press.
4. Hewitt, K (1977) Regions of Risk: A Geographical Introduction to Disasters, Longman, Harlow.
5. Kates RW and I Burton (1986) Geography, Resources and Environment, Vol. I & II, Themes from the work of Gilbert F White, The University of Chicago Press, Chicago
6. Smith K (1996) Environmental Hazards: Assessing Risks and Reducing Disasters, Routledge, London.
7. Varley, A, Disaster, Development and Environment, John Wiley and Sons, Chichester.
8. National Policy on Disaster Management, 2009, Ministry of Home Affairs, Govt. of India, New Delhi.


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16GEOG304DCEC (ii)
Soil Geography
Exam course Code - 3068

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The main aim of this course is to appraise the students about soil formation processes and geographical distribution of soils in the world. The course shall cover the fundamental processes, development, classification and mapping of this resource.

Course Outcomes (COs): Study of Soil Geography shall make the students understand the significance of soil resources in the development of the society. It should also make the students to internalize the relationship between soils and other natural resources.

UNIT-I

1. Nature and scope of Soil Geography.
2. Soil formation factors (Parent material, flora and fauna, climatic and topographic) and Processes of soil formation and soil development (physical, biotic and chemical).
3. Soil profile and its characteristics (zonal, azonal and intra zonal soils).

UNIT-II

4. Physical properties of soils: morphology, (texture, structure, colour, porosity and permeability), water, air and temperature.
5. Chemical properties of soils: soils reaction and controlling factors, soil clays, organic matter and humus.
6. Biological properties of soils (Soil organisms).


UNIT-III

7. Soil classification: genetic, taxonomic and 7th Approximation, their characteristics and world patterns.
8. Soil erosion and Degradation Processes

UNIT-IV

9. Conservation methods to improve the physical qualities of soils.

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10. Methods and mechanism of soil survey.
11. Soil reclamation and management, integrated soil and management.

Suggested Readings:

1. Birkland P.W (1999): Soil and Geomorphology, oxford university press, Inc., New York.
2. Brady Nyle C.; Weil Raymond C. (2012): The nature and Properties of soils, Pearson publishing, Prentice hall of India, Pvt. Ltd. New Delhi.
3. Brickland, P.W. 1984. Soils and Geomorphology. Oxford University Press, London.
4. Buckman, H.O and Brady, N.C. 1960. The Nature and Properties of Soils. MacMillan, New York.
5. Bunting, B.T.: The Geography of Soils, Hutchinson, London, 1973.
6. Clark, GR. 1957. Study of Soil in the Field, Oxford University Press, Oxford.
7. Daji, JA.1970. A Text Book of Soil Science. Asia Publishing House, New Delhi.
8. Fenwick I.M and knapp B.J (1982): Soils – Processes and Response, Unurin Brothers Ltd.; The Greshman press, survey.
9. Foth H.D. and Turk LM. 1972. Fundamentals of Soil Science. John Wiley, New York.
10. Govinda Rajan, S.V. and Gopala Rao, H.G.: Studies on Soils of India. Vikas Publications, New Delhi, 1978.
11. Mc. Bride, M.B.: Environmental Chemistry of Soils, Oxford University Press, New York; 1999.
12. Pitty, A.F. 1978. Geography and Soil Properties. University Press, London.
13. Ray choudhuri, S.P.: Soils of India, ICAR, New Delhi, 1958.
14. Sehgal, J.2000. Pedology- concepts and Applications. Kalyani Publications, New Delhi.


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16GEOG304DCEC (iii)
Political Geography
Exam course Code - 3069

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective is to acquaint the students with conceptual framework of geo-political issues and assessment of Indian position in the emerging geo-political situation.

Course Outcomes (COs): The students shall be groomed to grasp the conceptual framework of geo-political issues and role and status India in contemporary geo-political situation.

UNIT-I

1. Nature and scope of political geography, its approaches and recent trends.
2. School of thoughts: political economy, world system, globalization.

UNIT-II

3. Concept of nation, state and nation-state, nationalism and nation building, emergence and growth of territorial state, globalization and the crisis of the territorial state forms of governance: unitary and federal.
4. Distinction between frontiers and boundaries, demarcation of boundaries, classification and functions of boundaries.
5. Landlocked state: advantages and disadvantages.

UNIT-III

6. Global strategic views: Mahan and Sea power; Mackinder and Heartland; Spykman and Rimland, Servasky and Air power.
7. Geo-politics in the post cold war world- S.B. Cohen's model of geo-politics.

UNIT-IV


8. Emergence of India as regional power: Geo-political significance of Indian and Pacific Ocean.
9. Geo-political issues in India with special reference to water disputes and riparian claims.
10. Gerrymandering and electoral abuse in India.
11. Kashmir problem and Indo-Pak relations.

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Suggested Readings:

1. Alexander, L.M. World Political Patterns Ran Mc Nally, Chicago, 1963.
2. De Blij, H.J. and Glassner, Martin: Systematic Political Geography, John Wiley, New York, 1968.
3. Dikshit, R.D .Political Geography: A Contemporary perspective, Tata McGraw Hill, New Delhi, 1996.
4. Dikshit, R.D. Political geography: A Century of Progress, Sage, New Delhi, 1999.
5. Sukhwai, B.L. Modern Political Geography of India Sterling publishers, New Delhi, 1968.
6. Taylor, Peter: political Geography Longman, London. 1985.
7. Fisher Charles A.: Essays in Political Geography, Methuen, London, 1968.
8. Pounds N.J.G.: Political Geography. McGraw Hill, New York, 1972.
9. John R. Short: An introduction to Political Geography Routledge, London, 1982.
10. Moddie, A.E: Geography Behind Political Hutchinson, London, Latest edition.
11. Prescott. J.R.V.: The Geography of Frontiers and Boundaris Aldine, Chicago.
12. Deshpande C.D: India-A Regional Interpretation Northern Book Centre, New Delhi, 1992.
13. Panikkar K.M.: Geographical Factors in India History: 2 Vols, Asia Publishing House Bombay, 1959.


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16GEOG304DCEC (iv)
Bio Geography
Exam course Code - 3070

L T P

Total Marks: 100

3 1 0

Credit – 4, Time: 3 Hrs.

External Assessment Marks: 80

Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective is to introduce the concept of biogeography, evolution and dispersal of flora and fauna, interaction between living and non-living organisms with physical environment, conservation of resources and human adaptation and adjustment to diverse environment.

Course Outcomes (COs): Students shall learn the significance of bio-geography, origin and evolution of flora and fauna, their dispersal over space and environmental hazard and laws to protect biodiversity and clean and safe environment.

UNIT-I

1. Nature, scope and significance of biogeography.
2. Basic ecological principles: Bio-energy cycle in territorial ecosystem; energy budget of the earth; trophic levels and food web.
3. Origin of fauna and flora: Major gene centers; domestication of plants and animals and their dispersal agents and routes.

UNIT-II

4. Distribution of plant life on the earth and its relation to soil, climate and human activities.
5. Geographical distribution of animal life on the earth and its relation to vegetation types, climate and human activities.

UNIT-III

6. Communities-Nature of communities and ecosystems: bio-diversities; human induced communities' change; habitat decay and conservation of biotic resources.
7. Industrial effluent and its effect on fresh water and marine biology.

UNIT-IV

8. Environmental hazards: Ecological consequences, human perception and adjustment with respect to flood, drought and earthquake.
9. Bio-Reserves in India.
10. National forest and wild life policy of India.

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Suggested Readings:

1. Agarwal, D.P.: Man and Environment in India through Ages, Book & Books, 1992.
2. Bradshaw, M.J.: Earth and Living Plant, ELBS, London, 1979.
3. Cox, C.D. and Moore, P.D.: Biogeography: An Ecological and Evolutionary Approach 5thedn. Blackwell, 1993.
4. Gaur, R.: Environment and Ecology of Early Man in Northern India R.B. Publication Corporation, 1987.
5. Hoyt, J.B.: Man and the Earth, Prentice Hall, U.S.A. 1992.
6. Huggett, R.J.: Fundamentals of Biogeography. Routledge, U.S.A. 1998.
7. Lillies, J.: Introduction of Zoogeography, McMillan. London. 1974.
8. Khushoo, T.N. and Sharma, M.(eds.): Indian Geosphere-Biosphere Har-Anand Publication, Delhi 1991.
9. Lapedes, D.N. (ed.): Encyclopedia of Environmental Science, McGraw Hill, 1974.
10. Mathur, H.S.: Essentials of Biogeography, Anuj Printers, Jaipur, 1998.
11. Pears, N.: Basic Biogeography 2ndedn. Longman, London, 1985.
12. Simmon, I.G.: Biogeography, Natural and Cultural, Longman, London 1974.
13. Tivy, J.: Biogeography: A study of Plants in Ecosphere 3rdedn. Oliver and Boyd, U.S.A., 1992.
- 14 WWF related website
- 15 Wild Life Institute of India Publications

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16GEOG305CC

Practical of Remote Sensing Techniques and Report writing of socio-economic data

Exam course Code - 3071

L T P

0 0 8

Credit – 04, Time: - 3 Hrs.

End sem. Max. Marks: 100

Distribution of Marks: 50+50

RS Techniques Practical exercise: 3x10=30.

RS Technique based Record: 10

Viva-Voce: 10

Note: The students will have to write a project report based on field survey which shall be duly supervised by the teacher.

Objective: The objective of the course is to teach the acquisition of skills of measurements on aerial photographs, capability of reading and interpreting physical and socio-economic features on photographs, acquaintance with different digital data products and software for the processing of satellite data, enhancement of skills about processing and extracting features from satellite imageries. Student is able to learn the techniques and tools used in the analysis of socio-economic data by applying them on the data collected through field survey and drawing inferences and interpretations.

Course Outcome (CO's):

1. To train the students in skills related to satellite data processing.
2. The writing of the project report shall train the students in analysis and interpretation of socio-economic data obtained from the field.

Part -A

1. Basic information on aerial photographs (annotation and markings).
2. Identification of Fiducial marks, Principal point, Conjugate Principal points and Flight line. 1 exercise
3. Stereoscope vision
4. Interpretation and preparation of land use/land cover from aerial photographs 2 exercise
5. Preparation of interpretation key of satellite imageries 1 exercise.
6. Visual interpretation and preparation of land use/land cover from satellite imageries 1 exercise
7. Georeferencing of Satellite Data by georeferenced toposheet or GCP's 1 exercise
8. Digital classification of satellite data (supervised and unsupervised) 2 exercise

Part -B

Scheme of Evaluation of Project Report based on Socio- economic data:

1. Report writing: 30 marks
2. Viva voce on report: 20 marks

Note: The paper is compulsory and students have to visit to collect socio-economic data, financial assistance to students and teachers may be provided by the university.

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Suggested Readings:

1. Bhatta Basudeb (2014). Remote Sensing and GIS. Oxford University Press, Oxford.
2. Guha Pardeep (2013). Remote Sensing for the Beginner. East West Press, New Delhi.
3. Kumar Meenakshi 2001. Remote Sensing, NCERT, New Delhi.
4. Lillesand and R.W. Kiefer, 2005. Remote Sensing and Image Interpretation, John Wiley and Sons.
5. Pritvish Nag, and M. Kudrat 1998. Digital Remote Sensing, Concept Publishing Company, New Delhi.

***Note:** There should be two examiners for practical paper in this semester as there are papers of Research Methodology and Remote Sensing. As, it will be difficult to take viva and exam of both 50+50 in three hours.


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16GEOG306 CC
Environmental Geography
Exam course Code – 3072

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The purpose of the course is to explain the students' various dimensions of the ecosystems, their spatial connotation, anthropogenic interventions and resultant impacts, international environmental summits and legal provisions for environment protection.

Course Outcomes (COs): The students will get exposed to the concept of ecosystem, its various processes, s, anthropogenic interventions and consequential impacts and world community's efforts to address such problems

UNIT-I

1. Environment Geography: meaning, nature and scope; fundamental concepts of Environment; Approaches and Methods in Environment Geography; Relationship with other branches of knowledge,
2. Environment: Definition and Meaning; Components of environment- abiotic & biotic types of environment.

UNIT-II

3. Concept of Ecosystem; Types, components and function of ecosystem.
4. Energy flow in ecosystem: food chain, food web, tropic levels, ecological production and ecological pyramids.
5. Biogeochemical cycles: Hydrological, carbon, oxygen and nitrogen cycles

UNIT-III

6. Environment Degradation – Nature, process, types and causes of Environment degradation, Types of environmental pollution, Sources and effects of environment pollution: air water and land,
7. Environment Hazard: Causes and Measures; Global warming and Climate change- Ozone depletion; Greenhouse effect; Acid Rain; Urban smog
8. Biodiversity and conservation: preservation and conservation of ecosystem through resource management.

UNIT-IV


9. Environment legislation: The Stockholm Conference, the Earth Summit, Kyoto Protocol and Paris declaration, Environment policy of India (post 2000 AD).

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10. Environmental laws in India: Wild Life Act, Water Act, Forest Act, Environment Protection Act and National Environment Tribunal Act.
11. Emerging environment issues in India, Environment conservation and management in India; Environment awareness and movement in India.

Suggested Readings:

1. Ackerman, E.A., Geography as a Fundamental Research Discipline, University of Chicago Research Papers, 1958.
2. Agarwal, A. and Sen, S.: The Citizens Fifth Report. Centre for Science and Environment New Delhi 1999.
3. Bertalanffy, L. General Systems Theory, George Bragiller New York, 1958.
4. Bodkin, E.: Environmental Studies, Charles E. Merrill Pub Co., Columbus, Ohio, 1982.
5. Chandna, R.C.: Environmental awareness, Kalyani Publishers, New Delhi, 1998.
6. Chorley, R.J., Geomorphology and General Systems Theory, U.S.G.S. Professional Paper, 500B, 1962.
7. Eyre, S.R. and Jones, G.R.J. (eds.), Geography as Human Ecology, Edward Arnold, London, 1966.
8. Kormondy, E.J.: Concepts of Ecology, Prentice Hall, 1989.
9. Manners, I.R. and Mikesell, M.W. (eds.), Perspectives on Environment, Commission on College Geography, Publ. No.13, Washington, D.C., 1974.
10. Nobel and Wright: Environmental Science, Prentice Hall, New York 1996.
11. Odum, E.P.: Fundamentals of Ecology, W.B. Saunders, Philadelphia, 1971.
12. Russwurm, L.H. and Sommerville, E.(eds.): Man's Natural Environment- A systems Approach, Duxbury, Massachusetts, 1985.
13. Sharma, H.S.: Ranthambhore Sanctuary-Dilemma of Eco-development, Concept, New Delhi, 2000.
14. Simmons, I.G.: Ecology of Natural Resources, Edward Arnold, London, 1981.
15. Singh, S.: Environmental Geography, Paryag Publications, Allahabad, 1991.
16. Smith, R.L: Man and his Environment: An Ecosystem Approach, Harper & Row, London, 1992.
17. I.N.E.P.: Global Environmental Outlook, U.N. Pub, New York, 1998.
18. World Resources Institute: World Resources, (Latest Report) Washington D.C.
19. World Watch Institute: State of the World, Latest Report) Washington, D.C.


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kaler (Dipat)

16GEOG301OEC
Fundamentals of Geography
Exam course Code - 3073

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Total Marks: 100

External Assessment Marks: 80

Internal Assessment Marks: 20

UNIT-I

1. Solar system, solar and lunar eclipse; Earth- shape, movement, formation of days/nights and seasons; location- latitude-longitude and the time zones, International Date Line.

UNIT-II

2. Interior of earth; volcanism and earthquakes; plate tectonics; weathering and erosion; brief introduction to major landforms.

UNIT-III


3. Weather and climate: factors affecting and distribution; composition and structure of atmosphere;
4. Atmosphere pressure and global winds; introduction to Monsoon.

UNIT-IV

5. Relief of oceans; oceanic salinity; circulation of oceanic water; currents of Atlantic, Pacific and Indian Oceans.

Suggested Readings:

1. Leong, G.C. Certificate Physical and Human Geography, Oxford University Press, New Delhi, 2015.
2. Getis, A., Bjelland, M. and Getis V. Introduction to Geography, McGraw Hill Education, 2014.
3. Singh, S. Physical Geogrpny, Pravalika Publication, Allahabad.
4. Strahler, A. Introducing Physical Geography, John Wiley & Sons, Inc.


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Jalpaiguri)

w.e.f. – 2024-25

16GEOG401CC
Geographical Thought
Exam course Code - 4061

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of 8 subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of this course is to introduce the students to the history, philosophy and methodology of geography. The postgraduate students of geography must have an idea about the course of development of the discipline in terms of changes in its philosophy and methodological innovations.

Course Outcomes (COs): The course would appraise the students about the development of geography as a scientific discipline. It would help them in assessing the positive aspects and shortcomings of the discipline.

UNIT-I

1. Classification of knowledge, Nature of Geography and its place among sciences
2. Nature of Geographic knowledge during ancient (Greek and Roman) and medieval (Arab) periods
3. Foundation of Modern Geography-contributions of Varenus, Kant, Humboldt and Ritter.

UNIT-II

4. Emergence of Geography as a study of (i) physical features (ii) chorology (iii) landscapes.
5. Concepts in Geography: Environmental Determinism and Possibilism, Areal Differentiation;
6. Dichotomy and Dualism in Geography: Physical vs Human Geography, and Systematic vs Regional Geography

UNIT-III


7. Quantitative Revolution-Emergence of geography as spatial science
8. Positivist Explanations in Geography- Laws, theories, models
9. Inductive & deductive logic in geographic explanations

UNIT-IV

10. Behavioural and Humanistic Perspectives in Geography
11. Social Relevance in Geography- Welfare, Radical and Feminist Perspectives
12. Postmodernism and Geography.


w.e.f. – 2024-25

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Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan, Jalandhar

Suggested Readings:

1. Dickinson, R E (1969), The Makers of Modern Geography, London.
2. Dikshit, RD (1997), Geographical Thought- A Contextual History of Ideas, Prentice Hall of India, New Delhi.
3. Harvey David (1989), Explanation in Geography, Edward Arnold, London.
4. Hartshorne, R (1959), Perspectives on the Nature of Geography, Rand MacNelly, Chicago.
5. James PE and Martin J Geoffrey (1972) All possible Worlds, John Wiley and Sons, New York.
6. Johnston, RJ (1983) Geography and Geographers, Edward Heinemann, London
7. Peet, Richard (1998) Modern Geographical Thought, Oxford, Blackwell Publishers.
8. Gaile GL and Willmott CJ, Geography in America at the Dawn of 21st Century, Oxford, 2003.
9. Holt-Jonson, Arild, Geography, History and Concepts: A Study's Guide, Sage, 2011.
10. Cresswel Tim, Geographic Thought: A critical introduction, Wiley- Blackwell, 2013.


Chairperson
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B.P.S.M.V. Khanpur Kaler (Sonapat)

16GEOG402CC

Fundamentals of Geographical Information System (Theory)

Exam course Code - 4062

Exam course Code - 3073

L T P

2 0 0

Credit – 2, Time: 2.5 Hrs.

Total Marks: 50

External Assessment Marks: 40

Internal Assessment Marks: 10

Note: Question 1 is compulsory comprising of five sub parts (two marks for each sub part), to be answered in 25-30 words. There will be six long questions, three from each unit. The candidate has to answer three long questions, at least one question from each unit. Question 1 carries ten marks. Long questions carry ten marks each.

Objective: The objective is to provide exposure to students regarding acquaintance with the fundamentals of Geographical Information Systems, capability to differentiate the data types in geographical information systems, understanding about the applications of geographical information systems in resource mapping and knowledge about types and functioning of global positioning system

Course Outcomes (COs): The course will equip the students with state of art concepts and methodologies of GIS and GPS technology.

UNIT-I

1. GIS: definition and scope; components and elements of GIS.
2. Concept of geoid and spheroid. Coordinate projection system: implications of spherical and planar coordinate systems and their transformations in GIS.
3. Geographic data: spatial and non-spatial; spatial data structure: raster and vector; data base management system.

UNIT-II

4. Spatial analysis: overlay, neighborhood and proximity; integration of raster and vector data; applications of GIS in urban, social, disaster and resource mapping, monitoring and management.
5. Fundamentals of Global Positioning System (GPS): concept and principles; GPS devices; GPS system: NAVSTAR, GALILIO and GAGAN; applications of GPS.

Suggested Readings:

1. Burrough, P.A. and McDonnell, R. (1998). Principles of Geographic Information Systems. Oxford University Press, Oxford.
2. Bhatta Basudeb (2014). Remote Sensing and GIS. Oxford University Press, Oxford.
3. Chang, K.T. (2003). Introduction to Geographic Information Systems. Tata McGraw Hill Publications Company, New Delhi.
4. Demers, M. N. (2000). Fundamentals of Geographic Information Systems. John Wiley and Sons, Singapore
5. Heywood I, Cornelius S and Carver S. (2000). An Introduction to Geographical Information Systems, Longman, New York.

w.e.f. – 2024-25

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Department of Geography

B.P.S.M.V. Khanpur (Kalan, Junpat)

16GEOG403DCEC (i)
Geography of Tourism
Exam course Code - 4063

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of this course is to appraise the students about the tourist resources in different parts of India. It brings out the eco-tourist potentials in different physiographic regions namely Northern Mountains, Plains, Peninsula, Coastal regions and beautiful Islands.

Course Outcomes (COs): Through this paper the students will internalize the importance of and the role played by the tourism industry in India. They will also get to know about the various important destinations and their ecological settings.

UNIT-I

1. Definition, nature, scope and significance of tourism geography.
2. Factors influencing tourism: historical, physical, socio-cultural and economic.

UNIT-II

3. Motivating factors of tourism: leisure, recreation, spiritual, attraction of site and situation.
4. Infrastructure and support system of tourism accommodation and supplementary accommodation.

UNIT-III

5. Eco-Tourism potentials in India with reference to northern mountains and plains, peninsula, coastal regions and islands.
6. Impact of tourism: physical, economic and social.

UNIT-IV

7. Environmental laws and tourism.
8. Impact of globalization and foreign capital on tourism development.
9. Government policies for tourism development.

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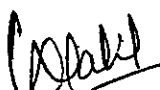
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(Signature)
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Gurpat)

Suggested Readings:

1. Bhatia A.K. Tourism Development; Principles and Practices. Sterling Publishers, New Delhi 1996.
2. Bhatia, A.K. International Tourism – Fundamentals and Practices, Sterling, New Delhi (1991).
3. Chandra R.H.: Hill Tourism: Planning and Development, Kanishka Publishers, New Delhi 1998.
4. Hunter C and Green H: Tourism and the Environment: A Sustainable Relationship, Routledge, London, 1995.
5. Inskeep.E: Tourism Planning: An Integrated and Sustainable Development Approach, Van Nostrand and Reinhold, New York, 1991.
6. Kaul R.K. Dynamics of Tourism & Recreation. Inter-India, New Delhi (1985).
7. Kaur J.: Himalayan Pilgrimages & New Tourism Himalayan Books, New Delhi, 1985.
8. Lea J.: Tourism and Development in the Third World, Routledge, London, 1988.
9. Molton D.: Geography of World Tourism Prentice. Hall, New York, 1993.
10. Pearce D.G. Tourism To-day: A Geographical Analysis, Harlow, Longman, 1987.
11. Robinson, H. A Geography of Tourism. Macdonald and Evans, London, 1996.
12. Sharma J.K. (ed): Tourism Planning and Development – A New Perspective Kanishka Publishers, New Delhi 2000.
13. Shaw G. And Williams A.M. Critical issues in Tourism-A Geographical perspective, Oxford: Blackwell, 1994.
14. Sinha P.C. (ed): Global Tourism: The Next decade, Oxford, Butterworth, Heinemann, Oxford, 1994.
15. Voase R Tourism: The Human Perspective Hodder & Stoughton, London, 1995.
16. Williams A.M. and Shaw G. (eds): Tourism and Economic Development- Western European Experiences, London.


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kaler (Unipat)

16GEOG403DCEC (ii)
Tropical Climatology
Exam course Code - 4064

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of this course is to appraise the students about the processes, dynamics and pattern of climate in the tropical area. It would also underline the significance of tropical climates and their impact on earth systems beyond tropics.

Course Outcomes (COs): This course would make the students understand the processes and resultant climatic pattern in tropical areas. It will also help them in establishing the linkages between tropical climates and weather systems in mid and high latitudes.

UNIT-I

1. Nature and scope and significance of Tropical Climatology.
2. Energy balance in tropical areas
3. Temperature distribution in tropical areas.

UNIT-II

4. Atmospheric Pressure and circulation in tropical areas-Hadley Cell
5. Walker Circulation, ENSO.
6. Monsoons-Theories of origin and characteristics and areas of influence

UNIT-III

7. Tropical Cyclones-Origin and characteristics.
8. Tropical Rainfall-Dynamics and distribution.
9. Heavy Precipitation events in tropical areas

UNIT-IV

10. Tropical Climates-Classification and characteristics.
11. Tropical Climates and agriculture: Human Adaptation to Tropical Climates.
12. Impact of Global Warming on Tropical Climates and Biomass.

w.e.f. – 2024-25


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[Signature]
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kaler (Conjpat).

Suggested Readings:

1. Barry, RF and RJ Chorley (1998) Atmosphere, Weather and Climate, Routledge, London.
2. Chritchfield, HJ, General Climatology.
3. Das PK (1987) The Monsoons, NBT Publications, New Delhi.
4. Fein JS and PM Stephens (1987) Monsoons, Wiley Inter-sciences.
5. Koenigsberger O H and others, Manual of Tropical Housing and Buildings, Universities Press
6. McGregor, GR and Simon Nierswold (1998) Tropical Climatology: An introduction to the Climates of the Low Latitudes, Wiley Inter-science.
7. Parenti, C (2011) Tropic of Chaos: Climate Change and New Geography of Violence, Nation Books, New York
8. Robinson PJ and S Henderson (1999) Contemporary Climatology, Henow.
9. Thompson, RD and A Perry (Ed.) (1997): Applied Climatology, Principles and Practices, Routledge, London.
10. Trewartha, GT. An Introduction to Climate. McGraw Hill Company, New York, 1980.


Chairperson
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B.P.S.M.V. Khanpur Kalan, Sonapat

16GEOG403DCEC (iii)
Geography of Health and Well-being
Exam course Code - 4065

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective of the course to make students develop an understanding of the concept of social wellbeing in the context of space. The students shall study the human development index and parameters of wellbeing.

Course Outcomes (COs): The course shall equip the students with the understanding of socio-economic inequalities prevailing in the society and their spatial dimensions. The students will learn about the significance of wellbeing in the society.

UNIT-I

1. Geography of Health Nature, Scope, Approaches to the study of Health Geography. Concept of Disease Ecology, Epidemiology. Welfare Geography: Concept of social well-being, development and approaches to study human welfare.
2. Human beings: needs and wants, quality of life, level of living and state of well-being in India, identification of social indicators, their data sources and problem.

UNIT-II

3. Human Development Index, poverty and its measures, poverty and inequality in India
4. Gender issues in the process of development and gender development index.

UNIT-III

5. Structure of education in Independent India, Regional patterns of educational development; enrolment and dropouts with reference to school education.
6. Financing education and education policy in India.

UNIT-IV

7. Health programmes and National Health Policy in independent India.
8. Nutritional Security in India.


Suggested Readings:

1. Ahmad, Aijazuddin, Social Geography, Rawat Publication, New Delhi, 1999.


w.e.f. – 2024-25

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Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Jalandhar)

2. Dreze Jean, Amartya Sen, Economic Development and Social opportunity, Oxford University Press, New Delhi, 1996.
3. Sen, Amartya & Drze Jean, Indian Development: Selected Regional Perspectives, Oxford University Press, 1966.
4. David M.Smith (1977), Human Geography: A Welfare Approach, Arnold Heinemann.
5. D.M.Smith (1973), The Geography of Social Well-being in the United States. M.cGraw- Hill, New York.
6. D.M. Smith (1977); Where the Grass is Greener: Geographical perspectives on inequality, Penguin, Haemonds worth.
7. Coates, B.E., R.J. Johnston and P.L. Knox (1977), "Geography and Inequality", Oxford University Press, London.
8. National Nutrition Monitoring Bureau (2000), "Dynamic Database on Diet and Nutrition", National Institute & Nutrition, Hyderabad
9. Draze, Jean and Amartaya Sen (2002), India: Development and Participation, OUP, New Delhi,
10. Uma Kapila (2007) (ed). India's Economic Development Since 1947. Academic Foundation.


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16GEOG403DCEC (iv)
Cultural Geography
Exam course Code - 4066

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective of the course is to introduce the students to the concepts of development of culture aspects and practices.

Course Outcomes (COs): The course shall make the students Enrichment of knowledge about main civilizations of world. It helps to enhancement of knowledge about factors and processes of cultural diversity. Acquaintance with racial classification and distribution in the world and awareness about changing characteristics of Indian society in regional context.

UNIT-I

1. Definition, nature and scope of Cultural Geography; cultural elements and components of culture.
2. The evolution of Human Civilizations with special reference to: Mesopotamia, the Nile Valley, the Indus Valley and the Hwang Ho Valley.

UNIT-II

3. Bases of cultural diversity and cultural transformation- race, religion and language.
4. Cultural landscape and cultural ecology.
5. The speed and efficiency of operation of cultural processes.

UNIT-III

6. Race, evolution of race, criteria of racial classification, theories of the classification of races-Zones and Strata or Migration Zone Theory of race evolution.
7. Classification of Races: Major races of the world: Nordics, Mongoloids, Negroids and Caucasoids.
8. Racial Classification in India- Sri Risley, A. C. Haddon, B. S. Guha.


UNIT-IV

9. Tribes of India with main emphasis on Naga, Khasis, Todas, Bhils and Santhals.
10. Patterns of livelihood: Various economic activities, cultural adaptations; agriculture, industrialization and modernization, technological changes and their geographical implications.

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Chairperson
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B.P.S.M.V. Kharipur Kalan, Jalandhar

Suggested Readings:

1. Craig, Mike (1998) Cultural Geography, Routledge Publications, London.
2. DeBlij, Harm J. (1977) Human Geography, Cultural Society and Space, John Wiley and Sons, New York.
3. Dickens, S.N. (1970) Introduction to Cultural Geography, Xerox College Publishing House, Waltham, Massachusetts.
4. Magunder, D. N. (1973) Races and Culture of India, Asia Publishing House, New Delhi.
5. Mukerjee, A.B. and Aijazuddin A. (1985) India: Culture, Society and Economy, Inter-India Publications, New Delhi.
6. Spencer, J.E. and Thomas, W.L. (1973) Introducing Cultural Geography, John Wiley and Sons, New York.
7. Taylor G. (1971) The Geography in the Twentieth Century, Asia Publishing House, New Delhi.
8. Wagner, P. L. and Mikesell, M. (1962) Readings in Cultural Geography, the University of Chicago Press, Chicago.

W. Lalit
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan, Sonapat

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16GEOG404DCEC (i)
Social Geography
Exam course Code - 4067

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: The objective of the course to make students understand the society and social structure in spatial context. It shall appraise the students about social space and spatial distribution of tribes, caste territories, religions and linguistic regions in India.

Course Outcomes (COs): This course shall equip the students with the understanding of spatial dimensions of the societal characteristics and organizations in India. It will make them understand the processes and patterns of social change and transformation in spatial context.

UNIT-I

1. Nature and scope of Social Geography, its development and place among social sciences.
2. Sources and problems of data for study in Social Geography of India.
3. Social differentiation and region formation, social evolution, social space, social and spatial justice.

UNIT-II

4. Tribes: Social formations, rural-urban and spatial distribution and impacts of development.
5. Castes: Origin, caste and morphology of settlements, caste and clan territories and distribution of scheduled castes.

UNIT-III

6. Languages: Classification, historical processes of diffusion and geographical distribution, Linguistic regions
7. Religions: Origin, historical background and spatial distribution of religious groups, minority and segregation in space, communalism.

UNIT-IV

8. Social change and transformation in India, Modernization and Sanskritization
9. Rural-urban interaction and social change.
10. Social wellbeing: Overview of the concept.

Suggested Readings:

1. Ahmad, Aijazuddin, Social Geography, Rawat Publication, New Delhi, 1999.


w.e.f. – 2024-25

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(Signature)
Chairperson
Department of Geography
B.P.S.N.V. Kharipur K.

2. Dreze Jean, Amartya Sen, Economic Development and Social opportunity, Oxford University Press, New Delhi, 1996.
3. Dubey, S.C.: Indian Society, National Book Trust, New Delhi, 1991.
4. Schwartzberg Joseph; An Historical Atlas of South Asia, University of Chicago Press, Chicago, 1978.
5. Sen, Amartya & Drze Jean, Indian Development: Selected Regional Perspectives, Oxford University Press, 1996.
6. Smith, David: Geography: A Welfare Approach, Edward Arnold, London, 1977.
7. Sopher, David.: An Exploration of India, Cornell University Press, 1980.
8. Subba Roa. Personality of India; Pre and Proto Historic foundation of India and Pakistan. M.S. University Baroda, Vadodara, 1958.


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Sonipat)

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16GEOG404DCEC (ii)
Gender Geography
Exam course Code - 4068

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective of the course is to introduce the students to the concepts of growth and development of gender geography, issues empowerment of women and policies.

Course Outcomes (COs): 1. Understanding about growth and evolution of gender geography. 2. Awareness about feminism and gender issues. 3. Acquaintance with gender gaps and empowerment of women in spatial context. 4. Enhancement of knowledge about gender sensitive issues and policies in India.

UNIT-I

1. Growth and evolution of the discipline; its connotation; traditional concept of interdependence between men and women; emergence of patriarchy and capitalism and post-modern feminist movement.
2. Gender based demographic structure; gender gaps in infant mortality rates; maternal mortality rate; female infanticide; gender and longevity gap- their spatial variations.

UNIT-II

3. Male-Female involvement in Economic and Social Activities; multiple roles of women in land, water and forest resource management.
4. Involvement of women in household activities, agriculture, mining, construction, industry, service and informal sectors.

UNIT-III


5. Gender gaps in social and public life: education, wage differentials in economic activities, health care and nutrition.
6. Scope for bridging gender gap: empowerment of women and education, economic opportunities, access to reproductive health services, involvement in decision making processes in development and environmental management.

UNIT-IV

7. Gender and Neo-liberalization Policies in India.
8. Making of Gender geography in India.

w.e.f. – 2024-25


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Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan, Karnal

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Suggested Readings:

1. Boserup, E (1989) Women's Role in Economic Development. Earthscan, London.
2. Dankelman, I and Davidson, J (1989) Women and Environment in the Third World. Earthscan, London.
3. Deblig, H.J (1991) Human Geography-Culture, Society and Space, John Wiley, New York.
4. Haraway, D (1991) Simians, Cyberages and Women-The Reinvention of Nature. Routledge, New York.
5. Johnston, R.J (1996), The Dictionary of Human Geography, Blackwell, Oxford,
6. Koblinsky, M (1993) The Health of Women-A Global Respective. Westview Press, Boulder.
7. Lee, D (1988) Women in Geography-A Comprehensive Bibliography. Boca Raton, Florida.
8. Lewis, R. R (1995) Feminity and Representation. Routledge, New York.
9. Momsen, JH. and Townsend, J (1987) Geography of Gender in the Third World, Albany, New York.
10. Montagu, A (1964) Man's Most Dangerous Myth-the fallacy of Race. Cleveland.
11. Reagent, A.C. and Monk J.J (1982) Women and Spatial Change. Kendell & Hund, Dubuque, Lowe.
12. Rhodda, A (1991) Women and Environment. Zed, London,
13. Seager, J. and Olson, A. Women in the world – An International Atlas.
14. Sivant, R.L (1985) Women-A World Survey, World Priorities Washington, D.C.
15. Skjelsback, I and Smith, D (2001) Gender, Peace and Conflict. Sage, London.
16. Sowell, T (1994) Race and culture-A world View. Basic Books, New York.
17. UNICEF (1990) The Lesser Child-the Girl in India. United Nations, Geneva.
18. United Nations (1991) The World's Women, 1970-1990. United Nations, New York.


Chairperson
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B.P.S.M.V. Khanpur Kalan (Sonapat)

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16GEOG404DCEC (iii)
Urbanization in India
Exam course Code - 4069

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective of the course is to introduce the students to pattern and processes of urbanization and urban governance issues.

Course Outcomes (COs): On completion of the course the students will have ability to understanding about pattern and processes of urbanization, Acquaintance with contemporary urban infrastructure issues, augmentation of knowledge about urban social issues and awareness about urban governance issues.

UNIT-I

1. History of urbanization in India: Ancient, Medieval, Colonial and post-independence phases of urbanization.
2. Processes of urbanization: Socio- cultural, political, economic and geographical processes.
3. Patterns of urbanization: settlement structure, level of urbanization, criteria of measurement and spatial patterns of urbanization in India.
4. Recent trends of urbanization in India.

UNIT-II

5. Urban housing.
6. Urban transport.
7. Water crisis and water management.
8. Urban sanitation.
9. Solid waste management.

UNIT-III

10. Urban poverty: measures of poverty, status, causes and policies.
11. Slums: current status, causes and policies.
12. Urban crime and delinquency.
13. Marginalization of poor in urban space.
14. Squeezing of urban social space.

UNIT-IV

15. Role of urbanization in economic and social change.
16. Urban land management: land acquisition problem and policies.
17. National urbanization policy.
18. Urban regions of India: case studies of metropolitan regions of Delhi, Mumbai,

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W. Laksh
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Distt. Jalandhar)

Kolkata, Chennai, Bangalore and Hyderabad.

Suggested Readings:

1. Ahluwalia, I.J., Kanbur, R. and Mohanty, P.K. (2014) Urbanization in India: Challenges, Opportunities and the Way Forward, SAGE India, New Delhi.
2. Alam, SM and Khan, W. (1972) Metropolitan Hyderabad and its Region: A Strategy for Development, Asia Publishing House, Bombay.
3. Amarjit, S. and Komol, S. (2020) Understanding Urbanization in Northeast India, Routledge.
4. Bhattacharya, B. (2006) Urban Development in India since Pre-Historic Times, Concept Publishing Company, New Delhi.
5. Denis, E. (2019) Subaltern Urbanization in India: An Introduction to the Dynamics of Ordinary Towns, Springer.
6. Forest, G.B. (2009) Cities of India, Shubhi publication.
7. Hust, E. and Mann, M. Urbanization and Governance in India, Manohar Publishers.
8. Kundu, A. (1992) Urban Development and Urban Research in India, Khanna Publication.
9. Mishra, R. P. (2019) Million Cities of India: Growth Dynamics, Internal Structure, Quality of Life and Planning Perspectives, IBP.
10. Purohit, A. (2011) Urbanization in India, Rosa publisher.
11. Nangia, S. (1976) Delhi Metropolitan Region: A study in Settlement Geography, Rajesh Publication.
12. Ramachandran, R. (1992) Urbanization and Urban Systems in India, Oxford press, London.
13. Rao V. L. S. P. Urbanization in India: Spatial Dimensions. Concept Publishing Co. New Delhi.
14. Rao V. L. S. P. (1979) The Structure of an Indian Metropolis: A study of Bangalore, Allied Publishers Bangalore.
15. Sharma, A.K. and Mishra, B.D. (2018) Urbanization in India: Issues and Challenges, Ane Publication, New Delhi.
16. Siva Ramakrishnan, K.C., Kundu, A. and Singh, B. N. (2005) A Handbook of Urbanization in India, Oxford University Press.


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalar (Sonapat)

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16GEOG404DCEC (iv)
Geography of Haryana
Exam course Code - 4070

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consists of subparts (short notes not exceeding 50 words each). Short notes shall cover entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: Haryana is a state with diversity in landscape, vegetation, soils, drainage network, economy, population characteristics and culture. It is agriculturally developed state and has got many resources, which are the main assets of the country and are also exported. Therefore it becomes immense important to make the students know about their state.

Course Outcomes (COs): After studying Geography of Haryana, students will become aware about the state's beautiful and diverse landscapes. They will acquire knowledge about the economy and valuable resources. This would also sharpen their understanding about state.

UNIT-I

1. Haryana through the ages; Administration division of Haryana – A changing scenario.
2. Physiography; Climate; and Drainage system.
3. Flora and Fauna; Soils; Soil degradation and conservation.

UNIT-II

4. Mineral resource and energy sources.
5. Agriculture and its problems; Irrigation and its modes; Green revolution; Distribution of major crops- Wheat, Rice, Sugarcane, Cotton.
6. Horticulture Crops- Fruits, Vegetation and Flower cultivation; Mushroom farming Houses (Poly Houses); Animal husbandry, Dairying and Fisheries.

UNIT-III

7. Density, Distribution and Growth of population.
8. Sex Ratio; Literacy; and workforce.
9. Trend, Pattern and Characteristics of Urbanization in Haryana.


UNIT-IV

10. Emerging pattern of industrial development; Industrial policy of Haryana.
11. Distribution and concentration of major industries: Agro Industries and Automobile Industry; Agricultural Marketing.

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B.P.S.M.V. Khanpur Kalan (Distt. Karnal)

12. Infrastructure Development – Transport, Information technology, health and education; Rural development and poverty alleviation; Tourism.

Suggested Readings:

1. Budda, P. Haryana through the Ages, Kurukshetra University, Kurukshetra.
2. Duggal, S.L. Soil- Geographical Zones of Haryana, Haryana Cooperative Press, Chandigarh.
3. Government of Haryana, Economic Survey of Haryana, 2016-17, Department of Economic and Statistical Analysis, Haryana.
4. Haryana State Gazetteers, Haryana State Gazetteer, Vol. 1 & II, Haryana Gazetteer Organization, Revenue Department, Chandigarh, 2005.
5. Roy, S. Urbanization in Haryana, Hindi ed., Radha Publications, New Delhi, 2000.
6. Singh, J. An Agricultural Geography of Haryana, Vishal Publication, Kurukshetra.
7. Singh, M. and Kaur, H. Economic Development of Haryana: An Era of Prosperity, Deep and Deep Publication Pvt. Ltd., New Delhi.


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B.P.S.M.V. Khanpur Kalan (Sonapat)

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16GEOG405CC
Practical Geography:
Fundamentals of Geographical Information Systems (Practical)
Exam course Code - 4071


L T P
0 0 8
Credit – 04, Time – 3 Hrs.

Max. Marks: 100
Distributions of Marks:
Lab Work Test: 60
Record on Lab Work: 20
Viva-Voce: 20
(1 exercise)
(3 exercise)
(1 exercise)

1. Georeferencing of Toposheet/Map.
2. Entry of spatial data (point, line, polygon)
3. Entry of non-spatial data.
4. Linking of Spatial and Non-spatial data
5. Preparing a layout with legend, grid and scale.
6. Mapping Land Use/ land cover
7. Thematic mapping (Socio-economic data)
 - (i) Choropleth (1 exercise)
 - (ii) Pie (1 exercise)
 - (iii) Circular (1 exercise)
 - (iv) Bar Diagram (1 exercise)
8. Location of GCP and mapping from GPS

Suggested Readings:

1. Burrough, P.A. and McDonnell, R. (1998). Principles of Geographic Information Systems. Oxford University Press, Oxford.
2. Bhatta Basudeb (2014). Remote Sensing and GIS. Oxford University Press, Oxford.
3. Chang, K.T. (2003). Introduction to Geographic Information Systems. Tata McGraw Hill Publications Company, New Delhi.
4. Demers, M. N. (2000). Fundamentals of Geographic Information Systems. John Wiley and Sons, Singapore
5. Heywood I, Cornelius S and Carver S. (2000). An Introduction to Geographical Information Systems, Longman, New York.


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B.P.S.M.V. Khanpur Kaler (Pat)

16GEOG406CC
Geography of Water Resources
Exam course Code - 4072

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt **FOUR** long questions, selecting one from each unit. All questions carry 16 marks each.

Objectives: The objective of the course is to introduce the students to the concepts of development of earth's finite water resources, its dynamic nature, availability, and management and conservation practices.

Course Outcomes (COs): The course shall make the students understand the issues related to spatial and temporal dimensions of availability, utilization, conservation, management and challenges of water resources.

UNIT-I

1. Definition, nature, scope and importance of Water Resources Geography.
2. Distribution and changing trends in use of water in the world.
3. Status of water resources in India.

UNIT-II

4. Factors affecting demand of water, water demand and supply (Domestic).
5. Estimation of water demand and use in agricultural sector.
6. Groundwater assessment, development and management.
7. Water pricing and its marketing, virtual and footprints of water.

UNIT-III

8. Irrigation induced water logging and salinity with reference to Indira Gandhi Canal project.
9. Sources, monitoring and management of water pollution.
10. Interstate water disputes-treaties with reference to India.
11. Water disputes and treaties with reference to India.


UNIT-IV

12. Water harvesting techniques.
13. Watershed management.
14. Issues and challenges of inter basin transfer of water.

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Chairperson
Department of Geography
B.P.S.M.V. Kharipur Kalan (Bapat)

Suggested Readings:

1. Aggarwal, A. and Narain, S. 1997. Dying Wisdom: Rise, Fall and Potential of India's Traditional Water Harvesting System. Centre of Science and Environment, New Delhi, 1997.
2. Gurjar R.K. and Jat B.C. 2008. Geography of Water Resources, Rawat Publications, Jaipur.
3. Jones, J.A. 1997. Global Hydrology-Processes, Resources and Environmental Management. Longman.
4. Michael. A.M. 1978. Irrigation: Theory and Practices. Vikas Publishing House Pvt. Ltd., New Delhi.
5. Mather, J.R. 1984. Water Resources Distribution, Use and Management. John Wiley, Marylane.
6. Newson, M. 1992. Land, Water and Development River Basin Systems and their Sustainable Management. Routledge, London.
7. Rao, K.L. 1979. India's Water Wealth. Orient Longman, New Delhi.
8. Tideman, E.M. 1996. Watershed Management; Guidelines for Indian Conditions, Omega, New Delhi.


Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan(Sonipat)

GEOG-401OEC
Geography of India
Exam course Code - 4073

L T P
3 1 0

Credit – 4, Time: 3 Hrs.

Total Marks: 100
External Assessment Marks: 80
Internal Assessment Marks: 20

Note: There will be nine questions in all. Question No. 1 is compulsory and consisting 8 subparts (short notes not exceeding 50 words each) covering entire syllabus. There will be 8 long questions, two from each unit. The candidate shall attempt FOUR long questions, selecting one from each unit. All questions carry 16 marks each.

Objective: India is a country with diversity in landscape, vegetation, soils, drainage network, economy, population characteristics and culture. It is rich in resources and has got many minerals and power resources, which are the main assets of the country and are also exported. Therefore it becomes immense important to make the students know about their country.

Course Outcomes (COs): After studying Geography of India, students will become aware about the country's beautiful and diverse landscapes. They will acquire knowledge about the economy and valuable resources. This would also sharpen their understanding about the unity in diversity in India.

UNIT-I

1. Physiography: Relief characteristics and physiographical divisions
2. Drainage systems and their functional significance.

UNIT-II

3. Climate: characteristics, seasons and climatic regions of India as given by Trewartha and R. L. Singh.
4. Soil and vegetation types - their distribution, characteristics and conservation.

UNIT-III

5. Agriculture: Characteristics of Indian agriculture, agricultural development in India and Problems of Indian agriculture
6. Irrigation: Types of irrigation, Major irrigation projects: Bhakra Nangal and Damodar Valley Projects


UNIT-IV

7. Production, distribution, status of use and conservation of following minerals: Iron ore, Mica, Manganese and Bauxite
8. Production, distribution, status of use and conservation of following power resources: Coal, Petroleum, Hydropower
9. Production and distribution of (a) iron and steel (b) Cotton textile and

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Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kal

Suggested Readings:

1. Tiwari, R. C.: Geography of India, Prayag Pustak Bhawan, Allahabad.
2. Bharucha, J.P., 1982: Vegetation of India, Oxford India, Bombay.
3. Dubey, R. N., 1974: Economic Geography of India, Kitab Mahal, Allahabad
4. Hussain Majid (2015): Geography of India, Mc Graw Hill Education.
5. Joshi, H. L., 1990: Industrial Geography of India, Rawat Publications, Jaipur
6. Nag, P. and Sengupta, S., 1992: Geography of India, Concept publications. Co., New Delhi.
7. Rautray, J.K.: Geography of regional disparity, Asian Institute of Technology, Bangkok, 1993
8. Singh, R. L.: India: A Regional Geography, N.G.S.I., Varanasi, 1971
9. Sharma, T. C. and Coutinho, O. 1988: Economic and Commercial Geography of India, Vikas Publishing House Pvt. Ltd, New Delhi.
10. Tirtna, R. and Krishan G., 1996: Geography of India, Rawat Publications, Jaipur & New Delhi.

(Signature)
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan (Sonapat)



Bhagat Phool Singh Mahila Vishwavidyalaya

Khanpur Kalan, Sonapat, Haryana-131305

DEPARTMENT OF GEOGRAPHY

ORDINANCE

MASTER OF SCIENCE GEOGRAPHY

(w. e. f. July 2024-2025)

1. Definitions

- 1.1. **Programme** stands for M.Sc. (Geography).
- 1.2. **Credit** is the weightage assigned to a paper in terms of contact hours.
- 1.3. **Grade** stands for a letter grade assigned to a student on the basis of evaluation of a paper on the 10 point scale.
- 1.4. **Grade point** stands for the numerical equivalent of the letter grade.

2. Duration

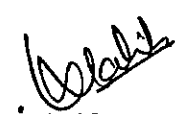
The duration of the Programme for M.Sc.(Geography) shall be **Two years** comprising four semesters. Each Semester shall be of 90 working days. However, all the candidates will be required to complete the Programme within a maximum period of **four years**.

3. Admission

3.1. **Eligibility:** : A candidate shall be eligible for admission to M.Sc.(Geography) Programme if she has passed the B.A. with Geography or B.Sc. Geography or B.A. Geography (Hons.) examination with Geography as one of the subject with 50% marks in aggregate from a recognized university or as prescribed by Haryana State education department. In case of SC/ST/Persons with Disabilities, categories, the candidate shall be given 5% relaxation.

No candidate who is in employment (full time/part time/Honorary Service) will be eligible to take admission in the programme without taking leave from her institution/office from the date of admission to termination of the final semester examination including other essential requirements. She has to submit an affidavit in this regard. If at any stage it is found that she has violated this rule, her admission shall stand cancelled.

Ordinance (M. Sc Geography) w.e.f session 2024-25

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3.2. **Procedure:** Admissions will be on the basis of merit/ entrance test or any other criterion adopted by B.P.S. Mahila Vishwavidyalaya from time to time. The last date for the receipt of the admission forms shall be notified by the University.

4. Fee

The Programme fee shall be paid by the candidate as prescribed by the University from time to time.

5. Teaching Methodology

The Methodology shall include Classroom teaching, Assignments, Viva-voce, Practical Work, Seminar, Workshop, Project Work, Quiz, Group Discussion etc.

6. Credit Weightage

Each Paper has a certain number of credits which describe its weightage. Credits of a paper are evaluated as under:-


- 6.1 **Lecture Teaching:** One credit per lecture per week per semester will generally be adopted.
- 6.2 **Tutorial:** One credit per tutorial hour per week per semester will be adopted.
- 6.3 **Minor Project/Seminar/ Colloquium/Group Discussion/ Assignment/Case Study:** Half credit each.
- 6.4 **Practical Teaching:** Half credit per lecture per week per semester will generally be adopted.

7. Examination

- 7.1 At the end of the each semester, there shall be an examination where each candidate shall be examined in the papers studied by her in that semester. Each semester examination shall be designated as first semester examination, second semester examination, third semester examination and so on.
- 7.2 The examination in each semester will be held according to the syllabi approved by the Post Graduate Board of Studies. The Board of examiners shall be appointed for each paper and shall be recommended by the Post Graduate Board of Studies.
- 7.3 The examination shall consist of theory papers and practical examination. Theory papers are to be set by the internal/external paper setters appointed by the Vice-Chancellor from a panel of examiners submitted by the Chairman of the department duly approved by the BOS of the concerned department.
- 7.4 For practical examination viva-voce shall be conducted jointly by the external and internal examiners. If an external examiner is not able to join, alternate examiner

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(including those of the same University dept.) may be appointed by the Chairperson of the concerned dept. with the intimation to the Controller of Examinations in the following preferential order:

- i) From outside
- ii) From BPSMV, Khanpur Kalan.

- 7.5 The examination for all odd semesters will normally be held in November/December and for the even semesters in April/May on such dates as provided by the University. The concerned teacher/paper coordinator should ensure that 100% syllabus is covered in each subject before the semester examination.
- 7.6 Every paper is coordinated by a member of the teaching staff of the department which is offering the paper in a given semester. This faculty member is called the paper coordinator. He/ She has the full responsibility for conducting the paper, coordinating the work of the other members of the faculty involved in the paper, holding the minor test and assignments. For any difficulty, the student is expected to approach the paper coordinator for advice and clarification. All the responsibilities from teaching to the award of final grade will be of the paper-coordinator.
- 7.7 Every student has to appear in the minor test. If a student does not take a minor test, she shall be awarded zero marks in the test. The marks obtained in sessional/practical/theory/drawing/general proficiency are to be submitted to the examination branch duly signed by the Chairperson of the department before the close of semester examination. The examination branch shall convert the marks in to equivalent grades as per the grading procedure.
- 7.8 If a candidate after attending the classes for the paper of studies in the department, either not appeared or having appeared in any semester examination and failed in one or more papers for that examination, she can appear for such papers as a re-appear student as per university rules.
- 7.9 For holding the Minor Tests during even and odd semester the schedule of minor exam shall be laid down by teacher(s) concerned in consultation with the Chairperson of the Department as the case may be and shall be made known to the students at the commencement of each semester. For each semester there will be two minor exams and both will be compulsory.
- 7.10 For Minor Test, the syllabus for Examination will be what is covered in particular term. The Major Test (EXTERNAL EXAM) will be based on the entire syllabus.

Every teacher will submit in writing to the Chairperson at the end of term i.e. intervening period between Minor Tests and Major Test, the content of the syllabus covered during the term.

- 7.11 After finalization of the marks of internal assessment, the same shall be displayed on the department notice board for the information of the students. Students, who have a specific grievance against the marks awarded to her, may discuss the same with the concerned Paper Co-ordinator, who after consideration of the grievances of all the students shall finalize the marks to be awarded for the paper
- 7.12 The awards of all internal assessments shall be sent to the examination branch within seven days of last day of the classes for that semester.

8. Re-appear

The candidates may take re-appear examinations as per the following guidelines:

Semester	When to appear
I st	Along with Regular I st Semester
II nd	Along with Regular II nd Semester
III rd	Along with Regular III rd Semester or IV th semester
IV th	Along with Regular IV th Semester or immediate Semester

09. Evaluation and Grading

9.1. The assessment will be 20 % Internal and 80% External.

9.2. The minimum passing marks/grade for passing any semester Examination shall be:

9.2 (a).40% in external examination and 40% in the aggregate of internal and external. In case a student fails to acquire 40% in the aggregate of the internal and external, she will be awarded re-appear in the theory (external) paper of that subject. There will be no re-appear in the internal assessment. The marks obtained in the internal assessment of a subject shall be carry forwarded, if a student gets re-appear in the external examination.

9.2 (b) 40% in each practical Examination/Viva-Voice Examination.


9.3 The weightage for internal evaluation is as follows:

9.3.1. Class tests/minor test/sessional tests 10% i.e. 10 marks out of 100

9.3.2. Assignments/Presentations/Seminars/Group Discussions 5% i.e. 5 marks out of 100

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Department of Geography
B.P.S.M.V. Khanpur Kaiz, Jhansi

9.3.3. Attendance 5% i.e. 5 marks out of 100.

Less than 75%	0 marks
75% and above & Less than 80%	3 marks
80% and above & Less than 85 %	4 marks
85% and above	5 marks

10. Adhoc Grace:

If there is any discrepancy/ out of syllabus/ printing error/ untoward incident during the examination, the matter be referred to a Standing Committee of

- (i) Controller of Examinations.
- (ii) HOD of the concerned Department.
- (iii) One faculty member concerning the subject.

The Committee may recommend re-conduct of the paper or uniform grace marks to all but that should not exceed 10% marks of that particular paper.

11. Moderation of Marks:

(a) Internal Examinations:- If there are more than one teacher associated in any internal assessment, one of the member be made co-coordinator by the concerned HOD and he along with the others can moderate the marks to maintain uniformity so that no student get undue advantage or disadvantage. It can be done by fixing criteria beforehand.


(b) External examinations: if there is unusual variation (very high or very low) in the awards, the COE may refer the matter to a Moderation Committee consisting of

- (i) Controller of Examinations
- (ii) HOD of the concerned Department
- (iii) One faculty member concerning the subject.

As per recommendation of the committee the result may be revised.

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12. Grading:

The academic performance of a student shall be graded on a ten point scale as prescribed by University Grants Commission.

Academic Performance	Letter Grades	Grade Points (G)
Outstanding	O	10
Excellent	A+	09
Very Good	A	08
Good	B+	07
Above average	B	06
Average	C	05
Pass	P	04
Fail	F	00
Absent	Ab	00

Note: 1. Pass Grade is Grade 'C' and above.


2. Grades 'P', and 'F' are fail grades.

The award of grades based upon marks obtained out of 100 shall be made as follows:

<u>Marks</u>		<u>Grade</u>		<u>Marks</u>
90	≤	O	≤	100
80	≤	A+	≤	89
70	≤	A	≤	79
60	≤	B+	≤	69
50	≤	B	≤	59
40	≤	C	≤	49
30	≤	P	≤	39
0	≤	F	≤	29

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Department of Geography
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13. Calculation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

The Grade Point Average is calculated as follows:-

$$\text{GPA} = \frac{\sum (\text{Number of credits} \times \text{Grade Points})}{\sum (\text{Number of Credits Registered})}$$

For the purpose of calculation of GPA for SGPA and CGPA only those programmes (including projects) will be taken into account in which the student has been awarded one of the pass grades. Here S stands for the sum of

$$(i) \text{ SGPA} = \frac{\sum C_i P_i}{\sum C_i}$$

Where

C_i = Number of credits earned in the i^{th} programme of a semester for which SGPA is to be calculated.

P_i = Grade point earned in i^{th} programme

$i = 1, 2, 3 \dots \dots \dots n$, represent the number of programmes in which a student is registered in the concerned semester.

$$(ii) \text{ CGPA} = \frac{\sum C_j P_j}{\sum C_j}$$

Where

C_j = Number of credits earned in the j^{th} programme up to the semester for which CGPA is to be calculated.


P_j = Grade point earned in the j^{th} programme. Any grade lower than the pass grade in a programme shall not be taken into account.

$j = 1, 2, 3 \dots \dots \dots n$, represent the number of programmes in which student was registered and obtained a grade not lower than 'C' upto the semester for which CGPA is to be calculated.

14. Attendance

14.1 No candidate shall be considered to have pursued a regular programme of the study unless she has attended not less than 75% of the lectures in each paper/seminar case discussion, field trips, tutorials etc. This requirement shall be fulfilled separately for each paper of study. A

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deficiency up to 10% may be condoned by the Chairperson of the Department and a further 5% by the Vice-chancellor.

14.2 If a student remains absent from the Department for more than four weeks without intimating the Chairperson/In-charge of the Department, her name will be removed from the Department rolls with information to the Academic Branch of the university.

14.3 In case the student's name is struck off due to non-payment of fee and is re-admitted later, her attendance shall not be counted for that period.

15. Scholarships:

A candidate while appearing in the re-appear examination shall not be eligible for a scholarship, a prize or a medal.

16. Improvement Case:

(i) A person who has qualified for the award of M.Sc Geography from this university may be allowed to re-appear as an ex-student in at the most two subjects in which she appeared earlier, with a view to improve her previous performance. The candidate shall be awarded only two consecutive chances along with the re-appear students in the subject(s) concern immediately after her passing for her degree.

(ii) No candidate shall be eligible for improvement after one year of passing the examination for the degree course.

(iii) The candidate will have to deposit fee and form for each examination separately.

(iv) The higher score in the subject(s) in which she re-appears for improvement will be taken in to account towards the final result and the marks already obtained by the candidate in the subjects in which she has not opted to improve her result shall be carried forward. The candidate shall be awarded a new DMC clearly mentioning 'Improvement Case' subject(s) with improved marks, only and the new grand total.

(v) In case the candidate does not improve her result, it shall be declared as 'Previous Result Stands.'


17. Division:

The successful candidates shall be classified in three divisions as under:

- (i) Those who obtained 60% or more of the aggregate number of marks in all the subject in all semester mention total semesters of that course taken together shall be placed in First division.

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- (ii) Those who obtain less than 60% but not less than 50 % of the aggregate number of marks in all subjects in all semesters taken together shall be placed in the second Division.
- (iii) Those who obtain below 50 % and not less than 40 % of the aggregate number of marks in all subjects in all semesters taken together shall be placed in the third Division.

18. General Guidelines:

18.1 Where this document is silent about any rule, the University policy regulation as framed from time to time will be applicable.

18.2 Admission, teaching schedule, preparatory holidays, examination, winter, summer vacation, shall be followed as specified in academic calendar of the University.

18.3. A student is deemed to have completed the requirements for the degree and is eligible for the award of degree if:

- a. She has satisfied all the academic requirements as per the regulations; and
- b. She has paid all fees due from her; and
- c. There is no case of indiscipline pending against her.
- d. Satisfied the minimum academic and residence requirements;
- e. Satisfactorily completed the requirements for the short duration across-curricular paper, industry internship and NCC/NSS as may be prescribed by the Academic Council;

18.4 A student who has completed all the requirements listed above shall be eligible for award of degree/ certificate. However, under extremely exceptional circumstances, where gross violation of the requirements is detected at any later stage, the Academic Council may recommend to the Executive Council to withdraw the degree already awarded.

18.5. The gap of one/two semesters missed by the student(s), as the case may be, will count towards the total duration of the programme permissible under the regulations.

18.6 Absence of registered students from classes during a semester shall be discouraged. However, for bonafide reasons such as illness, maternity a student may be granted leave of absence as per provision of leave rules for students framed by the University.

18.7 All academic problems of the students other than those affecting the University rules and regulations framed from time to time may be looked into by a committee constituted by the Dean of the faculty.

19. Grace Marks: Grace Marks shall be provided as per university rules.

Ordinance (M. Sc Geography) w.e.f session 2024-25

805
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kaler (Jorhat)

20. Promotion:

20.1 A student will be eligible for promotion to the second, third and fourth semester(s) who:-

20.1.1 Has been on the rolls of the Institute during the semester preceding the respective semester examination; and


20.1.2 Has attended not less than 75 % of lectures in the respective semester; and

20.1.3 Has passed at least 50 % of the papers in the preceding year examinations.

20.1.4 Failing which she shall be declared as FAIL in that semester and she shall be required to appear in the failed semester in all the papers currently in force as a private candidate (as ex-student).

Ordinance (M. Sc Geography) w.e.f session 2024-25

856


Chairperson
Department of Geography
B.P.S.M.V. Kharpur Kalan (Sonapat)

ANNEXURE-44

Legal approval of scheme and syllabus

messages

chairperson geography geography <dog@bpswomenuniversity.ac.in>
o: bansal_sudhir@rediffmail.com, Rajeshwariku@gmail.com







Fri, Feb 23, 2024 at 1:33 PM

Respected Sir/Mam

In reference to the meeting which was held on 1st Feb 2024 for PGBOS (M.Sc Geography) in the Dept. of Geography. Following amendment has been done in the scheme & syllabus w.e.f. 2024--25

--
Chairperson
(Department of Geography)
B.P.S.M.V.
Khanpur Kalan, Sonipat.

6 attachments







-  new scheme (1).pdf
529K
-  2nd sem (1).pdf
553K
-  3rd sem (1).pdf
560K
-  1st sem (1).pdf
533K
-  4th sem (1).pdf
562K
-  letter of adopted scheme and syllabus.docx
12K

chairperson geography geography <dog@bpswomenuniversity.ac.in>
o: sdahiya84@gmail.com, "nareshantil@yahoo.com" <nareshantil@yahoo.com>

Fri, Feb 23, 2024 at 2:15 PM

[Quoted text hidden]

6 attachments

-  new scheme (1).pdf
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-  2nd sem (1).pdf
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-  3rd sem (1).pdf
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-  1st sem (1).pdf
533K
-  4th sem (1).pdf
562K
-  letter of adopted scheme and syllabus.docx
12K


chairperson geography geography <dog@bpswomenuniversity.ac.in>
o: drkokilamalik@gmail.com


Fri, Feb 23, 2024 at 2:43 PM

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6 attachments

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 **4th sem (1).pdf**
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 **letter of adopted scheme and syllabus.docx**
12K

hairperson geography geography <dog@bpswomenuniversity.ac.in>
o: drkokilamalik@gmail.com

Fri, Feb 23, 2024 at 2:43 P

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6 attachments

 **new scheme (1).pdf**
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 **3rd sem (1).pdf**
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 **1st sem (1).pdf**
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 **4th sem (1).pdf**
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 **letter of adopted scheme and syllabus.docx**
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hairperson geography geography <dog@bpswomenuniversity.ac.in>
o: drkokilamalik@gmail.com


Fri, Feb 23, 2024 at 2:44 P

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 **1st sem (1).pdf**
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 **4th sem (1).pdf**
562K

 **letter of adopted scheme and syllabus.docx**
12K

rajeshwari <rajeshwariku@gmail.com>
o: chairperson geography geography <dog@bpswomenuniversity.ac.in>

Fri, Feb 23, 2024 at 10:43

I approve the same
regards



Professor Rajeshwari
Department of Geography

[Quoted text hidden]

udhir bansal <bansal_sudhir@rediffmail.com>
o: chairperson geography geography <dog@bpswomenuniversity.ac.in>

Sat, Feb 24, 2024 at 11:26 A

Respected Madam

Good morning

I hereby give my consent to the amendment as proposed.

Thanks and regards

S. K. Bansal

Dr.S.K. Bansal
Professor (Retd.)
Department of Geography
Maharshi Dayanand University
Rohtak - 124001 (Haryana)

09416052865 (M)

From: chairperson geography geography <dog@bpswomenuniversity.ac.in>
Sent: Fri, 23 Feb 2024 15:27:29 GMT+0530
To: Rajeshwariku@gmail.com, sdahiya84@gmail.com, antilnaresh154@gmail.com, bansal_sudhir@rediffmail.com
Subject: Regarding approval of scheme and syllabus

Respected Sir/Mam

In reference to the meeting which was held on 1st Feb 2024 for PGBOS (M.Sc Geography) in the Dept. of Geography. Following amendment has been done in the scheme & syllabus w.e.f. 2024--25

--
Dr. Kokila Malik
[Quoted text hidden]

Regarding approval of scheme and syllabus

chairperson geography geography <dog@bpswomenuniversity.ac.in>

Fri, Feb 23, 2024 at 3:27 PM

o: Rajeshwariku@gmail.com, sdahiya84@gmail.com, antilnaresh154@gmail.com, bansal_sudhir@rediffmail.com

Respected Sir/Mam

In reference to the meeting which was held on 1st Feb 2024 for PGBOS (M.Sc Geography) in the Dept. of Geography. Following amendment has been done in the scheme & syllabus w.e.f. 2024--25

--
Dr. Kokila Malik
Chairperson
(Department of Geography)
B.P.S.M.V.
Khanpur Kalan, Sonipat.

6 attachments

 letter of adopted scheme and syllabus.docx
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 1st sem (1).pdf
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 4th sem (1).pdf
562K

 2nd sem (1).pdf
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 3rd sem (1).pdf
560K

- 80 -

Regarding approval of scheme and syllabus

Rajeshwari <rajeshwariku@gmail.com>

Fri, Feb 23, 2024 at 10:42 P

o: chairperson geography geography <dog@bpswomenuniversity.ac.in>

I approve the scheme.

regards

Professor Rajeshwari

Department of Geography

Kurukshetra University, Kurukhetra

Haryana- 136119

+91 8901164014

[Quoted text hidden]

→ 811+

Regarding approval of scheme and syllabus

udhir bansal <bansal_sudhir@rediffmail.com>

Sat, Feb 24, 2024 at 11:26 A

o: chairperson geography geography <dog@bpswomenuniversity.ac.in>

Respected Madam

Good morning

I hereby give my consent to the amendment as proposed.

Thanks and regards

S. K. Bansal

Dr.S.K. Bansal
Professor (Retd.)
Department of Geography
Maharshi Dayanand University
Rohtak - 124001 (Haryana)

09416052865 (M)

From: chairperson geography geography <dog@bpswomenuniversity.ac.in>

Sent: Fri, 23 Feb 2024 15:27:29 GMT+0530

To: Rajeshwariku@gmail.com, sdahiya84@gmail.com, antilnaresh154@gmail.com, bansal_sudhir@rediffmail.com

Subject: Regarding approval of scheme and syllabus

Respected Sir/Mam

In reference to the meeting which was held on 1st Feb 2024 for PGBOS (M.Sc Geography) in the Dept. of Geography. Following amendment has been done in the scheme & syllabus w.e.f. 2024--25

--
Dr. Kokila Malik
[Quoted text hidden]

Regarding approval of scheme and syllabus

antilnaresh154@gmail.com <antilnaresh154@gmail.com>
Reply-To: "antilnaresh154@gmail.com" <antilnaresh154@gmail.com>
From: dog@bpswomenuniversity.ac.in

Sat, Feb 24, 2024 at 10:27 PM

Respected Madam

In reference to your mail kindly think about semester third Credits 16GEOG302CC. In my point of view all seminars have equal credits.

Yours Sincerely Dr.Naresh Kumar sent from Yahoo Mail on Android

[Quoted text hidden]

Faculty of Social Sciences
BhagatPhool Singh MahilaVishwavidyalaya, KhanpurKalan, Sonapat, Haryana

The minutes of the meeting of the Faculty of Social Sciences (FSS) held on 15.02.2024 at 1100 a.m. in the office of the Dean, FSS, BPSMV

Members Present:

1. Prof. Ravi Bhushan, Dean, FSS
2. Dr.SangitaSapra, Principal, GCW Murthal, Sonapat
3. Dr.SandeepKandhwai, Principal, GCW Madlaudha, Panipat
4. Dr.Kokila Malik, Chairperson, department of Geography
5. Dr.Rampal, Chairperson, Department of Political Science
6. Dr.Archana Malik, in-charge, Department of History & Archaeology
7. Dr.Anju, in-charge, Department of Economics
8. Dr.DeepaliMathur, Assistant Professor, Department of Social Work
9. Assistant Registrar (Academic) (Nominee of the Registrar)

Proceedings:

Agenda 1: To discuss and approve the scheme & syllabus of History subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The in-charge, Department of History & Archaeology presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of History subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, History.

Decision: Discussed & Approved

Agenda 2: To discuss and approve the scheme & syllabus of History subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the Department of History & Archaeology, BPSMV

Statement: The in-charge, Department of History & Archaeology presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of History subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the Department of History & Archaeology, BPSMV. The same has been approved by the UGBOS, History & Archaeology.

Decision: The FSS discussed the proposal and approved it in-principle with the recommendation that the said programme be launched once the required faculty with prescribed qualifications and infrastructure are in place.

Prof. Ravi Bhushan
mei

Sangita Sapra
Dr. Anju
Dr. Archana Malik

Dr. Sandeep Kandhwai
Dr. Deepali Mathur
84

Agenda 3: To discuss and approve the scheme & syllabus of Economics subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The in-charge, Department of Economics presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of Economics subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, Economics.

Decision: Discussed & Approved

Agenda 4: To discuss and approve the scheme & syllabus of Economics subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the Department of Economics, BPSMV

Statement: The in-charge, Department of Economics presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of Economics subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the department of Economics, BPSMV. The same has been approved by the UGBOS, Economics.

Decision: Discussed and Approved

Agenda 5: To discuss and approve the scheme & syllabus of Political Science subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The Chairperson, Department of Political Science presented the scheme (for 02 semesters) and syllabus (for the first 02 semesters) of Political Science subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, Political Science.

Decision: Discussed & Approved

Agenda 6: To discuss and approve the scheme & syllabus of Social Work subject for '04 Years B.A. Honours with Research (Single Major) Programme' to be offered by the Department of Social Work, BPSMV

Statement: The Chairperson, Department of Social Work presented the scheme (for the first 02 semesters) and syllabus (for the first 02 semesters) of Social Work subject for '04 Years B.A. Honours with Research (Single Major) Programme' to be offered by the department of Social Work, BPSMV. The same has been approved by the UGBOS, Social Work.

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15/7/24
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Raj
AS

Raj
Sharma

Wahid
Ay

Deepak Mathur

Decision: Discussed & Approved

Agenda 7: To discuss and approve the scheme & syllabus of Geography subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The Chairperson, Department of Geography presented the scheme (for 06 semesters) and syllabus (for the first 04 semesters) of Geography subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, Geography.

Decision: Discussed & Approved

Agenda 8: To discuss and approve the scheme & syllabus of value added course B-VAC-405 'Gurukul Tradition & the Philosophy of Bhagat Phool Singh'

Statement: The Dean, FSS presented the scheme and syllabus of value added course B-VAC-405 'Gurukul Tradition & the Philosophy of Bhagat Phool Singh' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved *and recommended to be taught compulsorily to all the students of the university. RC.*

Agenda 9: To discuss and approve the scheme & syllabus of value added course B-VAC-204 'Cultural History of Haryana'

Statement: The in-charge, Department of History & Archaeology presented the scheme and syllabus of value added course B-VAC-204 'Cultural History of Haryana' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 10: To discuss and approve the scheme & syllabus of value added course B-VAC-207 'Indian Heritage & Civilization'

Statement: The in-charge, Department of History & Archaeology presented the scheme and syllabus of value added course B-VAC-207 'Indian Heritage & Civilization' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 11: To discuss and approve the scheme & syllabus of value added course 'Community Engagement & Sustainable Development Goals'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of value added course 'Community Engagement & Sustainable

*Passing
19/07/24*

me

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AS

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RC

RC

Deepali Mathur

Development Goals' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 12: To discuss and approve the scheme & syllabus of value added course 'Social Work Response to Substance Abuse'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of value added course 'Social Work Response to Substance Abuse' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 13: To discuss and approve the scheme & syllabus of skill enhancement course (SEC) 'Life Skill Education.'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of SEC 'Life Skill Education' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 14: To discuss and approve the scheme & syllabus of skill enhancement course (SEC) 'Field Work Skill: Working with People'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of SEC 'Field Work Skill: Working with People' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 15: To discuss and approve the revised scheme, ordinance & syllabus of M.Sc. Geography

Statement: The Chairperson, Department of Geography presented the scheme and syllabus of M.Sc. Geography programme. The same has been approved by the PGBOS, Geography.

Decision: Discussed & Approved

Agenda 16: To discuss and approve the revised scheme & syllabus of PhD Course Work (Economics) offered by the Department of Economics, BPSMV

Statement: The in-charge, Department of Economics presented the scheme and syllabus of PhD Course Work (Economics) offered by the department of Economics, BPSMV. The same has been approved by the PGBOS, Economics.

A collection of handwritten signatures and initials in black ink. From left to right, there is a signature that appears to be 'Ramesh' with '15/11/24' written below it. Next to it is a signature that looks like 'Raj' with a checkmark. Below these are several other signatures and initials, including one that looks like 'Sudhakar' and another that looks like 'Sudhakar' with '217' written below it. On the far right, there is a signature that reads 'Deepali Mathur'.

Decision: Discussed and Approved

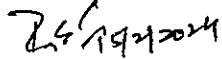
Agenda 17: To discuss and approve the scheme & syllabus of PhD Course Work (Political Science) offered by the Department of Political Science, BPSMV

Statement: The Chairperson, Department of Political Science presented the scheme and syllabus of PhD Course Work (Political Science) offered by the department of Political Science, BPSMV. The same has been approved by the PGBOS, Political Science.


Decision: Discussed and Approved

The meeting concluded with the vote of thanks proposed by the Dean, FSS.

Signatures of the Members:

Prof. Ravi Bhushan  24/11/2024

Dr. Sandeep Kandhwal  15/11/24

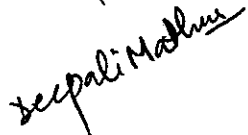
Dr. Sangita Sapra  15/10/24


Dr. Kokila Malik 

Dr. Rampal 

Dr. Archana Malik  15/12/24

Dr. Anju 

Dr. Deepali Mathur 

Assistant Registrar (Academic) 

Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

(A state university established by govt. of Haryana vides Act no. 31 of 2006)

www.bpswomenuniversity.ac.in

Course Structure for B. Tech Fifth Semester (Third Year)

Sl. No	Code	Course Title	Hrs/Week			Total Credits	Internal Marks	External Marks	Total Marks
			L	T	P				
Subjects									
1.	ECL-351	Linear Integrated Circuits	3	0	0	3	20	80	100
2.	ECL-353	Digital Signal Processing	3	0	0	3	20	80	100
3.	ECL-355	Microwave Theory and Techniques	3	0	0	3	20	80	100
4.	ECL-357	Electromagnetic Waves & Propagation	3	0	0	3	20	80	100
5.	*	Program Elective-I	3	0	0	3	20	80	100
6.	**	Open Elective-I	3	0	0	3	20	80	100
7.	HSMC-351	#Foreign Language	3	0	0	0	10	40	50 [#]
Labs									
8.	ECP-351	Linear Integrated Circuits Lab	0	0	2	1	10	40	50
9.	ECP-353	Digital Signal Processing Lab	0	0	2	1	10	40	50
10.	ECP-357	Community Service Oriented Project	0	0	2	1	10	40	50
11.	IPT-359	Professional Training Assessment- I	0	0	0	1	50	0	50
12.	HSMC-351	#Non Verbal Reasoning/ Generic Open Elective	2	0	0	0	50	0	50 [#]
Total			23	0	6	22	200	600	800

*PROGRAM ELECTIVE-I		** OPEN ELECTIVE-I	
Code	Subject	Code	Subject
ECEL-351	Wireless and Mobile Communication	OEL-351	Optimization Techniques and Application
ECEL-353	Analog CMOS Design	OEL-353	Cyber Law and Security
ECEL-355	Information Theory and Coding	OEL-355	Marketing Management and HRM
ECEL-357	Internet of Things	OEL-357	Remote Sensing & GIS
*****	MOOC / NPTEL Course	*****	MOOC / NPTEL Course

Note: 1. #Foreign Language (BSC-351) & Non Verbal Reasoning/ Generic Open Elective (HSC-351) shall be non credit, mandatory and qualifying paper. The marks of the same will not be counted in grand total and towards award of degree.

2. Students may opt Generic Open Elective course from CBCS offered by other department.

3. All Professional Training will be done in the summer break in the previous year and the assessment for the same will be done in the first four weeks of the opening of the academic session by the department in the next semester.

4. Students may opt NSS/NCC as per their choice for community service towards social responsibility.



Department of Electronics and Communication Engineering
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Khanpur Kalan (Sonapat), Haryana-131305

(A state university established by govt. of Haryana vides Act no. 31 of 2006)
www.bpswomenuniversity.ac.in

Course Structure for B. Tech Sixth Semester (Third Year)									
S. No.	Code	Course Title	Hrs/Week			Total Credits	Internal Marks	External Marks	Total Marks
			L	T	P				
Subjects									
1.	ECL-360	Mobile Communication and Network	3	0	0	3	20	80	100
2.	ECL-362	Control Systems	3	0	0	3	20	80	100
3.	ECL-364	Single Board Computers for Electronic System Design	3	0	0	3	20	80	100
4.	ECL-366	Digital System Design	3	0	0	3	20	80	100
5.	*	Program Elective-II	3	0	0	3	20	80	100
6.	**	Open Elective-II	3	0	0	3	20	80	100 [#]
7.	[#] HSMC-360	[#] Essence of Indian Traditional Knowledge	3	0	0	0	20	80	100 [#]
Labs									
8.	ECP-360	Computer Networks Lab	0	0	2	1	10	40	50
9.	ECP-362	Electronic Measurement Lab	0	0	2	1	10	40	50
10.	ECP-364	Single Board Computers for Electronic System Design Lab	0	0	2	1	10	40	50
11.	ECP-366	Scriptive Language Lab	0	0	2	1	10	40	50
Total			21	0	8	22	160	640	800

*Program Elective-2		** Open Elective-2	
Subject Code	Subject	Subject Code	Subject
ECCL-360	Satellite Communication	OEL-360	Scriptive Language
ECCL-362	Telecommunication Switching Systems and Networks	OEL-362	Electronic Measurement & Instrumentation
ECCL-364	Wireless Sensor Network	OEL-364	Waste to Energy
ECCL-366	Scientific Computing	*****	MOOCs / NPTEL Course

- Note:**
- [#]Essence of Indian Traditional Knowledge (HSL-366) will be non credit, mandatory and qualifying course. The marks of the same will not be counted in grand total and towards award of degree.
 - At the end of semester every student has to undergo 4-6 weeks Professional training/ Internship. The assessment and viva-voce for the same will be conducted in next semester.
 - Students may opt Programme Elective/Open Elective/Generic elective course from CBCS offered by other department.

Department of Electronics and Communication Engineering
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Khanpur Kalan (Sonapat), Haryana-131305

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www.bpswomenuniversity.ac.in

Course Structure for B. Tech Seventh Semester (Fourth Year)									
S No.	Code	Course Title	Hrs/Week			Total Credits	Internal Marks	External Marks	Total Marks
			L	T	P				
Subjects									
1.	ECL-471	Fiber Optic Communications	3	0	0	3	20	80	100
2.	*	Program Elective-3	3	0	0	3	20	80	100
3.	**	Program Elective-4	3	0	0	3	20	80	100
4.	***	Program Elective-5	3	0	0	3	20	80	100
5.	****	Open Elective-3	3	0	0	3	20	80	100
Labs									
6.	ECP-471	Minor Project	0	0	8	4	20	80	100
7.	ECP-473	Design & Simulation Lab	0	0	2	1	10	40	50
7.	IPT-471	Professional Training Assessment-II	0	0	0	1	50	0	50
Total			15	0	10	21	180	520	700

*Program Elective-3		**Program Elective-4	
Code	Subject	Code	Subject
ECEL-471-A	Network Security and Cryptography	ECEL-473-A	Multimedia Communication
ECEL-471-B	Embedded System	ECEL-473-B	Consumer Electronics
ECEL-471-C	Digital Signal Processors and Architecture	ECEL-473-C	Digital Image & Video Processing
ECEL-471-D	Machine Learning & AI	ECEL-473-D	Biomedical Instrumentation
ECEL-471-E	Introduction to MEMS	ECEL-473-E	Mixed Signal Design
Program Elective-5		*Open Elective-3	
Code	Subject	Code	Subject
ECEL-475-A	Software Defined Radio	OEL-471-A	Skills for Employability
ECEL-475-B	VLSI Design	OEL-471-B	Hybrid and Electrical Vehicle
ECEL-475-C	Biomedical Signal Processing	OEL-471-C	Intelligent Instrumentation
ECEL-475-D	Advanced Mobile Communication	OEL-471-D	Design Thinking & Product Innovation
*****	MOOC/NPTEL Course	OEL-471-E	Product Design & Simulation

Note:

- Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40% in the aggregate of internal and external examination of the subject

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2. Students may opt Elective course/Additional course as decided by Departmental Committee from NPTEL/MOOCs/Swayam or any other online platform. The course code for the same will be decided by Departmental Committee.
3. The students may opt individual project/R&D project/start-up project in collaboration with industry, R&D institutions etc.
4. Students may opt Programme Elective/Open Elective/Generic elective course from CBCS offered by other deptt.
5. Project coordinator and other assisting co-coordinators will be assigned the Project Stage-II load of, maximum of 02 hrs per week including their own guiding load of one hr. However, the guiding teacher will be assigned maximum of one period of teaching load irrespective of number of students/groups under him/her.

- 822 -

Internet of Things

ECEL-357
L T P
3 0 0

Total Credits: 3
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The students will be able to

1. Understand the basics of Internet of Things and protocols.
2. Learn application areas where Internet of Things can be applied.
3. Understand the middleware for Internet of Things.

Pre-requisite: None.

Course Outcomes: After completion of this course, student will be able to

1. Familiarize with the fundamentals of Internet of Things and protocols.
2. Identify suitable hardware and interfaces for IoT deployments.
3. Develop cloud computing model and service options.
4. Illustrate data analytics and security for IoT.

Content	08 hrs
UNIT- I	
IoT Introduction and Fundamentals: Deciphering the term IoT Applications where IoT can be deployed Benefits/Challenges of deploying an IoT, IoT components: Digital Signal Processing, Data transmission, Choice of channel (wired/wireless), back-end data analysis. Understanding packaging and power constraints for IoT implementation.	
Signals, Sensors, Actuators, Interfaces : Introduction to sensors & transducers, Introduction to electrodes & biosensors, Static and dynamic characteristics of sensors, Different types of sensors, Selection criteria's for sensors / transducers. Signal conditioning modules of IoT system , Energy and power considerations, Introduction to actuators, Different types of actuators, Interfacing challenges, Modules of data acquisition system, Wireless sensor node structure, positioning topologies for IoT infrastructure.	
UNIT- II	12 hrs
Communication and Networking in IoT: Review of Communication Networks, Challenges in Networking of IoT Nodes, range, bandwidth. Machine-to-Machine (M2M) and IoT Technology Fundamentals, Medium Access Control (MAC) Protocols for M2M Communications Standards for the IoT Basics of 5G Cellular Networks and 5G IoT Communications, Low-Power Wide Area networks (LPWAN)Wireless communication for IoT: channel models, power budgets, data rates.Networking and communication aspects: IPv6, 6LoWPAN, COAP, MQTT, Operating Systems need and requirements for IoT.	
UNIT- III	08 hrs
Modern networking: Cloud computing: Introduction to the Cloud Computing, History of cloud computing, Cloud service options, Cloud Deployment models, Business concerns in the cloud, Hypervisors, Comparison of Cloud providers, Cloud and Fog Ecosystem for IoT Review of architecture	
UNIT- IV	10 hrs
IoT Data analytics and Security: OLAP and OLTP, NoSQL databases, Row and column Oriented databases, Introduction to Columnar DBMS CStore , Run :Length and Bit vector Encoding, IoT Data Analytics. Cryptographic algorithms. Analysis of Light weight Cryptographic solutions IoT security, Key exchange using Elliptical Curve Cryptography, Comparative analysis of Cryptographic Library for IoT.	
IoT Applications: IoT applications like Home Automation, Precision Agriculture, Smart vehicles.	

— 823 —

Smart Grid, Industry 5.0.

Suggested Text Books/ References

1.	A Bahaga, V. Madiseti, "Internet of Things- Hands on approach", Universities Press (India) Pvt. Ltd. 2017.
2.	Rajkumar Buyya, Amir Vahid Dastjerdi, "Internet of Things Principles and Paradigms" Copyright © 2016 Elsevier Inc.
3.	William Stallings, " Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud" Publisher: Addison-Wesley 2015
4.	Samuel Greengard, "Internet of things", MIT Press, 2015.
5.	http://www.datamation.com/open-source/35-open-source-tools-for-the-internet-of-things1.html
6.	https://developer.mbed.org/handbook/AnalogIn
7.	http://www.libelium.com/50_sensor_applications/
8.	M2MLabs Mainspring http://www.m2mlabs.com/framework

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

- 824 -

Mobile Communication and Network

ECL-360
L T P
3 0 0

Total Credits: 3
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The students will be able to

1. Understand the basics of Internet of Mobile Communication
2. Understand the concept of Mobile Communication and Networks.

Pre-requisite: None.

Course Outcomes: After completion of this course, student will be able to

1. Understand cellular concepts and signal propagation in mobile communication.
2. Perform small simulations and plot results on modulation techniques.
3. Analysis performance of different generations of mobile communications.
4. Solve numerical problems on different multi-access and modulation schemes of mobile communications.

Content

UNIT- I	08 Hours
Cellular concepts- Cell structure, frequency reuse, cell splitting, channel assignment, handoff, interference, capacity, power control; Wireless Standards: Overview of 2G 3G, 4G and 5G cellular mobile standards.	
UNIT- II	12 Hours
Signal propagation- Propagation mechanism, reflection, refraction, diffraction and scattering, large scale signal propagation and lognormal shadowing. Fading channels- Multipath and small-scale fading- Doppler shift, statistical multipath channel models, narrowband and wideband fading models, power delay profile, average and rms delay spread, coherence bandwidth and coherence time, flat and frequency selective fading, slow and fast fading, average fade duration and level crossing rate. Capacity of flat and frequency selective channels. Antennas: antennas for mobile terminal, monopole antennas, PIFA, base station antennas and arrays.	
UNIT- III	08 Hours
Multiple access schemes-FDMA, TDMA, CDMA and SDMA. Modulation schemes- BPSK, QPSK and variants, QAM, MSK and GMSK, multicarrier modulation, OFDM. Receiver structure- Diversity receivers- selection and MRC receivers, RAKE receiver, equalization: linear-ZFE and adaptive, DFE. Transmit diversity Alamouti scheme	
UNIT- IV	10 Hours
MIMO and space time signal processing, spatial multiplexing, diversity/multiplexing tradeoff. Performance measures- Outage, average snr, average symbol/bit error rate. System examples GSM, EDGE, GPRS, IS-95, CDMA 2000 and WCDMA, 3G, 4G and 5G mobile communications. Smart Grid, Industry 5.0.	
Suggested Text Books/ References	
1.	Erik Dahlman, 4G: LTE-Advanced Pro and The Road to 5G
2.	Sassan Ahmadi, 5G NR: Architecture, Technology, Implementation, and Operation of

-825

Advanced Mobile Communication

ECEL-475-D
L T P
3 0 0

Total Credits: 3
Internal Marks: 20
External Marks: 80
Total Marks: 100

Course Objective: The students will be able to understand the advanced mobile communications technologies, in particular the 5G Technology. As India and the world migrate to 5G, with India wishing to take a leading role in 5G technologies, trained manpower in these technologies will be necessary.

Pre-requisite: None.

Course Outcomes: After completion of this course, student will be able to

1. Analyze the performances of CDMA and OFDM.
2. Configure MIMO scheme for channel performance improvement.
3. Analyze the Error performance of Ultra Wide Band systems and applications to 5G Wireless Standards.

Content

UNIT- I	(11 hours)
Evolution from 1G to 5G- Analog voice systems in 1G; digital radio systems in 2G, voice and messaging services, TDMA based GSM, CDMA, 2.5G (GPRS), 2.75G (EDGE); IMT2000: 3G UMTS, W-CDMA, HSPA, HSPA+, 3G services and data rates; IMT Advanced: 4G, LTE, VoLTE, OFDM, MIMO, LTE Advanced Pro (3GPP Release 13+); IMT2020: 5G, enhancements in comparison to IMT Advanced..	
UNIT- II	(11 hours)
Basics of 5G- 5G potential and applications; Usage scenarios: enhanced mobile broadband (eMBB), ultra reliable low latency communications (URLLC), massive machine type communications (MMTC), D2D communications, V2X communications; Spectrum for 5G, spectrum access/sharing; millimetre Wave communication, channels, and signals/waveforms in 5G, carrier aggregation, small cells, dual connectivity..	
UNIT- III	(14 hours)
5G Network - New Radio (NR), Standalone and non-standalone mode; non-orthogonal multiple access (NOMA); massive MIMO, beam formation, FAPI: PHY API Specification, flexible frame structure, Service Data Adaptation Protocol (SDAP); centralized RAN, open RAN; multi-access edge computing (MEC); software defined networking (SDN), network function virtualization (NFV); network slicing; restful API for service-based interface; private networks.	
UNIT- IV	(06 hours)
Current state and Challenges ahead 5G penetration in developed countries; deployment challenges in low-middle income countries, stronger backhaul requirements, dynamic spectrum access and usage of unlicensed spectrum, contrasting radio resource requirements; large cell usage: LMLC; possible solutions for connectivity in rural areas (Bharat Net, TVWS, Long-range Wi-Fi, FSO); non-terrestrial front haul/backhaul solutions: LEOs, HAP/UAV.	
Suggested Text Books/ References	
1. 4G, LTE - Advanced Pro and The Road to 5G by Erik Dahlman.	

2.	5G NR - Architecture, Technology, Implementation, and Operation of 3GPP New Radio Standards Hardcover by Dr. Sassan Ahmadi, 1 June 2019.
3.	Jochen Schiller, Mobile Communications, Pearson, 2008
4.	Gordon L. Stuber, Principles of Mobile Communication, Springer, 2017
5.	J. Schiller, "Mobile Communication" 2/e, Pearson Education, 2012.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.



ANNEXURE - 46

Department of Electronics and Communication Engineering
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
Office No. 01263-283124, www.bpswomenuniversity.ac.in

Proceeding of the UG Board of Studies of Electronics and Communication Engineering meeting:-

A meeting of the UGBOS of Electronics and Communication Engineering was held on 12/09/2023 at 11:30 AM in the office of Chairperson, Department of Electronics and Communication Engineering.

The following members were present:-

Prof. Manoj Duhan
Department of Electronics and Communication Engineering
DCRUS&T, Murthal
Email: duhan_manoj@rediffmail.com

Outside expert (Joined Online)

Prof. Nidhi Goel
Department of Electronics and Communication Engineering,
Indra Gandhi Delhi Technical University of women,
Delhi, Phone No- 9212119300,
Email:- nidhigoel@igdtuw.ac.in,

Outside expert (Joined Online)

Dr. Vijay Nehra
Department of Electronics and Communication Engineering,
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

Professor

Dr. Priyanka, Associate Professor
Department of Electronics and Communication Engineering,
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

Chairperson

Mrs. Sudesh Kumari Nandal
Department of Electronics and Communication Engineering,
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

Member (Joined Online)

Dr. Krishan Kumar
Department of Electronics and Communication Engineering,
Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305

Member

The members of UGBOS deliberated & discussed at length the proposed agenda items and the following decisions were taken:-

Agenda 1:- Considered and Approved.

Considered and approved the Panel of Examination of 1st, 3rd, 5th and 7th semester of B.Tech (ECE).

Agenda 2:- Considered and Approved.

1. After detailed deliberation and discussion at length, the course "Internet of Things" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 5th semester having course code ECEL-357 and credit of 3 in place of the course "Internet of things and Applications". The scheme and syllabus is attached herewith.
2. The course "Mobile Communication and Network" as directed by AICTE (Email received dated 03/03/2023) is introduced as a core course in B.Tech 6th semester having course code ECL-360 and credit of 3 in place of the course "Computer Network" in B.Tech 6th semester. The scheme and syllabus is attached herewith.

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3. The course "Advanced Mobile Communication" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 7th semester having course code ECEL-475-D and credit of 3 in place of the course "Mobile Programming". The scheme and syllabus is attached herewith.

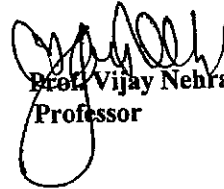
Any other Agenda items

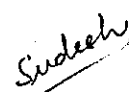
Agenda 3:- Considered and Resolved.

The application as received from the students regarding one semester industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. Further, the matter was referred to UGBOS and was deliberated and discussed at length. It has been found that the same is adopted at other reputed Universities like DCRUST Murthal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

Prof. Manoj Duhan,
Outside expert
(Joined Online)

Prof. Nidhi Goel,
Outside expert
(Joined Online)


Prof. Vijay Nehra
Professor


Mrs. Sudesh Nandal,
Member
(Joined Online)


Dr. Krishan Kumar
Member


Chairperson

Endst. No. BPSMV/ECE/23/408

Dated:-25/09/2023

Copy to:-




1. PS to Vice-chancellor (for kind information of Hon'ble Vice-chancellor) BPSMV Khanpur Kalan.
2. PA to Registrar (for kind information of Worthy Registrar), BPSMV Khanpur Kalan.
3. All members of UG BOS for information.
4. Office Copy, Department of Electronics and Communication Engineering for information records.


Chairperson

889

ott of ECE
idden]

3 attachments

-  **invitation.pdf**
493K
-  **Syllabus as per AICTE Revised curriculum ECE.zip**
38K
-  **Panel of Examination.zip**
218K

Chairperson, ECE <doece@bpswomenuniversity.ac.in>
To: manoj duhan <duhan_manoj@rediffmail.com>, nidhigoel@igdtuw.ac.in
Cc: anand_priyanka10@yahoo.co.in

Tue, Sep 12, 2023 at 4:47 PM






Respected sir/Madam

Please find attached herewith the panel of examination of odd semester (July-December, 2023), syllabus of three courses and scheme and syllabus of B.Tech (ECE) as per AICTE guidelines as discussed in the meeting held on 12/09/2023.

With regards

[Quoted text hidden]

5 attachments

-  **invitation.pdf**
493K
-  **Syllabus as per AICTE Revised curriculum ECE.zip**
38K
-  **Panel of Examination.zip**
218K
-  **1 Panel of Examination.zip**
226K
-  **1 Syllabus as per AICTE Revised curriculum ECE Final.zip**
261K

✓ **manoj duhan** <duhan_manoj@rediffmail.com>
To: "Chairperson, ECE" <doece@bpswomenuniversity.ac.in>

Tue, Sep 12, 2023 at 9:31 PM

✓ Dear chairperson,
No issues from my side...all fine.
Best wishes

Dr. Manoj Duhan,
Professor ECE Dept. & Chairman BME dept.,
Deenbandhu Chhotu Ram University of Science & Technology,
(NAAC A Grade, NBA Accredited State Govt. University), Murthal, Sonapat
01262-274621(R)
09355628366 (mb)
[Quoted text hidden]






Chairperson, ECE <doece@bpswomenuniversity.ac.in>
To: nidhigoel@igdtuw.ac.in

Fri, Sep 15, 2023 at 2:24 PM

[Quoted text hidden]

— 830r

Attachments

-  **invitation.pdf**
493K
-  **Syllabus as per AICTE Revised curriculum ECE.zip**
38K
-  **Panel of Examination.zip**
218K
-  **1 Panel of Examination.zip**
226K
-  **1 Syllabus as per AICTE Revised curriculum ECE Final.zip**
261K

✓ **Nidhi Goel** <nidhigoel@igdtuw.ac.in>
To: "Chairperson, ECE" <doece@bpswomenuniversity.ac.in>

Fri, Sep 15, 2023 at 3:28 PM

✓ Approved from my side.
[Quoted text hidden]

Chairperson, ECE <doece@bpswomenuniversity.ac.in>

Wed, Sep 20, 2023 at 3:46 PM











To: Vijay Nehra <nehra_vijay@yahoo.com>, anand_priyanka10@yahoo.co.in, sudesh kharb <sudesh_30@rediffmail.com>, krishan kumar <krishan.bpsmv@gmail.com>, manoj duhan <duhan_manoj@rediffmail.com>, nidhigoel@igdtuw.ac.in

Respected sir/madam

Please find attached herewith minutes of the meeting of UG BOS, Scheme and syllabus and Remuneration Bill etc. of the department of Electronics and Communication Engineering.

[Quoted text hidden]

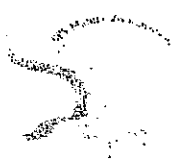
10 attachments

-  **TA DA Form.pdf**
374K
-  **Minutes of UG BOS.docx**
77K
-  **Internet of Things.docx**
17K
-  **Mobile Communication and Network.docx**
16K
-  **Advanced Mobile Communication.docx**
17K
-  **B.Tech_ECE__corrected scheme_12.9.23.doc**
391K
-  **Panel of Examiner ECE 1st Sem.docx**
69K
-  **Panel of Examiner ECE 7th Sem.docx**
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-  **Panel of Examiner ECE 5th Sem.docx**
52K
-  **Panel of Examiner ECE 3rd Sem.docx**
54K

Nidhi Goel <nidhigoel@igdtuw.ac.in>

Mon, Sep 25, 2023 at 11:48 AM

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Bhagat Phool Singh Mahila Vishwavidyalaya,
Khanpur Kalan (Sonapat), Haryana-131305
www.bpswomenuniversity.ac.in

Ref. No. BPSMV/Dean, FET/24/02

Date:- 10/01/2024

Proceeding of the meeting of Faculty of Engineering and Technology held on 10.01.2024 at 11.00 am. in the office of Dean, Faculty of Engineering and Technology, BPSMV, Khanpur Kalan.

The following members were present:-

1. Dr. Sandeep Khandhwai, Principal, Govt. College for Women, Sonipat
2. Dr. Priyanka, Associate Professor, Chairperson, ECE
BPSMV, Khanpur Kalan, Sonipat
3. Dr. Sonal Chairperson, CSE&IT, BPSMV, Khanpur Kalan, Sonipat
4. Dr. Harinder Pal, In-Charge, Deptt of FT, BPSMV, Khanpur Kalan, Sonipat
5. Mrs. Sudesh Nandal, Associate Professor, Deptt of ECE, BPSMV, Khanpur Kalan, Sonipat
6. Dr. Manju Saroha, Assistant Professor, Department of CSE & IT, BPSMV, Khanpur Kalan, Sonipat.
7. AR, Secretary, BPSMV, Khanpur Kalan

After detailed discussion and deliberation, the following decisions were taken:-

Agenda No.1: To consider the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric".

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Ritika Sharma in Department of Fashion Technology with the research topic "Design, Development and Assessment of Sustainable Denim Fabric" under joint supervision of Dr. Harinder Pal, Assistant Professor, Department Fashion Technology as supervisor and Prof. J.N Chakraborty, as co-supervisor Department of Textile Technology, NIT, Jalandhar, Punjab duly approved by DRC in its meeting held on 12/08/2023 and PGBOS meeting held on 18/10/2023 of the Department of Fashion Technology (Copy attached).

Agenda No 2: To Consider the case of de-registration of Ms. Sunita, Ph.D Scholar having registration No 2017041100022985 in Department of Electronics and Communication Engineering.

Resolved and approved: - Considered and approved the case of de-registration of Ms. Sunita, Ph.D Scholar, having registration no 2017041100022985 as resolved and approved by DRC and PGBOS in its meeting held on 31/08/2022 and 05/1/2024 respectively (Copy attached).

Agenda No 3:- To consider the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques"

Resolved and Approved: Considered and approved the case of Ph.D Registration in respect of Ms. Rubi D/o Sh. Shab Singh in Department of CSE&IT with the research topic "Enhancing Data Security in Cloud Computing using Cryptographic Techniques" under Joint supervision of Dr. Sunita Rani as supervisor and Dr. Vinod Kumar Saroha as

Jan
10/1/24

Prayant

Sonal
Tollan

832
Manu
10/1/24

Sunita
10/01/24

by
Prayant

Co-Supervisor duly approved by DRC in its meeting held on 05/01/2024 and PGBOS meeting held on 09/01/2024 of the Department of Computer Science & Engineering and Information Technology (Copy attached).

Agenda No 4:- To consider the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering regarding implementation of AICTE directive for introduction of course on "Internet of things, Mobile Communication of Network and advance mobile communication" as well as and six month internship in FET.

Resolved and Approved: Considered and approved the case of proceeding of the UG Board of Studies of Electronics and Communication Engineering. After detailed deliberation and discussion at length, the course "**Internet of Things**" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 5th semester having course code ECEL-357 and credit of 3 in place of the course "**Internet of things and Applications**". The scheme and syllabus is attached herewith.

1. The course "**Mobile Communication and Network**" as directed by AICTE (Email received dated 03/03/2023) is introduced as a core course in B.Tech 6th semester having course code ECL-360 and credit of 3 in place of the course "**Computer Network**" in B.Tech 6th semester. The scheme and syllabus is attached herewith.
2. The course "**Advanced Mobile Communication**" as directed by AICTE (Email received dated 03/03/2023) is introduced in B.Tech 7th semester having course code ECEL-475-D and credit of 3 in place of the course "**Mobile Programming**". The scheme and syllabus is attached herewith.
3. The application as received from the students regarding one semester industrial training was discussed firstly with the faculty members of the department and all faculty members are of view that the same may be implemented for enhancing internship and placement of the students of the department. Further, the matter was referred to UGBOS and was deliberated and discussed at length. It has been found that the same is adopted at other reputed Universities like DCRUST Murthal, Panjab University, etc. Moreover, it may provide the opportunity to students for internship and placement. The modalities of the same are attached herewith.

Vijay Nehra
Prof. (Dr) Vijay Nehra
Dean, FET

Sandeep
Dr. Sandeep Khandwal
Outside expert

Priyanka
Dr. Priyanka
Chairperson, ECE

Sonal
Dr. Sonal
Chairperson, CSE&IT

Harinder Pal
Dr. Harinder Pal
In-Charge, FT

Sudesh
Mrs. Sudesh Nandal
Member

Manin
Dr. Manin Saroha
Member

Assistant Registrar
Assistant Registrar
(Academic Branch)
Dated:-10/01/2024

Endst. No. BPSMV/ECE/24/

Copy to:-

1. All Chairperson, Faculty of Engineering and Technology for Information necessary action.
2. Office Copy, Faculty of Engineering and Technology

LL.M SCHEME (w.e.f 2024-2025)						
LL.M. 1 ST SEMESTER						
S.NO.	PAPER CODE	NOMENCLATURE OF PAPER	Hours per Week	MAX. MARKS External: Internal 80:20		CREDIT S
Paper 1	LLM 101	Legal Theory	5	80	20	5
Paper 11	LLM 102	Indian Constitutional Law and the New Challenges	5	80	20	5
Paper 111	LLM 103	Principles of Statutory Interpretation	5	80	20	5
Paper 1V	LLM 104	Legal Research Methodology	5	80	20	5

Total Credits=20

LL.M. 2nd SEMESTER

LL.M. 2 nd SEMESTER						
S.NO.	PAPER CODE	NOMENCLATURE OF PAPER	Hours per Week	MAX. MARKS External: Internal 80:20		CREDITS
Paper 1	LLM 201	Law & social Transformation in India	5	80	20	5
Paper 11	LLM 202	International laws & Human Rights	5	80	20	5
Paper 111	LLM 203	Public and Private International law	5	80	20	5
Paper 1V	LLM 204	Family Law	5	80	20	5

Total Credits=20

LL.M. 3r^d SEMESTER

<p align="center">LL.M. 3r^d SEMESTER (the candidate is required to opt any one group out of the following groups) Group "A" Criminal and Corporate Law</p>						
S.NO.	PAPER CODE	NOMENCLATURE OF PAPER	Hours per Week	MAX. MARKS External: Internal 80:20		CREDITS
Paper I	LLM 301- A	Corporate Management	5	80	20	5
Paper II	LLM 302- A	Intellectual Property Rights	5	80	20	5
Paper III	LLM 303- A	Penology and treatment of offenders	5	80	20	5
Paper IV	LLM 304- A	Socio Economic offences	5	160	40	5

Total Credits=20

- 835 -

Seema

LL.M. 3r^d SEMESTER

LL.M. 3r ^d SEMESTER Group "B" Constitutional & Environmental Law						
S.NO.	PAPER CODE	NOMENCLATURE OF PAPER	Hours per Week	MAX. MARKS External: Internal 80:20		CREDITS
Paper I	LLM 301- B	Comparative constitutional law & governance	5	80	20	5
Paper II	LLM 302- B	Administrative law and judicial process	5	80	20	5
Paper III	LLM 303- B	International environmental law	5	80	20	5
Paper IV	LLM 304- B	Constitutionalism, Federalism and Pluralism	5	160	40	5

Total Credits=20

Seena

- 836 -

LL.M. 4th SEMESTER

LL.M. 4 th SEMESTER						
Group "A"						
S.NO.	PAPER CODE	NOMENCLATURE OF PAPER	Hours per Week	MAX. MARKS		CREDITS
				External: 80	Internal: 20	
Paper I	LLM 401- A	Competition and consumer protection laws	5	80	20	5
Paper II	LLM 402- A	Banking and insurance laws	5	80	20	5
Paper III	LLM 403- A	Human Right and Criminal justice System	5	80	20	5
Paper IV	LLM 404- A	Dissertation	5	80	20	5

Total Credits=20

Seena

- 837 -

LL.M. 4th SEMESTER

Group "B"

S.NO.	PAPER CODE	NOMENCLATURE OF PAPER	Hours per week	MAX. MARKS External: Internal 80:20		CREDITS
Paper I	LLM 401- B	Environmental law and policies	5	80	20	5
Paper II	LLM 402- B	Environmental protection in India	5	80	20	5
Paper III	LLM 403- B	Transparency laws and Indian democracy	5	80	20	5
Paper IV	LLM 404- B	Dissertation	5	80	20	5

Total Credits=20

Same

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B.P.S. Mahila Vishwavidyalaya Khanpur Kalan (Sonipat)
Department of Laws
Minutes of P.G./U.G BOS 2023 (held on 15-9-2023)

To

- 1 Prof. Vijay Nehra
Dean Faculty of Law,
B.P.S.M.V. Khanpur Kalan
- 2 Prof. (Dr.) (Dr.) Naresh Vats,
Outside experts, Deptt. of Law, Punjab University Chandigarh
- 3 Prof. (Dr.) Jaswant Saini,
Outside experts,
Deptt. of Law, MDU, Rohtak
- 4 Dr. Seema Dahiya,
Asstt. Prof./Incharge
Deptt. of Laws, BPSMVKK
- 5 Dr. Raiesh Hooda,
Asstt. Prof. Deptt. of Laws,
BPSMVKK
- 6 Dr. Alka Bhardi (UG, BOS)
Asstt. Prof. Deptt. of Laws,
BPSMVKK

Special Invitee

- 1 Dr. Purnima (Alumnus)
Sr. Assistant Professor
Mahareja Agrasen Institute of Management Studies,
Rohini Delhi, GGSIPU
- 2 Mr. Amit Manchanda (Industry person)
Founder & Managing Partner
Ab Initio India LLP, New Delhi

Sub:- Minutes of P.G. /U.G Board of Studies in Law.

Agendas :-

Agenda 1. Proceedings of DRC for consideration & approval.

Agenda no.1 considered and approved.

Agenda 2:- To approve the registration of Pre. Ph.D. Course work students in Ph.D.
(Law) Programme.

Agenda no. 2 considered and approved.

Sr. No.	Candidate	Approved Research Topic	Supervisor
1	Akansha Gangwan	CYBER CRIME AGAINST WOMEN AND CHILDREN : A COMPARATIVE STUDY OF INDIA ,USA AND UK	Dr. Kritika
2	Rashmi	CYBER CRIMES IN INDIA : JUDICIAL AND LEGISLATIVE APPORACH	Dr. Seema Dahiya
3	Vanika	ANTI-DEFECTION LAWS IN INDIA : A CRITICAL STUDY	Dr. Anil Balhera
4	Parul	STATUS OF REFUGEES IN STATE OF ASSAM : A SOCIO LEGAL CRITIQUE	Dr. Pawan
5	Manu Kadiyan	EMERGING TRENDS IN ALTERNATIVE DISPUTE RESOLUTION MECHANISM: A CRITICAL ANALYSIS	1. Dr. Rajesh Hooda 2. Dr. Anu Bala

6	Nancy Dhillon	RIGHT TO PRIVACY WITH SPECIAL REFERENCE TO SOCIAL MEDIA: ISSUES AND CHALLENGES	Dr. Sandhya Rohal
7	Shushila Sharma	LAW RELATING TO BANKING FRAUDS IN INDIA : AN ANALYTICAL STUDY	1. Dr. Rajesh Hooda 2. Dr. Anu Bala

Agenda 3:-Approval of Examiners panel for PhD, LLM and BA/BB.A. LL.B course. -

Agenda no.3 considered and approved. List of examiners is attached herewith.

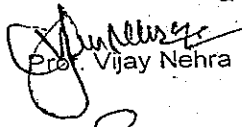
Agenda-4 :-Approval for change of Credit system for PG & UG Courses w.e.f. session 2023-24 and defined as 3:1 (as per UGC Guidelines) & 4:1 (as per BCI guidelines) respectively

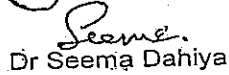
Agenda no.4 considered and approved.

Agenda 5:- Approval of shifting of Dissertation Paper of LLM from 3rd to 4th semester.

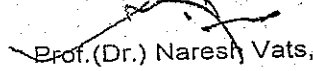
The interchange is as follows:- Paper IV (304 A & 304 B) of 3rd semester with Paper IV (404 A & 404 B) of LLM 4th Semester.

Agenda no 5 is considered and approved and there is interchange of Paper IV (304 A & 304 B) of 3rd semester with Paper IV (404 A & 404 B) of LLM 4th Semester.

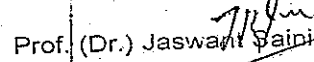

Prof. Vijay Nehra



Dr Seema Dahiya

Dr. Dr. Purnima (Alumnus)
(ONLINE)

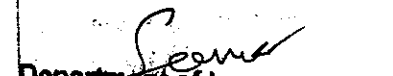

Prof. (Dr.) Naresh Vats,

Dr. Rajesh Hooda
(ONLINE)


Prof. (Dr.) Jaswant Saini,


Dr. Alka Bhatt (UG,BOS)

Mr. Amit Manchanda
(Industry person)
(ONLINE)


Department of Laws
BPS Mahila Vishwavidyalaya
Khanpur Kalan (Sonapat)

B.P.S. Mahila Vishwavidyalaya Khanpur Kalan (Sonipat)
Faculty of Law

MINUTES OF THE MEETING OF FACULTY OF LAW HELD ON 10-01-2024

The Meeting of Faculty of Law, held in the office of the Dean Faculty of Law on 10-1-2024 at 2:30 P.M. The following were present:-

- | | |
|---|-----------|
| 1. Prof. (Dr.) Vijay Nehra, Dean, faculty of Law | Dean |
| 2. Dr. Sandeep Khandhwai, | Member |
| 3. Dr. Seema Dahiya , Incharge | Member |
| 4. Dr. Anu Bala Asst.. Prof. BPSMV | Member |
| 5. Mr.Rajesh Narwal, A.R.,
Incharge Academic, Registrar's nominee. | Secretary |

Agenda 1:- To Consider the case of Ph.D registration of research scholar of Department of Laws.

Resolved and Approved:-

Considered and approved the topics of research and name of supervisors as amended and approved by DRC held on 4-9-2023 and PGBOS in its meeting held on 15-9-2023 of Department of Laws.

(Copy attached)

Sr. No.	Candidate	Approved Research Topic	Supervisor
1	Akansha Sangwan	CYBER CRIME AGAINST WOMEN AND CHILDREN : A COMPARATIVE STUDY OF INDIA , USA AND UK	Dr. Kritika
2	Rashmi	CYBER CRIMES IN INDIA : JUDICIAL AND LEGISLATIVE APPORACH	Dr. Seema Dahiya
3	Vanika	ANTI-DEFECTION LAWS IN INDIA : A CRITICAL STUDY	Dr. Anil Balhera
4	Parul	STATUS OF REFUGEES IN STATE OF ASSAM : A SOCIO LEGAL CRITIQUE	Dr. Pawan
5	Manu Kadiyan	EMERGING TRENDS IN ALTERNATIVE DISPUTE RESOLUTION MECHANISM: A CRITICAL ANALYSIS	1. Dr. Rajesh Hooda 2. Dr. Anu Bala
6	Shushila Sharma	LAW RELATING TO BANKING FRAUDS IN INDIA : AN ANALYTICAL STUDY	1. Dr. Rajesh Hooda 2. Dr. Anu Bala

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Seema
**Department of Laws,
BPS Mahila Vishwavidyalaya
Khanpur Kalan (Sonipat)**

Agenda 2:-To consider the case of change of credit system for PG(LLM two-year course) & UG (BA/BBA.LLB 5 year course)Courses in Department Laws.

Resolved and Approved:-

Considered and Approved the case for change of Credit system for PG & UG Courses w.e.f. session 2023-24 for entire scheme and defined as 3:1 instead of 4:1 (as per UGC Guidelines) for LLM two year course by PGBOS in its meeting held on 15-9-2023 & 4:1 instead of 5:1(as per UGC guidelines) for BA/BBA.LLB. 5year course by UGBOS in its meeting held on 15-9-2023 of Department of Laws. (Copy attached)

Agenda 3:-To Consider the case of shifting of Dissertation Paper of LLM from 3rd to 4th semester.

Resolved and Approved:-

Considered and approved the shifting of Dissertation Paper of LLM from 3rd to 4th semester. The Dissertation Paper IV (304A & 304 B) of 3rd semester with Paper IV (404 A(Socio-economic offences) & 404 B(Constitutionalism, Federalism and Pluralism) of LLM 4th Semester by PGBOS in its meeting held on 15-9-2023 of Department of Laws. (Copy attached)

Meeting ended with a vote of thanks to the chair.

Vijay Nehra
Vijay Nehra
10/1/24

Anu Bala
(Anu Bala) 10/1/24

Seema Dahiya
10/1/2024
(Seema Dahiya)

Sandeep Khandwal
10/1/24
(Sandeep Khandwal)

Assistant Registrar
(Academic Branch)
Dated :10-1-2024

Endst.No/BPSMV/Laws/24/

Copy to

1. Office Record, Dean Faculty of Law for information.
2. All members of Faculty of Law for information.

Seema
Department of Laws
BPS Mahila Vishwavidyalaya
Khanpur Kalan (Sonapat)

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BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA, KHANPUR KALAN

**Common Ordinance
for**

4 Year Under Graduate Programmes: Certificate, Diploma, 3 Year Degree, 4 Year Degree (Honours/Honours with Research) Semester System Under Learning Outcome Based Curriculum Framework - Choice Based Credit System (LOCF-CBCS)

(w. e. f. Academic Session 2024-25)

The ordinance is based upon National Education Policy (NEP) - 2020 and shall be applicable from the Academic Session 2024-25 to all the 4-year Degree (Honours/Honours with Research) and 3-year Degree programmes, proposed to be offered by the University Teaching Departments/Institute and Affiliated Colleges/Regional Centres and South Campus.

1 Definitions:

- 1.1 **NEP - 2020:** National Education Policy introduced in year 2020.
- 1.2 **Programme:** An educational programme leading to award of a Degree, Diploma or Certificate.
- 1.3 **Course:** Course refers to a paper having specified credits which is a component of a programme in a subject. The course defines the learning objectives and learning outcomes. A course may be designed comprising credits for lectures/tutorials/laboratory work/field work/outreach activities/project work/internship/vocational training etc. or combination thereof.
- 1.4 **Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year and a semester comprises 90 working days.
- 1.5 **Choice Based Credit System (CBCS):** The CBCS provides choice for students to select from the prescribed courses [Discipline Specific Course (DSC) – Major, Minor; Vocational Course (VOC); Multidisciplinary Course (MDC); Ability Enhancement Course (AEC); Skill Enhancement Course (SEC); Value Added Course (VAC); Internship, and Research Project courses].
- 1.6 **Credit Based Semester System (CBSS):** Under the CBSS, the requirement for awarding a degree or diploma or certificate is prescribed in terms of number of credits to be completed by the students.
- 1.7 **Credit Point:** It is the product of grade point and number of credits for a course.
- 1.8 **Credit:** Credit is the weightage given to each course of study. It is the numerical value assigned to a course according to the relative importance of the contents and the contact hours required to teach the prescribed syllabi of the programme.

- 1.9 **Grade Point:** It is a numerical weight allotted to each letter grade on a 10-point scale.
- 1.10 **Letter Grade:** It is an index of the performance of students in a said course. Grades are denoted by letters O, A+, A, B+, B, C, P and F.
- 1.11 **Semester Grade Point Average (SGPA):** The Semester Grade Point Average (SGPA) is a measure of student's performance in a given semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.
- 1.12 **Cumulative Grade Point Average (CGPA):** It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.
- 1.13 **Semester:** Each semester will consist of 15-18 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from July to December and even semester from January to June.
- 1.14 **Transcript or Grade Card or Certificate:** Based on the grades earned, a Transcript/Grade Card/ Certificate shall be issued to all the registered students after every semester. The grade certificate will display the course details (code, title, number of credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.
- 1.15 **Learning Outcome Based Curriculum Framework (LOCF):** The learning outcomes of the programme are mapped against well-defined outcomes of its courses.
- 1.16 **NHEQF:** National Higher Education Qualifications Framework (level 4.5 to level 8) for standardise qualifications and academic mobility.
- 1.17 **Major and Minor Subject:** Major subject is the subject of main focus and the Minor subject helps a student to gain a broader understanding beyond the major subject.

2 Duration:

The duration of the 4 years undergraduate programme shall be of eight semesters. Each semester shall be of 90 working days. Students may exit after completion of the 1st year, 2nd year and 3rd year. Such students shall be allowed to re-enter the degree programme within three years and required to complete the degree programme within the stipulated maximum period of seven years. The total duration for completing the programme shall not exceed 7 years.

3 Eligibility:

A candidate who has passed Senior Secondary Certificate Examination (10+2 Standard) of the Board of School Education, Haryana; or any other examination recognized as equivalent thereto with at least 40% marks in

aggregate with English as one of the subjects, shall be eligible to join First Semester of the UG Programme (NHEQF Level 5) subject to the following conditions:

- 3.1 To opt for Mathematics/Computer Science as a major/minor subject, the candidate must have passed Mathematics as a subject in the qualifying exam.
- 3.2 To opt for Botany/Biochemistry/Biotechnology/Microbiology/Zoology/Genetics/Anthropology/Forensic Science as major/minor subject the candidate must have passed Biology as a subject in the qualifying exam.
- 3.3 To opt for Physics/Statistics/Electronics/Geology, as major/minor subject(s) the candidate must have passed mathematics and physics as subjects in the qualifying exam.
- 3.4 To opt for chemistry as major/minor subject the candidate must have passed chemistry as a subject in qualifying exam.

The ITI pass outs (with English qualified as additional subject at 10+2 level) are also eligible for seeking admission in First Semester of the UG Programme (Level 5) in Arts subjects.

Necessary relaxation in the pass percent will be provided for eligibility as per Haryana Government rules prevailing from time to time.

- 3.5 In case seats remain vacant in any programme after final physical counselling, a candidate who has been placed under compartment or re-appear in one subject only in Senior Secondary Certificate Examination (10+2 Standard) of the Board of School Education, Haryana, or equivalent examination of another University/Board may be allowed to study provisionally for the First Semester of the UG programme. Such a candidate shall pass the compartment/reappear subject before commencement of the examination of 1st semester of the concerned UG Programme of the University. If a candidate does not clear the compartment/reappear subject even before commencement of the 1st Semester examination, her provisional admission to concerned Bachelor's degree Programme shall be cancelled *ab initio*.

For such candidates, the merit list shall be prepared by assuming 33 marks in the compartment/re-appear course/paper for all the candidates under this category.

- 3.6 New admission to vacant seats at Levels 6, 7 and 8 will be provided if a candidate seeking admission has passed preceding level(s) and secured the prescribed number of credits, respectively. However, this will be subject to fulfilment of other eligibility conditions.

- 3.7 4-year UG (Honours) or (Honours with Research) in Major Subject will be offered after completion of '3-year UG programme with double major subjects' to those students who have completed 48 credits in the concerned major subject. In addition to the above, 4-year UG (Honours with Research) in Major Subject will be offered only to those students who have obtained CGPA 7.5 or more in the 3-year UG programme.
- 3.8 4-year UG (Honours) or (Honours with Research) in Major Subject will be offered after completion of '3-year UG programme with one major and one minor subject' to those students who have completed 60 credits in the concerned major subject. In addition to the above, 4-year UG (Honours with Research) in Major Subject will be offered only to those students who have obtained CGPA 7.5 or more in the 3-year UG programme.

4 Procedure:

Admission shall be done on the basis of merit of the qualifying examination/entrance test or any other criteria adopted by the University.

5 Fees:

The programme fee shall be paid by the candidate as prescribed by the University from time to time.

6 Pedagogy:

The pedagogy shall include classroom teaching, assignment, practical work, seminar, workshop, presentations, internship, vocational training, group discussions, quiz, field work, summer training, tutorials, and project work etc.

7 Courses:

The courses/activities constitute the programmes of study. Each of them will require a specific number of hours of teaching/guidance and laboratory/studio/workshop activities, field-based learning/projects, internships, and community engagement and service.

- 7.1 Discipline Specific Core Course (DSC): A compulsory course of a subject aimed to cover the basics of major/minor subject.
- 7.2 Discipline Specific Elective (DSE)/Discipline Minor Course (MIC)/Discipline Minor Vocational Course (MIC (VOC)): Elective course offered to enhance knowledge and skills in the major/minor specializations.
- 7.3 Discipline Skill Enhancement Courses (DSEC): A course in major/minor subject aimed at providing hands-on training, competencies, skills, etc. in the subject.
- 7.4 Multidisciplinary Courses (MDC): The courses based on introductory knowledge in a subject. A student will study MDC in the subject of discipline other than the discipline of major and minor subjects to gain knowledge across the disciplines.

- 7.5 Ability Enhancement Courses (AEC): The courses aimed at enabling the students to achieve competency in the English language and a Modern Indian Language (MIL) with special emphasis on language and communication skills.
- 7.6 Skill Enhancement Courses (SEC): These courses are aimed at imparting practical skills, hands-on training, soft skills, etc. to enhance the employability of students.
- 7.7 Value-Added Courses (VAC): These courses aim at enabling the students to acquire and demonstrate the acquisition of knowledge and understanding of human values, Indian knowledge system, contemporary India, environmental science and education, digital and technical solutions, health and wellness, yoga education, sports and fitness, etc.
- 7.8 Lecture courses: Courses involving lectures relating to a field or discipline by an expert or qualified personnel in a field of learning, work/vocation or professional practice.
- 7.9 Tutorial courses: Courses involving problem-solving and discussions relating to a field or discipline under the guidance of qualified personnel in a field of learning, work/vocation, or professional practice.
- 7.10 Practicum or Laboratory work: A course requiring students to participate in a project or practical or lab activity that applies previously learned/studied principles/theory related to the chosen field of learning, work/vocation, or professional practice under the supervision of an expert or qualified individual in the field of learning, work/vocation or professional practice.
- 7.11 Seminar: A course requiring students to participate in structured discussion/conversation or debate focused on assigned tasks/readings, current or historical events, or shared experiences guided or led by an expert or qualified personnel in a field of learning, work/vocation, or professional practice.
- 7.12 Internship: A course requiring students to participate in a professional activity or work experience, or cooperative education activity with an entity external to the education institution, normally under the supervision of an expert of the given external entity. A key aspect of the internship is induction into actual work situations. Internships involve working with local industry, government or private organizations, business organizations, artists, crafts persons, and similar entities to provide opportunities for students to actively engage in on-site experiential learning.
- 7.13 Studio activities: Studio activities involve the engagement of students in creative or artistic activities. Every student is engaged in performing a creative activity to obtain a specific outcome. Studio-

based activities involve visual- or aesthetic-focused experiential work.

- 7.14 Field practice/projects: Courses requiring students to participate in field-based learning/projects generally under the supervision of an expert of the given external entity.
- 7.15 Community engagement and service: Courses requiring students to participate in field-based learning/projects generally under the supervision of an expert of the given external entity. The curricular component of 'community engagement and service' will involve activities that would expose students to the socio-economic issues in society so that the theoretical learning's can be supplemented by actual life experiences to generate solutions to real-life problems.

8 Credit Weightage:

Each course can have a certain number and combination of Lecture, Tutorial credits, and Practical credits which reflect its weightage.

- 8.1 Lecture/Tutorial: One credit per hour per week
- 8.2 Practical/Practicum: One credit two hours per week
- 8.3 Seminar/Colloquium/Group Discussion/Studio activities/Field practice/Projects/Community engagement and service: One credit two hours per week.
- 8.4 Research project/Dissertation: 12 credits
- 8.5 Summer Internship/Vocational Internship/Training : 4 credits

9 Subjects and Courses:

- 9.1 A student will opt any of the two subjects from various disciplines/subjects offered in the Department/ Institute/College as one major and one minor subject of study. Any subject in a discipline can be a major or minor subject for Undergraduate programme. Major and Minor subjects will be from the same discipline.

OR

A student will opt any of the two subjects from various disciplines/subjects offered in the Department/ Institute/ College as two major subjects of study. Any subject in a discipline can be a major subject for Undergraduate programme. Both Major subjects will be from the same discipline.

- 9.2 A student will study core, discipline specific elective, discipline skill enhancement courses and practicum courses in these subjects as per respective Curriculum Framework Annexure-1 or Annexure-2, as the case may be.
- 9.3 A student will study three multidisciplinary courses (MDCs) in first three semesters from the discipline other than the discipline of major and minor subjects. However, if a multidisciplinary course across the discipline cannot be offered by the Department/institute/College,

due to some constraints, then a student will opt MDCs through online platform SWAYAM or online MDC courses offered by the BPSMV University or through other such online platforms approved by the UGC or from a cluster college i.e. from a neighbouring Institute/College if time table is not overlapping.

- 9.4 A student will study at least one AEC in English.
- 9.5 A student will select AEC, SEC and VAC courses from a pool of respective courses offered in Department/Institute/College. Each student will study one VAC in Human Values and Ethics before exit. The number of these courses will be offered by the Department/Institute/College according to the availability of faculty and infrastructure.
- 9.6 Internship:
- (i) A student for the undergraduate programme shall be required to undergo 4-6 weeks of Internship (4 credits/100 marks) after the second semester examination if she opts to exit with Undergraduate certificate in Discipline after second semester. All continuing students will complete internship after fourth semester examination during summer vacation. However, Internship after fourth semester will not be compulsory for those students who have taken lateral entry into the third semester and have completed internship of 4-6 weeks during first year.
 - (ii) The students will inform and get approval from the Chairperson/Director/Principal of the Department/ Institute/ College before going for internship. The internship will involve working with local industry (Government or private organizations), businesses, artists, crafts persons etc. Student will submit a copy of the report (hard copy and soft copy in PDF) to the Department/Institute/College within 30 days after the completion of internship. The evaluation of the internship shall be done by an internal examiner based on the report and Viva-Voce. The report and viva voce shall carry equal weightage. The Viva-Voce shall be conducted within one month from the date of submission of internship report in the Department/Institute/College.
 - (iii) The internship will be governed by the prevailing rules of the University from time to time.
- 9.7 Research:
- (i) A student of fourth-year Bachelor in Honours with Research will be required to work on the Research Project/Dissertation of 12 credits (300 marks) during eighth semester.

- (ii) A student shall submit a request on a research area within one month of commencement of seventh semester. The staff council of the Department/Institute/College shall allot a teacher as a guide for research supervision. The synopsis of the research shall be approved by the Staff Council on the recommendation of the guide in seventh semester. Only a full time regular teacher of the concerned Department with Ph. D. in the concerned subject shall act as a Research Guide.
- (iii) The student shall be required to submit three hard copies of her dissertation along with one soft copy in PDF format to the Department/Institute/College by the end of June of the concerned year. The late submission can be allowed with late fees as decided by the University from time to time.
- (iv) The typing/printing of dissertation should be done on both sides of the paper on A-4 size paper in font size '12' in 'Times New Roman' format. The thesis should be typed in 1½ space. But the bibliography/references should be typed in single space. The cover page of dissertation would be in Orange Colour with Maroon Printing on it.
- (v) The dissertation shall include declaration from the research scholar countersigned by the Research Supervisor about originality and level of similarity/plagiarism in the dissertation.
- (vi) The Central Library shall issue the Plagiarism Verification Certificate duly countersigned by the University Librarian/ Professor In-charge that the similarity index is acceptable as per UGC guidelines applicable from time to time. This certificate must be included in the dissertation.
- (vii) The dissertation shall be evaluated by an external examiner selected by the Vice Chancellor out of the approved panel forwarded by the UGBoS. The dissertation/research project report shall be evaluated by the external examiner followed by open viva-voce. The report of dissertation will be evaluated for 8 credits and open Viva-Voce shall carry weightage of 4 credits. The examiner shall be requested to send report within one month. The Viva-Voce shall be conducted within one month from the date of receiving of evaluation report from the external examiner.
- (viii) The examiners shall give a detailed report (in the prescribed format) on the dissertation and make a clear-cut recommendation whether dissertation is accepted or rejected.
- (ix) If the examiner recommends rejection of dissertation, then the dissertation may be sent to the second examiner for taking a final decision with the prior approval of the Vice Chancellor.

The dissertation revaluation fee shall be paid by the student as prescribed by the University from time to time.

- (x) A successful student may publish original results of the Training/Survey/Project Reports/Dissertation as a paper, in a Journal of repute and the copyright of paper shall be shared by the student and research guide equally.

- 9.8 With the permission of Department/Institute/College, a student can opt for online courses, up to 40% of the courses of the programme except core and SEC courses through online platform SWAYAM or online courses offered by BPSMV or through other such online platforms approved by the UGC as per University guidelines prevailing from time to time.

10 Medium of Instruction:

- 10.1 For Arts/Tourism/Home Science /Commerce subjects:
- 10.1.1 The medium of instruction shall be Hindi/English.
 - 10.1.2 The question paper shall be set in both English and Hindi, except in the case of languages, in which the questions shall be set in the language concerned.
 - 10.1.3 The students shall write their answers in Hindi/English except in the case of languages, in which the answers shall be written in the language concerned.
- 10.2 For Science subjects:
- 10.2.1 The medium of instruction shall be mainly in English. Hindi Medium will also be offered wherever feasible.
 - 10.2.2 The question paper shall be set in English. Bilingual question paper will be provided, wherever possible.
 - 10.2.3 The students can write the answers in English/Hindi.

11 Examination:

- 11.1 At the end of each semester, there shall be an examination where each candidate shall be examined in the courses studied by them in that semester. Each semester examination shall be designated as first semester examination, second semester examination, and third semester examination and so on.
- 11.2 The examination in each semester will be held according to the syllabi approved by the Board of Studies. The panel of examiners for all courses shall be recommended by the Under Graduate Board of Studies (UGBoS) of the concerned Department.

- 11.3 The panel of examiners/paper setters recommended by concerned UGBoS shall be submitted to the Examinations Branch for approval of the Vice Chancellor.
- 11.4 The question papers shall be set and the answer books shall be examined by the External/Internal paper-setter(s) as the case may be.
- 11.5 For practical examination, viva-voce shall be conducted jointly by the external and internal examiners. If an external examiner is not able to join, alternate examiner (including those of the same University Department) may be appointed by the Chairperson of the concerned Department under intimation to the Controller of Examinations in the following preferential order: i) From outside ii) From BPSMV, Khanpur Kalan.
- 11.6 The examination for all even and odd semester will normally be held in December/January and also in May/June on such date as provided by the University. The concerned teacher/course coordinator should ensure that 100% syllabus of each course is covered before the end semester examination.
- 11.7 **Eligibility for Examination:** End-Term Examination shall be open to a regular student who: -
- 11.7.1 has been on the rolls of the Department/Institute/College during the semester.
- 11.7.2 has passed the requisite qualifying examination as laid down in ordinance, if she is a candidate for the First Semester Examination or has passed the preceding Semester Examinations if she is a candidate for the Second/Third/Fourth/Fifth Semester Examination respectively.
- 11.7.3 has attended not less than 75% of the lectures in each course. This requirement shall be fulfilled separately for each course of study. A deficiency upto 10% may be condoned by the Chairperson of the Department. In some special cases the Vice Chancellor may condone a further 5%. A relaxation of additional 20% may be given in attendance by the chairperson in case of maternity/miscarriages and in similar cases.
- 11.8 **Supplementary examinations** will be held for Re-appear candidates as under
- 11.8.1 Odd Semester : Along with the First, Third, Fifth and Seventh Semester.
- 11.8.2 Even Semester : Along with the Second, Fourth, Sixth and Eighth Semester.

- 11.8.3 Any Semester : Flexi exam on the request of the candidate on a special fee prescribed by the University from time to time.
- 11.9 The last date(s) by which the examination forms shall be uploaded on the examination portal shall be as per the schedule notified by the Controller of Examinations from time to time.
- 11.10 The amount of examination fee to be paid by a student for each semester shall be as prescribed by the Controller of Examinations from time to time.
- 11.11 The Examination Branch shall prepare the grade/result and will notify it.
- 11.12 If a candidate is not able to pass any semester examination during her regular studies in the programme, her pass credits will be accumulated in the Academic Bank of Credits (ABC) and she can pass the deficient courses any time within 7 years or as stipulated in the ABC guidelines from time to time.
- 11.13 A candidate who discontinues her studies at any point of time may be permitted to join the remaining studies and complete balance credits within the stipulated maximum period of seven years.

12 Assessment and Evaluation:

- 12.1 Each student shall be examined in the course(s) as laid down in the schemes and syllabus prescribed by the Academic Council from time to time through a system of Continuous Comprehensive Assessment (CCA) using a mix of Internal and End-Term evaluation.
- 12.2 The Internal Assessment and End Term Evaluation for different courses of programme shall carry 30:70, 25:50, and 15:35 weightage for 4 credit, 3 credit and 2 credit courses respectively.
- 12.3 The weightage for internal evaluation is as follows:

Sr. No.	Component	Weightage (30 Marks)	Weightage (25 Marks)	Weightage (15 Marks)
(i)	Class tests/minor test/Sessional tests	15 marks	10 marks	5 marks
(ii)	Assignments/Presentations/Seminars/Group Discussions, etc.	10 marks	10 marks	5 marks
(iii)	Attendance	5 marks	5 marks	5 marks
	Less than 60%	0 marks		
	Up to 65%	1 marks		
	Up to 70%	2 marks		
	Up to 75%	3 marks		
	Up to 80%	4 marks		
	Above 80%	5 marks		

- 12.4 The chairperson of the Department shall decide the mode, guidelines, regulation and timing of the internal assessment test in consultation with faculty members of the Department.

- 12.5 The students will be assessed through a system of Continuous Comprehensive Assessment (CCA) by the teachers of the Department/Institute/College using templates of evaluation rubrics and outcome based evaluation to help their progression through the programme. A complete record should be maintained by the concerned teachers for three years. The confidentiality of all reports of mentoring shall be maintained by the teacher to respect the privacy of students.
- 12.6 In case of a 4 credit course the evaluation will be done for 100 marks (External 70 + Internal 30) i.e. one credit will carry 25 marks and accordingly a 3 credit course the evaluation will be done for 75 marks and a 2 credit course the evaluation will be done for 50 marks.
- 12.7 The practical course/course component will be evaluated by End Term Examination only.
- 12.8 The student will have to obtain 40% in external examination and 40% in the aggregate of internal and external in each course. In case a student fails to acquire 40% in the aggregate of the internal and external, she will be awarded re-appear in the theory.(external) of that course. There will be no re-appear in the internal assessment. If a student gets re-appear in the external examination, the marks obtained in the internal assessment of a course shall be carried forward.
- 12.9 The Chairperson/Principal shall ensure uploading of the Internal Assessment marks at least one week before the commencement of the End-Term Semester Examinations on the examination portal of the University as notified by the Controller of Examinations time to time.
- 12.10 The office of the concerned Department/Institute/College shall maintain the internal assessment record provided by the course teacher, up to one year from the date of declaration of semester examination results.
- 12.11 **Ad-hoc Grace:** If there is any discrepancy/out of syllabi/printing error/untoward incident ensued during the examination, the matter shall be referred to a standing committee consisting of
- Controller of Examination
 - HOD of the concerned Department
 - One faculty member concerning the subject
- The committee may recommend re-conduct of the paper or uniform grace marks to all but that should not exceed 10% marks of that particular paper.
- 12.12 Moderation of Marks and Grace Marks shall be awarded as per the norms of the University prevailing from time to time.

13 Letter Grades, Grade Points and Award of Grades:

13.1 Letter Grades and Grade Points:

13.1.1 A 10-point grading system with the following letter grades shall be used to grade the academic performance of a student :

Letter Grades and Grade Points

Letter Grade	Grade Points
Outstanding (O)	10
Excellent (A+)	09
Very Good (A)	08
Good (B+)	07
Above Average (B)	06
Average (C)	05
Pass (P)	04
Fail (F)	00
Absent (AB)	00

13.2 Award of Grades : The conversion factor for conversion from SGPA/CGPA to percentage of marks shall be 10. Award of grades and the corresponding grade points will be based on absolute marks as under:

Grade Conversion

Letter Grade	Grade Points	Marks
Outstanding (O)	10	85-100
Excellent (A+)	09	75-84
Very Good (A)	08	65-74
Good (B+)	07	55-64
Above Average (B)	06	50-54
Average (C)	05	41-49
Pass (P)	04	40
Fail (F)	00	Less than 40
Absent (AB)	00	Absent

13.2.1 These grade points have been set keeping in view the UGC requirements of Grade B and B+ to be not less than 50 and 55 percent, respectively.

13.2.2 A student obtaining Grade F or Ab shall be considered failed and will be required to reappear in the examination within the permissible chances given in the concerned ordinance for obtaining a pass grade.

- 13.2.3 If 'F'/'Ab' Grade is awarded to a candidate in major project/internship, she will get only one more chance to repeat the project work at the end of the next Semester. However, if a candidate still gets 'F'/'Ab' Grade in a major project, the same will not be eligible for the award of a degree.
- 13.2.4 For audit pass courses 'Satisfactory' or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.
- 13.2.5 The grade points awarded to a student in any particular course will be based on the performance of the student in the internal assessment (sessional tests, attendance and assignments/presentations etc.) and the external assessment (end semester examination) taken together.

13.3 Computation of SGPA and CGPA:

The following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) shall be used :

- 13.3.1 The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$SGPA (S_i) = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

where C_i is the number of credits of the i^{th} course and G_i is the grade point scored by the student in the i^{th} course.

- 13.3.2 The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$CGPA = \frac{\sum(C_i \times S_i)}{\sum C_i}$$

where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester.

- 13.3.3 The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- 13.3.4 While assigning the letter grade corresponding to the marks obtained, the fraction of 0.5 and above marks shall be rounded up to the nearest higher integer and below 0.5 shall be ignored.
- 13.3.5 Transcript (Format): Based on the above recommendations on letter grades, grade points, SGPA and CGPA, the examination branch of the University

may issue the transcript for each semester and a consolidated transcript indicating the performance in all semesters after completion of the programme.

13.3.6 The merit list will be prepared and Gold Medal will be awarded to the candidate securing highest CGPA provided the candidate must have passed all the semester examinations at the first attempt and within minimum duration of the programme. In case two candidates obtain the same CGPA then both the candidates will be awarded Gold Medal.

13.3.7 Illustration of Computation of SGPA and CGPA and Format for Transcripts Computation of SGPA and CGPA

Illustration for SGPA

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit x Grade)
Course 1	3	A	8	3 x 8 = 24
Course 2	4	B ⁺	7	4 x 7 = 28
Course 3	3	B	6	3 x 6 = 18
Course 4	3	O	10	3 x 10 = 30
Course 5	3	C	5	3 x 5 = 5
Course 6	4	B	6	4 x 6 = 24
	20			139
Thus, SGPA = 139/20 = 6.95				

Illustration for CGPA

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Credit 20 SGPA 6.9	Credit 22 SGPA 7.8	Credit 25 SGPA 5.6	Credit 26 SGPA 6.0	Credit 26 SGPA 6.3	Credit 25 SGPA 8.0
Thus, CGPA = $20 \times 6.9 + 22 \times 7.8 + 25 \times 5.6 + 26 \times 6.0 + 26 \times 6.3 + 25 \times 8.0$					
----- = 6.73					
144					

14 Award of Certificate/Diploma/Degree:

- 14.1 All programmes shall be offered as per UGC list of 'Specification of Degree' prevailing from time to time (Annexure – I, II and III).
- 14.2 All Certificate/Diploma/Degree shall be awarded in consonance with Table 1 to 5 of Curriculum and Credit Framework of 4 year Multidisciplinary/Interdisciplinary/Single Major Programme.
- 14.3 The duration of the programme for the award of Undergraduate Certificate in discipline/subjects shall be one academic year and of Undergraduate diploma in discipline/ subjects will be two academic years. The duration of Bachelor's Degree in discipline/ subjects shall be three academic years and of Bachelor's Degree Honours in subject/ Honours with Research in subject shall be four academic

years. Each year shall be divided into two semesters i.e. July to November/December and January to April/May.

- 14.4 A student can complete the Bachelor's degree within three years from the date of admission, Bachelor's degree Honours/Honours with Research within four Years, Undergraduate Diploma in two years and Certificate in one year. The reappear chances will be allowed as per general rules of examination of the University.
- 14.5 **UG Certificate:** Student who opt to exit after completion of the first year and has secured 48 credits (44 credits in case of single major) will be awarded a UG certificate if, in addition, she has to complete one vocational course of 4 credits during the summer vacation of the first year. The said student will be allowed to re-enter the degree programme within three years and complete the degree programme within the stipulated maximum period of seven years.
- 14.6 **UG Diploma:** Student who opt to exit after completion of the 2nd year and has secured 96 credits (94 credits in case of single major) will be awarded the UG diploma if, in addition, she has to complete one vocational course of 4 credits during the summer vacation of the second year. The said student will be allowed to re-enter within a period of three years and complete the degree programme within the maximum period of seven years.
- 14.7 **3-Year UG Degree:** Student who wish to undergo a 3-year UG programme will be awarded UG Degree in the Major discipline after successful completion of three years, securing 132 credits (136 credits in case of single major) and satisfying the minimum credit requirement as given in Table 1.
- 14.8 **4-year UG Degree (Honours):** A four-year UG Honours degree in the major discipline will be awarded to those who complete a 4-year degree programme with 180 credits (184 credits in case of single major) and have satisfied the credit requirements as given in Table 1.
- 14.9 **4-year UG Degree (Honours with Research):** A student who secures 75% marks and above in the first six semesters and wish to undertake research at the undergraduate level can choose a research stream in the fourth year. Such student should do a research project or dissertation under the guidance of a faculty member of the University/College. The research project/dissertation will be in the major discipline. The student, who secure 180 credits (184 credits in case of single major), including 12 credits from a research project/dissertation and have satisfied the credit requirements as given in Table 1 will be awarded UG Degree (Honours with Research).

Table1: Minimum Credit Requirements to Award Degree under Each Category

S. No.	Broad Category of Course	UG Programmes (Multidisciplinary/ Interdisciplinary)		UG Programmes (Single Major)		UG Programmes (Single Major) For students who choose to pursue single major after 2 nd semester of multidisciplinary Programmes	
		3-year UG	4-Year UG	3-year UG	4-Year UG	3-year UG	4-Year UG
1	Discipline Specific Courses (DSC)	72	112 (100+12*)	72	112 (100+12*)	68	108 (96+12*)
2	Minor Course (MIC including Vocational Courses [VOC])	24	32	24	32	32	40
3	Multidisciplinary Courses (MDC)	09	09	09	09	09	09
4	Ability Enhancement Courses (AEC)	08	08	08	08	08	08
5	Skill Enhancement Courses (SEC)	09	09	11	11	09	09
6	Value Added Courses (VAC)	06	06	08	08	06	06
7	Internship	04	04	04	04	04	04
8	Research Project / Dissertation*	-	12*	-	12	-	-
	Total	132	180	136	184	136	184

Note:*Honours students not undertaking research shall have to do 3 courses for 12 credits in lieu of a research project/Dissertation.

14.10 Multiple entry and exit :

- 14.10.1 A student will be allowed an exit option at Level 5 after passing one year of the programme with requisite credits of internship and they will be awarded an Undergraduate Certificate in subjects/discipline (Arts/ Science/ Commerce/Computer Applications/Management/ Tourism/ Mass communication/ Fine Arts/ Home Science, etc.).
- 14.10.2 A student will also be allowed an exit option at Level 6 after passing two academic years of the programme with requisite credits of internship and will be awarded Undergraduate Diploma in subjects/discipline (Arts/ Science/ Commerce/ Computer Applications/ Management/ Tourism/ Mass communication/ Fine Arts/ etc.).
- 14.10.3 A student will be allowed to exit at Level 7 after passing three years of the programme and will be awarded Bachelor's degree in subjects/discipline (Arts/ Science/ Commerce/ Computer Applications/ Management/ Tourism/ Mass communication/ Fine Arts/Home Science, etc.).

- 14.10.4 Bachelor's Degree Honours /Honours with Research in a subject will be awarded at Level 8 after four years of study.
- 14.10.5 Admission under Multiple Entry: The Department/Institute/College shall declare total number of seats available discipline and subject wise each year for fresh and lateral admissions.
- 14.10.6 The Department/ Institute/College may plan the number of seats discipline and subject wise in consonance with the faculty and infrastructure available.

15 Promotion:

- 15.1 A student will be allowed to join Third Semester only if she clears a minimum of 50% theory credits of the First and Second Semester examinations taken together. A student will be allowed to join Fifth Semester only if she clears a minimum of 50% theory credits of the First, Second, Third and Fourth Semester examinations taken together. However, such a student may pursue her studies for the next higher semester(s) and appear in the examination(s) for the same along with the examination for the lower semester(s).
- 15.2 A student who has completed the prescribed course(s) of a programme in the Department/Institute/College for any semester but does not appear in the examination, or, having appeared fails, may be allowed on the recommendation of the Chairperson/ Principal/Director of the Department/ Institute/College to appear/re-appear in the Semester Examinations/course(s) as the case may be, at the next regular examination for that Semester when such examination(s) are held, without attending the course(s) again as an ex-student only twice. While re-appearing in the examination, the student shall be exempted from appearing in the paper(s)/practical(s) in which she has obtained pass marks.
- 15.3 A student of 3-year UG programme with one major and minor subject will be allowed to join Seventh Semester of UG programme for Honours or Honours with Research in subject only if she clears all courses of preceding semesters and has earned 60 credits in the concerned major subject. In addition to the above, a student will be allowed to join seventh semester of 4-year UG programme for Honours with Research in Major Subject only if she has obtained CGPA 7.5 or more in the 3-year UG programme.

OR

A student of 3-year UG programme with two major subjects will be allowed to join Seventh Semester of UG programme for Honours or Honours with Research in subject only if she clears all courses of preceding semesters and earned 48 credits in the concerned major

subject. In addition to the above, a student will be allowed to join seventh semester of 4-year UG programme for Honours with Research in Major Subject only if she obtained CGPA 7.5 or more in the 3-year UG programme.

However, this will be subject to the availability of Graduate research seats in the fourth year of the programme. These seats will be computed based on regular Ph. D. holder teachers in the subject and infrastructure in the Department/Institute/College. A teacher can guide a maximum of five undergraduate research students at a time.

- 15.4 A student, whose result is declared late for no fault of her, may be permitted provisionally to attend classes of the next higher semester at her own risk and responsibility, subject to her passing the concerned semester examination. In such a case, the lectures will be counted from the date a student starts attending classes. In case a student fails to pass the concerned semester examination her attendance/Internal Assessment in the next higher Semester in which she was allowed to attend classes provisionally shall stand cancelled.

16 Attendance:

- 16.1 No candidate shall be considered to have pursued a regular course of the study unless she has attended not less than 75% of the lectures in each course. This requirement shall be fulfilled separately for each course of study. A deficiency upto 10% may be condoned by the Chairperson of the Department. In some special cases the Vice Chancellor may condone a further 5%. A relaxation of additional 20% may be given in attendance by the chairperson in case of maternity/miscarriages and in similar cases.
- 16.2 If a student is absent from the Department for more than four weeks without permission of the Chairperson/Course Coordinator of the Department, her name will be struck off from the Department rolls with information to the Academic Branch.
- 16.3 In case the student name is struck off due to nonpayment of fee and is re-admitted later, her attendance shall not be counted for that period.

17 Improvement:

A candidate who has passed the Bachelor programme is allowed to improve her result by appearing in the scheduled semester examination(s) according to the rules and syllabus prevailing at that time as an ex-student at the fees prescribed by the University from time to time. A candidate is allowed to make repeat attempts within 7 years' of passing the programme or as per the time

period stipulated in the ABC for accumulation of credits from time to time if registered.

18 General Guidelines:

- 18.1 The ordinance in force at the time a student joins the programme shall hold good only for the examination held during or at the end of the academic year and nothing in this ordinance shall be deemed to debar the University from amending the ordinance and the amended ordinance, if any, shall apply to all the students whether old or new.
- 18.2 A student can pursue one more academic programme along with the regular degree programme either in the physical mode (provided that the class timings do not overlap) or in the Open and Distance Learning (ODL) mode.
- 18.3 All academic problems of the students other than those affecting the University rules and regulations framed from time to time may be looked into by a committee constituted by the Dean Academic Affairs.
- 18.4 Eligibility Criteria, Fee Structure, Academic Calendar, Examination Schedule, Sports Calendar and Cultural Calendar for the academic year shall be given in the University Prospectus.
- 18.5 Admission, teaching schedule, preparatory holidays, examination, winter, summer vacation, shall be followed as specified in academic calendar of the University. A student is deemed to have completed the requirements for the degree and is eligible for the award of degree if:
 - 18.5.1 She has satisfied all the academic requirements as per the regulations; and
 - 18.5.2 She has paid all fees due from her; and
 - 18.5.3 There is no case of indiscipline pending against her.
 - 18.5.4 Satisfied the minimum academic and residence requirements.
- 18.6 A student who has completed the graduation requirement listed above shall be eligible for award of degree. However, under extremely exceptional circumstances, where gross violation of the graduation requirements is detected at any later stage, the Academic Council may recommend to the Executive Council to withdraw the degree already awarded.
- 18.7 Where this document is silent about any rule, the University Policy & regulations as framed from time to time will be applicable.

Table 2: Curriculum and Credit Framework for Undergraduate Programmes (Multidisciplinary)

Semester	Discipline-Specific Courses (DSC)	Minor (MIC)/ Vocational (VOC)	Multidisciplinary courses (MDC)	Ability Enhancement courses (AEC)	Skill Enhancement Courses (SEC)/ Internship /Dissertation	Value-Added Courses (VAC)	Total Credits
I	DSC - A1 @ 4 credits	MIC1 @ 2 credits	MDC1 @ 3 credits	AEC1 @ 2 credits	SEC1 @ 3 credits	VAC1 @ 2 credits	24
	DSC - B1 @ 4 credits						
	DSC - C1 @ 4 credits						
	DSC - A2 @ 4 credits						
	DSC - B2 @ 4 credits						
DSC - C2 @ 4 credits							
Students exiting the programme after second semester and securing 52 credits including 4 credits of summer internship will be awarded UG Certificate in the relevant Discipline/Subject							
III	DSC - A3 @ 4 credits	MIC3 @ 4 credits	MDC3 @ 3 credits	AEC3 @ 2 credits	SEC3 @ 3 credits		24
	DSC - B3 @ 4 credits						
	DSC - C3 @ 4 credits						
	DSC - A4 @ 4 credits						
	DSC - B4 @ 4 credits						
DSC - C4 @ 4 credits							
Students exiting the programme after fourth semester and securing 96 credits including 4 credits of summer internship will be awarded UG Diploma in the relevant Discipline/Subject							
V	DSC - A5 @ 4 credits	MIC5(VOC) @ 4 credits			Internship @ 4 credits#		20
	DSC - B5 @ 4 credits						
	DSC - C5 @ 4 credits						
	DSC - A6 @ 4 credits						
	DSC - B6 @ 4 credits						
DSC - C6 @ 4 credits							
Students will be awarded 3-year UG Degree in the relevant Discipline/Subject upon securing 132 credits							
VII*	DSC - H1 @ 4 credits	MIC8 @ 4 credits					24
	DSC - H2 @ 4 credits						
	DSC - H3 @ 4 credits						
	DSC - H4 @ 4 credits						
	DSC - H5 @ 4 credits						
DSC - H6 @ 4 credits							
VIII* (4yr UG Hon.)	DSC - H7 @ 4 credits	MIC9 @ 4 credits			Research project/ Dissertation @ 12 credits		24
	DSC - H8 @ 4 credits						
	DSC - H9 @ 4 credits						
	DSC - H10 @ 4 credits						
	DSC - H6 @ 4 credits						
DSC - H7 @ 4 credits	TOTAL CREDITS						180

*A student should select one major discipline (Out of A, B, or C studied during first three years of UG Programmes) in which he/she wishes to pursue Honors. This framework is subject to modification as per UGC guidelines at the University level. The universities may decide to offer the Honors degree Programmes subject to the fulfillment of credit point table.
#Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG Programmes without taking exit option.

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Table 3: Curriculum and Credit Framework for Undergraduate Programmes (Single Major)

Semester	Discipline-Specific Courses (DSC)	Minor (MIC)/ Vocational (VOC)	Multidisciplinary courses (MDC)	Ability Enhancement courses (AEC)	Skill Enhancement (SEC)/ Internship /Dissertation	Value-Added Courses (VAC)	Total Credits
I	DSC - A1 @ 4 credits	MIC1 @ 4 credits	MDC1 @ 3 credits	AEC1 @ 2 credits	SEC1 @ 3 credits	VAC1 @ 2 credits	22
	DSC - A2 @ 4 credits						
II	DSC - A3 @ 4 credits	MIC2 @ 4 credits	MDC2 @ 3 credits	AEC2 @ 2 credits	SEC2 @ 3 credits	VAC2 @ 2 credits	22
	DSC - A4 @ 4 credits						
Students exiting the programme after second semester and securing 48 credits including 4 credits of summer internship will be awarded UG certificate in the relevant Discipline/Subject							
III	DSC - A5 @ 4 credits	MIC3 @ 4 credits	MDC3 @ 3 credits	AEC3 @ 2 credits	SEC3 @ 3 credits	VAC3 @ 2 credits	22
	DSC - A6 @ 4 credits						
	DSC - A7 @ 4 credits						
	DSC - A8 @ 4 credits						
	DSC - A9 @ 4 credits						
IV	DSC - A10 @ 4 credits	MIC4(VOC) @ 4 credits	MDC4 @ 3 credits	AEC4 @ 2 credits	SEC4 @ 3 credits	VAC4 @ 2 credits	24
	DSC - A11 @ 4 credits						
	DSC - A12 @ 4 credits						
	DSC - A13 @ 4 credits						
	DSC - A14 @ 4 credits						
Students exiting the programme after fourth semester and securing 94 credits including 4 credits of summer internship will be awarded UG Diploma in the relevant Discipline/Subject							
V	DSC - A11 @ 4 credits	MIC5(VOC) @ 4 credits	MDC5 @ 3 credits	AEC5 @ 2 credits	SEC5 @ 2 credits	VAC5 @ 2 credits	24
	DSC - A12 @ 4 credits						
	DSC - A13 @ 4 credits						
	DSC - A14 @ 4 credits						
	DSC - A15 @ 4 credits						
	DSC - A16 @ 4 credits						
	DSC - A17 @ 4 credits						
	DSC - A18 @ 4 credits						
Students will be awarded 3 year UG Degree in relevant major Discipline/Subject upon securing 135 credits							
VII	DSC - H1 @ 4 credits	MIC7 @ 4 credits	MDC7 @ 3 credits	AEC7 @ 2 credits	SEC7 @ 3 credits	VAC7 @ 2 credits	24
	DSC - H2 @ 4 credits						
	DSC - H3 @ 4 credits						
	DSC - H4 @ 4 credits						
	DSC - H5 @ 4 credits						
	DSC - H6 @ 4 credits						
	DSC - H7 @ 4 credits						
	DSC - H8 @ 4 credits						
VIII (4yr UG Hon.)	DSC - H9 @ 4 credits	MIC8 @ 4 credits	MDC8 @ 3 credits	AEC8 @ 2 credits	SEC8 @ 3 credits	VAC8 @ 2 credits	24
	DSC - H10 @ 4 credits						
	DSC - H6 @ 4 credits						
	DSC - H7 @ 4 credits						
	DSC - H8 @ 4 credits						
VIII (4yr UG Hon. with Research)	DSC - H6 @ 4 credits	MIC8 @ 4 credits	MDC8 @ 3 credits	AEC8 @ 2 credits	SEC8 @ 3 credits	VAC8 @ 2 credits	24
	DSC - H7 @ 4 credits						186
						TOTAL CREDITS	186

#Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG Programmes without taking exit option.

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Table 4: Curriculum and Credit Framework for Undergraduate Programmes (Single Major)
(For students who choose to pursue single major after 2nd semester of multidisciplinary Programmes)

Semester	Discipline-Specific Courses (DSC)	Minor (MIC)/ Vocational (VOC)	Multidisciplinary courses (MDC)	Ability Enhancement courses (AEC)	Skill Enhancement Courses (SEC)/ Internship / Dissertation	Value-Added Courses (VAC)	Total Credits
I	DSC - A1 @ 4 credits	MIC1 @ 2 credits	MDC1 @ 3 credits	AEC1 @ 2 credits	SEC1 @ 3 credits	VAC1 @ 2 credits	24
	DSC - B1 @ 4 credits						
	DSC - C1 @ 4 credits						
II	DSC - A2 @ 4 credits	MIC2 @ 2 credits	MDC2 @ 3 credits	AEC2 @ 2 credits	SEC2 @ 3 credits	VAC2 @ 2 credits	24
	DSC - B2 @ 4 credits						
	DSC - C2 @ 4 credits						
Students exiting the programme after second semester and securing 52 credits including 4 credits of summer internship will be awarded UG Certificate in the relevant Discipline / Subject							
III	DSC - A3 @ 4 credits	MIC3 (VOC) @ 4 credits	MDC3 @ 3 credits	AEC3 @ 2 credits	SEC3 @ 3 credits	-----	24
	DSC - A4 @ 4 credits						
	DSC - A5 @ 4 credits						
IV	DSC - A6 @ 4 credits	MIC4(VOC)@ 4 credits	-----	AEC4 @ 2 credits	-----	VAC3 @ 2 credits	24
	DSC - A7 @ 4 credits						
	DSC - A8 @ 4 credits						
V	DSC - A9 @ 4 credits	-----	-----	-----	-----	-----	20
	DSC - A10 @ 4 credits						
	DSC - A11 @ 4 credits						
VI	DSC - A12 @ 4 credits	MIC5(VOC)@ 4 credits	-----	-----	-----	-----	20
	DSC - A13 @ 4 credits						
	DSC - A14 @ 4 credits						
Students exiting the programme after fourth semester and securing 100 credits including 4 credits of summer internship will be awarded UG Diploma in the relevant Discipline / Subject							
VII	DSC - A15 @ 4 credits	MIC6 @ 4 credits	-----	-----	-----	-----	24
	DSC - A16 @ 4 credits						
	DSC - A17 @ 4 credits						
Students will be awarded 3-year UG Degree in relevant major Discipline/Subject upon securing 136 credits							
VIII (4yr UG Hon.)	DSC - H1 @ 4 credits	MIC7 @ 4 credits	-----	-----	-----	-----	24
	DSC - H2 @ 4 credits						
	DSC - H3 @ 4 credits						
VIII (4yr UG Hon. with Research)	DSC - H4 @ 4 credits	-----	-----	-----	-----	-----	24
	DSC - H5 @ 4 credits						
	DSC - H6 @ 4 credits						
VIII (4yr UG Hon. with Research)	DSC - H7 @ 4 credits	MIC7 @ 4 credits	-----	-----	Research project/ Dissertation @ 12 credits	-----	24
	DSC - H8 @ 4 credits						
	DSC - H9 @ 4 credits						
#Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG Programmes without taking exit option.							

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Table 5: Curriculum and Credit Framework for Undergraduate Programmes (Interdisciplinary)

Semester	Discipline-Specific Courses (DSC)	Minor (MIC)/ Vocational (VOC)	Multidisciplinary courses (MDC)	Ability Enhancement courses (AEC)	Skill Enhancement (SEC)/ Internship / Dissertation	Value-Added Courses (VAC)	Total Credits
I	DSC - A1 @ 4 credits	MIC1 @ 2 credits	MDC1 @ 3 credits	AEC1 @ 2 credits	SEC1 @ 3 credits	VAC1 @ 2 credits	24
	DSC - B1 @ 4 credits						
	DSC - C1 @ 4 credits						
	DSC - A2 @ 4 credits						
	DSC - B2 @ 4 credits						
DSC - C2 @ 4 credits							
II	DSC - A3 @ 4 credits	MIC2 @ 2 credits	MDC2 @ 3 credits	AEC2 @ 2 credits	SEC2 @ 3 credits	VAC2 @ 2 credits	24
	DSC - B3 @ 4 credits						
	DSC - C3 @ 4 credits						
	DSC - A4 @ 4 credits						
	DSC - B4 @ 4 credits						
DSC - C4 @ 4 credits							
Students exiting the programme after second semester and securing 52 credits including 4 credits of summer internship will be awarded UG Certificate in the relevant Discipline / Subject							
III	DSC - A3 @ 4 credits	MIC3 @ 4 credits	MDC3 @ 3 credits	AEC3 @ 2 credits	SEC3 @ 3 credits		24
	DSC - B3 @ 4 credits						
	DSC - C3 @ 4 credits						
	DSC - A4 @ 4 credits						
	DSC - B4 @ 4 credits						
DSC - C4 @ 4 credits							
IV	DSC - A4 @ 4 credits	MIC4(VOC) @ 4 credits		AEC4 @ 2 credits		VAC3 @ 2 credits	20
	DSC - B4 @ 4 credits						
	DSC - C4 @ 4 credits						
	DSC - A5 @ 4 credits						
	DSC - B5 @ 4 credits						
DSC - C5 @ 4 credits							
V	DSC - A5 @ 4 credits	MIC5(VOC) @ 4 credits			Internship @ 4 credits#		20
	DSC - B5 @ 4 credits						
	DSC - C5 @ 4 credits						
	DSC - A6 @ 4 credits						
	DSC - B6 @ 4 credits						
DSC - C6 @ 4 credits							
Students exiting the programme after fourth semester and securing 96 credits including 4 credits of summer internship will be awarded UG Diploma in the relevant Discipline / Subject							
VI	DSC - A5 @ 4 credits	MIC6 @ 4 credits					20
	DSC - B5 @ 4 credits						
	DSC - C5 @ 4 credits						
	DSC - A6 @ 4 credits						
	DSC - B6 @ 4 credits						
DSC - C6 @ 4 credits							
Students will be awarded 3-year UG Degree with major in the relevant Discipline / Subject upon securing 132 credits							
VII*	DSC - H1 @ 4 credits	MIC8 @ 4 credits					24
	DSC - H2 @ 4 credits						
	DSC - H3 @ 4 credits						
	DSC - H4 @ 4 credits						
	DSC - H5 @ 4 credits						
DSC - H6 @ 4 credits							
VIII* (4yr UG Hon.)	DSC - H6 @ 4 credits	MIC9 @ 4 credits			Research project/ Dissertation @ 12 credits		24
	DSC - H7 @ 4 credits						
	DSC - H8 @ 4 credits						
	DSC - H9 @ 4 credits						
	DSC - H10 @ 4 credits						
VIII* (4yr UG Hon. with Research)	DSC - H6 @ 4 credits	MIC9 @ 4 credits			Research project/ Dissertation @ 12 credits	Total	180
	DSC - H7 @ 4 credits						
	DSC - H7 @ 4 credits						

*A student should select one major discipline (Out of A, B, or C studied during first three years of UG Programmes) in which he/she wishes to pursue Honors. This framework is subject to modification as per UG guidelines at the University level. The universities may decide to offer the Honors degree Programmes subject to the fulfillment of credit point table
 #Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG Programmes without taking exit option.

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NOTE:

DSC	Discipline Specific Course: Credit of a DSC major could be the combination of lecture credits, tutorial credits, and practical credits. DSC includes core courses, subject elective and subject skill enhancement courses.
MDC	Multidisciplinary Course: All UG students must undergo three introductory level multidisciplinary courses relating to Natural Sciences, Physical Sciences, Humanities, Arts & Social Sciences, Commerce & Management, Interdisciplinary Studies. Students are not allowed to choose or repeat courses already undergone at the higher secondary level (12th class) or opted as major and minor stream under this category.
AEC	Ability Enhancement Course: Ability Enhancement (Language) courses may be designed to achieve competency in the Modern Indian Language and English, with a special emphasis on language and communication skills.
SEC	Skill Enhancement Course: Skill Enhancement Courses may be primed to impart practical skills, hands-on training, soft skills, etc., to enhance the student's employability.
Summer Internship	Internships will require 120 hours (1 credit: 30 hrs of engagement) of involvement working with local industry, government or private organizations, business organizations, artists, crafts persons, and similar entities during summers. #Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG Programmes without taking exit option.
Research Project	Research Project/ Dissertation for UG degree (Honours with research) will be completed in the eighth semester under the guidance of a college and University faculty member.
VAC	Value Added Course: All UG students must undergo at least three Value Added Courses
MIC including VOC	Minor Course (MIC) with minimum 24 Credits including Vocational Course (VOC)
	For students who choose to pursue single major after 2nd semester of multidisciplinary Programmes The 16 credits earned during first year in the two subjects, other than the subject which is continued as Single Major, will be counted towards minor

DSC Major and Minor in I& II Semesters will have Foundation or Introductory level courses. DSC Major and Minor in III & IV semesters will be Intermediate Level Courses. Whereas DSC Major and minor in V & VI shall be of higher-level courses and in VII & VIII semesters, advanced level courses will be offered.

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Annexure – I

Programme Type	Nomenclature of the Degree as per NEP
Multidisciplinary	<ul style="list-style-type: none"> ➤ Bachelor of Arts ➤ Bachelor of Life Science ➤ Bachelor of Physical Science
Bachelor of discipline with Single Major	<ul style="list-style-type: none"> ➤ Bachelor of Arts (Hons.) in Economics ➤ Bachelor of Arts (Hons.) in English ➤ Bachelor of Arts (Hons.) in Geography ➤ Bachelor of Arts (Hons.) in Mathematics ➤ Bachelor of Arts (Hons.) in Political Science ➤ Bachelor of Arts (Hons.) in Sanskrit ➤ Master of Arts (5 Years Integrated) in English ➤ Master of Arts (5 Years Integrated) in Economics
<p>Note :</p> <ul style="list-style-type: none"> ➤ For 3 year degree programme Name of the degree will be Bachelor of Arts/Science with Major in (Subject) ➤ For 4 year degree programme Name of the degree will be Bachelor of Arts/Science (Honours) in (Subject) ➤ For 4 year degree programme Name of the degree will be Bachelor of Arts/Science (Honours with Research) in (Subject) 	
Interdisciplinary Programmes	<ul style="list-style-type: none"> ➤ Bachelor of Commerce (Hons.) ➤ Bachelor of Business Administration (Hons.) ➤ Bachelor of Computer Application (Hons.) ➤ Bachelor of Mass Communication (Hons.) ➤ Bachelor of Physical Education (Hons.) ➤ Bachelor of Home Science (Hons.) ➤ Bachelor of Hotel Management (Hons.) ➤ Bachelor of Commerce ➤ Bachelor of Business Administration ➤ Bachelor of Computer Application ➤ Bachelor of Mass Communication ➤ Bachelor of Physical Education ➤ Bachelor of Home Science ➤ Bachelor of Hotel Management

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Annexure – II

Discipline Specific Subject/Courses (Major/Minor)

Life Sciences	Physical Sciences	Commerce and Management	Arts, Humanities and Social Sciences	Interdisciplinary Studies
<ul style="list-style-type: none"> ➤ Biochemistry ➤ Biotechnology ➤ Botany ➤ Bioinformatics ➤ Medical Biotechnology ➤ Environmental Sciences ➤ Food Technology ➤ Forensic Sciences ➤ Genetics ➤ Microbiology ➤ Zoology ➤ Chemistry and other Life & Natural Sciences and other Natural Science 	<ul style="list-style-type: none"> ➤ Chemistry ➤ Physics ➤ Mathematics ➤ Computer Sciences ➤ Statistics ➤ Energy and Environmental Sciences and other Physical Science disciplines courses 	<ul style="list-style-type: none"> ➤ Accounting ➤ Commerce ➤ Business Studies ➤ Human Resource Management ➤ Finance ➤ Production & Operations Management ➤ International Business ➤ Business Economics ➤ E – Business ➤ Travel & Tourism Management ➤ Financial institutions ➤ Financial Technology ➤ Data Science ➤ English ➤ Sociology ➤ Psychology and ➤ Other areas. 	<ul style="list-style-type: none"> ➤ Economics ➤ History ➤ Geography ➤ Sanskrit ➤ Music ➤ Visual Arts ➤ Political science ➤ Psychology ➤ Sociology ➤ Defence Studies ➤ English ➤ Hindi ➤ Public Administration ➤ Library Sciences ➤ Journalism ➤ Mass Media and Communication among others ➤ Archaeology ➤ Comparative literature ➤ Arts and creative expressions ➤ Creative writing and literature ➤ language(s) ➤ philosophy and other related fields 	<ul style="list-style-type: none"> ➤ Environmental Sciences ➤ Yoga Sciences ➤ Gender Studies ➤ Political Economy and Development ➤ Global Environment & Health ➤ Cognitive Science ➤ International Relations ➤ Political Economy and Development ➤ Sustainable Development

Annexure – III

Discipline Specific Programmes

Life Sciences	Physical Sciences	Arts, Humanities and Social Sciences	Interdisciplinary Studies
➤ B.Sc. (Medical)	➤ B.Sc. (Non-Medical) ➤ B.Sc. (Computer Science)	➤ B.P.E.S ➤ B.Ed. ➤ B.A. ➤ B.M.C. ➤ M.A. English (Integrated) ➤ M.A. Economics (Integrated)	➤ B.B.A. ➤ B.COM. ➤ B.H.M. ➤ B.Sc. (Home Science) ➤ BTM ➤ B.Voc.

BPSMV Central Curriculum Development Board (CCBD) constituted vide Office Order Endst. No. BPSMV/Acad/23/3036-86 Dated 18/07/2023 to finalize the Common Ordinance, Scheme, and Courses (VAC, AEC, SEC, MDC, VOC) for 4 Year Under Graduate Programmes: Certificate, Diploma, 3 Year Degree, 4 Year Degree (Honours/Honours with Research) Under Learning Outcome Based Curriculum Framework - Choice Based Credit System (LOCF-CBCS) in accordance with NEP – 2022, UGC-CCFUGP, DHE-CCFUGP and related amendments.

1. Prof. Sanket Vij, Dean Academic Affairs	Convener
2. Prof. Shweta Singh, Dean – Colleges	Member
3. Prof. Ashok Verma, Director - IQAC	Member
4. Prof. Ravi Bhushan, Chairperson – Department of English	Member
5. Dr. Sunil Sangwan, Dean – Sciences	Member
6. Sh. Rajesh Narwal, A.R. (Academic)	Secretary

From

Additional Chief Secretary to Government of Haryana,
Department of Higher Education.

To

1. The Vice Chancellors of all State Universities under the aegis of Directorates of Higher and Technical Education.
2. The Principals of all Government, Aided and Self Financing Colleges.

Memo No. DHE-170005/5/2023-Deputy Director-NPE

Dated: 08th June, 2023

Subject: Regarding implementation of the key components of National Education Policy, 2020 in colleges and universities.

Kindly refer to the subject cited above.

In supersession of this office letter no. DHE-170006/11/2020-NPE dated 05.06.2023, it is stated that the State Government has decided to implement the key components of NEP 2020 in colleges and universities in a phased manner. Major key components of NEP 2020 are as below:

1. Quality Universities and Colleges
2. Towards a More Holistic and Multidisciplinary Education
3. Optimal Learning Environments and Support for Students
4. Internationalization
5. Motivated, Energized, and Capable Faculty
6. Equity and Inclusion in Higher Education
7. Teacher Education
8. Reimagining Vocational Education
9. Catalyzing Quality Academic Research in All Fields
10. Effective Governance and Leadership for HEIs
11. Promotion of Indian Languages, Arts, and Culture
12. Ethical Values/ Moral Education
13. Technology Use and Integration
14. Online and Digital Education: Ensuring Equitable Use of Technology
15. Adult Education and Lifelong Learning
16. KG to PG under one roof

Curriculum and Credit Framework for Undergraduate Programmes

Central Committee constituted vide letter no. DHE-170006/11/2020-NPE dated 24.04.2023 and 01.05.2023 to finalize a comprehensive Curriculum and Credit Framework for Four Year UG Programmes

1. Prof. Ajay K. Rajan, MDU, Rohtak	Convener
2. Prof. Anil Vashisht, NEP Coordinator, Kurukshetra University, Kurukshetra	Member
3. Prof. Surinder Singh Kundu, NEP Coordinator, Chaudhary Devi Lal University, Sirsa	Member
4. Prof. S. K. Sinha, NEP Coordinator, Chaudhary Ranbir Singh University, Jind	Member
5. Prof. Sanjeev Kumar, NEP Coordinator, Chaudhary Bansi Lal University, Bhiwani	Member
6. Prof. Manju Pruthi, NEP Coordinator, Indira Gandhi University, Meerpur, Rewari	Member
7. Prof. Sanket Vij, NEP Coordinator, BPSMV, Khanpur Kalan (Sonipat)	Member
8. Prof. Vinay Kumar Singh, NEP Coordinator, B.R. Ambedkar National Law University, Gurugram	Member
9. Prof. S. C. Kundu, NEP Coordinator, Gurugram University, Gurugram	Member
10. Dr. Naresh Sharma, NEP Coordinator, MVSU, Mundri (Kaithal)	Member
11. Dr. Ravi Kumar, NEP Coordinator, J.C. Bose University of Science & Technology, YMCA, Faridabad	Member
12. Prof. Anil Kumar Berwal, NEP Coordinator, DCRUST, Murthal Sonipat	Member
13. Prof. D. Kumar, NEP Coordinator, Guru Jambheshwar University of Science & Technology, Hisar	Member
14. Dr. Ajay Kaushik, NEP Coordinator, Pt. Lakhmi Chand State University of Performing & Visual Arts, Rohtak	Member
15. Prof. S.K. Pahuja, NEP Coordinator, Ch. Charan Singh Haryana Agriculture University, Hisar	Member
16. Prof. Sandeep Gupta, NEP Coordinator, Lala Lajpat Rai Veterinary University, Hisar	Member
17. NEP Coordinator, Pt. Bhagwat Dayal Sharma University of Health Sciences, Rohtak	Member
18. Prof. Rishi Pal, NEP Coordinator, Vishwakarma Skill University, Palwal	Member
19. Dr. Brij Pal, Deputy Director (Representative of DHE, Panchkula)	Member
20. Representative of HSHEC, Panchkula	Member
21. Prof. Dinesh Singh, DHEO, Rohtak (nominated by DHE)	Member
22. Prof. Sanju Abrol, DHEO, Panipat (nominated by DHE)	Member
23. Prof. Narasimhan B., NEP Coordinator, MDU, Rohtak	Member Secretary

Pool of Ability Enhancement Courses (AEC)

		First Year		Second Year	
		Semester-I (AEC-1)		Semester-II (AEC-2)	
Course Code	Nomenclature of Course	Course Code	Nomenclature of Course	Course Code	Nomenclature of Course
B-AEC-101	English -I	B-AEC-201	English-II	B-AEC-301	English -III
B-AEC-102	हिंदी -1	B-AEC-102	हिंदी -1	B-AEC-302	हिंदी -2
B-AEC-103	संस्कृत -1	B-AEC-103	संस्कृत -1	B-AEC-303	संस्कृत -2
				B-AEC-401	English -IV
				B-AEC-402	हिंदी -3
				B-AEC-403	संस्कृत -3

The students of 1st year will study AEC-1 in English language in any of the semester i.e. I or II.
The AEC-2 may be selected in any of the language i.e. Hindi, English, Sanskrit

Students will opt for one AEC-3 from the pool in this category offered by Department/Institute/College. Department/Institute/College can offer AEC in other Modern Indian languages (MILs) after getting approval from the university

Students will opt for one AEC-4 from the pool in this category offered by Department/Institute/College. Department/Institute/College can offer AEC in other Modern Indian languages (MILs) after getting approval from the university

ANNEXURE - 50

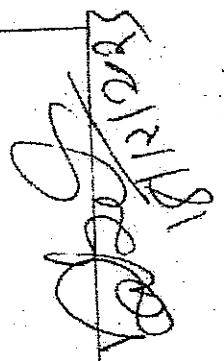
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18/12/2023

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Pool of Skill Enhancement Courses (SEC)

Semester -1		Semester -2		Semester -3		
Course Code	Nomenclature of Course	Course Code	Nomenclature of Course	Course Code	Nomenclature of Course	
B-SEC-101	Office and Spreadsheet Tools	B-SEC-201	Digital Marketing	B-SEC-301	Tour and Travel Management	
B-SEC-102	Accounting through Tally	B-SEC-202	Food and Beverage Services	B-SEC-302	Health Care Management & First Aid Training	
B-SEC-103	Business Communication	B-SEC-203	Vedic Mathematics	B-SEC-303	Catering skills	
B-SEC-104	Office Management	B-SEC-204	Renewable Energy Sources	B-SEC-304	Proficiency in German-III	
B-SEC-105	Stock Market Operations	B-SEC-205	Typing Shorthand in Hindi	B-SEC-305	Proficiency in French-III	
B-SEC-106	Cyber Security	B-SEC-206	Web Designing and Development	B-SEC-306	Proficiency in Russian-II	
B-SEC-107	Financial Literacy	B-SEC-207	Proficiency in German-II	B-SEC-307	Indian Cuisine	
B-SEC-108	Typing Shorthand in English	B-SEC-208	Proficiency in French-II	B-SEC-308	Waste Management Techniques	
B-SEC-109	Proficiency in German-I	B-SEC-209	Proficiency in Russian-II	Students will opt for one SEC from the pool in this category offered by the Department/Institute/College. Department/Institute/College can add more SEC in the pool after getting approval from the University.		
B-SEC-110	Proficiency in French-I	B-SEC-210	Computer Hardware Maintenance			
B-SEC-111	Proficiency in Russian-I	B-SEC-211	IT Return Filing			
Students will opt for one SEC from the pool in this category offered by the Department/Institute/College. Department/Institute/College can add more SEC in the pool after getting approval from the University.			B-SEC-212			Textile Coloring and Designing
			B-SEC-213			Translation English-Hindi
Students will opt for one SEC from the pool in this category offered by the Department/Institute/College. Department/Institute/College can add more SEC in the pool after getting approval from the University.			B-SEC-214	Content Writing		


 18/12/2023

Pool of Skill Enhancement Courses (SEC)


Students will opt for one SEC from the pool in this category offered by the Department/Institute/College. Department/Institute/College can add more SEC in the pool after getting approval from the University.

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Pool of Value Added Courses (VAC)

First Year		Second Year	
VAC-1		VAC-4	
Course Code	Nomenclature of Course	Course Code	Nomenclature of Course
B-VAC-101	Human Values and Ethics	B-VAC-401	Climate Change
B-VAC-301	Environmental Studies	B-VAC-402	Ecology and Literature
		B-VAC-403	Women Rights and Community
		B-VAC-404	Indian Traditional Sports
		B-VAC-405	Gurukul Tradition and Philosophy of Bhagat Phool Singh
		B-VAC-406	Sustainable Development Goals
		B-VAC-407	Universal Human Values
		B-VAC-408	Life Skills from Bhagwat Gita
		Students will opt for one VAC course from the pool in this category offered by Department/ College/ Institute. Department/ College/ Institute can offer any other value added course after getting	
VAC-2		VAC-3	
Course Code	Nomenclature of Course	Course Code	Nomenclature of Course
B-VAC-201	Constitutional Values and Fundamental Duties	B-VAC-301	Environmental Studies
B-VAC-202	Yoga and Meditation	B-VAC-101	Human Values and Ethics
B-VAC-203	Panchkoshha: Holistic Development of Personality		
B-VAC-204	Culture History of Haryana		
B-VAC-205	Ayurveda and Nutrition		
B-VAC-206	Intellectual Property Rights		
B-VAC-207	Indian Heritage & Civilization		
B-VAC-208	Indian Knowledge System		
B-VAC-209	Artificial Intelligence		
B-VAC-210	Disaster Management		
50% of students of 1st semester		Students will opt for one VAC course	
		The students, who have taken	


 18/12/2023

Pool of Value Added Courses (VAC)

<p>of Department/ College/Institute will be offered a course on Human Values and Ethics and the remaining 50% will be offered course on Environmental Studies.</p>	<p>From the pool in this category offered by Department/ College/ Institute, any other value added course after getting approval from the University</p>	<p>Human Values and Ethics course in the Ist semester, will study a course on Environmental Studies and vice-versa</p>	<p>approval from the University</p>
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English-I

Course Code: B-AEC-101

Total Credits: 2

L - T - P

1 - 1 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course outcomes:

CO1: Learners understand the structure of language and how language varies over time, across social situations and social groups.

CO2: To be proficient in articulating thoughts and communicating ideas in English language.

CO3: To participate in debates and discussions where ideas are tested and sharpened and honing the skill of public speaking.

CO4: Student should be able to effectively use English language to meet professional and personal goals and hold meaningful conversations.

Unit – I

- Speech Sounds in English Language.
- Accent, Rhythm and Intonation
- What is Listening & types of Listening.
- Barriers to Listening.
- Story-based method and task-based method.

Unit – II

- What is Speaking?
- Different contexts of Speaking.
- Learning language as a skill:
 - i. Pronouncing new sounds
 - ii. Selecting vocabulary items
 - iii. Producing grammatical structures
 - iv. Using devices for managing conversations
- Developing spoken skills through exposure and use.
- Integrating skill learning and natural-learnin

Recommended Readings:

1. Anderson, Anne and Tony Lynch. *Listening*. Oxford: OUP, 1988. Print.
 2. Field, John. *Listening Comprehension*. London: Macmillan, 1983. Print.
 3. Geddes, Marion. *How to Listen*. London: BBC, 1988. Print.
 4. Ur, Penny. *Teaching Listening Comprehension*. Cambridge: CUP, 1984. Print.
 5. Scarborough, David. *Reasons for Listening*. Cambridge: CUP, 1984. Print.
 6. Bialystock, E. *Communication Strategies*. Oxford: Basil Blackwell, 1990. Print.
 7. Noalsco, Rob and Lois Arthur. *Conversations*. Oxford: OUP, 1987. Print.
 8. Pattison, P. *Developing Communication Skills*. Cambridge: CUP, 1987. Print.
 9. Rivers, W.M. *Communicating Naturally in a Second Language*. Cambridge: CUP, 1983. Print.
 10. Widdowson, H.G. *Aspects of Language Teaching*. Oxford: OUP, 1990. Print.
-

Instructions for External Theory Paper Setter/Examiner:

Note: The paper must be strictly according to the prescribed syllabus.

The question paper shall be of 35 marks (Unit I of 18 marks and unit II of 17 marks each) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan

SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTI-DISCIPLINARY) W.E.F. 2024-25

3 Year Undergraduate Multi Discipline Program (HINDI) Syllabus, Semester-2

Course(B-AEC- 102)		Session 2024-2025	
Subject- 2ND Semester		हिंदी -I Course Code-B-AEC- 102	
Level of the course	100-199		
Credits	Theory-2	Tutorial -0	Total-3
Contact Hours	2 per week	0-per week	2 per week
Suggested Evaluation Method			
Total Marks: 50	50		
Internal Assessment: 15 Marks	Class Participation		04
	Seminar/Presentation/Assignment/Quiz/Class Test etc.		04
	Mid Term Exam:		07
Term-End Examination. (External) 35 Marks	35		

हिंदी -1

COURSE CODE: B-AEC- 102

कुल क्रेडिट 02

समय = 1.5 घंटे

कुल अंक: 50

आंतरिक मूल्यांकन: 15

बाह्य मूल्यांकन: 35

पाठ्यक्रम परिणाम

CO1 रोजगार एवं व्यवसाय के क्षेत्र में हिंदी को प्रतिष्ठित करना होगा।

CO2 हिंदी भाषा के मानक रूप को प्रतिष्ठित करना होगा।

CO3 अंतरराष्ट्रीय स्तर पर हिंदी की पहचान करनी होगी।

CO4 हिंदी भाषा के माध्यम से राष्ट्रीयता का भाव उत्पन्न करना होगा।

इकाई 1:-

अनुवाद का अर्थ, परिभाषा और स्वरूप

अनुवाद; कला, विज्ञान और शिल्प

अनुवाद का महत्त्व

Wally *युवा* *R*
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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTI-DISCIPLINARY) W.E.F. 2024-25

अनुवादक के गुण

अनुवाद की चुनौतियां

अनुवाद के प्रकार: शब्दानुवाद, छायानुवाद, व्याख्यानुवाद, आशुनुवाद

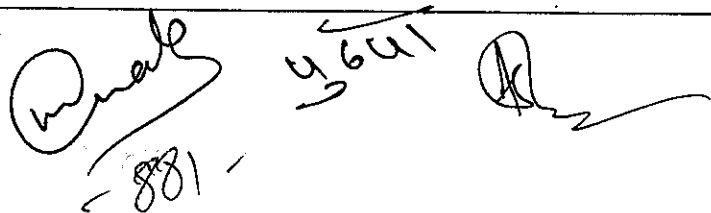
अनुवाद में कंप्यूटर की भूमिका

इकाई 2:- प्रयोजनमूलक हिंदी और अनुवाद

- प्रयोजनमूलक हिंदी और अनुवाद की भूमिका
- सीरियलों का हिंदी अनुवाद
- कार्यालय में प्रयुक्त हिंदी अनुवाद
- बैंकिंग साहित्य का हिंदी अनुवाद
- डबिंग क्षेत्र में हिंदी अनुवाद
- हिंदी साहित्य का अन्य भाषाओं में अनुवाद
- अनुवाद के क्षेत्र में रोजगार की संभावनाएं

सहायक ग्रंथ सूची

- डॉ सुरेश सिंघल: अनुवाद सिद्धांत एवं व्यवहार, अभिनव प्रकाशन, दिल्ली 6
- डॉ0 पूरनचंद टंडन, प्रयोजनमूलक हिंदी और अनुवाद, किताब घर, नई दिल्ली - 2
- वृहत पारिभाषिक शब्द-संग्रह, मानवीकी खंड दो, वैज्ञानिक एवं तकनीकी शब्दावली आयोग, केंद्रीय हिंदी निदेशालय तथा समाज कल्याण मंत्रालय, भारत सरकार।
- डा0 हरिश्चंद्र वर्मा, भाषा और भाषा विज्ञान, लक्ष्मी पब्लिशिंग हाउस, रोहतक।
- डॉ हरिश्चंद्र वर्मा, शुद्ध लेखन और हिंदी का मानक रूप, विद्या भारती संस्कृति शिक्षा संस्थान, कुरुक्षेत्र हरियाणा।
- www.encyclopedia.centre.com
- www.wikipedia.com
- www.culturepedia.com
- [www.archive.org\(hindi shabd sagar\)](http://www.archive.org(hindi shabd sagar))

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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTI-DISCIPLINARY) W.E.F. 2024-25

आवश्यक निर्देश:-

- इकाई एक में से चार प्रश्न दिए जाएंगे जिसमें से विद्यार्थी को तीन करने होंगे, कुल अंक 15 होंगे।
- इकाई 2 में से चार प्रश्न पूछे जाएंगे, जिसमें से विद्यार्थी को तीन के उत्तर देने होंगे। कुल अंक 15 होंगे।
- समस्त पाठ्यक्रम में से विद्यार्थी को पांच बहुविकल्प प्रश्नों के उत्तर देने होंगे, प्रत्येक प्रश्न एक अंक का होगा।

Course(B-AEC-302)		Session 2024-2025	
Subject- 3rd Semester		हिंदी -I Course Code-B-AEC-302	
Level of the Course		100-199	
Credits	Theory-2	Tutorial -0	Total- 3
Contact Hours	2 per week	0-per week	2 per week
Suggested Evaluation Method			
Total Marks:	50	50	
Internal Assessment: 15 Marks	Class Participation		04
	Seminar/Presentation/Assignment/Quiz/Class Test etc.		04
	Mid Term Exam:		07
Term-End Examination. (External) 35 Marks	35		

Qual 36/44
882. R

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

Semester- 1

Course Nomenclature: संस्कृत भाषा एवं भारतीय संस्कृति-बोध /1
Course Code : B-SKT--AEC1-103

Total Credits : 2
L-T-P
2-0-0

External Theory Marks:35
Internal Theory Marks:15
Time Allowed: 1.5 Hours

Course Outcomes: छात्रों को भारतीय ज्ञान-परम्परा,सभ्यता एवं संस्कृति का बोध होगा तथा विद्यालय संबन्धी व्यावहारिक शब्दों/पक्षियों/खट्वान्नों आदि के संस्कृत नाम का पता चलने से उनका शब्दकोश समृद्ध होगा। श्लोकों के शुद्ध लेखन एवं पठन के माध्यम से वे जीवन के आदर्शों/ मूल्यों को समझते हुए श्रेष्ठ कर्मों की ओर अग्रसर होंगे।

Unit -I

1. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी 7अंक
(पाठ-1, भारतीय संस्कृति का रूप)
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी 7अंक
(पाठ-2, वर्णाश्रम व्यवस्था)
सारांश/वर्ण्य विषय पर आधारित प्रश्न

Unit -III

- 3.(क) संस्कृत में विद्यालय संबन्धी वस्तुओं के नाम। 4अंक
क्लासरूम, मेज, कुर्सी,बेंच(पुस्तक रखने की),बेंच(बैठने की)
बैग,किताब,कलम,टीचर,अलमारी,अध्यापिका,शूज,कमरा,खिड़की,
पंखा,इन्स्पेक्टर,डक्टर,कम्प्यूटर,कंघी,रजिस्टर,कोपी,ड्राइंग,कॉलेज,
स्कूल,यूनिवर्सिटी, किवाड़,गेट,मेन गेट,कैंची,गेट कीपर,पियन,क्लर्क,
मैदान,गेंद,फुटबाल,घण्टा,चपरासी,चॉक,चांसलर,झाड़ू,टाइमटेबल,दरी,निब
प्रिंसिपल,फाउण्टेन पेन,दरी,फीस,फाइल,यूनिफॉर्म,दीवार घड़ी,एग्जी, सहपाठी।

- (ख)संस्कृत में पक्षियों के नाम । 3अंक
कोयल, कौआ,चील,बगुला,मोर,मुर्गी,तोता,पतंगा,राजहंस,चमगादड़
गौरैया,कबूतर,उल्लू,बटेर,हंस,गरुण,चकवा,मैना,बतख,पक्षी।

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CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

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Unit -IV

- 4.(क)संस्कृत में पाश्चात्य खाद्यान्नों के नाम। 7अंक
चिप्स, चाकलेट, स्नैक्स, पिज्जा, बर्गर, सैंडविच, फूट जैम, आइसकीम,
केक, बिस्किट, कोल्डड्रिंक, च्यूइंगम, कोल्डकॉफी, कॉफी पाउडर, सोडापानी।
- (ख)कण्ठस्थ किन्हीं दो श्लोकों का शुद्ध लेखन।

Recommended Books/e-resources/LMS:

1. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी।
2. वृहद् अनुवाद चन्द्रिका-चक्रधर नौटियाल, मोतीलाल बनारसी दास, दिल्ली 2003।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात (7) अंको का होगा। प्रश्न-पत्र हल करने का समय डेढ़ (1.5) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित सात (7) प्रश्न पूछे जाएँगे। प्रत्येक लघूत्तरात्मक प्रश्न एक अंक (1) का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

English-II

Course Code: B-AEC-201

Total Credits: 2

L - T - P

1 - 1 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course outcomes:

CO1: Learn to comprehend and interpret discourses.

CO2: Learn to compose comprehensive and well-structured paragraphs.

CO3: Learn to utilize literary terms and vocabulary, critical methods, and various lenses of interpretation in their writing.

CO4: Learn the formatting and documenting conventions of the discipline.

Unit - I

- What is Reading?
- The purposes of Reading.
- Different kinds of Reading.
- Reading aloud and silent reading.
- Mechanics of reading.

Unit - II

- What is writing?
- The basic Unit in writing.
- Form vs. Meaning.
- Language and thought.
- Types of writing.
- Functions of writing.
- Sub-skills of writing.

Recommended Readings:

1. Britton James. *Teaching Writing*. In Davies, A. (ed.) *Problems of Language and Learning*. London: Heinemann, 1975. Print.
2. Byrne, Don. *Teaching Writing Skills*. London: Longman, 1979. Print.
3. White, Ron. *Teaching Written English*. London: George Allen and Unwin, 1980. Print.
4. CIEFL. *CDC Report*. 1989.
5. Doff, Adrian. *Teach English. A Training Course for Teachers. Trainer's Handbook*. Cambridge: CUP, 1988. Print.
6. Ghosh, R.N. and B.K. Das. "Teaching the Skills of English" in the *Methods of Teaching English*. Hyderabad: CIEFL, 1973. Print.
7. Grellet, Françoise. *Developing Reading Skills*. Cambridge: CUP, 1981. Print.

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8. Williams, Eddie. *Reading in the Language Classroom*. Hongkong: Modern English Publications, 1984. Print.
 9. Munby, J. *Communicative Syllabus Design*. Cambridge: CUP, 1978. Print.
 10. Webster, James. *Reading Matters. A Practical Philosophy*. London: McGraw-Hill Book Company (UK) Ltd, 1982. Print.
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Instructions for External Theory Paper Setter/Examiner:

Note: The paper must be strictly according to the prescribed syllabus.

The question paper shall be of 35 marks (Unit I of 18 marks and unit II of 17 marks each) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

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CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

Semester- 2

Course Nomenclature: संस्कृत भाषा एवं भारतीय संस्कृति-बोध -2

Course Code : B-SKT-AEC2 -203

Total Credits : 2

L-T-P

2-0-0

External Theory Marks:35

Internal Theory Marks:15

Time Allowed: 1.5Hours

Course Outcomes: छात्रों को भारतीय ज्ञान-परम्परा,सभ्यता एवं संस्कृति का बोध होगा तथा विविध खाद्य पदार्थों/विविध प्रकार के रंगों के लिए प्रयुक्त होने वाले संस्कृत शब्दों का पता चलने से छात्रों का शब्द भण्डार बढ़ेगा ईश्वर-स्तुति / प्रार्थनापासना मन्त्रों/श्लोकों के लेखन एवं पठन से भारतीय जीवन पद्धति एवं मूल्यों में उनका विश्वास दृढ़ होगा।

Unit -I

1. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस्. एल. नागोरी 7अंक
(पाठ-3, पंच यज्ञ एवं संस्कार)
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस्. एल. नागोरी 7अंक
(पाठ-4, प्राचीन भारत में नारी की स्थिति)
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -III

- 3.(क) भारतीय खाद्यान्नों/पकवानों के नाम संस्कृत में। 7अंक
धान, आटा,चावल,मूँग,उड़द,गेहूँ, पूड़ी, रायता, इडली,सांभर,
अचार,अण्डा, अमचूर,आटा, आलूटिक्की, कटी,काफी,केक,खिचड़ी,पापड़,
हलवा,फूटजैम,खीर,गुड़,चटनी,चाय,चीनी,डबलरोटी,दहीबड़ा,दूध,दाल,नमक,
तेल,पकवान,पनीर,पराठा,भात,मक्खन,मठरी,मुर्ब्बा,राजमा,लस्सी,समोसा
सैंडविच,सेवई,सुबह का नाश्ता,मूँगफली,ग्रीन टी,प्याज,प्याज डोसा,रसम।

(ख) रंगों के नाम संस्कृत में।

लाल,हरा,नीला,पीला,नारंगी,काला, सफेद,बैंगनी,नारंगी, गुलाबी
भूरा,आसमानी,गहरा लाल,गेहूँ जैसा रंग,सुनहरा,चौंटी,केसरिया
मिट्टी जैसा रंग,ग्रे,गहरा नीला,खाकी रंग,ताँबा,मैजेंटा।

Unit -IV

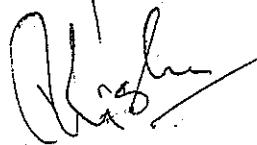
4. (क) कण्ठस्थ दो श्लोकों का शुद्ध लेखन। 7 अंक
(ख) शान्तिमंत्र, गायत्री मंत्र, महामृत्युंजय मंत्र लेखन एवं अनुवाद।

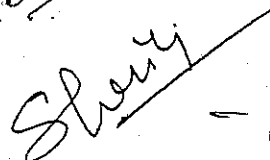
Recommended Books/e-resources/LMS:

1. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी
2. वृहद् अनुवाद चन्द्रिका-चक्रधर नौटियाल, मोतीलाल बनारसी दास, दिल्ली 2003।
3. वैदिक प्रेरण फॉर नॉलेज पीस एंड कोएक्जिस्टेंस - प्रो० बी. बी. चौबे।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात (7) अंको का होगा। प्रश्न-पत्र हल करने का समय डेढ़ (1.5) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएँगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित सात (7) प्रश्न पूछे जाएँगे। प्रत्येक लघूत्तरात्मक प्रश्न एक (1) अंक का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाए। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।





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English-III

Course Code: B-AEC-301

Total Credits: 2

L - T - P

1 - 1 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course outcomes:

CO1: Developing an understanding of appropriate word forms and vocabulary.

CO2: Use a variety of accurate sentence structures meaningfully in written and oral form.

CO3: Developing students' ability to infer meaning.

CO4: Acquiring linguistic competence for employability.

Unit – I

The Verbal:

- Main Verbs and Auxiliaries
- Tense, Aspects, Voice
- Meanings of the Modal Verbs
- Multi-word-verbs

Adjectives

Adverbs

Sentence modifiers

Unit – II

The Noun Phrase:

- Basic Noun Phrase
- Determiners: article features
- Pronouns and Case
- Relative clauses and other post modifiers.

The Prepositional Phrase

Basic Sentence

Compound and Complex Sentences

Recommended Readings:

1. Greenbaum, S. *An Introduction to English Grammar*. Essex: Longman, 1991. Print.
2. Quirk, R. and S.Greenbaum. *A University Grammar of English*. London: Longman, 1973. Print.

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3. Leech, G. and J. Svartik. *A Communicative Grammar of English*. London: Longman, 1975. Print.
 4. Leech, G. *English Grammar Today*. London: The Macmillan Press, 1982. Print.
 5. Sinclair, J. *Collins Cobuild English Grammar*. New Delhi: Rupa & Co., 1990. Print.
 6. Greenbaum, S. *The Oxford English Grammar*. Oxford: OUP, 1996. Print.
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Instructions for External Theory Paper Setter/Examiner:

Note: The paper must be strictly according to the prescribed syllabus.

The question paper shall be of 35 marks (Unit I of 18 marks and unit II of 17 marks each) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan

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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

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Course(B-AEC-302)		Session 2024-2025	
Subject- 3rd Semester AEC-302		हिंदी -1 Course Code-B-	
Level of the Course	100-199		
Credits	Theory-2	Tutorial -0	Total- 3
Contact Hours	2 per week	0-per week	2 per week
Suggested Evaluation Method			
Total Marks:	50	50	
Internal Assessment: 15 Marks	Class Participation		04
	Seminar/Presentation/Assignment/Quiz/Class Test etc.		04
	Mid Term Exam:		07
Term-End Examination. (External) 35 Marks	35		
हिंदी -1 COURSE CODE: B-AEC-302			
कुल क्रेडिट 02 50 समय = 1.5 घंटे 15 मूल्यांकन: 35			कुल अंक: आंतरिक मूल्यांकन: बाह्य
पाठ्यक्रम परिणाम CO1 कंप्यूटर के विभिन्न अंगों एवं उनके कार्यों का ज्ञान होगा CO2 कंप्यूटर पर हिंदी के विभिन्न फॉन्ट का ज्ञान होगा।			

- 891-   4641

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan

SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

- CO3 हिंदी की विभिन्न वेबसाइट्स का ज्ञान होगा।
CO4 हिंदी में प्रकाशित विभिन्न ई पत्र पत्रिकाओं का ज्ञान होगा।
CO5 हिंदी में टाइपिंग का प्रशिक्षण प्राप्त होगा।
CO6 कंप्यूटर और हिंदी भाषा

इकाई 1 :- कंप्यूटर और हिंदी
कंप्यूटर परिचय एवं महत्व
कंप्यूटर का संरचनात्मक स्वरूप
हिंदी के विविध फॉन्ट
कंप्यूटर में हिंदी की चुनौतियां एवं संभावनाएं
हिंदी के विभिन्न की बोर्ड

इकाई 2:- हिंदी भाषा और प्रौद्योगिकी

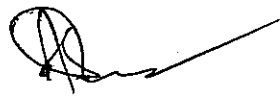

- इंटरनेट पर हिंदी
- हिंदी की वेबसाइट
- यूनिकोड, देवनागरी लिपि और हिंदी भाषा
- इंटरनेट पर हिंदी के पत्र पत्रिकाएं
- हिंदी भाषा शिक्षण और ई लर्निंग

संदर्भ ग्रंथ सूची :-

- विजय कुमार मल्होत्रा, कम्प्यूटर के भाषिक अनुप्रयोग
- संतोष गोयल, हिंदी भाषा और कंप्यूटर
- डा नरेश मिश्र, प्रयोजनमूलक हिंदी राजपाल एंड संस दिल्ली 6
- www.encyclopedia.centre.com
- www.wikepea.com
- www.culturepedia.com
- www.archive.org

आवश्यक निर्देश:-

- इकाई एक में से चार प्रश्न दिए जाएंगे जिसमें से विद्यार्थी को तीन करने होंगे, कुल अंक 15 होंगे।
- इकाई 2 में से चार प्रश्न पूछे जाएंगे, जिसमें से विद्यार्थी को तीन के उत्तर देने होंगे। कुल अंक 15 होंगे।



5654
- 872 -

English-IV

Course Code: B-AEC-401

Total Credits: 2

L - T - P

1 - 1 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course outcomes:

CO1: describe or express their opinions on topics of personal interest such as their experiences of events, their hopes and ambitions.

CO2: read and understand information on topical matters and explain the advantages and disadvantages of a situation.

CO3: write formal letters, personal notes, blogs, reports, and texts on familiar matters.

CO4: comprehend and analyse texts in English.

Unit – I

Fluency in English Language:

- In the University: Introducing oneself -- Note-making (Introduce yourselves as individuals and as groups -- group discussion exercise Take notes on your fellow students' introductions, Introduce characters from the text you are reading via posters)
- In the domestic sphere: Diary/ Blog writing (Write a diary entry and convert it into a blog post, Convert a transcript/ script/ piece of dialogue into a diary entry/ blog post)
- In public places: CV Job applications (Write the CV of a fictional character, Write the perfect job application for your dream job)

Unit – II

Oral Presentations:

- Debate, Elocution
- Anchoring, Public Address
- TED Talks, Narrating Events
- Storytelling and Poem Recitation

Recommended Readings:

1. Allen, W. S. *Living English Speech*. London: Orient Longman, 1968. Print.
 2. Balasubramanian, T. *A Text Book English Phonetics for Indian Students*. Madras: Macmillan India Ltd., 1981. Print.
 3. Bansal, R. K. and J.B. Harrison. *Spoken English: A Manual of Speech & Phonetics*. Hyderabad: OBS, 2013. Print.
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813

4. Davidson, Jeff. *The Complete Guide to Public Speaking*. Breathing Space Institute, 2003. Print.
 5. Goleman, Daniel. *Working with Emotional Intelligence*. London: Bantam Books, 1998. Print.
 6. Hall, Calvin S. et al. *Theories of Personality*. New Delhi: Wiley. rpt. 2011. Print.
 7. Holtz, Shel. *Corporate Conversations*. New Delhi: PHI. 2007. Print.
-

Instructions for External Theory Paper Setter/Examiner:

Note: The paper must be strictly according to the prescribed syllabus.


The question paper shall be of 35 marks (Unit I of 18 marks and unit II of 17 marks each) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan

SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

- समस्त पाठ्यक्रम में से विद्यार्थी को पांच बहुविकल्प प्रश्नों के उत्तर देने होंगे, प्रत्येक प्रश्न एक अंक का होगा।

Course(B-AEC-402)		Session 2024-2025	
Subject- 4th Semester AEC-402		हिंदी -3 Course Code-B-	
Level of the course	100-199		
Credits	Theory-2	Tutorial -0	Total- 3
Contact Hours	2 per week	0-per week	2 per week
Suggested Evaluation Method			
Total Marks: 50	50		
Internal Assessment: 15 Marks	Class Participation	04	
	Seminar/Presentation/Assignment/Quiz/Class Test etc.	04	
	Mid Term Exam:	07	
Term-End Examination. (External) 35 Marks	35		
हिंदी -3 मीडिया लेखन COURSE CODE: B-AEC402			
कुल क्रेडिट 02 50 समय = 1.5 घंटे 15			कुल अंक 51 आंतरिक मूल्यांकन 15 बाह्य मूल्यांकन = 35

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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

बाह्य

मूल्यांकन: 35

पाठ्यक्रम परिणाम

CO1 प्रयोजनमूलक हिंदी की तकनीक एवं इसके विभिन्न रूपों का ज्ञान होगा।

CO2 विद्यार्थी को भाषायी ज्ञान होगा।

CO3 विद्यार्थी को प्रयोजनक मूलक हिंदी के विकास क्रम का मूलभूत ज्ञान होगा।

CO4 विद्यार्थी को प्रयोजनमूलक हिंदी के विभिन्न रूपों एवम् लिपि का ज्ञान होगा।

इकाई 1 :- संपादन कला

प्रिंट मीडिया

इलेक्ट्रॉनिक मीडिया

फीचर लेखन

रिपोर्ट लेखन

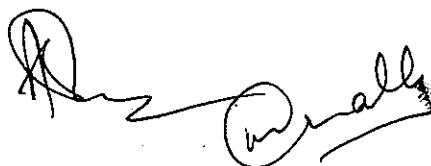
पृष्ठ सजा एवं प्रस्तुतीकरण

इकाई 2:- प्रमुख जनसंचार माध्यम

प्रेस, रेडियो, टेलीविजन, इंटरनेट, वीडियो, पावर प्वाइंट प्रेजेंटेशन, हिंदी के प्रमुख पोर्टल।

संदर्भ ग्रंथ सूची :-

- डा अशोक कुमार शर्मा, संचार क्रांति और हिंदी पत्रकारिता
- डॉ मनमोहन सिंह, समाचार पत्र:- लेखन एवं मुद्रण कला
- डॉ बहादुर सिंह, प्रयोजनमूलक हिंदी:- व्यावसायिक एवं तकनीकी स्वरूप, माधव प्रकाशन, यमुनानगर।
- डॉ नरेश मिश्र, प्रयोजनमूलक हिंदी
- डॉ सुरेश सिंघल, अनुवाद सिद्धांत की रूपरेखा।
- सुरेश सिंघल, अवधारणा और आयाम
- अनुवाद, केंद्रीय हिंदी निदेशालय मानव संसाधन विकास मंत्रालय की आंशिक वित्तीय सहयोग से प्रकाशित त्रैमासिक पत्रिका।
- डॉ मंजू मुकुल, संप्रेषण:- चिंतन और दक्षता
- मनोहर प्रभाकर:- फीचर लेखन



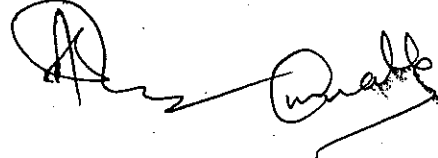
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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

- ओम गुप्ता, मीडिया लेखन और विचारा।
- एच के अग्रवाल, सरकारी संस्थानों में टिप्पणी और प्रारूप लेखन।
- www.encyclopedia.centre.com
- www.wikepa.com
- www.culturepedia.com
- www.archive.org

आवश्यक निर्देश:-

- इकाई एक में से चार प्रश्न दिए जाएंगे जिसमें से विद्यार्थी को तीन करने होंगे, कुल अंक 15 होंगे।
- इकाई 2 में से चार प्रश्न पूछे जाएंगे, जिसमें से विद्यार्थी को तीन के उत्तर देने होंगे। कुल अंक 15 होंगे।
- समस्त पाठ्यक्रम में से विद्यार्थी को पांच बहुविकल्प प्रश्नों के उत्तर देने होंगे, प्रत्येक प्रश्न एक अंक का होगा।

 4641

Office and Spreadsheet Tools B-SEC-101

Total Credits : 3

L - T - P

0 - 1 - 4

External Practical Marks: 50

Internal Assessment Marks : 25

Course outcomes: After completing this course, the learner will be able to:

CO1: understand the basic concept of MS Word and MS Excel

CO2: perform editing and formatting in documents and spreadsheets

CO3: perform various logical, arithmetic, and financial functions in MS Excel

CO4: create and use charts and graphs in documents and spreadsheets.

Unit-I

MS Word: Word interface, creating and saving a document, home toolbar, font style, format, editing tools, insert table, merge table, table properties, auto fit, image, header, footer, page layout, page and section breaks, references, find, replace, goto, review, track changes, view, printing document, and frequently used shortcuts.

Unit -II

MS Excel: Excel Inter face, worksheet area, frequently used commands in Excel, basic functions in Excel, relative & absolute referencing, logical functions:
Arithmetic functions: sum & sumif, average & average if, count & countif, Running Total, If & nested if

Unit -III

Custom list, filter, conditional formatting, V-Lookup & H-lookup, validation, preparation of tables, table styles, filter and sort a table, freeze panes, create charts, format charts, insert and format objects and graphs.

Recommended Readings:

1. Elizabetha A. Microsoft Word 2022. Kindle Unlimited Publisher. 2021.
 2. S Ima A Lex. Excel formulas and functions: Cool Tips and Tricks wit Formulas in Excel. Caprioru Publisher. 2019.
 3. Ramirez Adam. Excel formulas and functions Step by Step Guide With Examples. Caprioru Publisher. 2019.
-

Instructions for External Examiner: The students shall be evaluated on the basis of external practical, viva voce and project comprising of 20 marks for practical exercises on computer, 10 marks for viva voce and 20 marks for project file.

Accounting through Tally

B-SEC-102

Total Credits : 3

L - T - P

O - 1 - 4

External Practical Marks: 50

Internal Assessment Marks : 25

Time allowed : 2 hrs

Course outcomes:

CO1: To understand and acquire skills to use diverse accounting tools.

CO2: To develop ability to use accounting software's for financial analysis and decision making.

Unit – I

Basics of Accounting: Account types, accounting rules, accounting principles, double-entry system, financial statements, transactions, and many other basic concepts, Introduction to Tally: Pre-requisites and utility, Fundamentals of Tally ERP 9 – Create, Alter, Updating, Protecting, Backup, Restore and Shut down Company in Tally ERP 9.

Unit – II

Accounting Configuration & Features: Group Creation, Ledger Creation, Voucher Creation; Voucher Entry: Inventory voucher, non-accounting voucher, Order processing voucher. Inventory Configuration & Features: Inventory and Stock groups, Stock Unit, Batches and Expiry. Journal Entry, Ledger posting.

Unit – III

Financial Reports: Preparation of Final Accounts i.e. Balance – sheet, Trading and Profit and Loss A/c, Trial balance, Sales register, Purchase register, Cash book, Bank book, Journal register. Cash and Funds Flow Analysis, Graphic representation of Financial Performance.

Recommended Readings:

1. Tally Professional Combo Vol 1 & Vol 2. Sahaj Enterprises Professional ed. India, 2022. Print ISBN 978-8195243891.
2. Tally Prime with GST - A Complete Training Guide with Assignment. T Balaji Publication India. Print ISBN 978-8195295425
3. Tally Education Pvt. Ltd. Official Guide To Financial Accounting Using Tally. Erp 9. BPB Publications 2018. Print ISBN 9387284999

Instructions for External Practical Paper Setter/Examiner:

The practical examination will be conducted by a board of two examiners i.e. one External and one Internal. The assessment shall be done on the basis of practical assignment, industry case studies and viva voce etc. The external and internal examiner shall be appointed by the chairperson of the department concerned.

- 899 -

BUSINESS COMMUNICATION

B-SEC-103

Total Credits: 3

L - T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 hrs

Course Outcomes:

CO1: Students will be able to understand fundamentals of communication and able to use concept in day to day world

CO2: Students will be able to demonstrate necessary skills to handle day-to-day managerial responsibilities, such as - making speeches, controlling one-to-one

CO3: Students will be able to understand different ways of non verbal communication

CO4: Students will be able to understand different methods of written communication

UNIT-I

Purpose and process of communication; myths and realities of communication; paths of communication; oral communication: noise, barriers to communication; listening- listening process, types of listening, deterrents to listening process, essentials of good listening; telephonic communication. Presentation skills: prerequisites of effective presentation;

UNIT-II

Non verbal communication: gestures, handshakes, gazes, smiles, hand movement, styles of working, voices modulations, body sport for interviews; business etiquettes: business dining, business manners of people of different cultures, managing customer care.

UNIT-III

Written communication: mechanics of writing ,report writing, circulars, notices, memos, agenda and minutes; business correspondence- business letter format, styles of letter arrangement, types of letters, telex manages, facsimiles, electronic mail; dairy writing; developing resumes.

Recommended Reading:

1. Kaul, Asha. Business Communication, New Delhi: PHI
2. Chaturvedi, P.D., and Mukesh Chaturvedi. Business Communication. Pearson Education
3. McGrath, E.H. Basic Managerial Skills for All. New Delhi: PHI

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 questions of 4 marks each, all are compulsory. Section 'B' will contain 6 questions (2 questions from each unit) of 10 marks each. The students will be required to attempt any three questions (one question from each unit).

OFFICE MANAGEMENT

Code: B-SEC-104

Total Credits- 03

L-T-P

3- 0- 0

Internal Marks: 25

External Marks: 50

Time Allowed : 2 hrs.

Course Outcomes:

CO1: To understand the functioning of a modern office.

CO2: To understand and acquire knowledge of internal and external correspondence, Internet and email

CO3: To acquire operational knowledge of various office equipments.

Unit -1

Meaning of office, Importance of office, Functions of an office, Qualities of an office manager, Sections and sub sections of an office, Office furniture and fixtures, Office Layouts. Working facilities – lighting arrangements; seating arrangement; Air-conditioning; ventilation; interior decoration; recreational facilities; safety and sanitary arrangement; pollution, noise and security control etc.

Unit – 2

Meaning and importance of Office correspondence, Incoming correspondence procedures, Outgoing correspondence procedures, Ordinary post, Registered post, Parcel, Speed post, Courier and e-mail etc., Traditional and modern filing methods, CFMS, Internet and e-mail, Video conferencing.

Unit- 3

Uses and Operations of Modern Office Equipments: Printers, Photocopier, Conference equipments, Computer and peripherals like scanner, speakers etc., CCTV, Electronic billing machine, Biometric device. LED Projector etc.

INSTRUCTIONAL STRATEGY

The teacher of this subject should supplement the classroom teaching with industrial/field visits. Experts from various organizations should be invited to deliver expert lectures. Mock situations may be created in the classroom and students may be given live experiences/environment/ culture to enable them appreciate the real life situation.

RECOMMENDED BOOKS

1. Office Management by Shashi Gupta and Sushil Nayya, Kalyani Publications, New Delhi
2. Office Management by P.K. Gupta, Kalyani Publications, New Delhi
3. Office Management by Ghosh and Aggarwal, Office Management by Ghosh and Aggarwal.

Stock Market Operations

Course Code: B-SEC-105

Total Credits: 3

L- T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 hrs

Course outcomes: On successful completion of the course, the Students will be able to:

CO1: Explain the art of investing in stock markets and provide conceptual understanding of the concept of stock exchange in India.

CO2: Explain the various stocks included in the Sensex and other indices.

CO3: Demonstrate the process of opening demat accounts and the process of margin and short selling activities and Develop the efficient stock portfolios.

CO4: Articulate the actions taken by the SEBI in protecting the interests of small investors.

Unit – I

Financial markets- Meaning and Significance; Money market and capital market - market for debt and equity issues; primary market- IPOs and SFOs; secondary markets - meaning, objectives, functions. Stock exchanges-historical background; management and regulation of stock exchanges in India; Major stock exchanges in India - BSE, NSE and OTCEI; regional stock exchanges in India. SEBI - establishment, objectives and functions; SEBI's regulations relating to stock markets; future challenges.

Unit – II

Objectives and benefits of investment analysis, investment alternatives. New issue market, cost and mechanics of investing in securities, Open outcry system and screen based trading; settlement procedure, transaction cost, buying and selling shares - procedure; market order and limit order; internet trading; buying on margin and short sale; problems relating to Margin trading and short selling.

Unit – III

Listing of Securities-Listing requirements, procedure, fee – Listing of rights issue, bonus issue, further issue – Listing conditions of BSE and NSE – Delisting.; Stock brokers-functions of brokers. Stock Market Indices: meaning, purpose, and consideration in developing index and methods and problems. Stock market indices in India: BSE indices; NSE indices; S&P CNX Nifty: scrip selection criteria and construction. Risk management system in BSE & NSE.

Skill Development Activities

1. Collect information on NASDAQ, Nifty, Sensex and write brief report on the same.
2. List out the recent IPO in Indian Primary Market.
3. List out the leading share brokers in India.
4. Procedure for Opening the Demat A/c. List out the functions of CDSL and NSDL.
5. Identify a company of your choice and record its share prices for one month.
6. Any other activities, which are relevant to the course.

903

Recommended Readings:

1. Prasanna, Chandra. Investment Analysis and Portfolio Management. 6th ed. New Delhi: McGraw Hill, 2021. Print.

2. Bodie, Kane, Marcus and Mohanty. Investments. 11th ed. New Delhi: McGraw Hill Publications, 2019. Print
3. P S Bala Ram and T Srilakshmi. Stock Market Operations. 1st ed. New Delhi: Himalaya Publications, 2016. Print.
4. F C Sharma. Financial Market Operations. Latest ed. New Delhi: SBPD Publications, 2015. Print.
5. Jaydeb Sarkhel and Seikh Salim. Indian Financial System and Financial Market Operations. Latest ed. New Delhi: McGraw Hill, 2018. Print.
6. Michael Simmons. Securities Operations. Latest ed. New Delhi: Wiley Publications, 2002. Print.
7. Robert G Hagstrom. The Warren Buffett Way. 3rd ed. New Delhi: Wiley Publications, 2013. Print.
8. S. Guruswamy. Capital Markets. Latest ed. New Delhi: TMH. 2009. Print.
9. Alan R. Kanuk. Capital Markets in India. Latest ed. New Delhi: John Wiley. 2007. Print

Instructions for External Theory Paper Setter/Examiner: The question paper will have two sections. Section 'A' shall comprise of 5 questions of 4 marks each, all are compulsory. Section 'B' will contain 6 questions (2 questions from each unit) of 10 marks each. The students will be required to attempt any three questions (one question from each unit).

Cyber Security

B-SEC-106

Total Credits: 3

L - T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 hrs

Course outcomes:

CO1: Students will be able to understand the concept of Cyber Security and Computer Ethics.

CO2: Became familiar about cyber crime and cyber law

CO3: To became familiar with the concept of Cyberspace, Legal aspects of Cyber Crime

CO4: To understand basic concept of digital payments, E- Commerce, Social Media Crimes

Unit – I

Introduction to Cyber security

Introduction: Computer Security, Authentication, Threats, Cryptography, Vulnerabilities

Attacks: Web Attack, Browser Attack, Email Attacks, Website Data Computer Ethics and Security Policies

Unit – II

Tools

Network Tools: Firewalls, Packet filters, Types of Firewalls, Network Address Translation, Virtual Private Networks, Intrusion Detection System

Cyber Law: Classification of Cyber Crimes, Legal perspective of Cyber Crimes, IT Act, Cyber Security in India

Unit – III

Cyber Crime

Hacking, Criminal Behaviour, Digital Forensics, Realms of Cyber World, Cyberspace, Digital Identity

E- Commerce, Online Banking, Credit Card and UPI Security, Types of Social Media, Guidelines for Social Media and basic Window Security

Recommended Readings:

1. R.C.Mishra, Cyber Crime Impact in New Millennium, Auther Press, Edition 2010
2. Kumar K, Cyber Laws: Intellectual Property & E-Commerce Security, Dominant Publishers

Instructions for External Theory Paper Setter/Examiner:

Nine questions will be set in all by the examiners taking three questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt six questions, selecting two questions from each unit. Question No.1 is compulsory which is from entire syllabus.

Financial Literacy
Course Code :- B-SEC-107

Total Credits : 3

L - T - P

2 - 1 - 0

External Theory Marks: 50
Internal Assessment Marks : 25
Time allowed : 2 hrs

Course outcomes:

CO1: understand the basics of financial literacy, personal finance and financial planning.

CO2: gain the knowledge of investment and different investment avenues available for managing finance.

CO3: understand the different banking products.

CO4: develop proficiency for analysing different digital payment system.

Unit – I

Financial Planning and Personal finance : Meaning, Importance, Scope and Perquisites of Financial Literacy. Personal finance: Concept, need, principles, scope; Personal finance services and strategies; Personal financial planning: Process, factors affecting; Financial planner: Role and functions; Financial objectives; Time Value of Money: Compounding and discounting.

Unit – II

Investment Planning and Management : Basics of investment; Investment avenues and strategies; Mutual Funds: Concept, types, asset management companies, identifying mutual fund for investment; Investing in stock markets: Identifying stocks, holding, day trading, hedging instruments, etc.; Investing in real estate: Identifying properties, likely legal issues in purchase of property, documents in purchase of property; Other avenues for investment: Gold bonds, sovereign bonds, , tax saving instruments, PPF, Provident Fund, etc.; Identifying risky avenues for investment.

Unit – III

Banking and Digital Payment System : Banking products and services. Digitalisation of financial transactions : Debit Cards, Credit Cards, Net Banking, UPI transactions and Digital Wallets.

Recommended Readings:

1. Jack R. Kapoor, Les R. Dlabay, Robert J. Hughes, Melissa Hart. Personal Finance. 12th edition. Tata McGraw Hill India. 2020.
2. Madura Jeff. Personal Finance. 7th edition. Pearson India. 2020.
3. Arthur J. Keown. Personal Finance. 8th edition. Pearson India. 2018.
4. Madhu Sinha. Financial Planning: A Ready Reckoner. 2nd edition. McGraw Hill. 2017.
5. Lewis Altfest. Personal Financial Planning. Tata McGraw Hill. 2016.
6. M.N. Gopinath: Banking Principles and Operations. 7th Edition. Snow White Publisher, Mumbai. 2021.

Instructions for External Theory Paper Setter/Examiner : The examiner shall set seven questions in all covering the whole syllabus. Question no.1 will be compulsory covering all the units and shall carry seven small questions of two marks each. The rest of the six

questions will be set from all three units. The students will be required to attempt three questions (at least one question from each unit) carrying 12 marks each.

TYPING SHORTHAND (ENGLISH)

Code: B-SEC-108

Total Credits- 03

L-T-P
2-0-2

Internal Practical Marks: 25
External Practical Marks: 25
External Theory Marks: 25
Time Allowed : 2 Hrs.

Course Outcomes:

- CO1: To understand and acquire typing skill.
CO2: To acquire basic knowledge of Stenography.
CO3: To acquire advanced knowledge of Stenography.

Unit -1

Proper sitting posture on the computer, Practicing second row (home row), upper row and bottom row, Practicing words and simple sentences, Practicing shift keys and other non-printing keys and ensuring proper margins and linespacing, Practice of small paragraphs of about 100-150 words

Unit- 2

Importance of shorthand, Emphasis on phonetic system in Pitman's shorthand, Sitting position, Holding of pen and Note book and their quality, Consonants, Straight, Curves, Joining of consonants, Vowel Signs- vowel indication, First Place, Second Place, Third Place, Intervening vowels and their positions, Grammalogues and punctuation, Alternate forms of 'H' (upward and downward), Abbreviated 'W', Circle 'S' and 'Z' (left and right), Stroke 'S' and 'Z'.

Unit- 3

Loops 'STR', Initial hooks to straight strokes and curves, Alternate forms of 'FR', 'VR' etc., Intervening vowels, Circle or loop preceding initial hooks, Final hooks of 'N' and 'F', Circles and loops to final hooks, The SHUN hook, The Aspirate, Upward and downward 'R', Upward and downward 'L' and 'Sh', Compound Consonants, Vowel Indication, The Halving Principle, The Doubling principle, Diaphonic or Two vowel signs, Dictation from seen passages, Dictation from unseen passages.

INSTRUCTIONAL STRATEGY

For effective teaching of stenography, it is important for the teacher to familiarize students with the general background, scope of work, employment opportunities and future prospects in order to motivate them for continuous, organised and methodical learning and practising. Stenography being a new language science for students, complimentary to the language of English, the teacher is expected to simultaneously built up the language skills of learners to achieve the goal. For securing masters in the skill the following steps are prescribed:

1. Assessment of student group profile i.e. determining the aptitude level of each student. The intake not to exceed 15-20 students
2. Presentation of subject with due emphasis on practicals
3. Proportional teaching of topics during the prescribed semester period
4. Use of only shorthand notebook and pencil
5. Ensure right direction for writing strokes and signs and their proper length
6. Emphasis on legibility of outlines and repeated practice
7. Monitoring of vowel placement and positioning at the initial stage.
8. Repeated practice of prescribed word exercises, grammalogues, phrases etc.
9. Strict adherence to speed exercises at different speed levels from simple to complex
10. Practice variety of speed drills and Periodical tests

Recommended Readings:

1. Pitman's Shorthand

- 908 -

Proficiency in German-I

B-SEC 109

Total Credits: 3

External Theory Marks: 50

L - T - P

Internal Assessment Marks: 25

2 - 1 - 0

Time allowed: 2 hrs

Course outcomes:

CO1: Communicate day to day life situations in basic/elementary German language effectively.

CO2: Possess knowledge of the values and beliefs of German culture and interact respectfully with diverse groups in basic/elementary German.

Contents: Elementary German based on text book Tangram Aktuell Niveau A1/1 , Lektion-1 & Lektion 2.

Unit – I

Hallo! Wie geht's (Hello, How are you?)

Greetings and introducing in German
Formal/Informal Dialogs
Verb position in sentences.
Counting 1-100,
Country, language and profession
Simple dialogues on life situations

Unit – II

Begegnungen (Meeting with the people)

Address, Telephone number details
Alphabet und spellings in German
Nominative case: Bestimmter, unbestimmter und negativer Artikel.
Akkusativ case : Unbestimmter und negative Artikel

Unit – III

Bestellungen (to order at a restaurant)

Food and Drink culture
Verb conjugation: present tense
Simple dialogues on life situations

Prescribed text book: Tangram Aktuell Niveau A1/1 Lektion 1-4, Lektionen 1&2, Max Heuber Verlag, Ismaning, 2005, [Published and distributed in India by German book Depot Delhi].

Recommended Readings:

1. Sprachkurs Deutsch I & 2, Moritz Diesterweg Verlag, Frankfurt am Main, 1989, [Published and distributed in India by Goyal Saab Publishers & Distributors, New Delhi 1997]

Instructions for External Theory Paper Setter/Examiner:

Student shall select 5 out of 7 questions. Each question carries 10 Marks. (5X10=50)

— 909

Proficiency in French-I

B-SEC 110

Total Credits: 3

External Theory Marks: 50

L - T - P

Internal Assessment Marks: 25

2 - 1 - 0

Time allowed: 2 hrs

Course outcomes:

CO1: Communicate day to day life situations in basic/elementary French language effectively.

CO2: Possess knowledge of the values and beliefs of French culture and interact respectfully with diverse groups in basic/elementary French.

Contents:

Unit – I

Identity, know-how of a particular lifestyle

Introducing oneself in a group

Verbs, masculine, feminine, interrogation, négation

Unit – II

Lifestyle, Things specific to a country

Telling about what we know or like about

a city or a village or a famous place

Articles, adjectives, interrogation

Unit – III

Leisure time activities, sports

Giving an idea, accepting or

Refusing an idea or an activity

Verbs, near future, prepositions

Prescribed text book: *Echo – A1*, CLE International [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]

Recommended Readings:

1. *Version Originale 1 – A1*, Maison de langues [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
2. *Connexions 1*, Didier [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
3. *Alter Ego-1*, Hachette [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
4. *Forum-1*, Hachette [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
5. *450 Exercices de Grammaire*, CLE International [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]

Instructions for External Theory Paper Setter/Examiner:

Student shall select 5 out of 7 questions. Each question carries 10 Marks. (5X10=50)

- 9/10 -

Proficiency in Russian-I

B-SEC 111

Total Credits: 3

External Theory Marks: 50

L - T - P

Internal Assessment Marks: 25

2 - 1 - 0

Time allowed: 2 hrs.

Course outcomes:

CO1: Communicate day to day life situations in basic/elementary Russian language effectively.

CO2: Possess knowledge of the values and beliefs of Russian culture and interact respectfully with diverse groups in basic/elementary Russian.

Contents: Elementary Russian based on text book Way to Russia 1.1 Goyal Saab (Ch 1-4)

Unit – I

Кто это? Что это? (Who is this? What is this?)

Vowels, consonants,

Voiceless voiced sounds

Pronouns: Demonstrative and personal

Simple dialogues

Unit – II

Здравствуйге! Как дела? (Hello! How are you?)

Intonation, construction,

Vowel pronunciation

Parts of speech: Nouns, Pronouns and adjectives

Nouns of Living, and Non living

Simple dialogues

Unit – III

Диалог по телефону (Telephonic dialogues)

Gender, singular & plural

Self introduction

Simple dialogues

Myself and family

Simple dialogues

Prescribed text book: Antonova V.E. et. Al.: "Daroga v Rossiyu" A1 (Level 1.1), [Textbook of Russian Language, 8th ed, St. Petersburg, Zlatoust –MSU, 2012 (Ch 1-4)

Recommended extra readings:

.G. Ovsienko "Russian for Beginners", S.Khavronina et al: "Russian in exercises" Russky Yazyk; Moscow.

Instructions for External Theory Paper Setter/Examiner:

Student shall select 5 out of 7 questions. Each question carries 10 Marks. (5X10=50)

- 911 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

17

Semester- 1

Course Nomenclature: योग एवं व्यक्तित्व-विकास
Course Code : B-SEC-112

Total Credits : 3
L-T-P
2-1-0

External Theory Marks:50
Internal Theory Marks:25
Time Allowed: 2 Hours

Course Outcomes: इस घटक से छात्रों को प्राचीन भारतीय ज्ञान परम्परा एवं वर्तमान जीवन में योग,सात्विक आहार,सदाचरण एवं अष्टांग योग आदि का महत्त्व ज्ञात होगा।विभिन्न आसनों एवं प्राणायाम के माध्यम से छात्रों को शारीरिक-मानसिक स्वास्थ्य लाभ हेतु प्रेरणा मिलेगी।

Unit –I

1. योग का परिचय। 10अंक
- योग: कर्मसु कौशलम्।
 - समत्वं योग उच्यते।
 - योगश्चित्तवृत्ति निरोधः।

योग की व्युत्पत्ति, अर्थ एवं परिभाषा /विशेषताएँ/महत्त्व आदि से संबन्धित प्रश्न पूछे जाएँगे।

Unit –II

2. अष्टांग योग का परिचय। (पातंजलयोगदर्शनम्) 10अंक
- यमनियमासनप्राणायामप्रत्याहारधारणाध्यानसमाधयोऽष्टावंगानि।
 - अहिंसासत्यास्तेयब्रह्मचर्यापरिग्रहाः यमाः।
 - शौचसन्तोषतपः स्वाध्यायेश्वरप्रणिधानानि नियमाः।
 - स्थिरसुखमासनम्।
 - श्वासप्रश्वासयोगतिविच्छेदः प्राणायामः।
 - स्वविषयासंप्रयोगे चित्तस्वरूपानुकार इवेन्द्रियाणां प्रत्याहारः।
 - देशबन्धचित्तस्थ धारणा।
 - तत्र प्रत्ययैकतानता ध्यानम्।
 - तदेवार्थमात्रनिर्भासं स्वरूपशून्यमिव समाधिः।
- सूत्रों की व्याख्या पूछी जाएगी।

Unit –III

3. आसन एवं प्राणायाम। 10अंक
- पद्मासन, वज्रासन,ताड़ासन,धनुरासन,गोमुखसन,सर्वांगासन,शवासन।
- प्राणायाम- कुम्भक,रेचक,पूरक।
- आसन एवं प्राणायाम से पूर्व सावधानियों और तैयारी, मानव के शरीर एवं मन पर उनका प्रभाव।

उपरोक्त आसन/प्राणायाम की विशेषता अथवा लाभ,सावधानियों आदि अथवा इनकी विविध मुद्राओं को रेखांकित करने से संबन्धित प्रश्न पूछे जाएँगे।

w.e.f. Academic Session 2024-25

(Signature)

(Signature) -9/12-

(Signature)
Chairperson
Date

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

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Unit -IV

4. यौगिक संस्कृति और मूल्य शिक्षा।

10अंक

यौगिक संस्कृति—चार पुरुषार्थ, चार आश्रम, चार सिद्धान्त (विवेक, वैराग्य, षट् सम्पत्ति, मुमुक्षुत्व)
आहार की यौगिक अवधारण—सात्विक, राजसिक, तामसिक और मिताहार।
नैतिक मूल्य, मूल्यों का क्षय आधुनिक-जीवन के संदर्भ में प्राचीन भारतीय मूल्यों की प्रासंगिकता।

उपरोक्त संदर्भ से जुड़े आलोचनात्मक/समीक्षात्मक प्रश्न पूछे जाएंगे।

Recommended Books/e-resources/LMS:

1. पातंजलयोगदर्शनम् – डॉ० देवी सहाय पाण्डेय।
2. योगासन एवं योगसाधना—डॉ० संतुपाल, चौखम्मा संस्कृत संस्थान, वाराणसी।
3. योग संदर्शिका— दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।
4. योगदर्शन—हिन्दी व्याख्या सहित, गीता प्रेस गोरखपुर।
5. योग के मूलभूत सिद्धान्त—डॉ० श्याम सुन्दर पाल।

प्रश्नपत्र—निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 50 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न दस (10) अंको का होगा। प्रश्न-पत्र हल करने का समय दो (2) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार (4) प्रश्न पूछे जाएँ। प्रत्येक लघूत्तरात्मक प्रश्न 2.5 अंको का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा तथा प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

Shiv
9/13

Shiv
Date

Digital Marketing
Course Code: B-SEC-201

Total Credits: 3

L - T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 hrs

Course outcomes:

CO1: Students will be familiar with the concepts and issues in digital marketing.

CO2: Students will be able to understand the key technologies and strategies used by firms in digital marketing.

CO3: Students will be able to learn key components of digital marketing.

Unit – I

Introduction to Digital Marketing-Fundamentals of Digital marketing & Its Significance, Traditional marketing Vs Digital Marketing, Evolution of Digital Marketing, Importance of Digital Marketing in today's business landscape, challenges faced by an organization in digital era, Online marketing mix, segmentation and targeting in virtual world, issues of online marketing.

Unit – II

Digital Marketing Strategies - Understanding multiple strategies such as Paid Search Advertising, Search Engine Optimization (SEO), Social Media Marketing, Content Marketing, Native Advertising, Email Marketing and Affiliate Marketing

Unit – III

Digital Marketing Mix: Online Advertising, Lead Generation, Social Media Marketing, Content and Copywriting. Influencer Marketing: Influencer, Payment to Influencer, difference between influencer marketing and celebrity endorsements.

Recommended Readings

1. Godfrey Parkin. Digital Marketing: Strategies for Online Success. New Holland. Print
2. Strauss. J & Frost. R. E- Marketing. Pearson Education. Print
3. Deepak Bansal. A Complete Guide to Search Engine Optimization. B.R Publishing Corp. Print
4. Seema Gupta. Digital Marketing, 3e. 3rd Edition. McGraw Hill Education (India) Private Limited, 2020. Print

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 questions of 4 marks each, all are compulsory. Section 'B' will contain 6 questions (2 questions from each unit) of 10 marks each. The students will be required to attempt any three questions (one question from each unit).

Food & Beverage Services

B-SEC-202

Total Credits:

25

L - T - P

2 - 0 - 2

External Theory Marks:

External Practical Marks: 25

Internal Assessment Marks: 25

Time allowed: 2hrs

Course outcomes: On successful completion of this course learners will be able to:

- CO1:** Understand the origin of F&B Service industry, F&B operations and outlets
CO2: Demonstrate knowledge of all the menu items, which offered in the F&B outlet.
CO3: Use the different types of equipment in the F&B Service outlets.
CO4: Learn the correct process of Food & Beverages service products.

Unit – I

Introduction to Food & Beverage Industry:-

Introduction and Origin of Food & Beverage Industry. Food & Beverage Operations (Types of F&B Outlets) Restaurant, Coffee Shop, Room Service, Bars, Banquets, Appetizers, Business Centres, Discotheques & Night Clubs. Ancillary department. Classification of F&B Establishments (Commercial & Non-Commercial).

Unit – II

Types of Services & Equipments:-

Functions of Food & Beverages Service department. Types of Service such as Table Service, English Silver, American, French, Russian. Self- Service, Buffet & Cafeteria Specialized Service. Food & Beverage Service Equipment, Types & usage of equipment's. Furniture, Chinaware, Silverware & Glassware, Linen.

Unit – III

Restaurant Planning & Designing:-

Planning and Development of Restaurant Planning, Space, Lighting, decoration. Mise-en-place & Mise-en-scene. Functioning of various Food & Beverages outlets. Types of Menus, Types of Meals, Functions of Menu,

Practical Components:

- Familiarization with F&B Equipments
- Basic cover layouts
- Table Setup
- Napkin folding
- Different style of services

Recommended Readings:

1. R. Singaravelavan, Food and Beverage Service Author Name. Book Title. 1st ed. Oxford University Press, 2011. Print
2. Dennis Lillcrap, John Cousins, Food & Beverage Service, 8th Edition, Hodden Education, 2010. Print.
3. Vijay Dhawan, "Food and Beverages Services", Frank Brothers and Company, Gautam Budh Nagar, 2000. Print.
4. Sudhir Andrews, Food & Beverage Service A Training Manual, 3rd Edition , Tata Mc Graw Hill Education, Noida, UP, 2015

Instructions for External Theory Paper Setter/Examiner:

The examiner shall set seven questions in all covering the whole syllabus except practical component. Question no-1 will compulsory covering all the units and shall carry four small questions of one mark each. The rest of three questions one from each unit will be set and all questions shall carry 07 marks. ← 9/6 -

Vedic Mathematics

B-SEC-203

Total Credits: (2+1=3)

L-T-P

2-0-0

External Theory Marks:35

Internal Assessment Marks:15

Time Allowed: 3 Hours

Course Outcomes:

- CO1:** Gain the knowledge of Sutras and Upsutras from Vedic Mathematics. Perform simple arithmetic calculations with speed and accuracy.
- CO2:** Have the procedural knowledge of multiplication of complicated numbers quickly with the aid of Vedic sutras and generate tables of any number.
- CO3:** Make use of Vedic sutras to quickly divide, and find LCM and HCF of many digit numbers.
- CO4:** Acquire the cognitive skills to calculate square and cube roots of numbers speedily with accuracy.

Unit-I

History of Vedic Mathematics and introduction to its Sutras and Upsutras. Addition in Vedic Mathematics: Without Carrying, Dot Meth method subtraction in Vedic Mathematics: Nikhilam Navatashcaramam Dashatah (All from 9 last 10). Fraction: Addition and Subtraction.

Unit-II

Multiplication of two numbers of two digits (Ekadhikena Purvena method), Multiplication of two numbers of three digits, (Ekanyunena Purvena method, Urdhva Tiryagbhyam method, Nikhilam Navatashcaramam Dashatah method), Combined Operations, Generating Tables (Nikhilam).

Unit-III

Division: Nikhilam Navatashcaramam Dashatah (two digits divisor), ParavartyaYojyet Method (three digits divisor). Divisibility: Ekadhikena Purvena Method (two digits divisor), Eknunen Purvena Method (two digits divisor) LCM, HCF.

Unit-IV

Squares of any two digits numbers: Base method, Squares of numbers ending in 5: Ekadhikena Purvena Method. Square Roots: Dwandwa Yoga (Duplex) Method, Square root (four digit number). Cubing: Yavadunam Method, Cube root (six digit numbers)

Instructions for External Theory Paper Setters/Examiners: The examiner will set 9 questions asking two questions from each unit and one compulsory question. The compulsory question (Question No. 1) will contain 7 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Practical

Total Credits: 1

L-T-P

0-0-2

External Practical Marks:20

Internal Assessment Marks:05

Time Allowed: 3 Hours

The examiner will set 4 questions at the time of practical examination by taking course outcomes (COs) into consideration. The examinee will be required to solve 2 questions. The evaluation will be done on the basis of practical record, viva-voce and written examination.

Problem Solving-Questions related to the following problems will be solved and record of those will be maintained in the Practical Note Book:

1. Addition of two 5-digit numbers by without carrying and dot method.
2. Subtraction of 5-digit numbers by base method.
3. Multiplication of 2-digit numbers by base method.
4. Multiplication of 3-digit numbers by numbers consisting of all 9s.
5. Multiplication of 3-digit numbers by numbers consisting of all 1s.
6. Multiplication of 3-digit numbers by Vinculum method.
7. Division of 2-digit and 3-digit numbers.
8. Generating table of any number.
9. Square of any 2-digit number by base method.
10. Square of any number ending with 5.
11. Square root of 4-digit numbers.
12. Cube root of 6-digit numbers.
13. LCM and HCF of numbers.
14. Answer checking by digit-sum method.

Recommended Readings:

1. U. S. Patankar and S. M. Patankar (2018). Elements of Vedic Mathematics. TTU Press.
2. V. Singhal (2014). Vedic Mathematics for all ages. Motilal Banarsidas Publishers.
3. R.K. Thakur (2013). The Essentials of Vedic Mathematics. Rupa Publications. New Delhi.
4. P. Tiwari and V.K. Pandey (2012). Vedic Mathematics - Modern Research Methods. Campus Books International.
5. S. K. Kapoor (2006). Vedic Geometry Course. Lotus Press.
6. A. Gupta (2004). Power of Vedic Mathematics with Trigonometry. Jaico Publishing House.
7. S.B.K. Krishna Trithaji (1990). Vedic Mathematics. Motilal Banarsidas, New Delhi.

Renewable Energy Sources
Course Code: B-SEC-204

Total Credits: 02			External theory marks: 50
L	T	P	Internal Assessment Marks: 25
2	1	0	Time allowed: 2.00 hrs

Course Outcomes: After completing this course students will be able to learn about:

CO1:	To understand the renewable energy sources
CO2:	To understand the working of power plants using renewable energy
CO3:	To understand the various methods of energy conversion from solar and wind
CO4:	To understand the sustainable energy sources along with their importance

Syllabus

Unit-I

Introduction	Definition: different types of energy sources, Renewable Energy Resources, Importance of Renewable Energy Resources, Types of Renewable Energy Resources, Present Indian and international energy scenario of conventional and RE sources.
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Unit-II

Types of Renewable Energy Resources	Wind Energy: Power in the Wind, Types of Wind Power Plants, Solar and thermal systems: Solar Radiation, Radiation Measurement, Solar Thermal Power Plant, thermal energy storage for solar heating and cooling, limitations. Bio-mass resources: environmental benefits, Geothermal Energy: Resources of geothermal energy, Environmental considerations, Classification of Hydropower plant.
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Unit-III

Other Energy Sources	Tidal Energy: Energy from the tides, Barrage and Non Barrage Tidal power systems. Wave Energy: Energy from waves, wave power devices, Ocean Thermal Energy Conversion (OTEC): Hydrogen Production and Storage, Fuel cell: Principle of working, various types, construction and applications.
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Recommended readings

- John Twideu and Tony Weir, "Renewal Energy Resources" BSP Publications, 2006.
- M.V.R. Koteswara Rao, "Energy Resources: Conventional & Non-Conventional" BSP Publications, 2006.
- C.S. Solanki, "Renewal Energy Technologies: A Practical Guide for Beginners" PHI Learning.
- Godfrey Boyle. "Renewable energy power for a sustainable future". Oxford University Press.

Instructions for External Theory Paper Setter/Examiner

Seven questions will be set in all by the examiners taking two questions from each unit (Each question is of 12 marks) and one question containing short answer type questions from entire syllabus (Seven questions of two marks each). Students will be required to attempt four questions in all by selecting at least one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Typing Short Hand in Hindi

B-SEC-205

Total Credits : 3

L - T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Marks : 25

Time allowed: 2 hrs

Course outcomes:

After completion of the course, students will be able to:

CO1: Understand the basic concepts of Short hand

CO2: Apply the knowledge of Circle, Phraseography, Hook

CO3: Understand the concept of Compound Consonant, Halving, Doubling etc.

CO4: Learn and make Speed and practice

UNIT 1: definition, Consonant, Joining, Vowels, symbols, word sign etc.

UNIT 2: Basics of knowledge of Circle, Hook, Phraseography, loop, half circle, final hook,

UNIT 3: Definition of compound consonant, halving, doubling, prefix, suffix

UNIT 4: Learn and make speed with numbers, symbols, lines, spelling of country, department, etc.

Recommended readings:

1. Manak ashulipi book

Note:

- 1 Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40 % in the aggregate of internal and external examinations of that subject.
- 2 There will be nine questions in total from all four units. First question is compulsory and set from all four units. Students will have to attempt any five questions in all selecting at least one question from each unit.

WEB DESIGNING AND DEVELOPMENT
CODE: B-SEC-206

NO OF CREDITS: 3
L T P
3 0 0

INTERNAL MARKS: 25
EXTERNAL MARKS: 50
TOTAL : 75

Course Outcomes:

After studying this Course the student will be able to:

1. Code a handful of useful HTML & CSS examples
2. Build semantic, HTML & CSS web page
3. Write basic scripts
4. Use Names, Objects, and Methods
5. Add Interactivity to a Web Page
6. Create Dynamic Web Pages using Java Script in HTML forms.

UNIT-I

Introduction and Basic concepts of internet, Software for Web Designing, Introduction to HTML: HTML Tags and Attributes, Lists, Hyperlink, Form, Headers, HTML Meta Tag, XHTML, HTML Deprecated Tags & Attributes

UNIT-II

CSS: Introduction, Features and benefits of CSS, CSS Syntax, External Style Sheet, Multiple Style Sheets, Value Lengths and Percentages. Selectors, Color Background Cursor, Text Fonts

UNIT-III

Lists Tables: List-Style-Type, List-Style-Position, List-Style-Image, CSS Tables, Box Model, CSS Dimensions, Display Positioning, CSS Visibility, CSS Display, CSS Scrollbars, CSS Layers with Z-Index.

UNIT-IV

The JavaScript: Introduction to JavaScript, JavaScript Conditionals, JavaScript Arrays, JavaScript Loops, JavaScript Functions, JavaScript Scope

RECOMMENDED READINGS:

1. Jon Duckett, JavaScript And JQuery: Interactive Front-End Web Development, Wiley
2. Jennifer Niederst Robbins, Learning Web Design: A Beginner's Guide To HTML, CSS, JavaScript, And Web Graphics, O'reilly
3. Steven M. Schafer, HTML, XHTML, And CSS Bible, Wiley
4. Felke-Morris, Basics of Web Design: Htm15 & Css3, 5th Edition, Pearson Education, 2019.
5. Felke-Morris, Web Development & Design Foundations with HTML 5, 10th Edition, Addison- Wesley, 2020.

Note: Nine questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt five questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

Proficiency in German-II

B-SEC 207

Total Credits: 3

External Theory Marks: 50

L - T - P

Internal Assessment Marks: 25

2 - 1 - 0

Time allowed: 2 hrs

Course outcomes:

CO1: Communicate day to day life situations in basic/elementary German language effectively.

CO2: Possess knowledge of the values and beliefs of German culture and interact respectfully with diverse groups in basic/elementary German.

Contents: Elementary German based on text book Tangram Aktuell Niveau A1/1, Lektion-3& Lektion 4.

Unit – I

Guten Tag! Ich suche (Good day, I look for..)

Counting 100 and above

Read and understand simple statistical data,

Inform about the prices and make purchase

Orient oneself in shopping mall

Simple conversations at shopping mall

Unit – II

Im Supermarkt (in the Supermarket)

Shopping in Supermarket

Orient oneself in supermarket

Asking for guidance and opinions

Simple conversations at supermarket

Unit – III

LeseText: Beim neunten "Nein" kommen die Tränen

Personal pronoun: dative, imperative sentences

Simple conversations

Reading Text: Beim neunten nein kommen die

Traenen

Prescribed text book: Tangram Aktuell Niveau A1/1 Lektion 1-4, Lektionen 1&2, Max Heuber Verlag, Ismaning, 2005, [Published and distributed in India by German book Depot Delhi].

Recommended Readings:

1. Sprachkurs Deutsch I & 2, Moritz Diesterweg Verlag, Frankfurt am Main, 1989, [Published and distributed in India by Goyal Saab Publishers & Distributors, New Delhi 1997.

Instructions for External Theory Paper Setter/Examiner :

Student shall select 5 out of 7 questions. Each question carries 10 Marks. (5X10=50)

- 992 -

Proficiency in French-II

B-SEC 208 (even semester)(syllabus)

Total Credits: 3

External Theory Marks: 50

L - T - P

Internal Assessment Marks: 25

2 - 1 - 0

Time allowed: 2 hrs

Course outcomes:

CO1: Communicate day to day life situations in basic/elementary French language effectively.

CO2: Possess knowledge of the values and beliefs of French culture and interact respectfully with diverse groups in basic/elementary French.

Contents:

Unit – I

Daily and Yearly events and activity
Asking and giving precision about time
Describing a past event

Unit – II

Travel, Transport
Possessive and demonstrative adjectives
Expressing advantages and disadvantages of an activity

Unit – III

Food, Meal, Feast
Partitive article, asking question, yes, no etc.
Describing Food or meal

Prescribed text book: *Echo – A1*, CLE International [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]

Recommended Readings:

1. *Version Originale 1 – A1*, Maison de langues [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
2. *Connexions 1*, Didier [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
3. *Alter Ego-1*, Hachette [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
4. *Forum-1*, Hachette [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]
5. *450 Exercices de Grammaire*, CLE International [Distributed in India by W. R. Goyal Publishers & Distributors, Delhi]

Instructions for External Theory Paper Setter/Examiner:

Student shall select 5 out of 7 questions. Each question carries 10 Marks. (5X10=50)

—923—

Proficiency in Russian-II

B-SEC 209 (even semester) (syllabus)

Total Credits: 3

External Theory Marks: 50

L - T - P

Internal Assessment Marks: 25

2:1-0

Time allowed: 2 hrs

Course outcomes:

CO1: Communicate day to day life situations in basic/elementary Russian language effectively.

CO2: Possess knowledge of the values and beliefs of Russian culture and interact respectfully with diverse groups in basic/elementary Russian.

Contents: Elementary Russian based on text book: Way to Russia 1.1 Goyal Saab (Ch 5-8)

Unit – I

Моя семья (My Family)
Family and relationship
Intonation construction: complex sentences
Personal pronouns: singular
Possessive pronouns: singular

Unit – II

Разговоры в магазине/в книжном киоске/ в библиотеке
(In the Supermarket/in the bookshop/ in the library)
Simple dialogues at supermarket
Simple dialogues at chemist shop
Visiting a doctor, Restaurant, library
Counting 1-100. Ordinal numbers 1-20.

Unit – III

Text: Москва/ Измайловский парк/ на Арбате
(Text: Moscow/ Izmaylovsky Park/ at the Arbat)
Questions with question words
Yes or No questions
Verb Conjugation: Present tense.
Information about Moscow.

Prescribed text book: Antonova V.E. et. Al.: "Daroga v Rossiyu" A1 (Level 1.1), Textbook of Russian Language, 8th ed, St. Petersburg, Zlatoust –MSU, 2012 (Ch 5-8)

Recommended Readings:

Recommended extra readings: V.G. Ovsienko "Russian for Beginners", S. Khavronina et al: "Russian in exercises" Russky Yazyk, Moscow.

Instructions for External Theory Paper Setter/Examiner:

Student shall select 5 out of 7 questions. Each question carries 10 Marks. (5X10=50)

-924

Computer Hardware and Maintenance

Course Code: B-SEC-210

Total Credits : 3

External Theory Marks: 50

L - T - P

Internal Assessment Marks : 25

2 - 1 - 0

Time allowed : 2 hrs

Course outcomes:

Upon successful completion of this course, the student will be able to:

(Knowledge based)

CO1: To classify and explain the function of PC, different computer hardware components; and functionality of hardware components and working of an operating system (OS);

CO2: Understand the purpose and functions of the computer peripherals;

(Skills based)

CO3: To install, configure, optimize and upgrade personal computers;

CO4: To be able to perform diagnostic procedures and troubleshooting techniques to personal computers, portable devices, operating systems and computer peripherals.

Unit – I

Introduction to Hardware: Basic terms and introduction, and functions of system modules (System board, firmware, storage devices, monitor, boot process, ports). CMOS and BIOS, Overview of system components, Motherboard: definition, Components/connections in motherboard, Knowing mother board of PC, Identifying types of motherboard, SMPS: Circuit diagrams and pin assignments, working of SMPS Input and load requirements.

Unit – II

Memory requirements and I/O devices: Features of different types memory modules, Reading memory error messages, adding RAM, Tips on installing memory chips. Disk structure: Cylinders, heads, platters, tracks and sectors, structure of a disk, hard disk controllers. Hard disk software installation: Physical formatting, partitioning, high level formatting, Hard disk installation.

995

Keyboard : Keyboard and Mouse operation, Key switches, Common faults and diagnostics,
Scanner: Working and types, CD- ROM drive:-CD drives mechanism installation of CD drive,
Monitors: Display basics, Display adapter cards, VGA and super VGA, Failure, Printer: Types,
Interfaces, Parts, Working Principle

Unit – III

Troubleshooting and maintenance: Troubleshooting basics, Troubleshooting by visual Inspection, Preventative Maintenance, Using Preventative Maintenance Tools, POST : Functions, Test Sequence, Error messages, Troubleshooting Procedures and Preventative Maintenance: Identifying Troubleshooting Tools, Hardware tools, Diagnostic software, Materials and equipment, Software utilities, Maintaining Environmental Controls, Ventilation and airflow, Humidity and liquids, Dirt and dust, Power, UPS, and suppressors, Completing Maintenance Tasks, Case and components, Power supplies and utilities

Recommended Readings:

Graves, Michael W.: "A Guide to PC Hardware Maintenance and Repair", Text Thompson Publishing, Second edition (2005). Print

Mueller, Scott M.: "Upgrading and Repairing PCS", Pearson's Education Inc., 20th Edition, (2012) Print

Instructions for External Theory Paper Setter/Examiner :

All the units 1, 2 and 3 are of equal marks (12.5 marks each). Question 1 is compulsory to all; consisting of 12.5 marks and is taken from the entire syllabus; in which each units is equally represented with 4/4.5 marks. Each unit 1, 2, and 3 has internal choices for the students in which half part of unit (equivalent to 12.5 marks) is to be attempted.

IT Return Filing **B-SEC-211**

Total Credits : 3
L - T - P
2 - 1 - 0

External Theory Marks: 50
Internal Assessment Marks : 25
Time allowed : 2 hrs

Course outcomes: The student shall be able to

- CO1: understand the basic process of computing taxable income and tax liability.
CO2: understand the concept of advance payment of tax and tax deduction at source and develop the ability of e-filing of TDS returns.
CO3: file IT return on individual basis.
CO4: know about various types of income tax return forms.
-

Unit – I

Introduction to income tax – basic terminology; types of assessee; income taxable under different heads- Income from Salary, House property, Business and Profession, Capital Gain and Other Sources; Meaning of ITR filing; difference between E-filing and regular filing of returns. E-filing process. due date of filing of income tax return.

Unit – II

Instructions for filling out form ITR-1 (SAHAJ), ITR-2 (Income other than PGBP), ITR-3 (Income from PGBP), ITR-4 (SUGAM); Introduction to Income Tax Portal; preparation of electronic return. Introduction to the concept of TDS; provisions in brief relating to advance payment of tax; prescribed forms for filing of TDS returns; exemption from TDS – Form 13, 15G, 15H

Unit – III

How to Register PAN, TAN, TIN, DIN and GSTIN online or manual. How to file Return Electronically on portal with or without Digital Signature Certificate. How to Pay Tax online through Net Banking. How to Generate Challans online and Manual. Form 16 B, How to view Tax Credit through 26AS, E Filing TDS Salary Return form 24Q and Challan.

Recommended Readings:

1. Ahuja, Girish. and Gupta, Ravi. Systematic Approach to Income Tax. Latest Edition, Bharat Law House, Delhi, 2023. Print.
2. Babbar, Sonal, Kaur, Rasleen and Khurana, Kritika. Goods and Service Tax (GST) and Customs Law. Latest Edition, Scholar Tech Press, 2023. Print
3. Bansal, K. M., GST & Customs Law, Latest Edition, Taxmann Publication, 2023. Print.
4. Gupta, S.S., Vastu and Sevakar, GST How to Meet Your Obligations, Latest Edition, Taxmann Publications, 2017, Print.
5. Singhanian V. K , GST & Customs Law, Latest Edition, Taxmann Publication, 2023, Print.

6. Singhania, Vinod K. and Singhania Monica. Students' guide to Income Tax. University Edition. Taxmann Publications Pvt Ltd., New Delhi, 2023, Print.

Instructions for External Theory Paper Setter/Examiner :

The examiner shall set seven questions in all covering the whole syllabus. Question no.1 will be compulsory covering all the units and shall carry seven small questions of two marks each. The rest of the six questions will be set from all three units. The students will be required to attempt three questions (at least one question from each unit carrying 12 marks each).

Textile Coloring and Designing

B-SEC-212

Total Credits : 3

L - T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Marks : 25

Time allowed : 2 hrs

Course outcomes:

After completion of the course, students will be able to:

CO1: Understand the basic concepts of Design

CO2: Apply the knowledge of elements and principle of design in Design Developments

CO3: Understand the concept of colour and its effect on designing

CO4: Learn and make use of dyeing and printing application.

UNIT 1: Design- definition, requirements of a good design, Types- natural and decorative, types of decorative design. Collage and its types – relief and flat. Introduction to principles of design- balance- proportion- emphasis, rhythm- harmony with their suitable example.

UNIT 2: Basics of elements of design: Lines – Horizontal, vertical, zigzag, diagonal and curve. Textures– Different types of textures, Shape: Geometrical, Realistic, Stylized, Abstract. Dots & Types of dots and their application in designing.

UNIT 3: Definition of colour with hue, value and chroma, color wheel; primary, secondary and tertiary colours, Colour Scheme, warm and cool colours, Colour value, tints, shades.

UNIT 4: Basic introduction to dyeing and printing, Difference between dyeing and printing, simple dyeing techniques: solid colour dye, tie and dye, shibori dyeing, simple printing techniques: block, screen and stencil

Recommended readings:

1. Sumathi G. J., "Elements of Fashion and Apparel Design", Second Edition, New Age International Publisher, 2022, Print .
2. Dr. Maulik Shah, "Basics of Textile Dyeing and Printing", Edition first, Shashwat Publication, 2023, Print
3. Student handbook on Textile Chemical Processing, 1st Edition by CBSE, 2014, E-Book
4. Hemalatha Jain, "Techniques of dyeing and printing" 1st Edition, Ane Books Pvt. Ltd, 2010, Print

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5. Manju Patni, "Textile Designing and printing", 1st edition-Hindi , Star publication, 2020, Print

Note:

- 1 Minimum passing marks for any subject (paper) shall be 40% in the external examination and 40 % in the aggregate of internal and external examinations of that subject.
- 2 There will be nine questions in total from all four units. First question is compulsory and set from all four units. Students will have to attempt any five questions in all selecting at least one question from each unit.

Course Nomenclature: Translation from English to Hindi

Course Code: B-SEC-213

Total Credits: 3

External Theory Marks: 50L-

T-P

Internal Assessment

Marks: 252-1-0

Time

Allowed: 2hrs
Course Outcomes: CO1. To introduce the learners to the significance of translation. CO2. To sensitise the learners towards the linguistic and cultural specificities of the two languages i.e. English and Hindi. CO3. To train the students in practical aspects of translation as an activity. CO4. To equip the students with translation skills. CO5. To enhance skill development and build confidence in over-all personality of the learners.

UNIT I

Basics of Translation: Definition, Process, Objectives, DOs and DONTs of translation, limitations of translation, translation versus original, importance of translation as an activity

UNIT II

Role and Qualities of a Translator, personality of the translator, the question of fidelity of the translator

UNIT III

English to Hindi Translation:
Understanding the specificities of the two languages, sentence structure
Exercises for practice

Suggested Reading:

1. Bassnett, Susan and Peter Bushed. *The Translator as Writer*. Continuum, 2006.
2. Mukherjee, Sujit. *Translation as Discovery*. Orient Blackswan, 2018.
3. Mukherjee, Sujit. *Translation as Recovery*. Pencraft International, 2004.
4. Bassnett, Susan and Andre Lefevere *Constructing Cultures: Essays on Literary Translation*. Cromwell Press, 1998.
5. Venuthi, Lawrence. *Translator's Invisibility: A History of Translation*. Routledge, 2017.

Instructions to the Paper Setter:

The question paper shall be of 50 marks (Unit I and II of 15 marks each and Unit III carrying 20 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee.

931

Bhagat Phool Singh Mahila Vishwavidyala Khanpur Kalan
Department of English

Course Nomenclature: Content Writing
Course Code: B-SEC-214

Total Credits: 3
L-T-P
2-1-0

External Theory Marks: 50
Internal Assessment Marks: 25
Time: 2hrs

Course Outcomes:

- CO1. To introduce learners to the basic concepts of Content Writing
- CO2. To sensitize them to the various styles and techniques of writing and editing
- CO3. To increase employ ability of the learners
- CO4. To create industry- academia interface through institutional support
- CO5. The knowledge of various styles and techniques of writing and editing
- CO6. A creation of an industry-academia interface through institutional support

Unit I: Basics of Content writing

1. The Concept of Content Writing and its relevance
2. Role and Functions of Content Writing
3. Scope and Types of Content Writing
4. Principles and processes of content writing

Unit II: Plagiarism laws in Content Writing

1. What is plagiarism, rules on plagiarism
2. How to write plagiarism-free copies

Unit III: Types of Content writing

1. The process of Content Writing— researching, structuring, formatting
2. Editing and Proof- Reading—following company style sheet, grammar, copy flow, restructuring, market research
3. Writing Styles -Non-fiction(Essays, Reports), Advertising, Newspapers
4. Writing blogs, case studies, write papers, write eBook

Tour and Travel Management

B-SEC-301

Total Credits: 3

L - T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Theory Marks: 25

Time allowed: 2hrs

Course Outcomes: After completion of this course students will be able to:

CO1: Understand tourism and its types and form.

CO2: know about the tourism products and resources and tourist destinations.

CO3: Understand the basics functions of travel Agency and tour operators.

CO4: know about the documentation required to travel abroad.

Unit-1

Components, Types and Forms of Tourism :-

Meaning & definitions of tourism, Growth and development of Tourism, Nature & Classification of tourism & tourists. Components of tourism, Types and Forms of Tourism, Inbound and outbound Tourism, Domestic & International tourism.

Unit-2

Tourism Products:-

Definition & meaning of Tourism Resources, Tourism resources, Indian resources Cultural resources, Art and Architecture, Historical Monuments, Fairs and Festivals, Craftsmanship, Museums and Art Galleries. Natural tourist Resources, diversity in Land form and Landscape, Flora and Fauna, National Parks and Sanctuaries. Created tourist destinations.

Unit- 3

Travel Agency & Tour Operations :-

History and growth of travel agency businesses, Types of travel agency and tour operations. Functions of Travel agency/Tour operations. Travel Documentation: Passports, its types, VISA, its types and requirements. Documents required for foreigners to visit India. Travel Organizations such as WTO, IATA, UFTAA, TAAI, IATO, ASTA, PATA and its functions. Types of Tour Operators. Types of Package Tours.

Recommended Readings:

1. M.R. Dileep. Tourism, Transport and Travel management, 1st ed. Routledge, 2019
2. Prof. K. Tanja. Tour and Travel Management. India. Laxmi Publication Pvt Ltd. 2020. Print
3. Sampad kumar Swain, Jitendra Mohan Mishra. Tourism: Principles and Practices. India. oxford university, 2011
4. Sunetra Roday, Archana Biwal, Vandana Joshi. Tourism Operations and Management. India Oxford University Press; Illustrated edition, 2009.

Instructions for paper setter/examiner:

The examiner shall set seven questions in all covering the whole syllabus. Question no-1 will compulsory covering all the units and shall carry four small questions of four marks each. The rest of three questions will be set from all the three units. The examiner will set two questions from each unit. All questions shall carry 12 marks.

933-

Catering Skills
B-SEC-303

Total Credits: 3
25

L - T - P
2 - 0 - 2

External Theory Marks:

External Practical Marks: 25

Internal Assessment Marks: 25
Time allowed: 2hrs

Course Outcomes: After completion of this course students will be able to:

- CO1: Understand about the concept of catering industry.
 - CO2: learn about the types of different catering service and buffet functions
 - CO3: learn the process of managing different types of Banquet functions
 - CO4: Develop different catering skills to organize event/ functions of different levels.
-

Unit-I

Catering Establishments and Functions:-

Define Catering Industry, Commercial Catering, Institutional Catering and Hospital Catering. Planning, organizing & control. Types of Food & Beverage outlets, types of service offered.

Unit-II

Catering Operation:-

Types of catering services, Functions of Catering. Buffet Catering. Factors to plan buffets, Area requirement, Planning and organization, Sequence of food, Types of Buffets, Display, Sit-down, Fork, Finger, Cold Buffet, Breakfast Buffets, Equipment, Supplies, Check list.

Unit-III

Banquet Management:-

Nature and types of business event. Booking procedure, function planning, organizing & control. Function prospectus, Checklist, documentation & Standard Operating procedures (SOPS). Banquet management types of banquets i.e. Formal and informal. Banquet function menus, sitting plans. Organization, duties & responsibilities of Banquet department.

Practical Components:

- Food and beverage-how to serve in banquets.
- Layout and drawing of the function's prospectus.
- Planning of different types of buffet counters and setting the counters.
- Planning the table layouts of different types of banquet function.
- Preparation of function checklist of buffet.
- Seating plans of different Banquet functions.

Recommended Reading:

1. John Cousins, Dennis Lillicrap, Suzanne Weekes, Food And Beverage Service, 9th ed 2014. Print.
 2. Kinton, Ronald, Victor Ceserani, and David Foskett. The theory of catering. E. Arnold, 2011, Oxford Press, Print.
 3. Krupa Shanker M, Management Theory for the Hotel Professional, United Publisher, Mangalore, 2016, print.
 4. Mohini Sethi & Surjeet Malhan, Catering Management - An Integrated approach, Macmillan Publisher New Delhi 2016, Print.
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Instructions for paper setter/examiner:

The examiner shall set seven questions in all covering the whole syllabus except practical component. Question no-1 will compulsory covering all the units and shall carry four small questions of one mark each. The rest of three questions one from each unit will be set and all questions shall carry 07 marks.

Indian Cuisine

B-SEC-307

Total Credits:

L - T - P

25

2 - 0 - 2

External Theory Marks: 25

External Practical Marks:

Internal Assessment Marks: 25

Time allowed: 2hrs

Course Outcomes: After completion of this course students will be able to:

CO1: Understanding of the characteristics of Indian foods.

CO2: Know about the herbs and spices used in Indian foods.

CO3: Know about the commodities used in Indian Cuisine.

CO4: Understand the fundamentals and basics preparations of Indian Cuisine.

Unit-1

Indian Cuisine :-

Introduction, Philosophy of Indian Food, Key features, regional influences on Indian Regional Foods, its salient features and cooking. Condiments, Herbs and Spices Used in Indian Cuisine, various ways of using spices, their storage and usage tips.

Unit-2

Commodities and their usage in Indian Kitchens:-

Introduction, Souring Agents, Colouring Agents, Thickening Agents, Tendering Agents, Flavouring and Aromatic Agents, Spicing Agents in Indian Kitchens. Purchasing and storing techniques.

Unit-3

Secrets and Basics preparations of Indian Cuisine:-

Introduction, Types, Blending of Spices, Concept of Dry and Wet Masalas, Pastes used in Indian Cooking, Preparations of Basic Indian and Regional Gravies, Dals, Rice and Breads.

Practical Component:-

- Popular Indian Breakfast Preparations
- Preparation of Basic Indian Gravies.
- Preparation of Basic Indian Dals.
- Preparation of Basic Indian Rice.
- Preparation of Basic Indian Breads.

Recommended Readings:

1. Parvinder. S. Bali. Food Production Operations. 3rd ed. Oxford Higher Education. 2021, Print.
2. Parvinder. S. Bali. Theory of Cookery. 1st ed. Oxford Higher Education, 2017. Print.
3. Wayne Gisslen, Professional Cooking, 5th Edition, Wiley 2002. Print
4. David Foskett & Victor Ceserani. Ceserani & Kinton's The Theory of Catering, 11th ed, Hodder Education 2007.

Instructions for paper setter/examiner:

The examiner shall set seven questions in all covering the whole syllabus except practical component. Question no-1 will compulsory covering all the units and shall carry four small questions of one mark each. The rest of three questions one from each unit will be set and all questions shall carry 07 marks.

936 -

Waste Management Techniques
Course Code: B-SEC-308

Total Credits: 02			External theory marks: 50
L	T	P	Internal Assessment Marks: 25
2	1	0	Time allowed: 2.00 hrs

Course Outcomes: After completing this course students will be able to learn about:

CO1:	Distinguish between different types of wastes along with their sources
CO2:	Various methods employed for collection and disposal of the waste
CO3:	Understand about the techniques used for the treatment of waste
CO4:	Observe the role of biotechnology in reduction of different waste

Syllabus

Unit-I

Definition, overview of solid waste management, types of solid wastes, sources of solid wastes, properties of solid wastes, Factors affecting the type and quality of waste, causes of Solid waste generation, associated risks of solid wastes, hierarchy of waste management options.
Key components of solid waste management, Generation, storage (containers), collection, transportation (human powered, animal powered and motorized).

Unit-II

Disposal of solid waste (Landfills, composting, incineration and pyrolysis), Recycling and resource recovery, Methods of handling and processing of solid wastes: separation, screening, size reduction, densification, baling, cubing, compaction and pelleting Role of Biotechnology in waste minimization.

Unit-III

Land filling: Site selection criteria, landfill layout, Occurrence of gases and leachate in landfills: composition and characteristics, different phases of gases formation.
Composting: definition, types, process description, design and operational consideration of aerobic composting; process. Description, design and operational consideration of anaerobic composting, vermicomposting.

Recommended readings

- Bhatia S.C. 'Solid and Hazardous Waste Management', Nice Printing Press, Delhi, 2007.
- Garg Santosh Kumar. 'Sewage Disposal and Air Pollution Engineering', 37th Edition, Khanna Publishers, 2008.
- John Pichtel. 'Waste Management Practices: Municipal, Hazardous and Industrial', 2nd Edition, CRC Press, USA, 2014.
- Tchobanoglous G., Theisen H., Vigil S.A. 'Integrated Solid Waste Management Engineering Principles and Management Issues', 2nd Edition, McGraw-Hill, USA, 2014.
- Singh, J.S., Singh, S.P. and Gupta, S.R. 'Ecology, Environment and Resource Conservation', S. Chand Publishing, New Delhi, 2015.
- Vesilind, P.A. and Worrell W.A. 'Solid Waste Engineering' 2nd Ed, Cengage India, 2016.
- CPHEEO. 'Manual on Municipal Solid Waste Management', Ministry of Urban Development', India, 2016.
- Rao M.N., Sultana Razia and Kota Sri Harsha. 'Solid and Hazardous Waste Management' BS Publications, 2017.
- Singh Jagbir and Ramnath AL. 'Solid Waste Management', Dreamtech Press, 2019.
- Masters Gilbert M. and Ela P. Wendell. 'Introduction to Environmental Engineering and Science', 10th Edition, Pearson Publications, 2019.

Instructions for External Theory Paper Setter/Examiner

The paper-setter is requested to set Nine questions in all by setting three questions from Each Unit equitably spread over the concerned unit. The students will have to attempt Five questions in all, selecting at least one question from each unit. All questions carry 10 marks each.

Human Values and Ethics

Course Code: B-VAC-101

Total Credits: 02			External theory marks: 35
L	T	P	Internal Assessment Marks: 15
2	0	0	Time allowed: 1.30 hrs

Course Outcomes: After completing this course students will be able to understand about:

CO1:	The need and importance of value education
CO2:	The importance of human values and ethics
CO3:	The integrated personality and well-being
CO4:	The professional ethics and global citizenship

Syllabus

Unit-I

Human Values	Understanding the need, content and process for Value Education. Classification of Value Education: understanding Personal Values, Social Values, and Moral Values and Spiritual Values. Values driven from different philosophy- Buddhism, Jainism, Hinduism and other religion. Meaning and nature of human values; Significance of human values in life; Relation between values and ethics.
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Unit-II

Ethics in life and Profession	Nature, characteristics and scope of professional ethics; Types of Professional Ethics; Professional Values: Trusteeship, Inclusiveness, Commitment, Sustainability, Accountability, Transparency, Impartiality, Integrity, empathy, Values for Global Citizenship: Equality, Justice, and Human Dignity.
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Recommended readings

- Dan P. McAdams, Kali Trzesniewski, Jennifer Lilgendahl, Veronica Benet-Martinez, Richard W. Robins. 'Self and Identity in Personality Psychology, Personality Science'. Vol. 2, Article e6035, <https://doi.org/10.5964/ps.603>, 2021.
- D.R. Kiran. Professional Ethics and Human Values, McGraw Hill Education (India), 2014.
- Kiran Kumar, K. Salagame: Meaning and Well-Being: Indian Perspectives, Journal of Constructivist Psychology, 2016.
- R.R. Gaur, R. Sangal, G.P. Bagaria: A Foundation Course in Human Values and Professional Ethics, Excel Books, 2009.
- S.K. Kiran Kumar: An Indian conception of wellbeing, in Henry, J. (Ed) European Positive Psychology Proceedings 2002. Leicester, UK: British Psychological Society, 2003.
- Vivian L Vignoles: Identity: Personal and Social, Chapter to appear in Oxford Handbook of Personality and Social Psychology (2nd ed.), edited by Kay Deaux and Mark Snyder, 2017.

Instructions for External Theory Paper Setter/Examiner

The examiner is requested to set **Nine** questions in all i.e., One Compulsory Objective Type Question (7x1) without any choice, equitably distributed over the whole syllabi and Four Questions from Each Unit equitably spread over the concerned unit. The students will have to attempt **Five** questions in all, selecting two questions from each unit. All questions carry equal marks.

- 938 -

Constitutional Values and Fundamental Duties

B-VAC-201

Total Credits: 2

L - T - P

2- 0 - 0

External Theory Marks: 35

Internal Assessment Marks : 15

Time allowed : 1.30 hrs

Course outcomes:

CO1: To understand basic philosophy behind Preamble and fundamental rights under the Constitution of India;

CO2: To understand basic philosophy behind directive principles of state policy under the Constitution of India and fundamental duties for citizens;

CO3: To understand basic forms of government at Central and Regional Levels under the Constitution of India;

CO4: To understand relationship among organizations at Central and Regional Levels under the Constitution of India;

Unit – I

Idea of Constitution and Constitutionalism, Ideals of the Preamble including sovereignty, socialism, secularism, democracy, republican character of Indian State, justice, liberty, equality, fraternity, human dignity and the unity and integrity of the Nation, concept of citizenship, fundamental rights and its types and principles for constitutional remedies;

Unit – II

Directive principle of justice and free access to justice, principle, principles of welfare state and egalitarian society, principles for early childhood care and education, principles for improving workers and public health and prohibition of intoxicating drugs, principles for promotion of educational and economic interests of weaker sections especially Scheduled Castes and Scheduled Tribes; principles against slaughtering animals especially cow and cattle, principles of uniform civil code, principles for protection of environment, principles for protection of monument or places of artistic or historic interest, principles of separation of functions of the state, principle for observation of international law, philosophy of fundamental duties for citizens;

Unit – III

Democracy, representative democracy, democratic parliamentary form of government at Central and Regional levels including Municipalities and Panchayats, Principles of Collective Responsibility of Council of Ministers, Principles for constitution of parliament, legislative assembly in each state or union territory, Principles of Free and Fair Elections

Unit – IV

939 -

Legislative and administrative relationship among government at central and regional levels, independent higher judiciary and lower judiciary in state; Services at Central and Regional levels, Principles of Contractual and Tortious Liability of the State,

Recommended Readings:

1. Dr. D.D. Basu, **Introduction to the Constitution of India, 20th Edition, LexisNexis Butterworths Wadhwa Nagpur and 2011. Print.**
 2. Madhav Khosla, **India's Founding Moment: The Constitution of a Most Surprising Democracy, 1st Edition, Harvard University Press, 2020. Print.**
 3. Granville Austin, **The Indian Constitution: Cornerstone of a Nation, Clarendon Press Oxford, 1966. Print.**
 4. Arun K Thiruvengadam, **The Constitution of India: A Contextual Analysis, Hart Publishing, 2017, Print.**
 5. M.P. Jain, **Indian Constitutional Law, 6th Edition, LexisNexis Butterworths Wadhwa Nagpur, 2011. Print.**
 6. Aakash Singh Rathore, **Amberkar's Preamble: A Secret History of the Constitution of India, Penguin Random House India, 2020.**
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Instructions for External Theory Paper Setter/Examiner:

1. The syllabi for external examination carries four units and it consists of three parts namely Part-A, B and C. Part-A is compulsory and it carries of three short questions of two marks each with at-least one question from each unit. Part-B carries four units with two questions of five marks each from each unit and a candidate is required to answer at-least one question from each unit. Part-C carries three questions of nine marks and a candidate is required to answer any one questions.

Yoga and Meditation

B-VAC-202

Total Credits:2

L-T-P

1-1-0

Total Marks: 50

External Theory Marks :35

Internal Assessment Marks: 15

Time allowed : 1:30 hrs

Course Outcomes:

CO1: Students will understand relation of yoga, health & mental health.

CO2: Students will understand the benefits & effects of Meditation.

CO3: Analyze the techniques and body posture to bring out healthy change.

CO4: Promote the awareness of health through yoga.

Unit I

Yoga for Health

1.1 concept of yoga: Meaning, definition of yoga.

1.2 History and development of yoga in India.

1.3 Surya Namaskar Steps, Mantra & its benefits

1.4 Meaning and importance of Astang yoga

1.5 Asanas : Uttanapadasana, Bhujangasana, Salabhasana, Naukasana, Vipareet Naukasana, Makarasana, Dhanurasana, Siddhasana, Svastikasana, Padmasana, Vakrasana, Ardhamatsyendrasana, Gomukhasana, Vajrasana, Supta-Vajrasana, Kurmasana, Uttana-Kurmasana, Padahastasana and Savasana.

1.6 Pranayama: Nadisodhana Anuloma-Viloma, Suryabedi, Ujjayi and sitkari.

Unit II

Meditation:

2.1 Concept of Meditation: Meaning, Definition and type of Meditation.

2.2 Different meditation techniques (Focused breathing, mindfulness, Walking meditation, Anxiety relief meditation etc.)

2.3 Benefits of meditation for mental and emotional well-being

2.4 Establishing a regular meditation practice

2.5 Mudra: Define and their benefits (Prana Mudra, Vayu Mudra, Gyan Mudra, Prithvi Mudra and Agni Mudra)

2.6 Bandh : Define and their benefits (Uddiyana bandha, Mula bandha and Jalandhara Bandha)

Recommended Readings:

1. Swami Satyananda Saraswati, Asana -Pranayama -Mudra -Bandha, Yoga Publications Trust, Munger, Bihar, India (2006)

2. Anil Karwande, Yoga, Amit Brothers Publications 200s4

For Paper Setter: - The paper must be strictly according to the prescribed syllabus. The paper shall be of 35 marks. The question paper shall be of 35 marks (Until I-20 Marks, Until II-15 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee.

- 941 -

Course Nomenclature: Cultural History of Haryana

Course Code B-VAC -204

Total Credits : 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks : 15

Time allowed : 1.30hrs

Course outcomes:

CO1: Understand the Cultural aspect of Haryana.

CO2: Understand the development of Harrapan civilisation in Haryana.

CO3: To make acquainted students with the knowledge of rich heritage of Haryana.

CO4: Understand the important architectural style and Art in Haryana.

Unit – I

1. Sources of History of Haryana
2. Harrapan civilization in Haryana
3. Vedic Civilization in Haryana
4. Art & Architecture in Haryana during ancient period

Unit – II

1. Society in medieval period
2. Art, Education & Language / dialect in Haryana
3. Cultural & Historical heritage in Haryana

Recommended Readings:

1. Buddha, Prakash, *Glimpses of Haryana*, Kurukshetra, 1967.
2. Kundu, C.L. and UdayShanker, *Education in Haryana Retrospect and Prospect*, Kurukshtra University, 1971.
3. Mittal, S.C. , *Haryana : A Historical Perspective*, Atlantic Publication, Delhi , 1986.
4. Handa ,Devender, *Sculptures From Haryana ,Iconography& Style* , Aryan Books International publication ,New Delhi,2006.
5. Nurullah, S. &J.P.Naik , *History of Education in India* ,London ,1951.
6. Phadke, H.A. , *Haryana : Ancient and Medieval*, Harman Publishing House , New Delhi,1990.
7. Singh, Chattar, *Social and Economic Change in Haryana*, National Book organisation, Delhi ,2004
8. Yadav, B.N.S. , *Society and Culture of Northern India in the 12th Century*,

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RakaPublication , Allahabad ,2012.

9. Yadav, K.C. ,*Haryana: Studies in History and Culture*,Kurukshetra,1968.
10. Singh ,Mahender ,*Haryana: ItihasEvamSanskriti*(Hindi), Vols. I &II ,Patak
Publisher &Distributor ,New Delhi,2023

Instructions for External Theory Paper Setter/Examiner:

1. Five questions shall be set in all, two questions from each unit candidate has to attempt 2 questions selecting at least one question from each unit,Each question shall carry 14 marks.
2. Question No 1 is, Compulsory and shall consist of seven short answer type Questions of 01mark each which shall be spread over the whole syllabus.

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Q43

Intellectual Property Rights

B-VAC-206

Total Credits : 2

External Theory Marks: 35

L - T - P

Internal Assessment Marks : 15

1 - 1 - 0

Time allowed : 1.30hrs

Course outcomes:

CO1: After completing this course, students will get sensitized about importance of IPRs and basic concepts of intellectual property

CO2: Students will be able to know the registration procedure, what constitute IP infringement and Remedies available in case of infringement.

CO3: Students will get knowledge of copyright and issue of plagiarism while writing their projects, assignments.

CO4: Students will also be able to know the concepts of license and assignments of IPRs

Unit I

Intellectual Property Rights- Definition, Essentials and Types of Intellectual Property, Transfer of Intellectual Property- License and Assignments, Patent- Definition, Types of Patents, Inventions which are not patentable. Registration of patent, Infringement and Remedies

Unit II

Copyright- Definition, Features of copyright, Subject matters of copyright, Registration, Exceptions under Copyright, Infringement and Remedies, Trademark and Geographic Indication of Goods. Objectives of National Intellectual Property Right Policy 2016

Recommended Readings:

1. Wadehra, B.L., Law relating to Intellectual Property Laws, 5th Edition, New Delhi: Universal Law Publishing Co., 2016. Print
2. Narayanan, P., Intellectual Property Laws, 3rd Edition, New Delhi: Eastern Law House. 2020. Print
3. Ahuja, V.K.. Intellectual Property Rights, 3rd Edition, Lexis Nexis, 2017. Print
4. Ganguli, Prabuddha. Intellectual Property Rights: Unleashing the Knowledge Economy, 1st Edition, Tata McGraw Hill Education, 2017. Print
5. Cornish, William and Llewelyn David. Intellectual Property: Patent, Copyright, Trademark and Allied Rights, 6th Edition, U.K.: Thomson, Sweet and Maxwell, 2007. Print
6. Tiwari, Rupinder and Bhardwaj Mamta. Intellectual Property: A Primer for Academia, Panjab University Chandigarh, 2021. E Book.
7. Study Material, Intellectual Property Rights- Law and Practice, Module 3, Elective paper 9.4, The Institute of Companies Secretaries of India, New Delhi, 2014. E Book

Course Nomenclature : Indian Heritage and Civilisation

Course Code B-VAC -207

Total Credits : 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks:15

Time allowed : 1.30hrs

Course outcomes:

CO1: Understand the distinctive features of Indian Culture.

CO2: Understand the features of various religious movements in Ancient India.

CO3: To make acquainted students with the knowledge of rich literary heritage of India .

CO4: Understand the link between culture & Heritage.

Unit-1

Indian Culture: An Introduction

1. Characteristics & Significance of Indian culture
2. Society in India through ages- Ancient period- varna and jati, family and marriage in India, position of women in ancient India, Contemporary period; caste system and communalism.
3. Religion and Philosophy in India: Ancient Period: Pre-Vedic and Vedic Religion, Buddhism and Jainism.

Unit-II

Indian Languages, Literature & Art

1. Evolution of script and languages in India: Brahmi Script & Kheroshti script.
2. Short History of the Sanskrit literature: The Vedas, The Brahmanas and Upanishads & Sutras, Epics: Ramayana, Mahabharata & Puranas.

A Brief History of Indian Arts and Architecture:

3. Indian Art & Architecture: Gandhara School and Mathura School of Art; Hindu Temple Architecture, Buddhist Architecture, Medieval Architecture and Colonial Architecture.

Recommended Readings:

1. Malik ,S.C. , *Understanding Indian Civilisation : A Framework of Enquiry*, Indian Institute of Advanced Study , Shimla,1975.
2. Mukerji ,D.P., *Sociology of Indian culture*, Rawat Publication ,Jaipur,1948.
3. Pandey ,Govind Chandra , *Foundations of Indian Culture*,Books & Books ,New Delhi ,1984.
4. Dutt,N.K., *Origin and Growth of caste in India* ,Calcutta ,Firm KLM,1986.
5. Majumdar ,R.C.(ed.)*The Vedic Age*, London.1951.
6. Basham ,A.L.,*Studies in Indian History and Culture*,Sambodhi Publication Pvt.Ltd.Calcutta ,1964

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7. Basham ,A.L.,*The Wonder That was India* , Sidwik and Jackson ,London ,1954.
8. ParmodChandra ,(ed,)*Studies in IndiantempleArchitecture*,New Delhi 1975.
9. Percy Brown ,*Indian Architecture :Buddhist and Hindu Periods* ,Bombay 1971.
10. V.S.Agarwala,*Indian Art* , PrithiviPrakashan ,Varansi ,1965.

Instructions for External Theory Paper Setter/ Examiner:Instructions for External Theory Paper Setter/Examiner:

1. Five questions shall be set in all; two questions from each unit. Candidate has to attempt 2 questions selecting at least one question from each unit ,Each question shall carry 14 marks.
- 2 Question No 1 is, Compulsory and shall consist of *seven* short answer type Questions of 01 mark each which shall be spread over the whole syllabus.



Indian Knowledge System

B-VAC-208

Total Credits : 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks : 15

Time allowed : 1.30hrs

Course outcomes:

CO1: To sensitize the students about Indian Knowledge System and Tradition

CO2: To understand and evaluate the culture, civilisation, art and creative practices, skills and values in ancient Indian system.

CO3: To analyze and interpret the enriched scientific Indian heritage.

Unit – I

Indian Knowledge System (IKS) : Introduction and Overview of Bharatavarsha, Organization, Historicity, Methodology and Framework of IKS; The Vedic Corpus: Introduction, classification and Sub-classification of Vedas; Philosophical Systems : Introduction, Development, Unique features, importance and type of Indian philosophical systems. Wisdom through the Ages and The Outreach of Indian Knowledge System.

Unit – II

Glimpses of Foundational Literature of Indian Civilisation : The Vedangas and Vedic Life: A Distinctive Features, Indian Language Sciences; Indian Mathematics, Astronomy, Health Sciences, Architecture and Town Planning, Fine Arts, Textiles, and Indian Polity and Economy, glimpses of classical Literature in Sanskrit and Other Indian Languages, Humanities and Social Sciences: Health, Wellness and Psychology; Governance and Public Administration

Recommended Readings:

1. Mahadevan, B., Bhat, Vinayak Rajat, Nagendra Pavana R.N. Introduction To Indian Knowledge System : Concepts And Applications. 3rd ed. New York: PHI, 2011. Print Book ISBN : 9789391818203.
2. Kapur K and Singh A.K (Eds) 2005). Indian Knowledge Systems, Vol. 1. Indian Institute of Advanced Study, Shimla. Tatvabodh of sankaracharya, Central chinmay mission trust, Bombay, 1995.
3. The Cultural Heritage of India. Vol.I. Kolkata:Ramakrishna Mission Publication, 1972.
4. Nair, Shantha N. Echoes of Ancient Indian Wisdom. New Delhi: Hindology Books, 2008
5. Dharampal, The Beautiful Tree: Indian Indigenous Education in the Eighteenth Century, Dharampal Classics Series, Rashtrottana Sahitya, Bengaluru, 2021.

Instructions for External Theory Paper Setter/Examiner:

The examiner shall set 8 questions covering whole syllabus of 7 marks each out of which a student will have to attempt 5 questions.

-947-

Artificial Intelligence

B-VAC-209

Total Credits: 2

L - T - P

1 - 1 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1.30hrs

Course outcomes:

CO1: Define and explain the fundamental concepts of AI

CO2: Understand real time applications of AI

CO3: Understand social and economic implications of AI

CO4: Analyzing the potential of AI in different domains

Unit – I

Definition and scope of AI, History of AI, comparison of AI with Human Intelligence, Machine Learning and its types, Neural Networks, Computer vision and Natural Language Processing (NLP)

Unit – II

Applications of AI in: Healthcare, Customer Service and Chat bots, Education, Finance, Transportation

Impact of AI on employment and workforce, AI and innovation, Emerging trends and future directions in AI

Recommended Readings:

1. S.Russell and P. Norvig, Artificial Intelligence: A Modern Approach, Prentice Hall, Latest Edition
 2. Tom Taulli, Artificial Intelligence Basics- A non Technical Introduction, Apress
-

Instructions for External Theory Paper Setter/Examiner:

Five questions will be set in all by the examiners taking two questions from each unit and one question containing short answer type questions from entire syllabus. Students will be required to attempt three questions, selecting one question from each unit. Question No.1 is compulsory which is from entire syllabus.

- 948 -

Disaster Management
Course Code: B-VAC-210

Total Credits: 02			External theory marks: 35
L	T	P	Internal Assessment Marks: 15
1	1	0	Time allowed: 1.30 hrs

Course Outcomes: After completing this course students will be able to:

CO1:	To provide basic conceptual understanding of disasters
CO2:	To provide basic understanding of types of disasters
CO3:	To understand approaches of Disaster Management
CO4:	To build skills to respond to disaster

Syllabus

Unit-I

Definitions- Hazard, Risk, Vulnerability, Disaster-Meaning, Nature Importance, Dimensions and scope of Disaster Management; Disaster Management Cycle, The Disaster Management Act 2005, Training and drills for disaster preparedness, Awareness generation program.

Unit-II

Natural and Man-made disasters, Natural disasters: Earthquakes, Floods, Landslide, Cyclones, Tsunami, Volcanoes, Avalanches, Global climate extremes. Man-made disasters: Terrorism, Gas leaks, Radiation leaks, Oil Spills, Forest Fires, Toxic waste Disposal.

Recommended readings

- Green Stephen, International Disaster Relief: Towards a Responsive systems. McGraw Hill Book Company, New York, 1980.
- Carter, W. Nick, Disaster Management: A Disaster Manager's Handbook. Asian Development Bank, Manila, 1991.
- Damon, P. Copola, Introduction to International Disaster Management. Butterworth Heineman, 2006.
- Rajan C.K. and Pandharinath N. 'Earth and Atmospheric Disaster Management: Nature and Manmade', S Publication, Hyderabad, 2009.
- Singh V., Aleya L., Singh M., and Singh K.K. 'Natural Disaster', APH Publishing Corporation New Delhi, 2010.
- Sahni P., Dhamija A. and Medury U. 'Disaster Mitigation: Experiences and Reflections', PHI; New title edition, 2011.
- Pandey, M. 'Disaster Management', Wiley India Pvt. Ltd., 2014.
- Murthy D.B.N. 'Disaster Management' Deep and Deep Publication PVT.Ltd. New Delhi, 2019.
- Sharma S.C. 'Disaster Management, Khanna Publishing House, 2021.

Instructions for External Theory Paper Setter/Examiner

The examiner is requested to set NINE questions in all by setting four questions from each unit and one compulsory question based on entire syllabus which will consist of objective type questions (7*1). All questions carry equal marks. The candidate is required to attempt five questions in all by selecting at least two questions from each unit. Question No.1 is compulsory.

- 949 -

Environmental Studies
Course Code: B-VAC-301

Total Credits: 02			External theory marks: 35
L	T	P	Internal Assessment Marks: 15
2	0	0	Time allowed: 1.30 hrs

Course Outcomes:

CO1:	Understand the basic concept of environmental studies and sustainable development
CO2:	Learn about the concept of ecosystem, various types of natural resources, value and conservation of biodiversity
CO3:	Learn about the different types of pollution, solid waste management, global environmental issues and environmental laws
CO4:	Know about the concept of population growth and its impacts on environment and environmental movements

Syllabus

Unit-I

Introduction to environmental studies	Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainable development.
Ecosystems	Definition, structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs, types of ecosystems
Natural resources: Renewable and Non-renewable Resources	Land degradation and soil erosion, Importance of forests, causes and impacts on deforestation on environment, use and over-exploitation of water, renewable and non-renewable energy sources.
Biodiversity and Conservation	Definition and its types, value of biodiversity, Endangered and endemic species of India. Threats and conservation of biodiversity

Unit-II

Environmental pollution	Types, causes, effects and controls; Air, water, soil and noise pollution, solid waste management, climate change, global warming, ozone layer depletion and acid rain.
Environmental Policies & Practices	Environment (Protection) Act, 1986, Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and control of Pollution) Act, 1974, Forest Conservation Act-1980 and Wildlife Protection Act-1972
Human Communities and the Environment	Impacts of Population growth on environment and human health, Role of Indian and other religions and cultures in environmental conservation and environmental movements.

Recommended readings

- Bharucha, E. A Textbook of Environmental Studies for Undergraduate Courses, Orient Blackswan Pvt Ltd. 2021.
- Kaushik, A & Kaushik, C.P. Perspectives in Environmental Studies. New Age International Pvt Ltd, New Delhi. 2022
- Goswami, P., Mandal, J. & Singh, S. A Textbook on Environmental Studies, Ashok book stall, Assam. 2022
- Basu, M. & Xavier Savarimuthu, S.J. Fundamentals of Environmental Studies. Cambridge University Press. 2017
- Singh, R.P. & Islam, Z. Environmental Studies. Concept Publishing Company. 2012

Instructions for External Theory Paper Setter/Examiner

The examiner is requested to set Nine questions in all i.e., One Compulsory Objective Type Question (7x1) without any choice, equitably distributed over the whole syllabi and Four Questions from Each Unit equitably spread over the concerned unit. The students will have to attempt Five questions in all, selecting two questions from each unit. All questions carry equal marks.

- 9450 -

Climate Change

Course Code: B-VAC-401

Total Credits: 02			External theory marks: 35
L	T	P	Internal Assessment Marks: 15
1	1	0	Time allowed: 1.30 hrs

Course Outcomes: After completing this course students will be able to:

CO1:	Understand about the origin, structure and importance of earth's atmosphere
CO2:	Learn about the causes, concept and factors responsible for climate change
CO3:	Learn about various impacts of climate change on human and environment
CO4:	Acquire knowledge about mitigation strategies adopted worldwide to combat climate change

Syllabus

Unit-I

Weather and climate; origin, composition and structure of atmosphere, basic atmospheric properties. Greenhouse gases – sources and trends in GHGs emission, role of aerosol, ozone and trace gases; Global warming, Climate change, natural and human induced climate change.

Unit-II

Impact of climate change: weather extreme, Sea level rise, Coral bleaching, Extinction risk of temperature sensitive species, melting of snow, ice and glaciers.
Mitigation strategies for global warming; carbon sequestration, role of forests in carbon sequestration; Kyoto protocol, IPCC.

Recommended readings

- Miller Jr., G.T. 'Environmental Science: Working With the Earth', Wadsworth Publishing Company, Belmont, California, 1997.
- Steffen, W., A. Sanderson, P. D. Tyson, J. Jager, P. M. Matson, B. Moore, III, F. Oldfield, K. Richardson, H. J. Schnellhuber, B. L. Turner, II, and R. J. Wasson. 'Global change and the Earth system: a Planet under Pressure', Springer-Verlag, New York, New York, USA, 2004.
- Botkin, D.B. and E.A. Keller. 'Environment Science: Earth as a Living Planet', John Wiley & Sons Inc., New York, 2004.
- Philander, S.G. (ed.). 'Encyclopedia of global warming and climate change. 2nd edition, SAGE Publications, Inc., California, 2008.
- Singh, J.S., Singh, S.P. and Gupta, S.R. 'Ecology, Environment and Resource Conservation', S. Chand Publishing, New Delhi, 2015.
- Kaushik, A & Kaushik, C.P. Perspectives in Environmental Studies. New Age International Pvt Ltd, New Delhi. 2022.

Instructions for External Theory Paper Setter/Examiner

The examiner is requested to set NINE questions in all by setting four questions from each unit and one compulsory question based on entire syllabus which will consist of objective type questions (7*1). All questions carry equal marks. The candidate is required to attempt five questions in all by selecting at least two questions from each unit. Question No.1 is compulsory.

- 951 -

Ecology and Literature

Course Code: B-VAC-402

Total Credits: 02			External theory marks: 35
L	T	P	Internal Assessment Marks: 15
1	1	0	Time allowed: 1.30 hrs

Course Outcomes: After completing this course students will be able to:

CO1:	Inculcate consciousness towards the <u>problematic situation</u> of Environment
CO2:	Think critically towards ecological crisis and the need for reducing carbon footprint
CO3:	Develop ecological consciousness leading to more responsible ecological behavior
CO4:	View environmental concerns as rose through plays, stories and poems
Syllabus	
Unit-I	
Negotiating environmental issues creatively	
• William Wordsworth: 'In April Beneath The Scented Thorn'	
• Rabindranath Tagore: 'The Waterfall'	
• Gieve Patel: 'On Killing a Tree'	
Unit-II	
Eco-critical literary representations	
• Mary Oliver: 'Sleeping in the Forest'	
• AK Ramanujan: 'A Flowering Tree'	
• Mamang Dai: 'Small Towns and the River'	
Recommended readings	
• Akhter, Tawhida, and Ahmad Bhat, Tariq. Literature and Nature. United Kingdom, Cambridge Scholars Publishing, 2022.	
• Shiva, Vandana. 'Development, Ecology and Women', Staying Alive: Women Ecology and Development. India: Zed Books, 1988.	
• Carl, Safina. Prologue & Chapter 1, Beyond Words: What animals think and feel, Souvenir Press, 2015.	
• Garrard, Greg. Ecocriticism. United Kingdom: Taylor & Francis, 2011.	
• Wohlleben, Peter. The Hidden Life of Trees: What They Feel, How They Communicate— Discoveries from a Secret World. India: Penguin Books Limited, 2016.	
Instructions for External Theory Paper Setter/Examiner	
The examiner is requested to set NINE questions in all by setting four questions from each unit and one compulsory question based on entire syllabus which will consist of objective type questions (7*1). All questions carry equal marks. The candidate is required to attempt five questions in all by selecting at least two questions from each unit. Question No.1 is compulsory.	

- 952 -

WOMEN RIGHTS AND SOCIETY

B-VAC-403

Total Credits : 2

External Theory Marks: 35

L - T - P

Internal Assessment Marks : 15

2 - 0 - 0

Time allowed : 1:30hrs

Objective: To provide an understanding of various Women Rights and privileges provided to Indian Women and to give the students in-depth understanding of the perspectives and position of Women in different eras.

Course Outcomes:-

After completion of the course the students will be able to:

- Co1. Basic understanding of existence of various constitutional and political rights. Idea about the laws related to family and marriage, gender based violence and work.
Co2. Develop an intersectional understanding of various perspectives and positions of women from historical to modern era.

UNIT I:

RIGHTS OF WOMEN IN INDIA

Constitutional Rights : Indian constitution relating to women – Fundamental rights – directive principles of state policy – rights to equality – rights against exploitation – cultural and educational rights – the right to constitutional remedy.

Political Rights: Political Rights of women in India – Electoral process – women as voters, candidates and leaders – pressure group – 73rd and 74th amendment and representation of women in local self government – women in Rural and urban local bodies – Reservation of women

Laws related to family and marriage:

Rights inside the family: Rights related to abortion (Medical termination of pregnancy) Domestic violence, Dowry prohibition Act, family court act 1986. Indian penal code, 1860 – Bigamy (Sec - 494), Adultery (Sec- 497), Rape (Sec- 375,376), Cruelty to Wife (Sec – 498-A); Information in Police, Protection in cases of Arrest and Detention of Women in Police Lockup.

Laws related to gender based violence and work :

Laws against violence & sexual crimes: eve teasing, rape, indecent representation of women, abduction and kidnapping – Immoral trafficking –sexual harassment at work place and visakha Judgment.

UNIT II:

WOMEN IN INDIAN SOCIETY

A Historical Perspective, Early Vedic, Vedic, Colonial and Modern Periods, Position of Women in Contemporary India and Haryana

REFERENCES

1. Anjani Kant, 2008, Women and the Law, A.P.H Publishing Corporation, NewDelhi.
2. Anu Saksena, 2004, Gender and Human Rights, Shipra, New Delhi
3. Arunima Baruah, 2004, The Soft Target-Crime Against Women, Kilaso Books, New Delhi
4. Dr.Dalbir Bharathi, 2008, Women and the law, A.P.H Publishing Corporation, NewDelhi.
5. P.D. Kaushik, 2007, Women Rights- Access to Justice, Bookwell, New Delhi.
6. IAWS, 1994, The State and The Women's Movement in India, IAWS, Delhi
7. National Commission for Women, 2001, Gender Equity-Making it Happen – Strategies and Schemes of Government of India, NCW, New Delhi

Course code – B-VAC-404

Course Title- Indian Traditional Sports

Total Credits :- 2

Total Marks-50

L - T - P

1 1 0

External Marks-35

Internal Marks-15

Duration - 1.5 hr.

Course Outcomes.

C O 1. This course teaches about introduction and concept about traditional sports.

C O 2. To understand the historical development of sports.

C O 3. Will help the students to promote healthy way of living.

Unit – I

1 . Ancient wisdom in traditional sports of india.

1.1 History of traditional sports.

1.2 Ancient and traditional games of india.

1.3 Aims and objectives of ancient sports.

Unit II

2. Concept and Objectives of Traditional sports.

2. 1. Kabaddi, Ball badminton, Martial Arts, Kho-Kho,

1.2 Boat race, Mallakhamb, Polo, Shatranj, Teerandaji.

1.3 Kusti- Pehlwani, Gilli Danda

Recommended Readings :- Bhartiya Paramprk khel by Kanishk Pandy, The Indian Traditional games: A study of the significance and Evolution of Indian Traditional games by Dr. Jagadeesh Pillai, Mapping Traditional games and sports by Mihir kumar, Ancient Indian sports A Historical Analysis journal by Lakhveer kaur and Rajesh Chander.

For paper Setter :- The paper must be strictly according to the prescribed syllabus. The paper shall be of 35 marks. The question paper shall be of 35 marks (Unit I—20 Marks, Unit II-15 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

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Gurukul Tradition and Philosophy of Bhagat Phool Singh
B-VAC-405

Total Credits: 02
L - T - P
2 - 0 - 0

External Theory Marks: 35
Internal Assessment Marks: 15
Time Allowed: 90 Minutes

Course Outcomes:

- CO1: Acquainting Learners with the Salient Tenets of Gurukul Tradition and its Relevance
CO2: Understanding Bhagat Phool Singh Ji's Journey from an Idea to the Institution
CO3: Enabling Learners to Practice the Philosophy of Bhagat Ji in the Contemporary Context
CO4: Understanding the Concept of Societal Growth through Community Engagement
-

Unit – I

- ✦ The History of Gurukul *Parampara* from Vedic Times to the Contemporary
- ✦ Women Education and Gurukul *Parampara*
- ✦ Gurukul Tradition and Modern Educational Systems
- ✦ Gurukul Tradition and the Global Context

Unit – II

- ✦ Critical Biography of Bhagat Phool Singh Ji: Idea to Institution
- ✦ Arya Samaj and Bhagat Phool Singh Ji: Social Context
- ✦ Bhagat Phool Singh Ji's Philosophical Tenets: *Jan Bhagidari* (community participation), *Upwas* (fasting), *Daan* (Philanthropy), *Jan Andolan* (mass movement), Experiential Education, *Ahimsa* (non-violence) Etc.
- ✦ Bhagat Phool Singh Ji and Women Empowerment Through Holistic Education

Recommended Readings:

1. आचार्य विष्णुमित्र विद्यामार्तण्ड, *अमर हुतात्मा श्री भक्त फूल सिंह जी का जीवन चरित्र*, 4th Edition, प्रकाशक, सचिव, महासभा गुरुकुल भैसवाल तथा कन्या गुरुकुल खानपुर कलां (मुद्रक आचार्य प्रिंटिंग प्रेस, दयानन्द मठ, गोहाना रोड, रोहतक), 1996, Print.

Instructions for External Theory Paper Setter/Examiner:

- ✦ The question paper (to be set in Haryanvi, Hindi & English) shall consist of 05 questions (02 & 03 questions from Unit I & Unit II respectively) of 07 marks each.
- ✦ The questions are to be of critical nature requiring the learner to contextualise Gurukul tradition and the philosophical concepts of Bhagat Phool Singh Ji in the contemporary educational paradigms.
- ✦ The examinee can write answers in any of the three languages i.e. Haryanvi, Hindi and English.
- ✦ The internal assessment is to be based on presentations made by the concerned learners.

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गुरुकुल परंपरा और भगत फूल सिंह जी का दर्शन
बी-वीएसी-405

कुल क्रेडिट: 02
एल-टी-पी
1-0-0

बाहरी सिद्धांत अंक: 35
आंतरिक मूल्यांकन अंक: 15
अनुमत समय: 90 मिनट

पाठ्यक्रम परिणाम:

- CO1: शिक्षार्थियों को गुरुकुल परंपरा के मुख्य सिद्धांतों और इसकी प्रासंगिकता से परिचित करवाना
CO2: भगत फूल सिंह जी की एक विचार से संस्थान तक की यात्रा को समझना
CO3: शिक्षार्थियों को समसामयिक संदर्भ में भगत जी के दर्शन को प्रयोग में लाने में सक्षम बनाना
CO4: सामुदायिक सहभागिता के माध्यम से सामाजिक विकास की अवधारणा को समझना

इकाई - I

- वैदिक काल से समकालीन तक गुरुकुल परम्परा का इतिहास
- महिला शिक्षा एवं गुरुकुल परम्परा
- गुरुकुल परंपरा और आधुनिक शैक्षिक प्रणालियाँ
- गुरुकुल परंपरा और वैश्विक संदर्भ

इकाई - II

- भगत फूल सिंह जी की जीवनी: विचार से संस्थान तक
- आर्य समाज और भगत फूल सिंह जी: सामाजिक संदर्भ
- भगत फूल सिंह जी के दार्शनिक सिद्धांत: जन भागीदारी, उपवास, दान, जन आंदोलन, अनुभवात्मक शिक्षा, अहिंसा आदि
- भगत फूल सिंह जी और समग्र शिक्षा के माध्यम से महिला सशक्तिकरण

अनुशासित पाठ्य सामग्री:

1. आचार्य विष्णुमित्र विद्यामार्तण्ड, *अमर हुतात्मा श्री भक्त फूल सिंह जी का जीवन चरित्र*, चतुर्थ संस्करण, प्रकाशक, सचिव, महासभा गुरुकुल भैसवाल तथा कन्या गुरुकुल खानपुर कला (आचार्य प्रिंटिंग प्रेस, दयानन्द मठ, गोहाना रोड, रोहतक), 1996, मुद्रण।

बाह्य सिद्धांत पेपर सेटर/परीक्षक के लिए निर्देश:

- प्रश्न पत्र (हरियाणवी, हिंदी और अंग्रेजी में सेट किया जाएगा) में 07 अंकों के 05 प्रश्न (क्रमशः इकाई I और इकाई II से 02 और 03 प्रश्न) होंगे।
- प्रश्न विचारशील प्रकृति के होने चाहिए, जिसके लिए शिक्षार्थी को गुरुकुल परंपरा और भगत फूल सिंह जी की दार्शनिक अवधारणाओं को समकालीन शैक्षिक प्रतिमानों में प्रासंगिक बनाना होगा।
- परीक्षार्थी हरियाणवी, हिंदी और अंग्रेजी यानी तीन भाषाओं में से किसी एक में उत्तर लिख सकता है।
- आंतरिक मूल्यांकन संबंधित शिक्षार्थियों द्वारा की गई प्रस्तुतियों पर आधारित होना चाहिए।

Sustainable Development Goals

Course Code: B-VAC-406

Total Credits: 02			External theory marks: 35
L	T	P	Internal Assessment Marks: 15
1	1	0	Time allowed: 1.30 hrs

Course Outcomes: After completing this course students will be able to:

CO1:	Understand about the concept, need and importance of sustainable development
CO2:	Learn about the significance of different i.e. 17 sustainable development goals
CO3:	Will be able to advocate about the concept of 3R i.e. reduce, reuse and recycle
CO4:	Will be able to conceive the concept of sustainability and contribute effectively in society for achieving SDGs

Syllabus

Unit-I

Sustainable Development: Meaning, Concept, Definition, History and Components; Ecology and Environmental conservation, Biodiversity loss and ecological imbalance; the role of higher education in sustainable development; Agenda 21 (1992); The Millennium Development Goals; Sustainable Development Goals. UNFCCC, COP, IPCC. Challenges to Sustainable Development

Unit-II

Sustainable Development Goals: No Poverty, Zero Hunger, Good Health and Well Being, Gender Equality, Decent work and Economic Growth, Industry, Innovation and Infrastructure, Reduce Inequalities: Goals: Clean water and Sanitation, Affordable and Clean Energy, Sustainable Production and Consumption, Climate Action, Life Below water, Life on Land, Peace Justice and Strong Institutions, Partner ships for the Goals.

Recommended readings

- Pezzey, J. Economic Analysis of Sustainable Growth and Sustainable Development'. Environment Department workingpaper No.15, The World Bank, 1989.
- Pearce, D.W. and Warford, J.J. World without End: Economics, Environment, and Sustainable Development. Oxford: Oxford University Press, 1993.
- Reid, D. Sustainable Development. An Introductory Guide, London: Earth scan Publications, 1995.
- Somnath Hazra and Anindya Bhukta. Sustainable Development Goals. Springer Cham, 2020.
- Somnath Hazra and Anindya Bhukta. SustainableDevelopmentGoals- An Indian Perspective, Springer Cham, 2022.
- William M. Lafferty and Oluf Langhelle. Towards Sustainable Development, Palgrave Macmillan, 1999.
- G. Arjun, Sarkar A. and others: Environmental Issues & Sustainable Development, Notion India Press, Chennai, 2019.
- Ahlawat, A.: Sustainable development Goals, Notion India Press, Chennai, 2019.
- Ossewarde, M.J.: Introduction to Sustainable Development, Sage Publication, New Delhi, 2018.
- Mishra, J.: Growth with Sustainability, Notion India Press, 2018

Instructions for External Theory Paper Setter/Examiner

The examiner is requested to set NINE questions in all by setting four questions from each unit and one compulsory question based on entire syllabus which will consist of objective type questions (7*1). All questions carry equal marks. The candidate is required to attempt five questions in all by selecting at least two questions from each unit. Question No.1 is compulsory.

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Universal Human Values

B-VAC-407

Total Credits : 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks : 15

Time allowed : 1.30hrs

Course outcomes:

CO1: To introduce and inculcate value education.

CO2: To understand and develop harmony at various levels.

CO3: To recognise the implications of right understanding in life and profession.

Unit – I

Introduction to Value Education: Understanding Value Education, Self-exploration as the Process for Value Education, Continuous Happiness and Prosperity – the Basic Human Aspirations, Right Understanding, Relationship and Physical Facility, Happiness and Prosperity – Current Scenario, Method to Fulfil the Basic Human Aspirations. **Harmony in the Human Being:** Understanding Human being as the Co-existence of the Self and the Body, distinguishing between the Needs of the Self and the Body, The Body as an Instrument of the Self, Understanding Harmony in the Self Lecture, Harmony of the Self with the Body, Programme to Ensure self-regulation and Health. **Harmony in the Family and Society:** Harmony in the Family – the Basic Unit of Human Interaction, Values in Human-to-Human Relationship, 'Trust' – the Foundational Value in Relationship, 'Respect' – as the Right Evaluation, Understanding Harmony in the Society, Vision for the Universal Human Order

Unit – II

Harmony in the Nature (Existence): Understanding Harmony in the Nature, Interconnectedness, self-regulation and Mutual Fulfilment among the Four Orders of Nature, Realizing Existence as Co-existence at All Levels, The Holistic Perception of Harmony in Existence. **Implications of the Holistic Understanding** – a Look at Professional Ethics: Natural Acceptance of Human Values, Definitiveness of (Ethical) Human Conduct, A Basis for Humanistic Education, Humanistic Constitution and Universal Human Order, Competence in Professional Ethics, Holistic Technologies, Production Systems and Management Models-Typical Case Studies, Strategies for Transition towards Value-based Life and Profession

Recommended Readings:

1. R R Gaur, R Asthana, G P Bagaria, A Foundation Course in Human Values and Professional Ethics, 2nd Revised Edition, Excel Books, New Delhi, 2019. ISBN 978-9387034-47-1.
2. The Teacher's Manual R R Gaur, R Asthana, G P Bagaria, A Foundation Course in Human Values and Professional Ethics – Teachers Manual, 2nd Revised Edition, Excel Books, New Delhi, 2019

Instructions for External Theory Paper Setter/Examiner :

The examiner shall set 8 questions covering whole syllabus of 7 marks each out of which a student will have to attempt 5 questions.

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Life Skills from Bhagwat Gita B-VAC-408

Total Credits : 2

L - T - P

2 - 0 - 0

External Practical Marks: 35

Internal Assessment Marks : 15

Time allowed : 1.30hrs

Course outcomes:

CO1: To understand the Indian and western philosophy of self, universe, personality and life.

CO2: To understand and demonstrate application of Lessons of Shrimad Bhagwat Geeta in life situations.

CO3: To apply the knowledge based upon Moral, Social Values and to realize the Karma Yoga.

Unit – I

An introduction to Shrimad Bhagavad Gita and its relevance in the contemporary world. Basic introduction to eighteen Chapters, Current Challenges in Society, Governance and Business Management. Concept of Spirituality. Spirituality and religion.

Concept of Sharir, Mana, Buddhi, Chit, Ahankar, Sankhya Darshan and concept of universe, Concept of Aatma, Dwait evam Adwait darshan, Listening skills, The Notion of Meaningful Work, Axioms of Work & Performance, Karma Yoga, Nishkam Karma, Concept of devotional Service, the Opulence of the Absolute, Detachment from action and results for better performance.

Unit – II

Self-Management lessons from Shrimad Bhagavad Gita, Mind as a key player in an individual, Meditation as a tool for self-management, Concept of Ashtang Yoga, Role of Yoga in addressing stress & anxiety, Self-Management by understanding the world within, State of Sat Chit Anand. Personality and Trigunas: Sat, Tamas and Rajas, Self-Actualisation Perspectives on Leadership and Work.

Note: Latest edition of readings may be used. The list of cases, references and relevant articles will be provided by the faculty in the class.

Recommended Readings:

1. The Bhagavad Gita with The Commentary of Sri Sankaracharya: Samata Books/Chennai
2. The Bhagavad Gita with Text, Translation and Commentary in the Words of SriAurobindo (Paperback) : Sri Aurobindo Divine Life Trust
3. Shree Mad Bhagwat Geeta : Bhakti Vedant Book Trust

Instructions for External Theory Paper Setter/Examiner :

The practical examination will be conducted by a board of two examiners i.e. one External and one Internal. The assessment shall be done on the basis of life related case studies and viva voce etc. The external and internal examiner shall be appointed by the chairperson of the department concerned.

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Bhagat Phool Singh, Mahila Vishvavidyalaya, Khanpur Kalan, Sonapat, Haryana

Established by the State Legislature Act XIII of 2006 ('B++' Grade NAAC Accredited)

Schemes and Syllabus of B. A. Geography

4 Year Multidisciplinary Course

SEMESTER 1st

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-101	DSC	Geography of India	3	0	2	4	20	10	50	20	100
2.	B-GEO-102	MIC	Geography of Haryana	2	0	0	2	15		35		50
3.	B-GEO-103	MDC	Geography in Everyday Life	3	0	0	3	25		50		75

SEMESTER 2nd

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-201	DSC	Physical Geography-I	3	0	2	4	20	10	50	20	100
2.	B-GEO-202	MIC	Settlement Geography	2	0	0	2	15		35		50
3.	B-GEO-203	MDC	Human Geography	3	0	0	3	25		50		75

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[Signature]
 Chairperson
 Department of Geography
 B.P.S.M.V. Khanpur Kalan, Sonapat


SEMESTER 3rd

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-301	DSC	Physical Geography-II	3	0	2	4	20	10	50	20	100
2.	B-GEO-302	MIC	Oceanography	4	0	0	4	30		70		100
3.	B-GEO-303	MDC	Social Geography	3	0	0	3	25		50		75

SEMESTER 4th

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-401	DSC	Population Geography	3	0	2	4	20	10	50	20	100
2.	B-GEO-402	MIC (VOC)	Agriculture Geography	4	0	0	4	30		70		100

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 Chairperson
 Department of Geography
 B.P.S.M.V. Khanpur Kalan Sanipati


SEMESTER 5th

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-501	DSC	Economic Geography	3	0	2	4	20	10	50	20	100
2.	B-GEO-502	MIC (VOC)	Geography of Tourism	4	0	0	4	30		70		100

SEMESTER 6th

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-601	DSC	Environment Geography	3	0	2	4	20	10	50	20	100
2.	B-GEO-602	MIC	Environmental Conservation	4	0	0	4	30		70		100
3.	B-GEO-603	MIC (VOC)	Transport Geography	4	0	0	4	30		70		100

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 Chairperson
 Department of Geography
 B.P.S.M.V. Khanpur Kalyan Singh

SEMESTER 7th

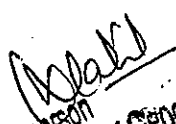
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-701	DSC-G1	Geographical Thought	4	0	0	4	30		70		100
2.	B-GEO-702	DSC-G2	Urban Geography	4	0	0	4	30		70		100
3.	B-GEO-703	DSC-G3	Introduction to Remote Sensing	2	0	4	4	15	15	35	35	100
4.	B-GEO-704	DSC-G4	Political Geography	4	0	0	4	30		70		100
5.	B-GEO-705	DSC-G5	Geography of Hazard Management	3	0	2	4	30		70		100
6.	B-GEO-706	MIC	Soil Geography	4	0	0	4	30		70		100

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Udall
 Chairperson
 Department of Geog.
 B.P.S. vi.V. Khanpur

SEMESTER 8th (UG with Hon's)


Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-801	DSC-G1	Research Methodology in Geography	3	0	2	4	20	10	50	20	100
2.	B-GEO-802	DSC-G2	Regional Planning in India	4	0	0	4	30		70		100
3.	B-GEO-803	DSC-G3	Fundamentals of Biogeography	4	0	0	4	30		70		100
4.	B-GEO-804	DSC-G4	Watershed Management in Geography	3	0	2	4	20	10	50	20	100
5.	B-GEO-805	DSC-G5	Project/Dissertation	4	0	0	4	30		70		100
6.	B-GEO-806	MIC	Resource Geography of India	4	0	0	4	30		70		100


 Chairperson
 Department of Geography
 B.P.S.M.V. Khanpur

SEMESTER 8th (Hon's with Research)

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	T	P		Internal		External		Total
								Th.	Pr.	Th.	Pr.	
1.	B-GEO-801	DSC-G6	Research Methodology in Geography	3	0	2	4	20	10	50	20	100
2.	B-GEO-802	DSC-G7	Watershed Management in Geography	3	0	2	4	20	10	50	20	100
3.	B-GEO-803	MIC	Gender Geography	4	0	0	4	30		70		100
4.	B-GEO-804	Dissertation	Dissertation	12	0	0	12					300

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 Chairperson
 Department of Geography
 ...v. Khanpur

Geography of India

Course Code – B-GEO-101

Total Credits – 4

External Theory Marks: 50

L-T-P

External Practical Marks: 20

3-0-2

Internal Assessment Theory Marks: 20

Internal Assessment Practical Marks: 10

Course Outcomes:

After completing this course, the learner will be able to:

1. Understand the Physiographic and climatic conditions of India.
 2. Enrich knowledge about resources, agriculture and Transport aspects of the country.
 3. Acquire knowledge about different soil types in India and need for their conservation.
-

Unit 1

1. Location, Extent and Physiographic Regions of India.
2. Climate of India: Influencing Factors and Monsoon.

Unit 2

3. Soil Types in India: Major Soil groups, their distribution and need for conservation.
4. Indian Agriculture and Green Revolution. Production of Wheat, Rice, Sugarcane and Tea.

Unit 3

5. Distribution of Metallic and Non-Metallic Minerals: Iron, Mica and Bauxite.
6. Power and Energy Resources: Coal, Hydro and Petroleum.

Unit 4

7. Industries: Cotton Textile, Iron & Steel and Sugar. Industrial Regions in India.
8. Modes of Transport and Communication.

Recommended Readings:

1. **Diwaker Ashok**, (2013) Bharat ka Bhugol avm Prayogatamk Bhugol, Jyoti Book P. Ltd.
Karnal

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Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan, Sonapat

2. **Hussain, Mazid**(2008) Geography of India, Tata Mcgraw Hill Publication, Delhi
3. **Khullar, D. R.** (2000) India: A Comprehensive Geography, Kalyani Publishers, New Delhi.
4. **Singh, R. L.** (1971) India: A Regional geography, National Geographical Society of India, Kalyani Publications, Varansi.
5. **Singh, Jagdish** (2003) A Comprehensive and Systematic Geography, Gyanodaya prakashan, Gorakhpur, 2nd Edition.
6. **Singh, Surender and Saroha Jitender** (2021) Geography of India, GKP Access Publication, 2nd Edition (both Hindi and English).

Instructions for External Theory Paper Setter/Examiner:

Time Allowed: 3 Hours

There will be 9 questions in all. Question 1 is compulsory comprising of five parts from entire syllabus (two marks for each sub part). There will be 8 long questions, two from each unit. The candidate has to answer four out of these questions, selecting at least one question from each unit. All questions carry equal marks.

Practical

Cartographic Techniques-I

Course Outcomes:

After completing this course, the learner will be able to:

1. Understand the Cartographic Technique scale.
2. Learn about the diagrams i. e. bars.

Practical Record: A project file consisting exercises on the below mentioned themes: -

1. Scale: Definition, methods of representation and its types (6 Exercise)
2. Representation of agricultural or industrial data through Bar diagrams: Simple bar, multiple bar, compound bar, line and bar diagram (4 exercises).

Recommended Readings:

1. **Singh, L. R. & Singh, R.** (2006) Practical Geography, Prayag Pustak Bhawan, Allahabad.
2. **Sharma, J. P.** Prayogatak Bhugol, Rutogy Publications, Meerut.
3. **Singh, Gopal** (1995) Map Work and Practical Geography, Vikas Publishing House, New Delhi.

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W. Lalit
Chairperson
Department of Geography
B.P.S.M.V. Kharipur Kalz

4. **Khullar, D. R.** (2000) Essentials of Practical Geography, New academic Publishing Co.
Mai Hisar Gate, Jullandhar.
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Instruction for External Practical Examiner:

Time Allowed: 3 Hours

There will be three questions in all and candidate has to attempt any two exercises.

Distribution of marks for evaluation: Exercise = 10 Marks

File Record = 5 Marks

Viva-Voce = 5 Marks

- 969 -

(Signature)
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan, Jullandhar

Geography of Haryana

Course Code – B-GEO-102

Total Credits – 2

External Theory Marks: 35

L – T - P

Internal Assessment Marks: 15

2 – 0 -0

Time Allowed: 1:30 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Understand the Physiographic and climatic conditions of Haryana.
2. Acquire knowledge about different types of soils of Haryana and need for their conservation.
3. Enrich knowledge about resources, agricultural and Transport aspects of the state.
4. Understand the mapping of administrative, physical and infrastructural characteristics of Haryana.

Unit 1

1. Evolution of the state, Location, Extent and Administrative Divisions.
2. Relief and Physiographic regions.
3. Climate, Drainage System and Soils.

Unit 2

4. Impact of Green Revolution in Haryana, distribution of major crops: Wheat, Rice, Sugarcane and Cotton.
5. Trends of Urbanisation in Haryana; Distribution of Urban Population.
6. Transport Network in Haryana: Roadways and Railways.

Recommended Readings:

1. **Census of India** (1981) Regional Division in Haryana.
2. **Census of India** (2001) Administrative Atlas of Haryana.
3. **Singh, Jasbir** (1976) Agricultural Geography of Haryana, Vishal Publishers, Kurukshetra.
4. **Singh, Jagjeet**, Haryana Digdarshan, Arihant Publications ltd. India.
5. **Vidyapeeth Times**, Haryana General Knowledge, Amar Ujala Publications, Noida.
6. **Khullar, D. R.** Bharat aur Haryana ka Bhugol.

— 970.

[Signature]
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kal:
.....patl

7. **Singh, Mandeep and Kaur Harvinder** (2004) Economic Development of Haryana, Deep & Deep Publications pvt. Ltd. India.

Instructions for External Theory Paper Setter/Examiner:

There will be 7 questions in all. Question 1 is compulsory comprising of seven sub-parts covering entire syllabus. (one mark for each sub part) to be answered in 10-15 words. There will be 6 long questions, three from each unit. The candidate has to answer four long questions selecting at least two question from each unit. All questions carry equal marks.

-971-

W. Lalit
Chairperson
Department of Geography
G. P. S. Noida
G. P. S. Noida

Geography in Everyday Life

Course Code – B-GEO-103

Total Credits – 3

External Theory Marks: 50

L – T - P

Internal Assessment Marks: 25

3 - 0 - 0

Time Allowed: 2 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Understanding the geographical phenomena observed in its surroundings.
2. Enrich skills about various elements that compose the surrounding environment.
3. Understand the Planet Earth and its Motions.

Unit 1

1. Solar System: Location, shape and uniqueness of earth.
2. Formation of Day/night, Seasons and Various movement of Earth
3. Continents and Oceans.

Unit 2

4. Latitude, Longitude, Time zones and International dateline.
5. Atmosphere: structure and composition.

Unit 3

6. Elements of weather and climate and its determinants.
7. Types of Vegetation in world.

Recommended Readings:

1. **NCERT** (2017), The Earth: Our Habitat, National Council for Education, Research and Training, Sri Aurobindo Marg, New Delhi.
2. **Ojha, S. K.** (2022) World Geography, Baudhik Prkashan, Prayagraj, UP.
3. **Husain Majid** (2018) Indian and World Geography, McGraw Hill Education(India) Private Limited Chennai.

- 972 -

M. Malik
Chairperson
Department of Geography
B.P.S. M.V. Kanpur K.

Instructions for External Theory Paper Setter/Examiner:

There will be 7 questions in all. Question 1 is compulsory comprising of seven parts spread over entire syllabus (two marks for each sub part). There will be 6 long questions, two from each unit. The candidate has to answer three long questions, at least one question from each unit.

933
Chairperson
of Geography
Committee

Physical Geography-I

Course Code – B-GEO-201

Total Credits – 4

External Theory Marks: 50

L-T-P

External Practical Marks: 20

3-0 -2

Internal Assessment Theory Marks: 20

Internal Assessment Practical Marks: 10

Course Outcomes:

1. To make the students understand about the physical Phenomenon of Earth (Interior & Exterior).
 2. To spread awareness about the landforms produced by different denudational processes.
 3. To make the students understand about climatic change.
-

Unit 1

1. Definition, Nature, Scope of physical geography and Geomorphology; Fields of Geomorphology.
2. Interior of the Earth, Geological Time Scale, Rocks.

Unit 2

3. Earth Movements: Earthquakes and Volcanos.
4. Theory of Isostasy: Wegner's Theory of Continental Drift, Plate Tectonic Theory.

Unit 3

5. Weathering: Causes and its types.
6. Mass-Movements: Causes, its types and impacts.

Unit 4

7. Concept of Cycle of Erosion: Cycle of Erosion by W. M. Davis and Penk.
8. Process of Wind, River, Underground, Glaciers and Sea Waves.

- 974

W. M. Davis
Chairperson
Department of Geography
B. ... Manipal ...

Recommended Readings:

1. Sharma H. S. Perspective and Concept in Geomorphology, New Delhi 1980.
 2. Singh Savinder, Geomorphology, Prayag Publications, Allahabad 1998.
 3. Singh Savinder Physical Geography, Prayag Publications, Allahabad 1998.
 4. Sparks B. W. Geomorphology, Longmans, London 1960.
 5. Parshad, Mahaveer, BhautikBhugol, Modern Publishers, 2011.
 6. Diwakar, Ashok, BhautikBhugol, Kalyani Publishers
-

Instructions for External Theory Paper Setter/Examiner:

Time Allowed: 3 Hours

There will be 9 questions in all. Question 1 is compulsory comprising of five parts from entire syllabus (two marks for each sub part). There will be 8 long questions, two from each unit. The candidate has to answer four out of these questions, selecting at least one question from each unit. All questions carry equal marks.

Practical

Cartographic Techniques-2

Time: 3 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Understand the cartographic techniques like; graphs, bars and diagrams.
2. Learn the dot and choropleth methods.

A practical file will be maintained by students consisting exercises on the below mentioned themes:

1. Representation of population data through Line graph, Age and Sex Pyramid (2 exercise).
2. Representation of population data through Climograph and Hythergraph (2 exercise).
3. Representation of different data through Circular Diagrams. (2 exercise; Proportional and Ring diagram).
4. Methods of representing population distribution and density: Dot and Choropleth method (2 exercise).

-975

Chairperson
Department of Geography
B.P.S.M.V. Kharipur

5. Representation of population data through Bar and Pie diagrams on map (2 exercise).

Recommended Readings:

1. **Singh, L. R. & Singh, R.** (2006) Practical Geography, PrayagPustakBhawan, Allahabad.
2. **Sharma, J. P. Prayogatamk Bhugol**, Rutogy Publications, Meerut.
3. **Singh, Gopal** (1995) Map Work and Practical Geography, Vikas Publishing House, New Delhi.

Instruction for External Practical Examiner:

Time Allowed: 3 Hours

There will be three questions in all and candidate has to attempt any two exercises.

Distribution of marks for evaluation: Exercise = 10 Marks

File Record = 5 Marks

Viva-Voce = 5 Marks

976

Alakh
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Khatola (Sonapat)

Settlement Geography

Course Code – B-GEO-202

Total Credits – 2

External Theory Marks: 35

L – T - P

Internal Assessment Marks: 15

2 – 0 - 0

Time Allowed: 1:30 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Provide knowledge about the fundamentals of settlements geography.
2. Enrich knowledge about the distribution of rural and urban settlements.
3. Familiarized with the types and patterns of rural and urban settlements.
4. Acquaint with the issues and policies regarding settlement.

Unit 1

1. Definition, nature and scope of settlement geography.
2. Theories of evolution and development of settlement.
3. Geographical factors affecting the growth of settlement distribution.

Unit 2

4. Rural settlement: shape, site, types and pattern.
5. Hierarchy of urban settlement: Rank- size rule and Primate City.
6. Issues and policies.

Recommended Readings:

1. **Deshpande, C. D.** (2005) "Cities: A Geographical Study", Translated by V. G. Amrita, MananPrakashan, Mumbai.
2. **Ghosh. S.** (2015) "Introduction to Settlement Geography", Orient Blackswan Private Limited, Hyderabad.
3. **Jyptirmoy Sen** (2007) "A Text Book of Social and Cultural Geography," Kalyani Publishers, New Delhi.
4. **Siddhartha, K and Mukherjee S.** (2016) "Cities, Urbanisation and Urban Systems (Settlement Geography)", Kitab Mahal, Allahabad.
5. **Singh, R. Y.** (2012) "Geography of Settlements", Rawat Publications, Jaipur.
6. **Thakur S. A.** (2012) "Settlement Geography"/ VastiBhugol- Konkan Geographers, Publication

- 977 -

Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalan, Jhansi (M.P.)

Instructions for External Theory Paper Setter/Examiner:

There will be 7 questions in all. Question 1 is compulsory comprising of seven sub-parts covering entire syllabus. (one mark for each sub part) to be answered in 10-15 words. There will be 6 long questions, three from each unit. The candidate has to answer four long questions selecting at least two question from each unit. All questions carry equal marks.

- 978.

(Signature)
Chairperson
Department of Geography
S.M.V. Khanpur Kala, Sonapat

Human Geography
Course Code – B-GEO-203

Total Credits – 3

External Theory Marks: 50

L – T - P

Internal Assessment Marks: 25

3 - 0 - 0

Time Allowed: 2 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Gain knowledge about population characteristics of India.
 2. Have understanding about distribution of tribes in India.
 3. Acquaint with distribution of regions in India.
 4. Gain insight into intricacies of caste structure of India.
-

Unit 1

1. Meaning, Nature and Scope of Human Geography.
2. The concept of changing Man-Environment Relationship: Determinism, Possibilism and Neo-determinism.
3. Evolution of mankind: Hunting and Food Gathering, Pastoral Nomadism and Subsistence Farming.

Unit 2

4. Population composition, sex ratio and literacy.
5. Spatial distribution of Races; Major Tribes in India: Santhal, Bheel, Gond, Munda.

Unit 3

6. Population Resource Regions (Ackerman).
7. Human Adaptation to the environment with reference to Eskimo, Bushman and Gujjar.

Recommended Readings:

1. Qazi, S.A. (2010) Population Geography, APH publishers.

- 979 -

M. V. Kharpur Kalan Sanipath
Chairperson
of Geography
S. S. M. V. Kharpur Kalan Sanipath

2. **Ramachandra, R.** (1992) Urbanization and Urban System in India, Oxford, London.
3. **Sharma, Y.K.** (2017) Human Geography, Narain publishers.
4. **Singh, N.** (2015) A Text Book of Human Geography, Rajesh Publishing.
5. **Hussain, M.** (2018) Human Geography, Rawat, Publication, Jaipur.
6. **Khullar, D. R.** India A comprehensive Geography, Kalayani Publisher.
7. **Chandna, R.C.** (2016) A Geography of Population: Concepts, Determinants and Patterns, Kalyani.
8. **Maurya, S. D.** Population Geography (Hindi/ English), ShardaPustakBhavan, Allahabad.
9. **Maurya, S.D.** (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.
10. **Hussain, M.** (2012) Manav Bhugol, Rawat Publications, Jaipur.
11. **Singh, Surender and Saroha Jitender,** Human and Economic Geography, GPK Publications.

Instructions for External Theory Paper Setter/Examiner:

There will be 7 questions in all. Question 1 is compulsory comprising of seven parts spread over entire syllabus (two marks for each sub part). There will be 6 long questions, two from each unit. The candidate has to answer three long questions, at least one question from each unit.

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Handwritten Signature
Chairperson
of Geography
...v. Kharipur K...

Date

Physical Geography-II

Course Code – B-GEO-301

Total Credits – 4

External Theory Marks: 50

L-T-P

External Practical Marks: 20

3-0 -2

Internal Assessment Theory Marks: 20

Internal Assessment Practical Marks: 10

Course Outcomes:

After completing this course, the learner will be able to:

1. Gain knowledge of mechanism of weather, climate and atmosphere.
2. Understand the global issues of climate and its change.

Unit 1

1. Weather and Climate, Atmosphere: Origin, Structure and Composition.
2. Insolation, Global Heat Budget, Temperature: Horizontal and Vertical Distribution and Inversion of Temperature.

Unit 2

3. Atmospheric Pressure: Measurement and Distribution, Pressure Belts, Winds: Planetary, Seasonal and Local.
4. Humidity: Measurement and Variables, Evaporation, Condensation and Precipitation: Forms, Types and Distribution.

Unit 3

5. Air Masses: Concepts and Classification, Fronts: Types and characteristics.
6. Weather Disturbances: Tropical and Extra – Tropical Cyclone, Anticyclones.

Unit 4

7. Climate Change; Global Warming.
8. Ozone Layer Depletion and Acid Rain.

Recommended Readings:

1. Trewartha, G. T. An Introduction to Climate, McGraw Hill, New York, 1981.

-981-

(Signature)
Chairperson
Department of Geography
S.P.S.M.V. Khanpur Kaler, Sonapat

2. Critchfield, H. General Climatology, Prentice Hall of India, 2002.
3. Diwakar, Ashok, Bhautik Bhugol, Kalyani Publishers, Allahabad.

Instructions for External Theory Paper Setter/Examiner:

Time Allowed: 3 Hours

There will be 9 questions in all. Question 1 is compulsory comprising of five parts from entire syllabus (two marks for each sub part). There will be 8 long questions, two from each unit. The candidate has to answer four out of these questions, selecting at least one question from each unit. All questions carry equal marks.

- 982 -

M. K. S.
Chairperson
Department of Geography
B.P.S.M.V. Kharpur Kalan, Jhansi

PRACTICAL

Map Projection

Time Allowed: 3 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Learn about the projections and their utility for different parts of globe.

A practical file will be maintained by students consisting exercises on the below mentioned themes: -

Preparation of Cylindrical projections (3 exercise)

Conical Projections (4 exercise)

Zenithal Projections, Polar case only (5 exercise)

Conventional Projections (2 exercise)

Recommended Readings:

1. Singh, L. R. & Singh, R. (2006) Practical Geography, Prayag Pustak Bhawan, Allahabad.
2. Sharma, J. P. Prayogatamk Bhugol, Rutogy Publications, Meerut.
3. Singh, Gopal(1995) Map Work and Practical Geography, Vikas Publishing House, New Delhi.

Instruction for External Practical Examiner:

Time Allowed: 3 Hours


There will be three questions in all and candidate has to attempt any two exercises.

Distribution of marks for evaluation: Exercise = 10 Marks

File Record = 5 Marks

Viva-Voce = 5 Marks

- 983 -


Chairperson
Department of Geography
B.P.S.M.V. Khari, Jf Kalan (Saripat)

Oceanography

Course Code – B-GEO-302

Total Credits – 4

External Theory Marks: 70

L-T-P

Internal Assessment Marks: 30

4 - 0 - 0

Time Allowed: 3 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Gain knowledge on the properties of oceans and their floor.
2. Make the students understand about Temperature and Salinity of water bodies.
3. Understand the concepts of Reefs and oceanic Sedimentation.

Unit 1

1. Definition, Nature and Scope of Oceanography.
2. Wegner's Drift Theory Hypothesis and Sea floor Spreading Theory, Plate Tectonic Theory

Unit 2

3. Major Features of Ocean Basins and Relief Structure of Pacific, Atlantic and Indian Ocean.
4. Coral Reefs: Definition, Formation and their types.

Unit 3

5. Physical and Chemical Properties of Sea water: Salinity, Temperature and Density distribution of oceans, affecting factors.
6. Oceanic Deposits: their sources, distribution pattern and affecting factors.

Unit 4

7. Oceanic Currents: Circulation in Pacific, Atlantic and Indian Ocean.
8. Tides and Oceanic Resources.

Recommended Readings:

1. Barry, R. G. and Chorley, R. J., Atmosphere, Weather and Climate, Routledge, 1998.
2. Critchfield, H., General Climatology, Prentice-Hall of India, 2002

-984

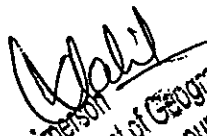
(Signature)
Chairperson
Department of Geography
B.P.S.M.V. Kharip - Kharip (Campus)

3. **King, C.** Oceanography for Geographers, Edward Arnold, London, 1975.
 4. **Trewartha, G. T.:** An Introduction to Climate, Mc. Graw Hill, New York, 1981.
 5. **Trewartha, G.T.,** The Earth's Problems Climates, University of Wisconsin Press, USA.
-

Instructions for External Theory Paper Setter/Examiner:

There will be 9 questions in all. Question 1 is compulsory comprising of seven sub-parts covering entire syllabus (two marks for each sub part). There will be 8 long questions, two from each unit. The candidate has to answer four long questions selecting at least one question from each unit. All questions carry equal marks.

- 985 -


Chairperson
Department of Geography
S.P.S.M.V. Khanpur Kalan, Jalandhar

Social Geography

Course Code – B-GEO-303

Total Credits – 3

External Theory Marks: 50

L – T - P

Internal Assessment Marks: 25

3 – 0 - 0

Time Allowed: 2 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Gain knowledge about ethnic and social groups in India.
2. Understand the social structure and religious diversity of India.
3. Be well versed with concept of well-being and its indicators.
4. Develop the skill to process social data.

Unit 1

1. Definition, nature and scope of social geography.
2. Social Structure and Processes: Tribes, and their spatial distribution.

Unit 2

3. Caste, Language and Dialects: origin, form and their distribution.
4. Religion: major religion and religious plurality in India.

Unit 3

5. Social problems: geography of poverty and human development index.
6. Gender inequality and gender development index.

Recommended Readings:

1. Ahmad, A. (1993) Social Structure and Regional Development, Rawat Publications Jaipur.
2. Ahmad, A. (1999) Social Geography, Rawat Publications, Jaipur.
3. Ahmad, A. (2012) Social Geography of India, Concept Publishing Company, New Delhi.
4. Knox, P. L. (1975) Social Well-being: A Spatial Perspective, Oxford University Press, London.
5. Panelli, R. (2004) Social Geographies: From Difference to Action, Sage Publications, London.

- 986 -

M. V. K.
Chairperson
Department of Geography
B.P.S.M.V. Jaipur Kal. Municipal

Population Geography

Course Code – B-GEO -401

Total Credits – 4

External Theory Marks: 50

L-T-P

External Practical Marks: 20

3-0 -2

Internal Assessment Theory Marks: 20

Internal Assessment Practical Marks: 10

Course Outcomes:

After completing this course, the learner will be able to:

1. Understand nature and scope of population geography.
 2. Enhance the knowledge about demographic aspects of population.
 3. Familiarize with problems and policies of population in India.
-

Unit 1

1. Population Geography: Nature & scope of population geography.
2. Sources and nature of population data in India: Census, National Sample Survey and Sample Registration System

Unit 2

3. Population distribution and density: Affecting factors and spatial pattern as per latest census.
4. Growth of population: Affecting factors, pattern and trends of population growth in India.
5. Population Theories: Malthusian theory of population growth and its relevance in modern time, Demographic Transition Theory.

Unit 3

6. Fertility and Mortality: Affecting factors and distribution pattern in India.
7. Sex composition: Affecting factors and distribution patterns of Sex Composition and Sex Ratio in India.

Unit 4

8. Migration: Stream, Types, Causes and affecting Factors in India.
9. Population problems and policies.

Recommended Readings:

1. **Chandna, R. C.** (2016) Geography of Population: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.

- 988 -

(Signature)
Chairperson
Dept. of Geography
B.P.S.M.V. Kharpur Kalan (Jhansi)

2. **Maurya, S. D.** (2022) Population Geography (Hindi/ English), Sharda Pustak Bhavan, Allahabad.
3. **Ghosh, B. N.** (1978) Population Theories & Demographic Analysis, Menasha Parkashan, Meerut.
4. **Hassan, I. H.** (2018) Population Geography, Rawat Publication, Jaipur.
5. **Qazi, S. A.** (2010) Population Geography, APH Publishers.

Instructions for External Theory Paper Setter/Examiner:

Time Allowed: 3 Hours

There will be 9 questions in all. Question 1 is compulsory comprising of five parts from entire syllabus (two marks for each sub part). There will be 8 long questions, two from each unit. The candidate has to answer four out of these questions, selecting at least one question from each unit. All questions carry equal marks.

Practical

Introduction to Aerial Photography

Time Allowed: 3 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. Understand the function and utility of Aerial photographs.
2. Do Interpretation of Aerial Photographs.

A practical file will be maintained by students consisting exercises on the below mentioned themes: -

1. History and Fundamentals of Aerial Photographs ; Demarcation of Fiducial marks; Principal Point; Conjugate Principal Point; Flight line; Scale of Aerial Photographs.
2. Interpretation of physical and cultural features on Aerial photographs.
3. Stereoscope.

Recommended Readings:

1. Khullar, D. R. (2013) Introduction to Remote Sensing, GIS and Quantitative Methods, Kalyani Publishers.
2. George J. (2005) Fundamentals of Remote Sensing Universities Press India.

3. Chauniyal, D. D. (2016) Sudur Samvedan Tatha Bhogolik Suchna Pranali Sharda Pustak Bhawan, Allahabad.
-

Instruction for External Practical Examiner:

Time Allowed: 3 Hours


There shall be three questions in all and candidate has to attempt any two questions.

Distribution of marks for evaluation: Exercise = 10 Marks

File Record = 5 Marks

Viva-Voce = 5 Marks

- 990 -


Chairperson
Department of Geography
B.P.S.M.V. Kharipur Kalan, Sonapat

Agriculture Geography

Course Code – B-GEO-402

Total Credits – 4

External Theory Marks: 70

L -T- P

Internal Assessment Marks: 30

4 - 0 - 0

Time Allowed: 3 Hours

Course Outcomes:

After completing this course, the learner will be able to:

1. To know about the spatial organization of agricultural activities in world and India.
2. Know about the origin, location, distribution of the agricultural activities.
3. Know about the modern agriculture, its dynamics.
4. Understand the Agricultural Models.

Unit 1

1. Nature, scope and significance of agricultural geography.
2. Determinants of agricultural patterns: physical, technological and cultural factors.

Unit 2

3. Agricultural Concepts: (i) Cropping Pattern (ii) Crop diversification (iii) Crop combination (iv) Agri-business.
4. Measurement of Weaver's method of crop combination and Gibb's Martin method of crop diversification.

Unit 3

5. Approaches in agricultural regionalization: Von Thunen Model of agricultural land use.
6. Bases of identification of agricultural regions by Whittlessey.

Unit 4

7. Green Revolution: Its impacts and consequences in India.
8. Food production and food security in India, Agricultural Policies and their Implementation in India.

Suggested Readings:

1. Symons, Leslic (1967): Agricultural Geography, G. Bell and Sons, London.

941-
Chairperson
Department of Geography
B.P.S.M.V. Khanpur Kalyan (Ganipat)

2. Geoffrey, H.F.: (1970) Geography of Agriculture: Themes in Research, Practice Hall.
3. Morgon, W.B. and Munton, R. J. C.: (1971) Agricultural Geography Methuen, London.
4. Singh Jasbir and Dhillon S. S. (1994), Agricultural Geography, Tata McGraw Hill, New Delhi.
5. Husain, Majid (1996), Systemic Agricultural Geography, Rawat Publications, Jaipur.
6. Tarrant, J. R. (1974) Agricultural Geography, Willey, New York.
7. Safi, Mohammad (2007) Agricultural Geography.
8. Singh Jasbir (1989) Agricultural Geography.
9. Bowler T. R. (1992), The Geography of Agriculture in Developed Market Economics, Longman.
10. Grigg D. (1995) Introduction to Agricultural Geography, Routledge, London.

Instructions for External Theory Paper Setter/Examiner:

There will be 9 questions in all. Question 1 is compulsory comprising of seven sub-parts covering entire syllabus (two marks for each sub part). There will be 8 long questions, two from each unit. The candidate has to answer four long questions selecting at least one question from each unit. All questions carry equal marks.

- 999

(Signature)
Chairperson
Department of Geography
B.P.S. M.V. K. J. Unipat

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of History & Archaeology
CURRICULUM & SCHEME OF EXAMINATIONS

BACHOLAR of ARTS with HISTORY (Multidisciplinary)
Academic Session 2024 – 25

Scheme of Examination for the 1st Semester:

Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS	DSC1	Idea of Bharat	3	0	1	4	30	70	100
2	B-HIS	MIC1	Emergence of Buddhism and Jainism in Ancient India	2	0	0	2	15	35	50
3	B-HIS	MDC1	Glimpses of Ancient India	2	0	1	3	25	50	75
4	B-AEC	AEC1					2	15	35	50
5	B-SEC1	SEC1					3	25	50	75
6	B-VAC1	VAC1					2	15	35	50
							16			

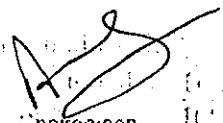
Scheme of Examination for the 2nd Semester:

Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS-DSC	DSC	History of India (From Earliest Times to Gupta Period)	3	0	1	4	30	70	100
2	B-HIS-MIC2	MIC	History of Haryana (From Earliest to Sultanate Period)	2	0	0	2	15	35	50
3	B-HIS-MDC2	MDC	Glimpses of Medieval India	2	0	1	3	25	50	75
4	B-AEC2	AEC					2	15	35	50
5	B-SEC2	SEC					3	25	50	75
7	B-VAC2	VAC					2	15	35	50
							18			

Students exiting the programme after second Semester and securing 52 credits including Summer Internship of 4 credits will be awarded UG certificate in relevant discipline/ subject..

w.e.f. 2024-2025

- 993



Chairperson
 Dept. of History & Archaeology
 B.P.S.M.V Khanpur Kalan, Sonapatna

Scheme of Examination for the 3rd Semester:

Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS-DSC	DSC	History of India (Gupta period to sultanate period)	3	0	1	4	30	70	100
2	B-HIS-MIC3	MIC3		3	0	1	4	30	70	100
3	B-HIS-MDC3	MDC	Glimpses of Modern India	2	0	1	3	25	50	75
4	B-AEC3	AEC					2	15	35	50
5	B-SEC3	SEC					3	25	50	75
							16			

Scheme of Examination for the 4th Semester:

Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS-DSC	DSC	History of India (1526-1757)	3	0	1	4	30	70	100
2	B-HIS-MIC4(Voc)	MIC4 (VOC)					4	30	70	100
3	B-AEC4	AEC					2	15	35	50
4	B-VAC3	VAC					2	15	35	50
							12			

Students exiting the programme after Fourth Semester and securing 96 credits including 4 credits of summer internship will be awarded UG Diploma in relevant discipline/subject.

w.e.f. 2024-2025

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Division of Marks

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5	5	50
5	5	50

Scheme of Examination for the 5th Semester:

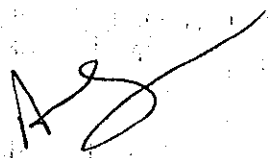
Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS-DSC	DSC	History of India (1757-1947)	3	0	1	4	30	70	100
2	B-HIS-MIC5(Voc)	MIC5		3	0	1	4	30	70	100
3	Internship						4	30	70	100
							12			

Scheme of Examination for the 6th Semester:

Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS-DSC	DSC	Modern World	3	0	1	4	30	70	100
2	B-HIS-MIC6	MIC6					4	30	70	100
3	B-HIS-MIC7(Voc)	MIC7					4	30	70	100
							12			

Student will be awarded 3 year UG degree in relevant major Discipline /Subject upon securing 132 credits.

w.e.f. 2024-2025


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Scheme of Examination for the 7th Semester:

Sr. No	Course Code	Course Type	Course Name	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS-DSC	DSC	State in India	3	0	1	4	30	70	100
2	B-HIS-DSC	DSC	Economic History of India	3	0	1	4	30	70	100
3	B-HIS-DSC	DSC	Gender in Indian History	3	0	1	4	30	70	100
4	B-HIS-DSC	DSC	History of Historical Writings -1	3	0	1	4	30	70	100
5	B-HIS-DSC	DSC	Introduction to Indian Art History	3	0	1	4	30	70	100
6	B-HIS-MIC8	MIC8	Understanding Heritage	3	0	1	4	30	70	100
							24			


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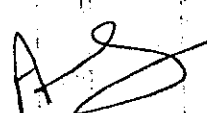
w.e.f. 2024-2025

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Scheme of Examination for the 8th Semester:

Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-HIS-DSC	DSC	Socio-Cultural History of India	3	0	1	4	30	70	100
2	B-HIS-DSC	DSC	History of Historical Writings-II	3	0	1	4	30	70	100
3	B-HIS-DSC	DSC	Science and Technology in India	3	0	1	4	30	70	100
4	B-HIS-DSC	DSC	Historical Tourism Theory & Practice	3	0	1	4	30	70	100
5	B-HIS-DSC	DSC	Historical Seminar	3	0	1	4	30	70	100
6	B-HIS-MIC9	MIC9	Understanding Popular Culture	3	0	1	4	30	70	100
							24			

Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG programmes without taking exit.


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w.e.f. 2024-2025

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Scheme of Examination for the 8th Semester 4 Year U.G. Hons with Research)

Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	HR-HIS-DSC	DSC	Socio-Cultural History of India	3	0	1	4	30	70	100
2	HR-HIS-DSC	DSC	History of Historical Writings -II	3	0	1	4	30	70	100
3	HR-HIS-MIC9	MIC	Understanding Popular Culture	3	0	1	4	30	70	100
4		Dissertation	Research Project / Dissertation Writing				12			300
							24			

Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG programmes without taking exit.

Sr. No	Course Code	Course Type	Course Name	Workload			credits	Division of Marks		
				L	P	T		Internal	External	Total
1	HR-HIS-DSC	DSC	Socio-Cultural History of India	3	0	1	4	30	70	100
2	HR-HIS-DSC	DSC	History of Historical Writings -II	3	0	1	4	30	70	100
3	HR-HIS-MIC9	MIC	Understanding Popular Culture	3	0	1	4	30	70	100
4		Dissertation	Research Project / Dissertation Writing				12			300
							24			

Four credits of internship earned by a student during summer internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursue 3 year UG programmes without taking exit.


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w.e.f. 2024-2025

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Paper Name – Idea of Bharat
Course Code-B-HIS-(DSC1)

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time allowed: 3hrs.

Course Outcomes:

- CO1: Acquaint with the concept of *Bharat/Bharatvarsha* and its eternity and major Knowledge, Traditions & Educational System in Ancient India.
- CO2: Understand the concepts, ideas and developments in the spheres of *Dharma*, Philosophy, Art and Culture in ancient India.
- CO3: Grasp the concepts, ideas and developments in the spheres of Science, Environment, Polity and Economy in ancient India.

Unit -1

The Concept of *Bharatvarsha*:

- Indian Knowledge Traditions: Understanding of *Bharatvarsha* and its Political Contours
- Indian Concept of Time and Space
- Ancient Indian Literature: *Vedas, Upanishads, Epics, Puranas*
- Jain and Buddhist Literature

Unit-2

Dharma, Philosophy, Art and Culture

- Indian Perception of *Dharma* and *Darshan*- A brief Survey
- The Concept of *Vasudhaiva Kutumbakam*: Man, Family, Society and World
- Polity and Governance: A study of Monarchical and Republican states (From Vedic to Buddhist period)
- Salient Features of Indian Arts

Unit-3

Science, Environment and Economy

- Science & Technology in Ancient India
- Environmental Conservation: Indian View
- Indian Economy: Agriculture, Industry, Trade and Commerce during Mauryan & Gupta period

Unit-4

Maps (India):

- Important settlements during Vedic Period
- Important Rivers in Ancient India
- Mahajanpadas* of Ancient India

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Recommended Books/e-resources:

- Altekar, A.S, *Education in Ancient India*, Nand Kishore & Bros, Varanasi, 1944.
- Arrhenius, G., *Evolution for Space*.
- Arvind, Shri, *Bhartiya Sanskriti Ke Adhar*, Arbindo Ashram, Pondyecheri.
- Bhagvadatt, *Vrihad Bharat Ka Itihas*, Pranav Prakashan, New Delhi.
- Dharampal, *The Beautiful Tree*, Other India Press, Delhi, 1995.
- Dinkar, Ramdhari Singh, *Sanskriti Ke Char Adhyaya*, Sahitya Academy, New Delhi, 1956.
- Durant, Will, *The Story of Civilization*, US, Jan. 1993 (11 Vol).
- Dwivedi, Kapil Dev, *Vedon Mein Tatva Gyan*, Tatva Bharti Anusandhan Parishad, New Delhi, 2014.
- Elliott, Faith Robertson, Elliott, *Gender, Family and Society*, St. Martin press, New York, 1996
- Ginsburg, Zekuthial, *New light on Our Numerals*
- Maurice, Thomas, *Indian Antiquities*, Pub. T. Maurice, 1806, London.
- Mittal, Satish Chand, *Bhartiya Sanskriti Ke Char Adhyaya*, ABISY, New Delhi, 2018 Mohan, Narendra, *Bhartiya Sanskriti*, Prabhat Prakashan, New Delhi, 2011.
- Mookherjee, Radha, *The Fundamental Unity of India*, Longsman, Calcutta, 1914.
- Mookherjee, Radha Kumud, *Indian Shipping*, Pub. South Asia Books, 1999.
- Pandey, Govind Chandra, *Bhartiya Sanskriti*, Hindi Grantha Academy, Bhopal, 2008
- -----, *Vedic Sanskriti*, Lok Bharti Prakashan, Allahabad.
- Pandey, Omprakash, *Drishvya Jagat Kayatatat*, Prabhat Prakashan, New Delhi, 2005.
- Pandey, Rajbali, *Bhartiya Puralipi*, Lok Bharti Prakashan, Allahabad, 1998
- Sihag, Balbir Singh, *Kautilya: The True Founder of Economics*, Vitasta Publishing Pvt. Ltd, Delhi, 2014.

Instructions for Paper-Setter:

- 1: Nine questions shall be set in all, two questions from each Unit. Question No 1 is Compulsory and consist of seven short answer type questions of 2 marks each which shall be spread over the whole syllabus. Each question shall carry equal marks i.e. 14 marks.
- 2: The candidate shall be required to attempt five questions in all selecting one question from each Unit and the Compulsory Question.

The Map Questions shall be carrying 14 marks each (09 Marks for map work and 05 marks for Explanatory Note). For visually disabled students, the part relating to the Explanatory Note shall carry full marks.

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3

Paper Name – Emergence of Buddhism & Jainism in Ancient India
Course Code-B- HIS(MIC1)

Total Credits: 2
L-T-P
2-0-0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1:30 hrs.

Course Outcomes:

- CO1:** Understand the social, political background Jainism and Buddhism in India.
CO2: Acquaint with main teaching of Jainism and Buddhism.
CO3: understand the deep rooted impact of two new Religions.

Unit-1

Buddhism

- a. Historical Background and origin of Buddhism
- b. Life and teachings of Buddha
- c. The Impact and importance of Buddhism

Unit-2

Jainism

- a. Historical Background and origin of Jainism
- b. Life of Mahavira and Sectarian Divisions
- c. Teaching of Jainism

Recommended Books/e-resources:

- Jyotiprasad Jain, 'Religion and Culture of the Jains', Bhartiya Jnanapitha Publications, New Delhi, 1975.
- Jagdishchandra Jain, 'Studies in Early Jainism', Navrang, New Delhi, 1992.
- N. K. Singhi (ed.), Ideal, Ideology and Practice: Studies in Jainism, Printwell Publishers, Jaipur, 1987.
- S. Stevenson, 'The Heart of Jainism', Munshiram Manoharlal Publishers Pvt.Ltd., 1995.
- P. S. Jaini, The Path of Purification, Motilal Banarasidass, Delhi, 1998.
- V. A. Sanghavi, Life and Legacy of Mahavira, Veer Nirvan Bharti Publications, Meerut, 1975.
- R. Williams, Jaina Yoga, Motilal Banarasidass, Delhi, 1963.
- V. M. Kulkarni, 'The Story of Rama in Jaina Literature', Saraswati Oriental Studies No. 3, Ahmedabad, 1990

Instructions for Paper-Setter:

1. Five questions shall be set in all two questions from each unit of 14 marks each. The candidate shall be required to attempt two questions in all selecting at least one question from each unit.
2. Question no. 1 is compulsory and shall consist 7 short answer type questions of 1 marks each which shall be spread over the whole syllabus.

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Paper Name - Glimpses of Ancient India
Course Code-B-HIS-(MDC1)

Total Credits: 3
L-T-P
2-1-0

External Theory Marks: 50
Internal Assessment Marks: 25
Time allowed: 3hrs.

Course Outcomes:

- CO1: Learn the major historical developments from the origins of Harappan Civilization up to the rise of Buddhism and Jainism in ancient India.
- CO2: Understand the major historical developments pertaining to the rise of Magadha empire, Mauryan Empire and Post-Mauryan states in ancient India.
- CO3: Acquaint with historical developments pertaining to the rise of Gupta Empire and Post-Gupta Powers like Pushpabhuties & Chalukayas and Triangular Struggle for Hegemony of Kannauj in ancient India.
- CO4: Familiar with the Polity and Administration of Cholas.

Unit-1

- a. Harappan Civilization: Origin, Extent, Urbanization, Socio-Economic condition
- b. Vedic Age: Polity, Socio-Economic condition
- c. Religious Movements: Buddhism and Jainism
- d. Rise of Magadhan Empire

Unit-2

- a. Mauryan Empire: Chandragupta Maurya and Ashoka
- b. Post-Mauryan State: Kushanas
- c. Gupta Empire: Conquests of Samudragupta and Chandragupta II

Unit-3

- a. Post-Gupta Period: Pushpabhutis and Chalukya of Badami
- b. Tripartite Struggle for Hegemony of Kanauj
- c. Tomars of Haryana
- d. Invasions of Mahmud Ghaznavi, Muhammad Ghori and Battles of Tarain and their Impact

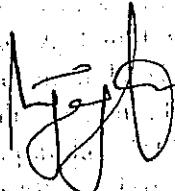
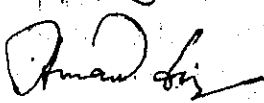
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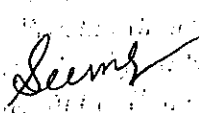
Recommended Books/e-resources:

- Allchin, B. and Allchin R. *Origins of a Civilization: The Pre-history and Early Archaeology of South Asia*, Viking, New Delhi, 1997.
- Basham, A. L. *The Wonder that was India*, Rupa Publications, Bombay, 1971.
- Bhandarkar, D. R. *Some Aspects of Ancient Hindu Polity*, Benares, 1929.
- Bogucki, P. *The Origin of Human Society*, Wiley-Blackwell, Massachusetts, 1999.
- Burton, Stein, *History of India*, OUP, New Delhi, 1998.
- Carr, E. H. *Itihas Kya Hai*, Macmillan Publication, New Delhi, 1976.
- Chandra Satish, *Medieval India from the Sultanate to the Mughals*, Delhi 1997.
- ----- *History of Medieval India*, Orient Blackman, Reprint Hyderabad, 2018
- ----- *Madhyakalin Bharat: Rajniti Samaj and Sanskriti*, Delhi, 2007.
- Dinkar, Ramdhari Singh, *Sanskriti Ke Char Adhyaya*, Sahitya Academy, 1956.
- Farukhi, A. *Prachin Evam Madhyakalin Samajik Sanrachanaye aur Sanskritiya*, Manak Prakashan Delhi, 2015.
- Habib, Irfan, *The Indus Civilization*, Tulika, New Delhi, 2002.
- Jayasval, K. P. *Hindu Polity*, Calcutta, 1924.
- Jha, D. N. and Shrimali, K. M., *Prachin Bharat Ka Itihas*, New Delhi, 1990.
- Kosambi, D. D., *Prachin Bhartiya Sabhyata Evam Sanskriti*, Rajkamal, New Delhi.
- Lahri, Nayanjot, ed. *The Decline and Fall of the Indus Civilization*, Permanent Black, New Delhi
- Majumdar, R. C., *History and Culture of the Indian People*, V Vols., Bhartiya Vidhya Bhavan Se Bombay, 1970, 1979, 1980.
- Sharma, R. S., *India's Ancient Past*, OUP, New Delhi, 2007.
- ----- *Looking for the Aryans*, Orient Longman Publishers, Delhi, 1995.
- ----- *Aspects of Political Ideas and Institution in Ancient India*, Motilal Banarsidas, New Delhi

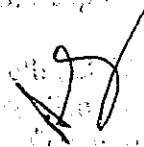
Instructions for Paper-Setter:

1. Seven questions shall be set in all two questions from each unit of 14 marks each. The candidate shall be to attempt three questions in all selecting at least one question from each unit.
2. Question no. 1 is compulsory and shall consist 8 short answer type questions of 1 marks each which shall spread over the whole syllabus.

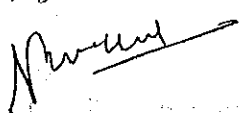












Paper Name – History of India (From Earliest Times to Gupta period)
Course Code-B-HIS-(DSC)

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time allowed: 3hrs.

Course Outcomes:

- CO1: Learn about the Sources for reconstructing the history of Ancient India and also know the major historical developments from the origins of Harappan Civilization upto the rise of Magdha Empire in ancient India.
- CO2: Understand the major historical developments pertaining to the rise of Mauryan Empire, Post-Mauryan states like Kushana and Satvahana, rise of Gupta Empire, and Post Gupta Powers in ancient India.

Unit-1

- Meaning of History and Sources of Ancient Indian History
- Stone Age in India: A brief Survey
- Harappan Civilization: Origin, Extent, Urbanization & Socio-Economic condition
- Vedic Age: Polity & Socio-Economic condition

Unit-2

- Religious Movements: Buddhism and Jainism
- Mahajanapada: Rise of Magdhan Empire
- Mauryan Empire: Chandragupta Maurya and Ashoka

Unit-3

- Post-Mauryan State: Kushanas and Satvahanas
- Gupta Empire: Conquests of Samudragupta and Chandragupta II
- Administration of Guptas

Unit-4

Maps (India):

- Important Sites of Harappan Civilization
- Mahajanapadas
- Expansion of Ashoka's Empire with special reference to his edicts
- Vedic Age: Polity & Socio-Economic condition

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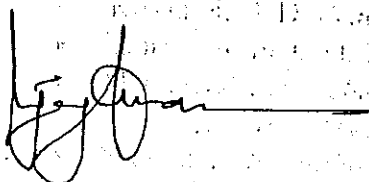
Recommended Books/e-resources:

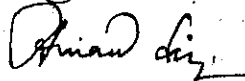
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- Basham, A. L. *The Wonder that was India*, Rupa Publications, Bombay, 1971.
- Bhandarkar, D. R. *Some Aspects of Ancient Hindu Polity*, Benares, 1929.
- Bogucki, P. *The Origin of Human Society*, Wiley-Blackwell, Massachusetts, 1999.
- Burton, Stein, *History of India*, OUP, New Delhi, 1998.
- Carr, E. H. *Itihas Kya Hai*, Macmillan Publication, New Delhi, 1976.
- Chandra Satish, *Medieval India from the Sultanate to the Mughals*, Delhi 1997.
- -----*History of Medieval India*, Orient Blackman, Reprint Hyderabad, 2018
- -----*Madhyakalin Bharat: Rajniti Samaj and Sanskriti*, Delhi, 2007.
- Dinkar, Ramdhari Singh, *Sanskriti Ke Char Adhyaya*, Sahitya Academy, 1956.
- Farukhi, A. *Prachin Evam Madhyakalin Samajik Sanrachanaye aur Sanskritiya*, Manak Prakas Delhi, 2015.
- Habib, Irfan, *The Indus Civilization*, Tulika, New Delhi, 2002.
- Jayasval, K. P. *Hindu Polity*, Calcutta, 1924.
- Jha, D. N. and Shrimali, K. M., *Prachin Bharat Ka Itihas*, New Delhi, 1990.
- Kosambi, D. D., *Prachin Bhartiya Sabhyata Evam Sanskriti*, Rajkamal, New Delhi.
- Lahri, Nayanjot, ed. *The Decline and Fall of the Indus Civilization*, Permanent Black, New Dell
- Majumdar, R. C., *History and Culture of the Indian People*, V Vols., Bhartiya Vidhya Bhavan S Bombay, 1970, 1979, 1980.
- Sharma, R. S., *India's Ancient Past*, OUP, New Delhi, 2007.
- -----*Looking for the Aryans*, Orient Longman Publishers, Delhi, 1995.
- -----*Aspects of Political Ideas and Institution in Ancient India*, Motilal Banarsidas, New Delhi

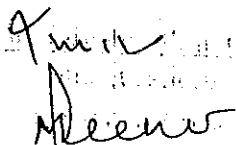
Instructions for Paper-Setter:

1. Nine questions shall be set in all, two questions from each Unit. Question No. 1 is Compulsory and consist of seven short answer type questions of 2 marks each which shall be spread over the whole syllabus. Each question shall carry equal marks i.e. 14 marks.
2. The candidate shall be required to attempt five questions in all selecting one question from each and the Compulsory Question.

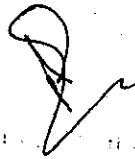
The Map Questions shall be carrying 14 marks each (09 Marks for map work and 05 marks for Explanatory Note). For visually disabled students, the part relating to the Explanatory Note shall carry full marks.

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1005

Paper Name – History of Haryana (From Earliest to Sultanate Period)
Course Code-B-HIS-(MIG2)

Total Credits: 2
L-T-P
1-1-0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1:30hrs.

Course Outcomes:

- CO1: The Students know their regional history from stone age to Medieval Period.
- CO2: The Students learnt about the formation and administrative structure of rise of state and new po Haryana region..
- CO3: Explain and analyse the Turkish Invasion and it's impact on Haryana.

Unit-1

- a. Sources of History of Haryana
- b. Harappan Civilization : General Features and its expansion in Haryana
- c. Vedic Civilization : Origin and Development,
- d. Historicity of the Battle of Mahabharata

Unit-2

- a. The Battles of Tarain and their impact
- b. Sources of Medieval History of Haryana
- c. Revolts of Meos and Rajputs
- d. Provincial Administration during Sultanate period

CO1: The Students know their regional history from stone age to medieval period.

CO2: The Students learnt about the formation and administrative structure of rise of state and new po Haryana region..

CO3: Explain and analyse the Turkish Invasion and it's impact on Haryana.

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Recommended Books/e-resources:

- Buddha Prakash, *Haryana through the Ages*, Kurukshetra University, Kurukshetra, 1962.
- _____, *Glimpses of Haryana*, Kurukshetra University, Kurukshetra, 1969.
- Das Gupta, K.K., *Tribal History of Ancient India*,
- Devahuti, D., *Harsha : A Political Study*, Oxford Clarendon Press, 1970.
- Dwivedi, H.N., *Dilli ke Tomar (736-1193)*, Vidya Mandir Prakashan, Gwalior, 1973.
- Goyal, J.B., (ed.) *Haryana-Puratattna, Itihas, Sanskriti, Sahitya evom Lokwarta*, Delhi, 1966.
- Gupta, S.P. & Rama & Chandran, K.S., *Mahabharata: Myth and Reality*, Agam Prakashan, New De 1976.
- Phadke, H.A. *Haryana: Ancient and Medieval*, Harman Publication House, New Delhi, 1990.
- Phogat, S.R., *Inscriptions of Haryana*, Kurukshetra University Kurukshetra, 1978.
- Puri, B.N., *History of Gurjar-Pratiharas*, Munshiram Manoharlal, New Delhi, 1968.
- Sen, S.P. (Ed.), *Sources of the History of India*, Vol. II, Munshiram Manoharlal, New Delhi, 1979.
- Datta, Rajat, *Rethinking A Millennium: Perspectives on Indian History from the Eight to Eighteenth Century*, Aakar Books, Delhi, 2008.
- Husain, Yusuf, *Glimpses of Medieval Indian Culture*, Asia Publishing House, Bombay.
- Irfan Habib (ed.), *Madhyakalinbharat*, Vols. 1-8, Rajkamal Prakashan, Delhi, 2003.
- Jackson, Peter, *The Delhi Sultanate, A Political and Military History*, Cambridge University Press, York, 1999.

Instructions for Paper-Setter:

1. Five questions shall be set in all two questions from each unit of 14 marks each. The candidate shall be req to attempt two questions in all selecting at least one question from each unit.
2. Question no. 1 is compulsory and shall consist 7 short answer type questions of 1 marks each which shall spread over the whole syllabus.

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Paper Name – Glimpses of Medieval India
Course Code-H-HIS-(MDC2)

Total Credits: 3
L-T-P
2-1-0

External Theory Marks:50
Internal Assessment Marks: 25
Time allowed: 3hrs.

Course Outcomes:

- CO1: Learn the major historical developments pertaining to the Emergence and Consolidation of Delhi Sultanate; State Apparatus of the Sultanate; rise of Bahmani and Vijaynagar Empires, and the growth of Bhakti and Sufi Movements in medieval India.
- CO2: Understand the major historical developments pertaining to the Establishment of Mughal Rule; rise of Shershah Suri and his Administration, and Polity & Policies of the Great Mughals.
- CO3: Grasp the features of Society and Economy under the Mughals; nature of Mughal Systems of Mansabdari, Zabti, Jagirdari and Izaradari, and the causes of Disintegration of Mughal Empire.
- CO4: Acquaint with the Emergence of Regional Powers in 18th century; Rivalry between European Powers in India and Carnatic Wars, and the Conquest of East India Company over Bengal.

Unit-1

- a. Establishment and Consolidation of Delhi Sultanate: Polity of the Sultans
- b. State Apparatus of Delhi Sultanate: Administration with special reference to *Iqtadari* System
- c. Bhakti and Sufi Movements

Unit-2

- a. Establishment of Mughal Rule: Babur and Humayun
- b. Shershah Suri and his Administration
- c. Rajput policy of Akbar

Unit-3

- a. Society and Economy under Mughals
- b. Mansabdari, Jagirdari & Land revenue system under Mughals
- c. Disintegration of Mughal Empire

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Recommended Books/e-resources:

- Aziz, A. *The Mansabdari System and the Mughal Army*, Idarah-i-Adabiyat, New Delhi, 1954.
- Chandra Satish, *Medieval India from the Sultanate to the Mughals*, Delhi 1997.
- -----*History of Medieval India*, Orient Blackman, Reprint Hyderabad, 2018
- -----*Madhyakalin Bharat: Rajniti Samaj and Sanskriti*, Delhi, 2007.
- Majumdar, R.C., J.N. Choudhri & S. Chaudhri, *The Mughal Empire*, Vol.7, Bharti Vidhya Bhawan, Bombay, 1960
- Morland, W.H., *The Agrarian System of Moslem India*, Central Books Allahabad, 1920
- Prasad, Beni, *History of Jahangir*, OUP, London, 1922
- Prasad, Ishwari, *The Life and Times of Humayan*, Orient Longman, Calcutta, 1955
- Ali, M. Athar, *The Mughal Nobility Under Aurangzeb*. Asia Publishing House, Bombay, 1966.
- Ashraf, K.M., *Life and Conditions of the People of Hindustan*, Munshiram Manoharlal, Delhi, 1970.
- Chandra Satish, *Essays on Medieval Indian History*, Oxford University, Press, New Delhi. 2003.
- -----, *Essays in Medieval Indian Economic History*, Munshiram Manoharlal, Delhi, 1987.
- -----, *Parties and Politics at the Mughal Court*, People's Publishing House, Delhi, 1987.
- -----, *Medieval India*, Vols. 1 & 2, Har-Anand Publications, Delhi.
- Datta, Rajat, *Rethinking A Millennium: Perspectives on Indian History from the Eight to Eighteenth Century*, Aakar Books, Delhi, 2008.
- Husain, Yusuf, *Glimpses of Medieval Indian Culture*, Asia Publishing House, Bombay.
- Irfan Habib (ed.), *Madhyakalin Bharat*, Vols. 1-8, Rajkamal Prakashan, Delhi, 2003.
- Jackson, Peter, *The Delhi Sultanate, A Political and Military History*, Cambridge University Press, New York, 1999.
- Kulke, Hermann (ed.), *State in India 1000-1700*, Oxford University Press, New Delhi, 1997.
- Mehta, J.L., *Madhyakaleen Bharat : Ek Sankshipt Itihas*, Arun Publishing House, Chandigarh, 2012.
- Mukhia, Harbans, *Perspectives on Medieval History*, Vikas Publication, New Delhi, 1993.
- Raychaudhuri, Tapan & Irfan Habib (eds.), *Cambridge Economic History of India C. 1200-1750*, Vol. I, Orient Longman, Delhi, 1982
- Sarkar, Jadunath, *The Fall of the Mughal Empire*, 4 Vols. Orient Longman, Delhi, 1988-92 (Fourth ed.)
- Siddiqui, I.H. (ed.), *Medieval India: Essays in Intellectual Thought Culture*. Munshiram Manoharlal Publish New Delhi, 2003.
- Streusand, Douglas E., *The Formation of the Mughal Empire*, Oxford University Press, Delhi, 1989.
- Verma, H.C. (ed.), *Madhyakalin Bharat, Vols. 1 & 2*. Hindi Madhyam Karyavaya Nadeshalya University (Delhi).
- -----, *History of Medieval India*, Oxford University Press, New Delhi, 1997.
- -----, *Madhyakalin Bharat*, Vols. 1-8, Rajkamal Prakashan, Delhi, 2003.
- -----, *Parties and Politics at the Mughal Court*, People's Publishing House, Delhi, 1987.
- -----, *Medieval India*, Vols. 1 & 2, Har-Anand Publications, Delhi.
- -----, *Essays on Medieval Indian History*, Oxford University Press, New Delhi, 2003.
- -----, *Essays in Medieval Indian Economic History*, Munshiram Manoharlal, Delhi, 1987.
- -----, *Parties and Politics at the Mughal Court*, People's Publishing House, Delhi, 1987.
- -----, *Medieval India*, Vols. 1 & 2, Har-Anand Publications, Delhi.
- -----, *Rethinking A Millennium: Perspectives on Indian History from the Eight to Eighteenth Century*, Aakar Books, Delhi, 2008.
- -----, *Glimpses of Medieval Indian Culture*, Asia Publishing House, Bombay.
- -----, *Madhyakalin Bharat*, Vols. 1-8, Rajkamal Prakashan, Delhi, 2003.
- -----, *The Delhi Sultanate, A Political and Military History*, Cambridge University Press, New York, 1999.
- -----, *State in India 1000-1700*, Oxford University Press, New Delhi, 1997.
- -----, *Madhyakaleen Bharat : Ek Sankshipt Itihas*, Arun Publishing House, Chandigarh, 2012.
- -----, *Perspectives on Medieval History*, Vikas Publication, New Delhi, 1993.
- -----, *Cambridge Economic History of India C. 1200-1750*, Vol. I, Orient Longman, Delhi, 1982
- -----, *The Fall of the Mughal Empire*, 4 Vols. Orient Longman, Delhi, 1988-92 (Fourth ed.)
- -----, *Medieval India: Essays in Intellectual Thought Culture*. Munshiram Manoharlal Publish New Delhi, 2003.
- -----, *The Formation of the Mughal Empire*, Oxford University Press, Delhi, 1989.
- -----, *Madhyakalin Bharat, Vols. 1 & 2*. Hindi Madhyam Karyavaya Nadeshalya University (Delhi).

Instructions for Paper-Setter:

1. Seven questions shall be set in all two questions from each unit of 14 marks each. The candidate shall be required to attempt three questions in all selecting at least one question from each unit.
2. Question no. 1 is compulsory and shall consist 8 short answer type questions of 1 marks each which shall be spread over the whole syllabus

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of Economics

CURRICULUM & SCHEME OF EXAMINATIONS


FOR

FOUR YEAR BA Economics (Multidisciplinary) PROGRAMME

From the Academic Session 2024 - 25

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks	Total Marks	
1	B-ECO-A1-101	DSC	Introductory Micro Economics	4	0	0	4	30	70	100	
2	B-ECO-M1-103	MTC	Basic Economics	2	0	0	2	15	35	50	
3	B-ECO-MDC1-105	MDC	Element of Economics.	3	0	0	3	25	50	75	
4	B-AEC-101	AEC	University Pool				2	15	35	50	
5	B-SEC-101	SEC	University Pool				3	25	50	75	
6	B-VAC-101	VAC	University Pool				2	15	35	50	
Total Credits											
Total Marks											

Note:- Course will be commenced w.e.f session 2024-25

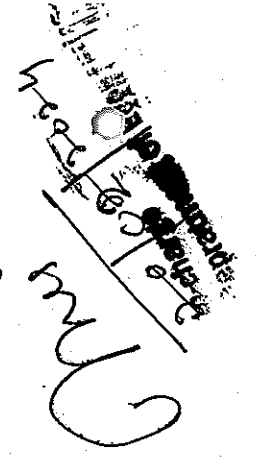

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 20/02/2024

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First Year: Second Semester										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-ECO-A2-102	DSC	Introductory Macro Economics	4	0	0	4	30	70	100
2	B-ECO-M2-104	MIC	Economic History of India	2	0	0	2	15	35	50
3	B-ECO-MDC2-106	MDC	Indian Economy-I	3	0	0	3	25	50	75
4	B-AEC-102	AEC	University Pool				2	15	35	50
5	B-SEC-102	SEC	University Pool				3	25	50	75
6	B-VAC-102	VAC	University Pool				2	15	35	50
Total Credits										Total Marks

Second Year: Third Semester										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-ECO-A3-201	DSC	Intermediate Micro Economics	4	0	0	4	30	70	100
2	B-ECO-M3-203	MIC	History of Economic Thought	4	0	0	4	30	70	100
3	B-ECO-MDC3-205	MDC	Basic Statistics	3	0	0	3	25	50	75
4	B-AEC-201	AEC	University Pool				2	15	35	50
5	B-SEC-201	SEC	University Pool				3	25	50	75
Total Credits										Total Marks

Note:- Course will be commenced w.e.f session 2024-25



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 Jammu, J.K.

Second Year: Fourth Semester											
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks	Total Marks	
1	B-ECO- A4-202	DSC	Intermediate Macro Economics	4	0	0	4	30	70	100	
2	B-ECO-M4-204	MIC (VOC)	Monetary Economics	4	0	0	4	30	70	100	
3	B-AEC-202	AEC	University Pool				2	15	35	50	
4	B-VAC-202	VAC	University Pool				2	15	35	50	
Total Credits									Total Marks		

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Third Year: Fifth Semester											
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks	Total Marks	
1	B-ECO- A5-301	DSC	Economics of Growth and Development	4	0	0	4	30	70	100	
2	B-ECO-M5-303	MIC (VOC)	Haryana Economy	4	0	0	4	30	70	100	
3	B-ECO-SEC-305	Internship					4	30	70	100	
Total Credits									Total Marks		

Note:- Course will be commenced w.e.f session 2024-25

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Department of Economics

Third Year : Six Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-ECO- A6-302	DSC	Indian Economy	4	0	0	4	30	70	100
2	B-ECO-M6-304	MIC	Public Finance	4	0	0	4	30	70	100
3	B-ECO-M7-306	MIC (VOC)	Data Analysis in Economics	4	0	0	4	30	70	100
Total Credits								Total Marks		

Fourth Year : Seventh Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-ECO- H1-401	DSC	Quantitative techniques-I	4	0	0	4	30	70	100
2	B-ECO-H2-403	DSC	Agricultural Economics	4	0	0	4	30	70	100
3	B-ECO-H3-405	DSC	Environmental Economics	4	0	0	4	30	70	100
4	B-ECO-H4-407	DSC	International Economics	4	0	0	4	30	70	100
5	B-ECO-H5-409	DSC	Computer Application in Economics	4	0	0	4	30	70	100
6	B-ECO-M8-411	MIC	Economics of Development and Planning	4	0	0	4	30	70	100
Total Credits								Total Marks		

Note:- Course will be commenced w.e.f session 2024-25

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 Bangalore

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Fourth Year : Eight Semester (Hons)										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-ECO-H6-402	DSC	Basic Econometrics	4	0	0	4	30	70	100
2	B-ECO-H7-404	DSC	Research Methodology	4	0	0	4	30	70	100
3	B-ECO-H8-406	DSC	Financial Economics	4	0	0	4	30	70	100
4	B-ECO-H9-408	DSC	Natural Resource Economics	4	0	0	4	30	70	100
5	B-ECO-H10-410	DSC	Behavioral Economics	4	0	0	4	30	70	100
6	B-ECO-M9-412	MIC	Data Analytics	4	0	0	4	30	70	100
Total Credits								Total Marks		

Fourth Year : Eight Semester (With Research)										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-ECO-H6-402	DSC	Basic Econometrics	4	0	0	4	30	70	100
2	B-ECO-H7-404	DSC	Research Methodology	4	0	0	4	30	70	100
3	B-ECO-M9-412	MIC	Data Analytics	4	0	0	4	30	70	100
4	B-ECO-SEC-414	Dissertation	Research Project/ Dissertation				12			300
Total Credits								Total Marks		

Note:- Course will be commenced v.e.f session 2024-25

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Deputy Director
Department of Economics

INTRODUCTORY MICRO ECONOMICS

Course Code-B- ECO- A1-101

Total Credits: 4

L - T - P

4 - 0 - 0

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3hrs

Course outcomes: After completing this course, the learner will be able to:

CO1: To understand the meaning nature and scope of Economics.

CO2: To examine the different types of economic activities, central economic problems and concept of production possibility curve.

CO3: To understand the concepts of demand and supply, elasticity, consumer and production theory.

❖ *Notes for Examiner: There will be nine questions in all. Question No.1 is compulsory consisting of seven short answer type questions (30-35 words) carrying two marks each, set from the whole syllabus. The remaining eight questions shall be from the four units, i.e., one question from each of the four units carrying 14 marks each. The examinees have to attempt one question from each unit besides the compulsory question.*

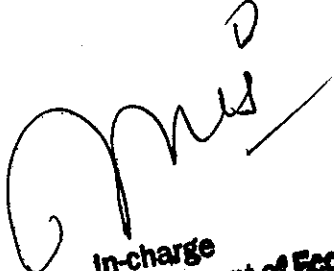
Unit – I

Meaning, Nature and Scope of Economics- Significance of Economics, Firms and Household: Meaning of Firms and Household; Relationship Between Firms and Household; Circular Flow of Economic Activities (Two – Sector); Difference between Micro and Macro Economics; Central Economic Problems: Scarcity and Choice, Production Possibility Curve.

Unit – II

Demand and Supply- Individual Demand; Market Demand; Law of Demand; Demand Determinants; Elasticity and its Measurement: Types of Elasticity of Demand; Price, Income and Cross Elasticity; Measurement of Elasticity of Demand; Determinants of Elasticity of Demand Supply and its Determinants; Law of Supply; Market Equilibrium, Elasticity of Supply

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Department of Economics

Unit – III

Cardinal Utility Analysis- Law of Diminishing Marginal Utility, Law of Equi-Marginal Utility; Derivation of Demand Curve; Ordinal Utility Analysis: Indifference Curve, Properties of Indifference Curve, Budget Line, Equilibrium of Consumer; Consumer Surplus, Isoquant and Iso-Cost Lines and Producer's Equilibrium

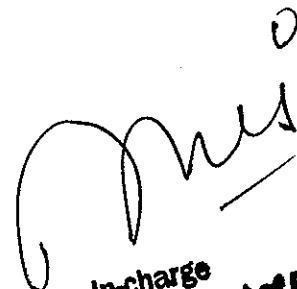
Unit – IV

Production Analysis- Production Function-Short Run and Long Run; Total Product; Marginal Product; Average Product; Law of Returns to Factor; Law of Returns to Scale, Cost and Revenue Analysis: Types of Costs; Traditional theory of cost and their interrelation; TR, MR, AR and their relationships

Recommended Readings:

1. I. Ahuja, H.L. Advance Micro Economics. S.Chand & Company: New Delhi, 2010. Print.
 2. Dwivedi, D.N. Microeconomics – Theory & Applications. Pearson, 2011. Print.
 3. Koutsoyiannis, A. Modern Microeconomics. MacGraw Hill: New Delhi, 2005. Print.
 4. Mankiw, N.G. Principles of Microeconomics. 6th ed. South-Western Cengage Learning, 2012. Print.
 5. Salvatore D. Microeconomics-Theory and Applications. Oxford University Press, 2006. Print.
 6. Varian,H. Intermediate Microeconomics. East-West Press, 2003. Print.
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Department of Economics

BASIC ECONOMICS

Course Code- B-ECO-M1-103

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 3hrs

Course outcomes:

CO1: Learner will enrich with the understanding of the various concepts of demand and supply.

CO2: It will acquaint the students with aggregate behavior of macroeconomic variables in an economy.

CO3: Learner will get basic understanding of economic growth and development with various measurements.

❖ *Notes for Examiner: There will be five questions in all. Question No.1 is compulsory consisting of five short answer type questions (30-35 words) carrying two marks each, set from the whole syllabus. The remaining four questions shall be from the two units, i.e., 2 questions from each of the two units carrying 12.5 marks each. The examinees have to attempt one question from each unit besides the compulsory question.*

Unit -1

Basic Concepts of Micro and Macro- Demand and Supply Analysis, Consumer Equilibrium, Utility and Indifference Curve: Production Function, Cost Function, Economies of Scale, Law of Returns, Basic Features of Markets: Perfect Competition, Monopoly, Monopolistic Competition. Basic Characteristics of the Indian Economy and issue of the Indian Economy (Inflation, Poverty, Unemployment, Black Money and Inequalities), Economic Reforms, Liberalization and Globalization, Current Issues of Indian Economy, NITI Aayog.

Unit-2

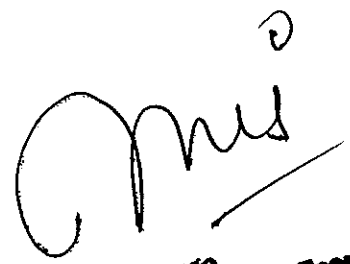
National Income and Economics of Growth & Development - Various Concepts of National Income, Consumption Function, Investment Function and Multiplier, Trade Cycles, Inflation, Monetary and Fiscal Policy, Money Supply, Money Multiplier, Various Definitions of Money, High Powered Money. Basic Concepts of Growth and Development, PQLI, HDI, GDI, Measurement of Poverty and Inequality, Vicious Circle of Poverty.

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In-charge
Department of Economics

Recommended Readings:

1. Koutsoyiannis, A. (1979). Modern Micro-Economics, Palgrave MacMillan Press London.
2. Mankiw, G.N. (2018). 8th edition: Principles of Microeconomics, Cengage Learning Publication.
3. Pindyck R. and Rubinfeld D. (2017). 8th ed., Microeconomics, Pearson Publication.
4. Sen, A. (1999). Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
6. Thirlwall, A.P. (2011). 9th ed. Growth and Development, Palgrave Macmillan, New York.
7. Meire, G.M and Rauch, J. (2000), Leading Issues in Economic Development, Oxford University Press, New York.
8. Ray, Debraj (2004). 7th ed. Development Economics, Oxford University Press, New Delhi.
9. Froyen, R. T. (2008). 10th ed. Macroeconomics: Theory and policies, Prentice Hall.
10. Mankiw, N. G. (2006). 4th ed. Principles of Macroeconomics, Cengage Learning Publication.


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ELEMENTS OF ECONOMICS

Course Code- B-ECO-MDC1-105

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 3hrs

Course outcomes:

CO1: Learner will enrich with the understanding of the various principles of demand theory.

CO2: It will acquaint the students with aggregate behaviour of macroeconomic variables in an economy.

CO3: Learner will get basic understanding of economic growth and development with various measurements.

❖ *Notes for Examiner: There will be seven questions in all. Question No.1 is compulsory consisting of five short answer type questions (30-35 words) carrying 2.5 marks each, set from the whole syllabus. The remaining six questions shall be from the three units, i.e., 2 questions from each of the three units carrying 12.5 marks each. The examinees have to attempt one question from each unit besides the compulsory question.*

Unit -1

Demand Analysis- Demand Analysis and Supply Analysis, Consumer Equilibrium, Utility and Indifference Curve: Production Function, Cost Function, Economies of Scale, Law of Returns, Basic Features of Markets: Perfect Competition, Monopoly, Monopolistic Competition.

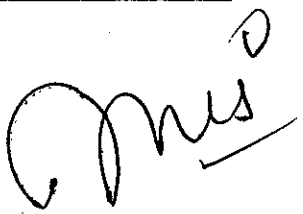
Unit-2

National Income- Various Concepts of National Income, Consumption Function, Investment Function and Multiplier, Trade Cycles, Inflation, Monetary and Fiscal Policy, Money Supply, Money Multiplier, Various Definitions of Money, High Powered Money.

Unit-3

Growth and Development and Basics of Indian Economy - Basic Concepts of Growth and Development, PQLI, HDI, GDI, Measurement of Poverty and Inequality, Vicious Circle of Poverty, Balanced and Unbalanced Growth Theory, and Sustainable Development. Basic Characteristics of the Indian Economy and issue of the Indian Economy (Inflation, Poverty, Unemployment).

- 1019 -


In-charge
Department of Economics

Recommended Readings:

1. Koutsoyiannis, A. (1979). Modern Micro-Economics, Palgrave MacMillan Press London.
 2. Mankiw, G.N. (2018). 8th edition: Principles of Microeconomics, Cengage Learning Publication.
 3. Pindyck R. and Rubinfeld D. (2017). 8th ed., Microeconomics, Pearson Publication.
 4. Sen, A. (1999). Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
 6. Thirlwall, A.P. (2011). 9th ed. Growth and Development, Palgrave Macmillan, New York.
 7. Meire, G.M and Rauch, J. (2000), Leading Issues in Economic Development, Oxford University Press, New York.
 8. Ray, Debraj (2004). 7th ed. Development Economics, Oxford University Press, New Delhi.
 9. Froyen, R. T. (2008). 10th ed. Macroeconomics: Theory and policies, Prentice Hall.
 10. Mankiw, N. G. (2006). 4th ed. Principles of Macroeconomics, Cengage Learning Publication.
 11. Gardner, A. (1978). Macroeconomics, Theory and Policy, Macmillan Library.
 12. Shapiro, E. (2003). ed. Macroeconomic Analysis, Galgotia Publications New Delhi.
 13. Rana and Verma, (2015). Macroeconomic Analysis, Vishal publications.
 14. Mankiw, N. G. (2000). Macroeconomics, Macmillan Worth Publishers 4th Edition.
 15. Taylor, L. (1983). Structuralism Macroeconomics, Basic Books, New Longman.
 - Aggrawal, A.N. (2014). Indian Economy- Problems of Development & Planning, New Age Inter-national Publishers, New Delhi.
 16. Bardhan, P.K. (2010). Political Economy of Development in India, Edition 9th Oxford University Press, New Delhi.
 17. Dutt R. and Sunderam K.P.M (2016). Indian Economy, S Chand &Co. Ltd. New Delhi.
 18. Mishra S.K &Puri V.K. (2016). Indian Economy and its development experience, Himalaya Publishing House, New Delhi.
 19. Kapila, U. (2016). Indian Economy: Policies and Performances, Edition (27th), Academic Foundation, New Delhi
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In-charge
Department of Economics

INTRODUCTORY MACRO ECONOMICS

Course Code- B-ECO- A2-102

Total Credits: 4
L - T - P
4 - 0 - 0

External Theory Marks: 70
Internal Assessment Marks: 30
Time allowed: 3hrs

Course outcomes:

CO1: Learner will get a basic understanding of basic macroeconomics and the concept of national income, circular flow, and national income accounting.

CO2: Students will be able to understand the concept of aggregate demand & supply and Inflation.

CO3: Students will also understand the concept of employment and output determination in context of classical and Keynesian economists.

CO4: Learner will get a basic understanding of consumption and investment.

❖ *Notes for Examiner: There will be nine questions in all. Question No.1 is compulsory consisting of seven short answer type questions (30-35 words) carrying two marks each, set from the whole syllabus. The remaining eight questions shall be from the four units, i.e., one question from each of the four units carrying 14 marks each. The examinees have to attempt one question from each unit besides the compulsory question.*

Unit I

Introduction to Macroeconomics and National Income Accounting- Meaning, Nature and Scope of Macroeconomics; National Income accounting- Concepts of National Income and related aggregates, Measurement, Limitations of Measuring National Income; National Income Accounting: Importance and Issues; Circular Flow of Income-closed and open Economy: Issues in National Income Accounting-monetary and real GDP and per capita Income, GDP and welfare.

Unit II

Determination of Output and Employment- Unemployment: concept and types of unemployment, Natural Rate of Unemployment; The Classical Theory of Full Employment; Keynesian Theory of Employment and Output Determination.

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Unit III

Consumption and Investment- Consumption Function: Short run and Long Run Consumption Function; Investment: Concepts, Marginal Efficiency of Capital (MEC); Investment Multiplier and Accelerator.

Unit IV

Theories of Demand and Money Supply- Money: Meaning and Functions of Money, Demand for money; Classical Approach: Quantity theory of Money (Fisher's Transaction Approach), Cambridge Approach; Keynesian Theory of Demand for Money; Liquidity Trap; The Supply of Money: Meaning and Components. Fiscal and Monetary Policy: Objectives, Instruments and Operations

Recommended Readings:

1. Froyen, R. T. (2008). 10th ed. Macroeconomics: Theory and policies, Prentice Hall.
 2. Mankiw, N. G. (2006). 4th ed. Principles of Macroeconomics, Cengage Learning Publication.
 3. Gardner, A. (1978). Macroeconomics, Theory and Policy, Macmillan Library.
 4. Shapiro, E. (2003). ed. Macroeconomic Analysis, Galgotia Publications New Delhi.
 5. Rana and Verma, (2015). Macroeconomic Analysis, Vishal publications.
 6. Mankiw, N. G. (2000). Macroeconomics, Macmillan Worth Publishers 4th Edition.
 7. Taylor, L. (1983). Structuralist Macroeconomics, Basic Books, New Longman.
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ECONOMIC HISTORY OF INDIA

Course Code- B-ECO-M2-104

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks : 15

Time allowed: 3hrs

Course outcomes:

CO1: Learner will get basic understanding of Colonial India and Trends in National Income and its Sectoral Distribution

CO2: Students will be able to understand the concept Demographic Transition; Population Growth, Population and Poverty.

CO3: Students will be able to understand the Agrarian Structure and Land Relations and Industrial Policy

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- ❖ *Notes for Examiner: There will be five questions in all. Question No.1 is compulsory consisting of five short answer type questions (30-35 words) carrying two marks each, set from the whole syllabus. The remaining four questions shall be from the two units, i.e., 2 questions from each of the two units carrying 12.5 marks each. The examinees have to attempt one question from each unit besides the compulsory question.*

Unit – I

Colonial Indian Economic Structure- Background and Introduction; Indian Economy on the Eve of British Rule, Trends in National Income and its Sectoral Distribution; Economic Drain from India. Transition in India's Social Structure: India's Economic Backwardness; Demographic Transition.

Unit-II

Indian Agriculture and Economic Transition in India - Agrarian Structure and Land Relations, Famines and Food Problem, Co-operative Movement in India, Agricultural Policy, Commercialization of Agriculture. Industry, trade and railways: Industrial backwardness under British rule, India's major industries, Industrial policy.

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In-charge
Department of Economics

Recommended Readings:

1. Washbrook, D. (2012). The Indian economy and the British empire, in D. Peers, N. Gooptu (eds.): India and the British Empire, Oxford University Press
 2. Krishnamurty, J. (1982). Occupational structure, in D. Kumar, T. Raychaudhari (eds.): Cambridge Economic History of India 1757-c. 1970 2, Orient Longman
 3. Parthasarathi, P. (2009). Historical issues of deindustrialization in nineteenth century South India, in T. Roy, G. Riello (eds.): How India Clothed the World: The World of South Asian Textiles, 1500-1850.
 4. Ray, R. (1994). Introduction, in R. Ray (ed.): Entrepreneurship and Industry in India 1800-1947, Oxford University Press.
 5. Guha, S. (1991). Mortality declines in early 20th century India, Indian Economic and Social History, Review 28(4), 371-87.
 6. Kaushal, G. Economic History of India, Kalyani publications, New Delhi.
 7. Singh V.B. Economic History of India, Allied publications private limited, Bombay
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In-charge
Department of Economic

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INDIAN ECONOMY-1

Course Code – B-ECO-MDC2-106

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 3hrs

Course outcomes:

CO1: Learner will get basic understanding of Indian Economy and its objectives and Composition in economy.

CO2: To know about the features of Indian population and role of education, health policies in Indian economy.

CO3: Learner will be acquainted with the various reform of agricultural sector in India.

CO4: Students will also understand about the industrial development and its structure/pattern in Indian development.

- ❖ *Notes for Examiner: There will be seven questions in all. Question No.1 is compulsory consisting of five short answer type questions (30-35 words) carrying 2.5 marks each, set from the whole syllabus. The remaining six questions shall be from the three units, i.e., 2 questions from each of the three units carrying 12.5 marks each. The examinees have to attempt one question from each unit besides the compulsory question.*

Unit-I

Structure of Indian Economy- Nature and Characteristics of Indian Economy; National Income of India: Structure, Measurement and Composition. Growth and Inclusive Growth; Planning in India; Rationale, Objectives and Evaluation; NITI Aayog.

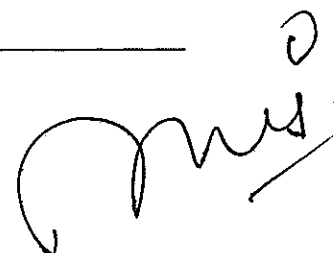
Unit-II

Population and Human Development- Demographic Features of Indian Population and their Trends and Issues, Demographic dividends; Issues in Education and Education policy, health and Gender Related Issues.

Unit-III

Issues in Indian Agriculture- Role of Agriculture in Indian Economy, Land Reforms, Green Revolution; White Revolution; Agricultural Price Policy in India; Doubling of Farm Income; Agricultural Marketing and Warehousing, Food Security in India. Industrial Development in India, Micro, Small and Medium Enterprises (MSMEs).

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In-charge
Department of Economics

Recommended Readings:

- 1 Aggrawal, A.N. (2014). Indian Economy- Problems of Development & Planning, New Age Inter-national Publishers, New Delhi.
 2. Virmani, A. (2014). Accelerating Growth and Poverty Reduction: A Policy Framework for India's Development.
 3. Bardhan, P.K. (2010). Political Economy of Development in India, Edition 9th Oxford University Press, New Delhi.
 4. Dutt R. and Sunderam K.P.M (2016). Indian Economy, S Chand &Co. Ltd. New Delhi.
 5. Mishra S.K & Puri V.K. (2016). Indian Economy and its development experience, Himalaya Publishing House, New Delhi.
 6. Kapila, U. (2016). Indian Economy: Policies and Performances, Edition (27th), Academic Foundation, New Delhi.
 7. Jalan, B. (1996). India's Economic Policy- Preparing for the Twenty First Century, Viking, New Delhi.
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In-charge
Department of Economics

Department of Political Science Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur
Kalan, Sonipat, Haryana

Scheme of Examination and Syllabi for 4-Year Under Graduate Multidisciplinary Program. (SCHEME-A) : (4 Years U.G. Honor's & Honor's with Research) Political Science with multiple Entry-Exit, Internship and Choice Based Credit System - Learning Outcome Based Curriculum Framework (CBCS-LOCF) in accordance with New Education Policy (NEP), 2020.

Sr.No.	Course Type	Course Code	Nomenclature of Paper	Workload			Credits	Internal Marks	External Marks	Total Marks
				T	P/T	TC				
1	DSC	B-POL-101	Principles of Political Science-I	3	1	4	4	30	70	100
	MIC	B-POL-102	Fundamentals of Political Science-I	2	NA	2	2	15	35	50
	MDC	B-POL-103	Indian Polity-I	2	1	3	3	25	50	75
2	DSC	B-POL-201	Principles of Political Science-II	3	1	4	4	30	70	100
	MIC	B-POL-202	Fundamentals of Political Science-II	2	NA	2	2	15	35	50
	MDC	B-POL-203	Indian Polity-II	2	1	3	3	25	50	75
3	DSC	B-POL-301	Indian Constitution	3	1	4	4	30	70	100
	MIC	B-POL-302	Comparative Politics	3	1	4	4	30	70	100
	MDC	B-POL-303	Indian Polity-III	2	1	3	3	25	50	75
4	DSC	B-POL-401	Indian Government and Politics	3	1	4	4	30	70	100
	MIC	B-POL-402	Perspectives on Democracy	3	1	4	4	30	70	100
5	DSC	B-POL-501	Introduction to International Relations	3	1	4	4	30	70	100
	MIC	B-POL-502	Governance: Issues and Challenges	3	1	4	4	30	70	100
6	MDC	B-POL-601	India's Foreign Policy	3	1	4	4	30	70	100
	MIC	B-POL-602	Indian Independence Movement.	3	1	4	4	30	70	100

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	MIC-	B-POL-603	India's Neighbourhood Policy	3	1	4	4	30	70	100
7.	DSC-HI	B-POL-701	Research Methodology - I/	3	1	4	4	30	70	100
	DSC-H	B-POL-702	Western Political Thought-I	3	1	4	4	30	70	100
	DSC-H	B-POL-703	Indian Political Thought - I	3	1	4	4	30	70	100
	DSC-H	B-POL-704	International Law	3	1	4	4	30	70	100
		B-POL-705	Political Sociology	3	1	4	4	30	70	100
	DSC-H	B-POL-706	Liberal Political Theory -I	3	1	4	4	30	70	100
	MIC	B-POL-707	Gender and Politics in India	3	1	4	4	30	70	100
8.	DSC-H	B-POL-801	Research Methodology - II	3	1	4	4	30	70	100
	DSC-H	B-POL-802	Western Political Thought-II	3	1	4	4	30	70	100
	DSC-H	B-POL-803	Indian Political Thought - II	3	1	4	4	30	70	100
	DSC-H	B-POL-804	Foreign Policy of Major Powers	3	1	4	4	30	70	100
	DSC	B-POL-805	Liberal Political Theory -II	3	1	4	4	30	70	100
	MIC	B-POL-806	Democracy in India	3	1	4	4	30	70	100
OR SEMESTER-8 (FOR HONOURS WITH RESEARCH IN POLITICAL SCIENCE)										
8	DSC-H	B-POL-801	Statistics & Research Methodology (Common)	3	1	4	4	30	70	100
	DSC-H	B-POL-802	Western Political Thought-II	3	1	4	4	30	70	100
	MIC	B-POL-803	Democracy in India	3	1	4	4	30	70	100
	Research	B-POL-807	Dissertation				-12-	----	-----	300

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat, Haryana

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DEPARTMENT OF POLITICAL SCIENCE

4Year Undergraduate Multidisciplinary Program (Political Science) Syllabus, Semester-I

DSC		Session 2024-2025	
Subject-Political Science		Semester 1 st	
Principles of Political Science-1		Course Code-B-POL-101	
Level of the Course	100-199		
Course Learning Outcomes	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> 1. Understand the meaning, nature and scope of Political Science. Understand the relationship of Political Science with other Social Sciences. 2. Understand the concept, development and theories of the origin of State. 3. Develop a detailed understanding of state and its relationship with society, government and nation. 4. Comprehend the concepts, features and theories of sovereignty. 		
Credits	Theory-3	Tutorial -1	Total- 4
Contact Hours	3 per week	1 per week	4 per week
Suggested Evaluation Method			
Internal Assessment: 30 Marks	Class Participation		05
	Seminar/Presentation/Assignment/Quiz/Class Test etc. --		10
	Mid Term Exam:		15
Term-End Examination.			70
Total Marks.			100
Instructions for Paper Setters.			
<ol style="list-style-type: none"> 1. Total NINE Questions will be set and students will be required to attempt FIVE questions. 2. Question No.1 will be compulsory and will consist of 7 short answer type questions of 2 marks each spread over the entire syllabus. 3. The remaining EIGHT questions will be set taking TWO questions from each of the four Units. The candidate would be required to attempt ONE question from each unit in addition to the compulsory question. 4. Each question will carry 14 marks. 			
<p>Principles of Political Science-1 Unit-1.</p>			

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Meaning, Nature, Scope and Significance of Political Science; Relationship of Political Science with Philosophy, History, Economics and Sociology. (Contact Hours- 12)

Unit-II

State: Meaning, Definition and Elements; Origin and Development of the State: Divine Origin Theory, Force Theory, Social Contract Theory and Evolutionary Theory. (Contact Hours- 12)

Unit-III

Functions of the State, State and Society, State and Government, State and Nation. (Contact Hours- 12)

Unit-IV.

Sovereignty: Meaning, Types and Main Characteristics; Monistic and Pluralist Theories of Sovereignty. (Contact Hours- 12)

Tutorial (Contact Hours- 12)

Recommended Books:

- M.P. Jain. (2021). Political Theory: An Introduction. Lexis Nexis.
- Ball, T., Dagger, R., & O'Neill, B. (2020). Political Ideologies and The Democratic Ideal Pearson.
- Heywood, A. (2019). Politics (5th Ed.). Palgrave Macmillan.
- Bidyut Chakrabarty. (2019). Indian Politics. Pearson.
- Copley, A. (2018). Essentials of Political Science. Oxford University Press.
- S.P. Verma (1988) Modern Political Theory, Vikas, New Delhi
- M.V. Pylee. (2018). Political Theory: Ideas and Concepts. SAGE Publications India.
- A.C. Kapur. (2017). Principles of Political Science. S. Chand Publishing.
- Roskin, M. G., Cord, R. L., Medeiros, J. A., & Jones, W. S. (2017). Political Science: An Introduction. Pearson.
- Beetham, D. (2013). The Legitimation of Power. Palgrave Macmillan.
- Beetham, D., & Boyle, K. (2019). Introducing Democracy: 80 Questions and Answers. Polity Press.
- Bodin, J. (1992). On Sovereignty: Four Chapters from the Six Books of the Commonwealth (J. H. Franklin, Trans.). Cambridge University Press.
- Dahl, R. A. (1957). The Concept of Power. Behavioral Science, 2(3), 201-215.
- Easton, D. (2013). The Political System: An Inquiry into The State of Political Science. University Of Chicago Press.
- Garner, R., Ferdinand, P., Lawson, S., & Wilkinson, A. (2016). Introduction to Politics. Oxford University Press.
- Heywood, A. (2013). Political Ideologies: An Introduction. Palgrave Macmillan.
- Heywood, A. (2017). Political Theory: An Introduction (5th Ed.). Palgrave Macmillan.
- Hoffman, J. (2005). Sovereignty. In W. Carlsnaes, T. Risse, & B. A. Simmons (Eds.),

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11/03/24

- Handbook of International Relations (Pp. 70-88). SAGE Publications.
- Kelsen, H. (2000). The Essence and Value Of Democracy. Rowman & Littlefield.
- Mill, J. S. (2002). On Liberty. Dover Publications.
- Rajeev Bhargava. (2019). Political Theory: An Introduction. Pearson.
- Rawls, J. (1971). A Theory of Justice. Harvard University Press.
- Raz, J. (1986). The Morality of Freedom. Oxford University Press.
- Skocpol, T. (1979). States and Social Revolutions: A Comparative Analysis Of France, Russia, and China. Cambridge University Press.
- Weber, M. (1978). Economy and Society: An Outline of Interpretive Sociology. University of California Press.

RS
3/11/24

4Year Undergraduate Multidiscipline Program (Political Science) Syllabus, Semester-I

MIC		Session 2024-2025	
Subject-Political Science		Semester 1st	
Fundamentals of Political Science-1		Course Code- B-POL-102	
Level of the Course		100-199	
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. Understand the meaning, nature and scope of Political Science. 2. Understand the elements, function and origin of the State. 3. Comprehend the concepts of power, authority and legitimacy. 4. Develop an understanding of the concept's rights, liberty and equality.		
Credits	Theory-2	Tutorial - 0-	Total- 2
Contact Hours	2 per week	-0-	2per week
Suggested Evaluation Method			
Internal Assessment: 15 Marks	Class Participation		04
	Seminar/Presentation/Assignment/Quiz/Class Test etc. --		04
	Mid Term Exam:		07
Term-End Examination. (External) 35 Marks			35
Total Marks			50
Instructions for Paper Setters.			
Instructions for Paper Setters 1. Total Seven Questions will be set and students will be required to attempt FIVE questions. 2. Question No. 1 will be compulsory and will consist of 7 short answer type questions of 1 mark each spread over the entire syllabus. 3. The remaining SIX questions will be set taking Three questions from each of the two units. The candidate would be required to attempt Two question from each unit in addition to the 1 compulsory question. 4. Each question will carry 07 marks.			
Fundamentals of Political Science-1			
Unit-1. Meaning, Nature, Scope and Significance of Political Science, State: Elements and Functions; Origin and Development of State. (Contact Hours-16)			
Unit-2.Key Concepts: Power, Authority, Legitimacy. Key Concepts: Rights, Liberty, Equality (Contact Hours- 16)			


 11/3/24

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Recommended Books:

- Ball, T., Dagger, R., & O'Neill, B. (2020). Political Ideologies and the Democratic Ideal Pearson.
- Jain.M.P. (2021). Political Theory: An Introduction. Lexis Nexis.
- Beetham, D., & Boyle, K. (2019). Introducing Democracy: 80 Questions and Answers. Polity Press.
- Gabha.O.P.(.) Dictionary of Political Science.
- Copley, A. (2018). Essentials of Political Science. Oxford University Press.
- Pylee.M.V. (2018). Political Theory: Ideas and Concepts. SAGE Publications India.
- Heywood, A. (2017). Political Theory: An Introduction. Palgrave Macmillan.
- Kapur, A.C., (2017). Principles of Political Science. S. Chand Publishing.
- Asirvatham.E.(1984). Political Theory. The upper India Pubs. House.Lucknow.
- Beetham, D. (2013). The Legitimation of Power. Palgrave Macmillan.
- Dahl, R. A. (1957). The Concept of Power. Behavioral Science, 2(3), 201-215.
- Heywood, A. (2013). Political Ideologies: An Introduction. Palgrave Macmillan.
- Heywood, A. (2013). Politics. Palgrave Macmillan.
- Kelsen, H. (2000). The Essence and Value of Democracy. Rowman & Littlefield.
- Mill, J. S. (2002). On Liberty. Dover Publications.
- Rajeev Bhargava. (2019). Political Theory: An Introduction. Pearson.
- Rawls, J. (1971). A Theory of Justice. Belknap Press.
- Roskin, M. G., Cord, R. L., Medeiros, J. A., & Jones, W. S. (2016). Political Science: An Introduction. Pearson.


1/3/24

4 Year Undergraduate Multidiscipline Program (Political Science) Syllabus, Semester-I

MDC		Session 2024-2025	
Subject-Political Science		Semester 1st	
Indian Polity-1		Course Code- B-POL-103	
Level of the Course		100-199	
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. Comprehend the salient features of the Indian Constitution and develop an understanding of Fundamental Rights and duties. 2. Develop an understanding of the powers, position and functions of the Union Executive. 3. Comprehend the functioning of the Union legislature. 4. Comprehend the functioning of the Indian judicial system.		
Credits	Theory-2	Tutorial – 1	Total- 3
Contact Hours	2 per week	1 per week	3 per week
Suggested Evaluation Method			
Total Marks:	75		75
Internal Assessment: 25 Marks	Class Participation		05
	Seminar/Presentation/Assignment/Quiz/Class Test etc. --		07
	Mid Term Exam:		13
Term-End Examination. (External) 50 Marks			50
Instructions for Paper Setters.			
Instructions for Paper Setters. 1.Total Seven Questions will be set and students will be required to attempt Four questions. 2. Question No. 1 will be compulsory and will consist of 7 short answer type questions of 2 mark each (14 Marks) spread over the entire syllabus. 3. The remaining Six questions will be set taking TWO questions from each of the Three units. The candidate would be required to attempt ONE question of 12 Marks from each unit			
Indian Polity-1			
Unit-1.Indian Constitution: Salient Features, Preamble, Fundamental Rights and Fundamental Duties.			
Unit-2.Union Executive: President, Prime Minister and Council of Ministers.			(Contact Hours- 11)
Unit-3.Union Legislature: Lok Sabha and Rajya Sabha.			(Contact Hours- 11)
Tutorial			(Contact Hours- 11)


 1/3/24

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Recommended Books:

- Laxmikant.M.(2023). Indian Polity. Mc Graw Hill.7th Edition.
- Srirangam.S.R.(2022).Indan Polity.Pearson.2nd Edition.
- Austin, G. (2000). Working a Democratic Constitution: The Indian Experience. Delhi, Oxford University Press.
- Austin, G. (1966). The Indian Constitution: Corner Stone of a Nation. Oxford, Oxford University Press.
- Basu, D. D. (1994). An Introduction to the Constitution of India. New Delhi, Prentice Hall.
- Bhushan, R., & Katju, M. (2012). Supreme but not Infallible: Essays In Honour of The Supreme Court of India. Hay House India.
- Pylee, M. V. (1998). An Introduction to the Constitution of India. New Delhi.

R.S.H.
1/3/24

4 Year Undergraduate Multidiscipline Program (Political Science) Syllabus, Semester-11

DSC		Session 2024-2025	
Subject-Political Science		Semester 2nd	
Principles of Political Science-II		Course Code-B-POL-201	
Level of the Course		100-199	
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: <ol style="list-style-type: none"> 1. Develop a thorough understanding of the theory and practice of government, separation of powers and rule of law. 2. Understand the various forms of government in a political system 3. Understand the nature and operation of political parties, pressure groups, representation and bureaucracy. 4. Comprehend the functioning of monarchy, totalitarianism, military rule and democratic political regimes 		
Credits	Theory-3	Tutorial -1	Total- 4
Contact Hours	3 per week	1 per week	4 per week
Suggested Evaluation Method			
Total Marks:	100		100
Internal Assessment:	30 Marks	Class Participation Seminar/Presentation/Assignment/Quiz/Class Test etc. -- Mid Term Exam:	05 10 15
Term-End Examination. (External)	70 Marks		70
Instructions for Paper Setters.			
<ol style="list-style-type: none"> 1. Total NINE Questions will be set and students will be required to attempt FIVE questions. 2. Question No.1 will be compulsory and will consist of 7 short answer type questions of 2 marks each spread over the entire syllabus. 3. The remaining EIGHT questions will be set taking TWO questions from each of the four Units. The candidate would be required to attempt ONE question from each unit in addition to the compulsory question. 4. Each question will carry 14 marks. 			
Principles of Political Science-II			
Unit-1. Theory and Practice of Government: Legislature, Executive and Judiciary; Separation of Powers and Rule of Law. (Contact Hours- 12)			
Unit-2. Forms of Government: Unitary and Federal; Parliamentary and Presidential. (Contact Hours- 12)			
Unit-3. Operational Dynamics of Political System: Political Parties, Pressure Groups, Representation and Bureaucracy. (Contact Hours- 12)			
Unit-4. Political Regimes: Monarchy, Totalitarianism, Military Rule and Democracy. (Contact Hours- 12)			
Tutorial- (Contact Hours- 12)			

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Recommended Books:

- M.P. Jain. (2021). Political Theory: An Introduction. Lexis Nexis.
- Ball, T., Dagger, R., & O'Neill, B. (2020). Political Ideologies and The Democratic Ideal Pearson.
- Heywood, A. (2019). Politics (5th Ed.). Palgrave Macmillan.
- Bidyut Chakrabarty. (2019). Indian Politics. Pearson.
- Copley, A. (2018). Essentials of Political Science. Oxford University Press.
- S.P.Verma .(1988).Modern Political Theory, Vikas .New Delhi.
- A.Appadorai.(1975).The Substance of Politics. Oxford University Press.
- M.V. Pylee. (2018). Political Theory: Ideas and Concepts. SAGE Publications India.
- A.C. Kapur. (2017). Principles of Political Science. S. Chand Publishing.
- Roskin, M. G., Cord, R. L., Medeiros, J. A., & Jones, W. S. (2017). Political Science: An Introduction. Pearson.
- Beetham, D. (2013). The Legitimation of Power. Palgrave Macmillan.
- Beetham, D., & Boyle, K. (2019). Introducing Democracy; 80 Questions and Answers. Polity Press.
- E. Asirvatham.(1984). Political Theory.The upper India Pubs. House.Lucknow.
- Dahl, R. A. (1957). The Concept of Power. Behavioral Science, 2(3), 201-215.
- Easton, D. (2013). The Political System: An Inquiry into The State of Political Science. University of Chicago Press.
- Garner, R., Ferdinand, P., Lawson, S., & Wilkinson, A. (2016). Introduction to Politics. Oxford University Press.
- Heywood, A. (2013). Political Ideologies: An Introduction. Palgrave Macmillan.
- Heywood, A. (2017). Political Theory: An Introduction (5th Ed.). Palgrave Macmillan.
- Hoffman, J. (2005). Sovereignty. In W. Carlsnaes, T. Risse, & B. A. Simmons (Eds.), Handbook of International Relations (Pp. 70-88). SAGE Publications.
- Kelsen, H. (2000). The Essence and Value Of Democracy. Rowman & Littlefield.
- Mill, J. S. (2002). On Liberty. Dover Publications.
- Rajeev Bhargava. (2019). Political Theory: An Introduction. Pearson.
- Rawls, J. (1971). A Theory of Justice. Harvard University Press.
- Raz, J. (1986). The Morality of Freedom. Oxford University Press.
- Skocpol, T. (1979). States and Social Revolutions: A Comparative Analysis Of France, Russia, and China. Cambridge University Press.
- Weber, M. (1978). Economy and Society: An Outline of Interpretive Sociology. University of California Press.

Rajeev
1/3/24

4Year Undergraduate Multidiscipline Program (Political Science) Syllabus, Semester-II

MIC		Session 2024-2025	
Subject-Political Science		Semester 2nd	
Fundamentals of Political Science-II		Course Code-B-POL-202	
Level of the course		100-199	
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. Comprehend the functioning of the executive, legislature and judiciary. 2. Understand the nature and functioning of unitary, federal parliamentary and presidential form of government. 3. Develop an understanding of the role of political parties, Pressure groups and bureaucracy in a political system. 4. Comprehend the functioning of monarchy, totalitarianism and democratic political regimes.		
Credits	Theory-2	Tutorial -0	Total- 3
Contact Hours	2 per week	0-per week	2 per week
Suggested Evaluation Method			
Total Marks: 50			50
Internal Assessment: 15 Marks	Class Participation		04
	Seminar/Presentation/Assignment/Quiz/Class Test etc. --		04
	Mid Term Exam:		07
Term-End Examination. (External) 35 Marks			35
Instructions for Paper Setters.			
Instructions for Paper Setters			
1. Total Seven Questions will be set and students will be required to attempt FIVE questions.			
2. Question No. 1 will be compulsory and will consist of 7 short answer type questions of 1 mark each spread over the entire syllabus.			
3. The remaining SIX questions will be set taking Three questions from each of the two units. The candidate would be required to attempt Two question from each unit in addition to the 1 compulsory question.			
4. Each question will carry 07 marks.			

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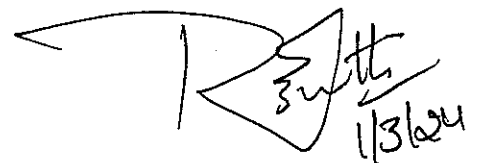
Fundamentals of Political Science-11

Unit-1. Institutions: Executive, Legislature, Judiciary. Types of Government: Unitary and Federal, Parliamentary and Presidential. (Contact Hours-16)

Unit-2. Operational Dynamics: Political Parties, Pressure Groups, Bureaucracy. Regimes: Democracy, Monarchy, Totalitarianism. (Contact Hours-16)

Recommended Books:

- M.P. Jain. (2021). Political Theory: An Introduction. Lexis Nexis.
- Ball, T., Dagger, R., & O'Neill, B. (2020). Political Ideologies and the Democratic Ideal. Pearson.
- Rajeev Bhargava. (2019). Political Theory: An Introduction. Pearson.
- Beetham, D., & Boyle, K. (2019). Introducing Democracy: 80 Questions and Answers. Polity Press.
- M.V. Pylee. (2018). Political Theory: Ideas and Concepts. SAGE Publications India.
- Copley, A. (2018). Essentials of Political Science. Oxford University Press.
- Heywood, A. (2017). Political Theory: An Introduction. Palgrave Macmillan.
- Kapur, A.C., (2017). Principles of Political Science. S. Chand Publishing.
- Beetham, D. (2013). The Legitimation of Power. Palgrave Macmillan.
- Dahl, R. A. (1957). The Concept of Power. Behavioral Science, 2(3), 201-215.
- Garner, R., Ferdinand, P., Lawson, S., & Wilkinson, A. (2016). Introduction to Politics. Oxford University Press.
- Heywood, A. (2013). Political Ideologies: An Introduction. Palgrave Macmillan.
- Heywood, A. (2013). Politics. Palgrave Macmillan.
- Kelsen, H. (2000). The Essence and Value of Democracy. Rowman & Littlefield.
- Mill, J. S. (2002). On Liberty. Dover Publications.
- Rawls, J. (1971). A Theory of Justice. Belknap Press.
- Roskin, M. G., Cord, R. L., Medeiros, J. A., & Jones, W. S. (2016). Political Science: An Introduction. Pearson.


R. S. Jithu
1/3/24

4Year Undergraduate Multidiscipline Program (Political Science) Syllabus, Semester-II

MDC		Session 2024-2025	
Subject-Political Science		Semester 2nd	
Indian Polity-II		Course Code-B-POL-203	
Level of the Course		100-199	
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to:		
	1. Understand the powers, position and functions of the State Executive.		
	2. Develop an understanding of the powers, position and function of the State legislature		
	3. Comprehend the functioning of the Indian Judicial system.		
	4. Comprehend the functioning of local self-government.		
Credits	Theory-2	Tutorial -1	Total- 3
Contact Hours	2per week	1 per week	3 per week
Suggested Evaluation Method			
Total Marks:	75		75
Internal Assessment 25	Class Participation		05
	Seminar/Presentation/Assignment/Quiz/Class Test etc. --		07
	Mid Term Exam:		13
Term-End Examination. (External)	50 Marks		50
Instructions for Paper Setters.			
1. Total Seven Questions will be set and students will be required to attempt Four questions.			
2. Question No. 1 will be compulsory and will consist of 7 short answer type questions of 2 mark each (14 Marks) spread over the entire syllabus.			
3. The remaining Six questions will be set taking TWO questions from each of the Three units. The candidate would be required to attempt ONE question of 12 Marks from each unit			
Indian Polity-II			
Unit-1.Executive: Types and Works of Executive, Governor, Chief Minister and Council of Ministers. (Contact Hours-11)			
Unit-2.Types and Works of Legislature, State Legislature: Legislative assembly and Legislative Council. (Contact Hours- 11)			
Unit-3. Judiciary: Supreme Court, Judicial Review High Courts and Subordinate Courts. (Contact Hours-11)			
Tutorial (Contact Hours- 11)			

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Recommended Books:

- Laxmikant.M.(2023). Indian Polity. Mc Graw Hill.7th Edition.
- Srirangam.S.R.(2022).Indian Polity.Pearson.2nd Edition.
- Austin, G. (1966). The Indian Constitution: Corner Stone of a Nation. Oxford, Oxford University Press.
- Austin, G. (2000). Working a Democratic Constitution: The Indian Experience. Delhi, Oxford University Press.
- Basu, D. D. (1994). An Introduction to the Constitution of India. New Delhi, Prentice Hall.
- Bhushan, R., & Katju, M. (2012). Supreme but not Infallible: Essays In Honour of The Supreme Court of India. Hay House India.
- Pylee, M. V. (1998). An Introduction to the Constitution of India. New Delhi.


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EXPERT LIST FOR PAPER SETTING AND EVALUATION FOR SUBJECT OF POLITICAL
SCIENCE, BPSMV, KK, SONEPAT

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R. S. Thakur
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19.	Dr. Parvesh Ranga	Assistant Professor, Department of Political Science, KUK.	9991219699	parveshranga00@gmail.com
20.	Dr. Jyoti	Assistant Professor, Department of Political Science, MDU, Rohtak	9467059554	
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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Mathematics Subject for 4 Year UG Programme

Common for ~~Bachelor of Arts~~ and Bachelor of Physical Science

w.e.f. Academic session- 2024-25

Scheme of Examination for 1st semester

First Year: 1 st Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-MAT-101	DSC	Calculus	3	2	0	4	20	10	50	20	100
2	B-MAT-102	MIC	Basic Algebra	2	0	0	2	15	0	35	0	50
3	B-MAT-103	MDC	Introductory Mathematics	3	0	0	3	25	0	50	0	75

Scheme of Examination for 2nd Semester

First Year: 2 nd Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-MAT-201	DSC	Algebra and Number Theory	3	2	0	4	20	10	50	20	100
2	B-MAT-202	MIC	Vector Calculus	2	0	0	2	15	0	35	0	50
3	B-MAT-203	MDC	Mathematics for commerce and Social Sciences	3	0	0	3	25	0	50	0	75

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Scheme of Examination for 3rd semester

Second Year: Third Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-301	DSC	Analytical Geometry & Vector Calculus	3	2	0	4	20	10	50	20	100
2	B-MAT-302	MIC	Business Mathematics	4	0	0	4	30	0	70	0	100
3	B-MAT-303	MDC	Mathematics for All	3	0	0	3	25	0	50	0	75

Scheme of Examination for 4th semester

Second Year: Fourth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-401	DSC	Differential Equations	3	2	0	4	20	10	50	20	100 ✓
2	B-MAT-402	MIC (VOC)	Mathematical Computing using Python	3	2	0	4	20	10	50	20	100 ✓

Scheme of Examination for 5th semester

Third Year: Fifth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-501	DSC	Advanced Calculus	3	2	0	4	20	10	50	20	100
2	B-MAT-502	MIC (VOC)	Data Structure using C	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 6th semester

Third Year: Sixth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-601	DSC	Sequences and Series	3	2	0	4	20	10	50	20	100
2	B-MAT-602	MIC	Probability Theory and Statistics	4	0	0	4	30	0	70	0	100
3	B-MAT-603	MIC (VOC)	Linear Programming	4	0	0	4	30	0	70	0	100

Scheme of Examination for 7th semester

Fourth Year: Seventh Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-701	DSC-M1	Groups and Rings	4	0	0	4	30	0	70	0	100
2	B-MAT-702	DSC-M2	Real Analysis-1	4	0	0	4	30	0	70	0	100
3	B-MAT-703	DSC-M3	Complex Analysis	4	0	0	4	30	0	70	0	100
4	B-MAT-704	DSC-M4	Special functions and integral transforms	4	0	0	4	30	0	70	0	100
5	B-MAT-705	DSC-M5	Discrete Mathematics	4	0	0	4	30	0	70	0	100
6	B-MAT-706	MIC	Programming in C and Numerical Methods	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th semester (4 years UG Hon.)

Fourth Year: Eighth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-MAT-801	DSC-M6	Linear Algebra	4	0	0	4	30	0	70	0	100
2	B-MAT-802	DSC-M7	Real Analysis-II	4	0	0	4	30	0	70	0	100
3	B-MAT-803	DSC-M8	Mechanics	4	0	0	4	30	0	70	0	100
4	B-MAT-804	DSC-M9	Topology	4	0	0	4	30	0	70	0	100
5	B-MAT-805	DSC-M10	Theory of Ordinary Differential Equations	4	0	0	4	30	0	70	0	100
6	B-MAT-806	MIC	Numerical Analysis	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th semester (4 years UG Hon. with Research)

Fourth Year: Eighth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-MAT-801	DSC-M6	Linear Algebra	4	0	0	4	30	0	70	0	100
2	B-MAT-802	DSC-M7	Real Analysis-II	4	0	0	4	30	0	70	0	100
3	B-MAT-803	MIC	Research Methodology and Statistics	4	0	0	4	30	0	70	0	100
4	B-MAT-804	Dissertation	Research Project/ Dissertation				12					300

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Calculus
B-MAT-101

Total Credits: 4
L - T - P
3 - 0 - 2

External Theory Marks: 50
Internal Assessment Marks: 20
Time allowed: 3 Hrs

Course outcomes:

CO1: Gain knowledge of the concepts and theory of limit, continuity and differentiability of functions. Attain skills of calculating the limit of functions and examining the continuity and differentiability of different types of functions and perform successive differentiation of functions. To apply the procedural knowledge to obtain the series expansions of functions which find multidisciplinary applications.

CO2: Understand concepts of asymptotes and curvature, the geometrical meaning of these terms and to have procedural knowledge to solve related problems.

CO3: Determine singular points of a curve and classify them. Understand the concept of rectification of curves and derive the reduction formulae.

CO4: Have theoretical knowledge and practical skills to evaluate the area bounded by the curves and volume and surface area of solids formed by revolution of curves.

Unit – I

$\epsilon - \delta$ definition of limit and continuity of a real valued function, basic properties of limits, types of discontinuities. Differentiability of functions. Application of L'Hospital rule to indeterminate forms. Successive differentiation, Leibnitz theorem, Taylor's and Maclaurin's series expansion with different forms of remainder.

Unit – II

Asymptotes: Horizontal, vertical and oblique asymptotes for algebraic curves, asymptotes for polar curves, Intersection of a curve and its asymptotes, Curvature and radius of curvature of curves (cartesian, parametric, polar & intrinsic forms), Newton's method, Centre of curvature and circle of curvature.

Unit – III

Multiple points, Node, Cusp, conjugate points. Tests for concavity and convexity, Points of inflection. Tracing of curves. Reduction formulae.

Unit – IV

Rectification, intrinsic equation of a curve, Quadrature, Area bounded by closed curves. Volumes and surfaces of solids of revolution.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Howard Anton, I. Bivens & Stephan Davis (2021). Calculus (12th edition). J. Wiley & Sons.
2. Gabriel Klambauer (1986). Aspects of Calculus (4th edition). Springer.

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3. Wieslaw Krawcewicz & Bindhyachal Rai (2003). Calculus with Maple Labs. Alpha Science Int'l Ltd.
4. Gorakh Prasad (2016). Differential Calculus (19th edition). Pothishala Pvt. Ltd.
5. George B. Thomas Jr., Joel Hass, Christopher Heil & Maurice D. Weir (2018). (14th edition). Pearson Education.
6. Monty J. Strauss, Gerald L. Bradley & Karl J. Smith (2002). Calculus (3rd edition). Dorling Kindersley (India) Pvt. Ltd

Practical

External Practical Marks: 20

Internal Assessment Marks: 10

Time allowed: 3 Hrs

Course Outcomes:

CO1: Attain cognitive and technical skills required for solving different problems of calculus associated with tracing of curves, determination of curvature and rectification of curves, volume and surface area of solids of revolution.

CO₂: Have technical and practical skills of solving calculus problems related to differentiation and integration of functions by using MAXIMA software.

(A) **Problem Solving-** Questions related to the following problems will be solved and their record will be maintained in the Practical Notebook:

1. Problems of curve tracing when equation is given in Cartesian coordinates.
2. Problems of curve tracing when equation is given in Parametric form.
3. Problems of curve tracing when equation is given in Polar coordinates.
4. Problem of determination of length of a curve expressed in Cartesian coordinates.
5. Problem of determination of length of a curve expressed in Polar coordinates.
6. Problem of determination of radius of curvature expressed in Cartesian coordinates.
7. Problem of determination of radius of curvature expressed in Polar coordinates.
8. Problem of determination of radius of curvature expressed in Parametric form.
9. Problem of determination of volumes and surfaces of solids of revolution for Cartesian curve.
10. Problem of determination of volumes and surfaces of solids of revolution for parametric curve.
11. Problem of determination of volumes and surfaces of solids of revolution for Polar curve.

(B) The following practicals will be done using MAXIMA software and their record will be maintained in the practical note book:

1. Learn to use basic operators and functions in Maxima software.
2. Simplify algebraic expressions and expressions containing radicals, logarithms, exponentials and trigonometric functions.
3. Expand algebraic, rational, trigonometric and logarithmic expressions.
4. Find derivatives of algebraic, trigonometric, exponential and logarithmic functions.
5. Find derivatives of functions involving above mentioned functions.
6. Problems of successive differentiation.

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Basic Algebra
B-MAT-102

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 Hrs

Course Outcomes:

CO₁: Gain knowledge of the concepts of symmetric, skew-symmetric, Hermitian, skew-Hermitian, Orthogonal and Unitary matrices.

CO₂: Have knowledge of procedure and cognitive skills used in calculating rank of a matrix, row rank and column rank of a matrix.

CO₃: Gain knowledge of the concepts of eigen values, characteristic equation, minimal polynomial of a matrix and technical skills used in solving problems based on Cayley- Hamilton theorem.

CO₄: Acquire knowledge of Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations and theorems on consistency of a system of linear equations.

UNIT-I

Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices. Elementary Operations on matrices. Rank of a matrices. Inverse of a matrix. Linear dependence and independence of rows and columns of matrices. Row rank and column rank of a matrix.

UNIT-II

Eigenvalues, eigenvectors and the characteristic equation of a matrix. Minimal polynomial of a matrix. Cayley Hamilton theorem and its use in finding the inverse of a matrix. Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations. Theorems on consistency of a system of linear equations. Unitary and Orthogonal Matrices.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. H.S. Hall and S.R. Knight: Higher Algebra, H.M. Publications 1994.
2. Shanti Narayan: A Text Books of Matrices.
- 3 Chandrika Prasad: Text Book on Algebra and Theory of equations, Pothishala Private Ltd., Allahabad.
4. Khurosh: Higher Algebra (Mir Publication)

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Introductory Mathematics
B-MAT-103

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 Hrs

Course Outcomes:

CO₁: Gain the knowledge of set theory, types of sets and operations on sets. Understand various concepts of matrices and determinants.

CO₂: Acquire the cognitive skills to apply different operations on matrices and determinants.

Gain the knowledge of the concepts of Arithmetic progression, Geometric progression and Harmonic progression, and find A.M., G.M. and H.M. of given numbers.

CO₃: Have the conceptual knowledge of straight lines and circles. Find out the slope of a line, angle between two lines, and know about various forms of a straight line and the standard form of a circle.

UNIT-I

Sets and their representations, Empty set, Finite and infinite sets, Subsets, Equal sets, Power sets, Universal set, Union and intersection of sets, Difference of two sets, Complement of a set, Venn diagram, De-Morgan's laws and their applications. An introduction to matrices and their types, Operations on matrices, Symmetric and skew-symmetric matrices, Minors, Co-factors. Determinant of a square matrix, Adjoint and inverse of a square matrix.

UNIT-II

Arithmetic progression, Geometric progression, Harmonic progression, Arithmetic mean (A.M.), Geometric mean (G.M.), Harmonic mean (H.M.), Relation between A.M., G.M. and H.M.

UNIT-III

Straight lines: Slope of a line and angle between two lines, Different forms of equation of a line: Parallel to co-ordinate axes, Point-slope form, Slope-intercept form, Two-point form, General form; Distance of a point from a straight line. Standard form of a circle and its properties.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. C. Y. Young (2021). Algebra and Trigonometry. Wiley.
2. S.L. Loney (2016). The Elements of Coordinate Geometry (Cartesian Coordinates) (2nd Edition). G.K. Publication Private Limited.
3. Seymour Lipschutz and Marc Lars Lipson (2013). Linear Algebra. (4th edition) Outline Series, McGraw-Hill.
4. C.C. Pinter (2014). A Book of Set Theory. Dover Publications.
5. J. V. Dyke, J. Rogers and H. Adams (2011). Fundamentals of Mathematics (10th edition), Brooks/Cole.
6. A. Tussy, R. Gustafson and D. Koenig (2010). Basic Mathematics for College Students (4th Edition). Brooks Cole.

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Algebra and Number Theory
B-MAT-201

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs

Course Outcomes:

CO₁: Have knowledge of the concepts used in solving problems based on relations between the roots and coefficients of general polynomial equation in one variable, solutions of polynomial equations having conditions on roots, common roots and multiple roots.

CO₂: Understand Descartes's rule of signs and learn cognitive and technical skills required in assessing nature of the roots of an equation and solving problems based on these.

CO₃: Have deeper and procedural knowledge required for solving cubic and biquadratic equations used in Mathematics as well as many other learning fields of study. To understand the basic concepts of number theory and their applications in problem solving and life-long learning.

CO₄: Have knowledge of concepts, facts, principles and theories of Linear Congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse, Chinese Remainder theorem. Attain cognitive skills used in solving linear Diophantine equations in two variables.

UNIT-I

Relations between the roots and coefficients of general polynomial equation in one variable, Solutions of polynomial equations having conditions on roots, Common roots and multiple roots, Transformation of equations.

UNIT-II

Solution of cubic equations (Cardon's method). Biquadratic equations and their solutions. Nature of the roots of an equation, Descartes's Rule of signs.

UNIT-III

Divisibility, Greatest common divisor (gcd), Least common multiple (lcm), Prime numbers, Fundamental theorem of arithmetic.

UNIT-IV

Linear congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse, Chinese Remainder theorem, Linear Diophantine equations in two variables.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

- 1) Stephen H. Friedberg, Arnold J. Insel & Lawrence E. Spence (2022). Linear Algebra (5th edition). Prentice Hall of India Pvt. Ltd.
- 2) K. B. Dutta (2004). Matrix and Linear Algebra. Prentice Hall of India Pvt. Ltd.
- 3) Vivek Sahai & Vikas Bist (2013). Linear Algebra (2nd edition). Narosa Publishing House.

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- 4) Seymour Lipschutz and Marc Lars Lipson (2013). Linear Algebra(4thEdition)OutlineSeries, McGraw-Hill.
- 5) I. Niven (1991). An Introduction to the Theory of Numbers (5th edition). John Wiley & Sons.
- 6) H.S. Hall and S.R. Knight (2023). Higher Algebra (7th edition). Arihant Publications.
- 7) Leonard Eugene Dickson (2009). First Course in the Theory of Equations. The Project Gutenberg EBook (<http://www.gutenberg.org/ebooks/29785>).

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

CO₁: Attain cognitive and technical skills required to formulate and solve practical problems involving Cardon's method, Ferrari's method and Descarte's method.

CO₂: Have technical and practical skills required for solving algebraic equations by using built in functions of MAXIMA software.

A) Problem Solving: Questions related to the following problems will be worked out and record of those will be maintained in the Practical Notebook:

1. Problems of solving cubic equations by Cardon's method.
2. Problems of solving biquadratic equations by Descarte's method.
3. Problems of solving biquadratic equations by Ferrari's method.
4. Problems to find GCD and LCM of two integers.
5. Problems to find solution of linear congruence using Euler's theorem.
6. Problems to find solution of linear congruence using Wilson's theorem.
7. Problems to find common solution of congruences using Chinese remainder theorem.

B) The following practicals will be done using MAXIMA Software and their record will be maintained in the practical note Book:

1. To find roots of algebraic equations using MAXIMA.
2. To find multiple roots of algebraic equations using MAXIMA.
3. Problems of solving cubic equations by Cardon's method using MAXIMA.
4. Problems of solving biquadratic equations by Descarte's method using MAXIMA.
5. Problems to find GCD and LCM of two or more integers using MAXIMA.
6. Problems of solving biquadratic equations by Ferrari's method using MAXIMA.

Instructions for External Practical Paper Setter/Examiner:

The practical component of the course has two parts, Problem Solving and Practical using MAXIMA software. The examiner will set 4 questions at the time of practical examination asking two questions from the part (A) and two questions from the part (B) by taking course learning outcomes (CLOs) into consideration. The examinee will be required to solve one problem from the part (A) and to execute one problem successfully from the part (B). Equal weightage will be given to both the parts. The evaluation will be done on the basis of practical record, viva-voce, write up and execution of the program.

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Vector Calculus
B-MAT-202

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 Hrs

Course Outcomes:

CO₁: Gain the knowledge of Scalar and vector product of multiple vectors.

CO₂: Acquire the knowledge of vector differentiation and derivative along a curve.

CO₃: Gain the knowledge of the concepts of gradient of a scalar point function, divergence and curl of vector point function

CO₄: Have the conceptual knowledge of properties of gradient, divergence, curl and Laplacian operator.

UNIT - I

Scalar and vector product of three vectors, product of four vectors. Reciprocal vectors. Vector differentiation. Scalar Valued point functions, vector valued point functions, derivative along a curve, directional derivatives.

UNIT-II

Gradient of a scalar point function, geometrical interpretation of $\text{grad } \phi$, character of gradient as a point function. Divergence and curl of vector point function, characters of $\text{Div. } \vec{f}$ and $\text{Curl } \vec{f}$ as point function, examples. Gradient, divergence and curl of sums and product and their related vector identities. Laplacian operator.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions 12 marks from each unit and one compulsory question of 11 marks by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. J.E. Marsden and A. Tromba, Vector Calculus, W.H. Freeman & Co. Ltd., 6th Edition.
2. Murray R. Spiegel, Vector Analysis, Schaum's outlines, McGraw Hill Education, New York.
3. N. Saran and S.N. Nigam, Introduction to Vector Analysis, Pothishala Pvt. Ltd., Allahabad.
4. Shanti Narayna, A Text Book of Vector Calculus. S. Chand & Co., New Delhi.

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Mathematics for Commerce and Social Sciences
B-MAT-203

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 Hrs

Course Outcomes:

CO₁: Understand and have the procedural knowledge of the concepts of differentiation. Gain the knowledge to find derivatives and integration of simple functions related to commerce and social sciences. Acquire skills to make use of derivatives and integration in realistic problems of the discipline.

CO₂: Have the conceptual knowledge of compound interest, annuity, loan, debenture and sinking funds and attain skills to use these concepts in problem solving.

CO₃: Gain the knowledge and understanding of the concepts of Linear programming and develop skills of formulating and solving linear programming problems based on real world problems.

UNIT-I

Differentiation, Derivatives of simple functions and other functions having applications in business and social studies, Maxima and minima of a function and their applications to Revenue, Cost, Demand, Production, Profit functions and other functions related to commercial and social Problems. Integration of simple functions and its applications in commercial and economic problems.

UNIT-II

Simple interest and compound interest. Annuities: Types of annuities, Present value and amount of an annuity (including the case of continuous compounding), Valuation of simple loans and debentures, Problems related to sinking funds.

UNIT-III

Linear Programming: Formulation of linear programming problems (LPP) and their solution by graphical and Simplex methods. Applications of linear programming in solving social science and business problems.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. E.T. Dowling (2020). Schaum's outlines of Calculus for Business, Economics and the Social Sciences. McGraw Hill.
2. S.C. Gupta and V.K. Kapoor (2014). Fundamentals of Mathematical Statistics. S.Chand & Sons, Delhi.
3. D.C. Sancheti and V.K. Kapoor (2011). Business Mathematics. Sultan Chand and Sons.
4. Holden (2010). Introductory Mathematics for Business and Economics. Ane/pal Exclusive.
5. E.T. Dowling (2009). Schaum outlines of Mathematical methods for Business and Economics. McGraw Hill.
6. E. Don and J. Lerner (2009). Schaum's outline of Basic Business Mathematics (2nd Edition). McGraw Hill.
7. L. N. Paul (2002). Linear Programming: an introductory analysis. Tata McGraw Hill. New Delhi.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
 Scheme and Syllabus of Home Science Subject for 3 Year UG Programme
 for ~~Bachelor of Arts~~ w.e.f. Academic session- 2024-25

Scheme of Examination for 1st semester

First Year: First Semester												
Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-HSC-101	DSC	Interior Decoration	3	2	0	4	20	10	50	20	100
2	B-HSC-102	MIC	Basics of food	2	0	0	2	15	0	35	0	50
3	B-HSC-103	MDC	Introductory Home science-I	3	0	0	3	25	0	50	0	75

Scheme of Examination for 2nd Semester

First Year: Second Semester												
Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-HSC-201	DSC	Introduction to Nutrition	3	2	0	4	20	10	50	20	100
2	B-HSC-202	MIC	Introduction to Communication	2	0	0	2	15	0	35	0	50
3	B-HSC-203	MDC	Introductory Home science-II	3	0	0	3	25	0	50	0	75

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Scheme of Examination for 3rd Semester

Third Semester												
Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-HSC-301	DSC	Introduction to Clothing	3	2	0	4	20	10	50	20	100
2	B-HSC-302	MIC	Food Preservation	3	2	0	4	20	10	50	20	100
3	B-HSC-303	MDC	Introductory Home science-III	3	0	0	3	25	0	50	0	75

Scheme of Examination for 4th Semester

Fourth Semester												
Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-HSC-401	DSC	Introduction to Textiles	3	2	0	4	20	10	50	20	100
2	B-HSC-402	MIC	Traditional Textiles	3	2	0	4	20	10	50	20	100

Scheme of Examination for 5th Semester

Fifth Semester												
Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-HSC-501	DSC	Rural Development	3	2	0	4	20	10	50	20	100
2	B-HSC-502	MIC	Basics of meal planning	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 6th Semester

Sixth Semester												
Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-HSC-601	DSC	Basics of Nutrition	3	2	0	4	20	10	50	20	100
2	B-HSC-602	MIC	Family Resource Management	3	2	0	4	20	10	50	20	100

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Interior Decoration
B-HSC-101

Total marks: 70
Internal marks: 20
External marks: 50

Total Credits: 3
Time: 3 Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:
CO1: To encourage experimentation with traditional and contemporary materials, technical processes, and methods
CO2: To impart knowledge and skills for making different floor plans for different income groups.
CO3: To develop skills, abilities & knowledge that enable artistic production & creative problem-solving skills.
CO4: To develop and apply concepts of art & design to create aesthetically pleasing interiors.

UNIT -I

Interior decoration: Definition, importance, and goals of interior decoration. Elements of art: Line, Form, Texture, size, Space and its application in interior decoration. Types of design: Structural and decorative and its application.

UNIT -II

Principles of art: Harmony, Balance, Rhythm, Proportion, Emphasis. Colour; Definition, importance, and types of colours. Psychological effect of Colour. Color Schemes, use of principles of art in colours and their factors.

UNIT -III

Table setting and table manners: Informal and formal table settings (buffet style, Indian style restaurant style, Cafe style). Furniture: Types of furniture, furniture arrangement for different areas (bedroom, drawing room, dining room, kitchen and its types), Factors affecting the selection and purchase of furniture, care and maintenance of furniture.

UNIT -IV

Flower arrangement: Importance and types of Flower Arrangement. Accessories used and points to be considered for Flower arrangement, Flower Decoration for different Occasions. Use of elements of art in Flower Arrangements.

Furnishings: Soft Furnishing (curtains, cushions, pillow and material for upholstered furniture), Wall Treatment and its types, Window Treatment and Decoration, Types of Floor Coverings.

Recommended Readings:

1. Gross, Crandall and Knoll (1980) management for modern families D Ecln. Prentice Hall in c New Delhi
2. Nickell and Dorsey (1986) Management in family living 4th Edn. Wely Gordon/Lee(1977) economics for consumers 7th edn. D Van Nostrancl Company
3. Seetharaman P.(2019), Interior Design And Decoration,India:CBS. M.PratapRao (2020),Interior Design: Principles And Practice,India, StandardPublishers and Distributors Pvt Ltd
4. FridaRamstedt (2020), The Interior Design Handbook: Furnish, Decorate, and Style Your Space,Clarkson Potter publishing.
5. Dr. Bhargava B. (2007), Principles of art,University Book House Pvt. Ltd.

6. Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
7. Riley & Bayen., (2003), The Elements of Design, Mitchell Beazley.
8. Rull Anna Hong (1961): Home furnishing, Wiley Eastern Pvt.Ltd.
9. BhatPranav and GoenkaShanita (1990): The foundation of art and Design, Bombay: Lakhani Book Depot.
10. Santosh Sharma Tikoo (2021) Family Resource Management, Modern Publication New Delhi.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal marks.

Practical

Total marks: 30

Internal marks: 10

External marks: 20

Total Credits: 1

Time: 3 Hrs.

1. Preparation of house plans for different income groups
 - a. Floor decoration: Alpana and Rangoli.
 - b. Pottery Painting and Decoration.
 - c. Creating various art pieces/accessories using various types of materials and techniques like Paper cutting, Collage, Candle making, Stone painting, Gift wrapping, Greeting cards with Decorative envelopes, Shopping bags/Decorative pouches.
2. Jewellery making for Fashion Designing
3. Table setting and Napkin folding.
4. Flower arrangement for different Rooms and Occasions.
5. Planning color Schemes for different Rooms (manual/computer aided)

Instructions for External Practical Paper Setter/Examiner:

1. The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration.
2. Equal weightage will be given to both the questions.
3. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

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Basics of Food
B-HSC-102

Total marks: 50
Internal marks: 15
External marks: 35

Total Credits: 2
Time: 1: 30 Hrs.

Course outcomes: A successful completion of this course, the students will be able to:

CO1: To understand the functions of food and role of various nutrients.

CO2: The students will be able to know the different cooking methods.

CO3: To understand the functions, sources, requirements and effects of excess and

CO4: deficiency of different vitamins and minerals.

Unit- 1

Foods: Definition, Food Groups, Functions of food. Essential: Food constitutes- Carbohydrates, Proteins, Fats Vitamins: A,D,E,K,B1,B2,B3,B12,C,Folic acid. Minerals: calcium, phosphorous, sodium, potassium, Iron. Sources, Functions, recommended daily allowances, effect of deficiency and excess of the above. Water: functions in the body. Role of dietary fiber in human nutrition.

Unit- II

Principles and methods of cooking: Advantages of cooking food, effect of cooking on different nutrients, Method of cooking, their advantages, and disadvantages. Moist Heat-boiling, stewing, steaming, Dry Heat- roasting, grilling, baking. Frying-shallow and deep. Radiation- solar and microwave.

Recommended Readings:

1. Srilakshmi, B. (2017). Nutrition Science. New Age International Limited, Publishers, New Delhi.
2. Dr. Santosh Sharma Tikoo, Food and Nutrition, Modern Publishers
3. Sushma Gupta, Neeru Garg, Amita Aggarwal, Jaspreet kaur and Parminder kaur text book of Foods and Nutrition by Kalyani Publications.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

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- 1062 -

Introductory Home Science-I
B-HSC-103

Total marks: 75
Internal marks: 25
External marks: 50

Total Credits: 3
Time: 2 Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:
CO1: Understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities.
CO2: Acquire professional and entrepreneurial skills for economic empowerment of self, and community in general.
CO3: To familiarize the students with personal, family and community developments.

UNIT -I

Important concepts: Objective, Education, formal and informal Home, Home maker, home making, home scientist. Home science education. Definition, Meaning and Objectives
Scope and need of home science.

UNIT -II

Structure and areas of home science- Food and nutrition, clothing and textile, home management, human development, extension education. Job opportunities in different areas of home science- Self-employment and Gainful employment

UNIT -III

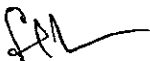
Institutions offering Home Science under agricultural and conventional/traditional universities. Role of Home Science Education in development of individual family and communities.

Recommended readings:

1. Blankship, M.L. 1991. Home economics education Boston, Houghton Mifflin company.
2. Chandra , A. 1995 .Introduction to home science, new Delhi metropolitan book Co.640 Ar 897 C .
3. Dhama, O.P. and Bhatnagar, O.P. 1991. Communication for development. New Delhi, oxford and IBH Publishing Co.
4. Dhama, O.P. 1986. Extension and rural welfare. Agra, ram Prasad and sons. Directorate of extension 1961. Extension education in community development, new Delhi, ministry of food and agriculture, govt. of India.
5. Devdas, R.P. 1978. Methods of teaching home science, new Delhi, national council of education, research and training.
6. Tikoo santosh,2018, family resource management, Modern publishers, Gulab bhawan-6, bahadur Shah zafar Marg, New Delhi

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question

1063, 

Introduction to Nutrition
B-HSC-201

Total marks: 70
Internal marks: 20
External marks: 50

Total Credits: 3
Time: 3 Hrs.

Course outcomes:

CO1: Summarize and critically discuss and understand both fundamental and applied aspects of Food Science and nutrition and Food Production.

CO2: Able to explain functions of specific nutrients in maintaining health.

CO3: Identifying nutrient specific force and apply the principles from the various factors of foods and related disciplines to solve practical as well as Real world problems.

CO4: Use current information Technologies to locate and apply evidence-based guidelines and protocol and get imported with critical thinking to take leadership roles in the field of health, diet special nutritional needs and nutritional counselling.

UNIT-I

Nutrition: Definition, meaning and importance , Basic Food groups, Functions, digestion and absorption of food. Introduction to Minerals: Calcium, Iron, Zinc, Fluorine, Iodine, Selenium, Copper, Manganese.

UNIT-II

Recommended dietary allowances (RDA), Classification, sources, functions, deficiency and excess of macro nutrients – carbohydrates, fats, proteins and micro nutrients- fat soluble vitamins-(A, D, E, K), water soluble vitamins:- vitamin B- thiamine, riboflavin, niacin, panthothenic acid, vitamin B12,pyridoxine, vitamin -C, water and fiber .

UNIT-III

Nutritional problems of the community and Brief introduction of Nutritional assessment methods. Common Nutritional Problems in India - Incidence, Causes, signs, and symptoms Protein Energy Malnutrition (PEM) ,IDD, Anaemia, Fluorosis, scurvy, Vit.A deficiency,

UNIT-IV

Adulteration in foods Basic terminology in food preparation Methods of cooking advantages and disadvantages, effect on nutritive values, Improving nutritional quality of foods germination, supplementation, fermentation, fortification and enrichment.

Recommended Readings:

1. Maney S (2008). Foods, Facts and Principles, 3rd Edition Published by Wiley Eastern, New Delhi.
2. Usha Chandrasekhar (2002) Food Science and Application in Indian Cookery, PhoenixPublishing House P. Ltd., New Delhi.
3. Raina U, Kashyap S, Narula V, Thomas S Suvira, VirS, Chopra S (2010) Basic FoodPreparation: A Complete Manual, 4th Edition, Orient Black Swan Ltd, Mumbai.
4. Srilakshmi, B. (2017) Nutrition Science, New Age International (P) Ltd., New Delhi,
5. Mahtab, S. Bamji, Kamala Krishnasamy, Brahman G.N.V (2012) Text Book of HumanNutrition, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
6. SunetraRoday (2017). Food Science and Nutrition, Oxford University Press, New Delhi.

7. Longvah, T, Ananthan, R., Bhaskarachary, K., Venkaiah, K (2017). Indian Food Composition
8. Tables (IFCT), Indian Council of Medical Research, National Institute of Nutrition, Hyderabad

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal marks.

Practical

Total marks: 30

Internal marks: 10

External marks: 20

Total Credits: 1

Time: 3 Hrs.

1. Use and Care of Kitchen Equipment
2. Standard weights and measures
3. Household measures for raw and cooked food
4. Sensory and textural evaluation of food items according to source of nutrient
5. Preparation of recipes rich in: Vitamin A,B, C, D, carbohydrate, protein, fat, fiber, Iron and calcium

Instructions for External Practical Paper Setter/Examiner:

The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration. Equal weightage will be given to both the questions. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

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Introduction to Communication
B-HSC-202

Total marks: 50
Internal marks: 15
External marks: 35

Total Credits: 2
Time: 1:30 Hrs.

Course Outcomes: A successful completion of this course will enable students to
CO1: To understand the concept of development of communication.
CO2: To develop and understand the importance of communication
CO3: To aware the different communication methods.

UNIT -I

Definition, concept and scope of communication, Functions of communication, Importance of communication.

UNIT -II

Types and problems of communication, Classification of communication methods: individual methods- farm and home visit, Farmers call, personal letter and group methods- Study tour, small group training and group meeting, Role of audio-visual aid in Communication: - Television, mobile phone and cinema.

Recommended Readings:

1. Chandra, A. 1995. Introduction to home science, new Delhi metropolitan book Co. 640 Ar 897.
2. Blankship, M.L. 1991. Home economics education Boston, Houghton Mifflin company.
3. Dhama, O.P. and Bhatnagar, O.P. 1991. Communication for development. New Delhi, oxford and IBH Publishing Co.
4. Dhama, O.P. 1986. Extension and rural welfare. Agra, Ram Prasad and sons. Directorate of extension 1961. Extension education in community development, new Delhi, ministry of food and agriculture, Govt. of India
5. Devdas, R.P. 1978. Methods of teaching home science, new Delhi, National council of education, Research and training.
6. Pattni M. Thakur. U.S. 2002. Extension education and community development, Indore, shiva publication.
7. G.L.Ray. 2008 Extension Communication and Management, Kalyani Publication, New Delhi

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

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- 1066 -

Introductory Home Science-II
B-HSC-203

Total marks: 75
Internal marks: 25
External marks: 50

Total Credits: 3
Time: 2 Hrs.

Course Outcomes: After completing this course, the learner will be able to:

- CO1: To understand basic concepts of nutrition & importance of various nutrients.
- CO2: To aware students regarding the Growth and development phases of Infancy
- CO3: To impart knowledge and skills for making different decoration methods and basic textile fibres, To impart knowledge and understanding about Home Science Extension education.

Unit-I

Definition, Concept and objectives Of Home Science, Basic terminology: Food, nutrients, nutrition, health, balanced diet, Malnutrition, Classification, sources, Function and deficiency of Carbohydrate, Protein, Fat, vitamin and minerals.

Unit-II

Flower arrangement: Importance and Types, Principles and Elements of Art in flower Arrangement ,Floor Decoration-Types(Rangoli & Alpana) and methods, Stain – Definition, classification, and methods of removing different types of stains

Unit-III

Human Growth and Development: Meaning and concept, Factors influencing growth & development milestones of infancy (0-2 years) and early childhood (3-6 years): Physical and motor development, Social and emotional development, Cognitive and language development
Home science Extension education: Meaning, Importance and objectives, Qualities of an extension worker

Recommended Readings:

1. Dahama, O.P and Bhatnagar O.P. (1995). Education and Communication for Development. New Delhi: Oxford and IBH Co.
2. Sushma Gupta, Neeru Garg, Amita Aggarwal, Jaspreet kaur and Parminder kaur(2016) text book of Foods and Nutrition and child development by Kalyani Publications.
3. Tikko, Santosh, (2017-2018) physiology, clothing and Textiles, modern publishers ,New Delhi
4. Patni Manju,2007, Extension education, Shiva Publications, Indore

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question



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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

B.A.
UG Programme Multidisciplinary

Scheme of Examination for the 1st Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1		DSC	English I	3	0	1	4	30	70	100
2		CCM1	English Fluency	1	0	1	2	15	35	50
3		MDC1	Business and Communication Skills-1	2	0	1	3	25	50	75

Scheme of Examination for the 2nd Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1		DSC	English II	3	0	1	4	30	70	100
2		MIC2	English Proficiency	1	0	1	2	15	35	50
3		MDC2	Business and Communication Skills-II	2	0	1	3	25	50	75

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

G. Phool Singh

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Department of English

Scheme of Examination for the 3rd Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1		DSC	English III	3	0	1	4	30	70	100
2		MIC3	English Language Fluency & Proficiency	3	0	1	4	30	70	100
3		MDC3	Developing Writing Skills	2	0	1	3	25	50	75

Scheme of Examination for the 4rd Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1		DSC	English III	3	0	1	4	30	70	100
2		MIC4(VOC)	*Field Visit		4		4	30	70	100

*Field Visit

Students shall visit nearby areas in groups and record narratives/ folk songs/ geets/ folklores and write a report on it and submit it in the department.

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

Scheme of Examination for the 5th Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1		DSC	English V	3	0	1	4	30	70	100
2		MIC5(VOC)	*Field Visit		4		4	30	70	100

*Field Visit


Students shall visit nearby areas in groups and record narratives/ folk songs/ geets/ folklores and write a report on it and submit it in the department.

Scheme of Examination for the 6th Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1		DSC	English V	3	0	1	4	30	70	100
2		MIC6	Indian Literature	3	0	1	4	30	70	100
3		MIC7(VOC)	*Field Visit		4		4	30	70	100

w.e.f. Academic Session 2024-25

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 Chairperson
 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan Sonapat, Haryana
 Date: 02-02-2024

Department of English

Semester I

Course Nomenclature: English -I

Course Code:

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1-Understanding stories (FICTION) as a literary genre
- CO2- Enhancing grammatical competence using stories
- CO3- Appreciation of life as reflected in stories
- CO4- Developing story writing as one of the hobbies
- CO5- Story telling: an effective communicative tool

Unit I

A Brief Introduction to Literature: FICTION for Semester - I

Various Genres of Literature under Study (Semesters 1-6) will be introduced briefly to the students along with the names of the famous propagators of concerned genres. In Semester I, students will be introduced to Fiction. (Matter Prescribed)

Note: This Chapter is restricted to MCQs only.

Short Stories – 4 Stories

1. 'Three Questions' by Leo Tolstoy
(A. Sujatha (ed.), *Effective English II*, BPSMV)
2. 'After Twenty Years' by O Henry
(Amrita Sharma (ed.), *Effective English IV*, BPSMV)
3. 'The Refugees' by Pearl S. Buck
(UshaBande and KrishanGopal (ed.), *The Pointed Vision*, O.U.P.)
4. 'The Bet' by Anton Chekhov (From *Effective English I & II*)
(UshaBande and KrishanGopal (ed.), *The Pointed Vision*, O.U.P.)

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English

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Unit II

Short Stories – 4 Stories (Indian Writers)

1. 'The Blind Dog' by R.K. Narayan
(Jaiveer Hooda, RandeepRana, Loveleen Mohan (ed.) *Language and Literature II*, Orient BlackSwan)
2. 'The Child' by Premchand
(JaiveerHooda, RandeepRana, Loveleen Mohan (ed.) *Language and Literature II*, Orient BlackSwan)
3. 'Karma' by Khushwant Singh
(Khushwant Singh, "Karma", *The Portrait of a Lady*, Penguin, 2009)
4. 'The Post Office' by Dhumketu
(Dhumketu, "The Post Office", *Ratno Dholi: The Best Stories of Dhumketu* (Translation - Jenny Bhatt), Harper Collins India, 2020)

Unit III

Grammar

1. Sentence and Types of Sentences: Affirmative, Negative, Interrogative. (Changing from Affirmative to Negative to Interrogative etc.)
2. Parts of Speech: Brief Introduction of all Parts of Speech
3. Adjectives
4. Adverbs

Unit IV

Vocabulary & Writing

1. Synonyms and Antonyms - Commonly Used: (List Prescribed in compendium IHL)
2. Paragraph Writing: Developing a Paragraph with the help of 'hints' given (Hint Development)
3. Punctuation Marks

Suggested /Recommended Reading for Semester I & II

- 1) Asha Kadyan (ed.), *Chronicles of Time*, O.U.P.
- 2) Dinesh Kumar and V.B. Abrol (ed.), *Ideas Aglow*, Publication Bureau, K.U.Kurukshetra
- 3) Raymond Murphy, *Murphys English Grammar*, C.U.P
- 4) N. Krishnaswamy, *Modern English*, Macmillan India
- 5) *Oxford Advanced Learners' Dictionary*, O.U.P.

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana
Date: 02.02.2024

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Department of English

Instructions for External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Note: The student will be required to attempt 5 Questions in all, one from each of the 4 Sections (A,B,C,D).

Question No. 1 (inclusive of all 4 Units) is compulsory.

Question No. 1

The Students will be required to attempt 12 Multiple Choice Questions (Each of One Mark) from all the 4 Units. (12 Marks)

SECTION – A

Question No. 2

- i) Explanation with reference to the context. The Students will be required to attempt one passage from the prescribed Stories. (8)
- ii) Short Answer Type questions based on the stories prescribed. (8)

Question No. 3

- i) Comprehension questions based on a paragraph from the prescribed stories. (8)
- ii) One long (essay type) question of about 150 words from the prescribed stories. (8)

SECTION – B

Question No. 4

- i) Explanation with reference to the context. The Students will be required to attempt one passage from the prescribed stories. (8)
- ii) Short Answer Type questions based on the stories prescribed. (8)

Question No. 5

- i) Comprehension questions based on a paragraph from the prescribed stories. (8)
- ii) One long (essay type) question of about 150 words from the prescribed stories. (8)

SECTION – C

Question No. 6

- i) Exercise on Types of Sentences (03)
- ii) Exercise on Parts of Speech (03)
- iii) Exercise on Adjectives (03)
- iv) Exercise on Types Adverbs (03)

SECTION – D

Question No. 7

- i) Exercise on Synonyms and Antonyms (Prescribed) (04)
- ii) Paragraph Writing with Hints Development (05)
- iii) Exercise on Punctuation (05)

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English

7

Course Nomenclature: English Fluency

Course Code:

Total Credits: 2

L-T-P

1-1-0

External Theory Marks: 35

Internal Assessment Marks: 15

Time Allowed: 3hrs

Course Outcomes: The course will help students to:-

1. describe or express their opinions on topics of personal interest such as their experiences of events, their hopes and ambitions
2. read and understand information on topical matters and explain the advantages and disadvantages of a situation
write formal letters, personal notes, blogs, reports, and texts on familiar matters •
3. comprehend and analyze texts in English
4. organize and write paragraphs and a short essays in a variety of rhetorical styles

Unit 1

In the University and Public Places:

- Introducing oneself -- Note-making (Introduce yourselves as individuals and as groups -- group discussion exercise Take notes on your fellow students' introductions)
- Pronunciation Intonation – Nouns, Verbs, Articles (Introduce characters from the text you are reading via posters)
- CV Job applications (Write the CV of a fictional character)
- Tenses and concord (Write the perfect job application for your dream job)

Unit II

In the Domestic Sphere and in the State:

- Diary/ Blog writing (Write a diary entry and convert it into a blog post)
- Modifiers, Prepositions, Conjunctions (Convert a transcript/ script/ piece of dialogue into a diary entry/ blog post)
- Research -- Filing an FIR, making an RTI request, submitting a consumer complaint (Find out what the procedure is for making a complaint about trees being cut in your neighborhood)
- Active & Passive voice; idioms (Draft a formal letter requesting information about the disbursal of funds collected by a residents' welfare association)

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Approved

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Department of English

Recommended Readings:

1. Tales of Historic Delhi by Premola Ghose Zubaan. 2011
2. 'The Lost Word' by Esther Morgan From New Writing, ed. Penelope Lively and George Szirtes, Picador India, New Delhi, 2001.
3. Squiggle Gets Stuck: All About Muddled Sentences: Natasha Sharma. Puffin Young Zubaan. 2016.
4. 'Amalkanti' by Nirendranath Chakrabarti From Oxford Anthology of Modern Indian Poetry, ed. Vinay Dharwadkar and A.K. Ramanujan, OUP, New Delhi, 1994, pp 52-3.
5. Extract from Bhimayana Srividya Natarajan and S. Anand. Navayana Publications. pp 60-71.
6. Where the Wild Things Are by Maurice Sendak Random House UK, 2000.
7. consumerhelpline.gov.in/consumer-rights.php

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The question paper shall be of 35 marks and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English

9

Course Nomenclature: Business and Communication Skills-I

Course Code:

Total Credits: 3

L-T-P

2-1-0

Course Outcomes:

External Theory Marks :50

Internal Assessment Marks: 25

Time Allowed: 2hrs

- CO1. Shape the linguistic ability of students in a business environment.
- CO2. Train both written and spoken communication of students.
- CO3. Train students in day-to-day practical application of language.
- CO4. Hone fluency and guide speaking practices of the learners.
- CO5. Enhance skill development and build confidence in over-all personality of the learners.

UNIT I

1. What is Communication?
2. Definition of Communication, Process, Objectives, Essentials of Good Communication,
3. Barriers, Role of Active listening, Overcoming Barriers of Communication

UNIT II

4. Business Correspondence
5. Emails- Register, Style. Standard Phrasing
6. Memo and Notice

UNIT III

7. Business-specific language Phrases
8. Reports-----
 - Skim Reading Reports and News Feeds
 - How to Report Information and Ideas
 - Writing Reports: Style, Register, Conventions

w.e.f. Academic Session 2024-25

Chairperson

Department of English

Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

G. Phool Singh

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Department of English

Suggested Reading:

1. *Communicative skills for Engineers and Scientists*. Delhi PHI, 2009.
2. Courtland L. Bovee's *Business Communication Today*, 10th edition, Pearson, 2010
3. Sinha, K.K. *Business Communication* Galgotia Publishing Company, New Delhi, 2012
4. Sharma, R.C. and Krishna Mohan Business correspondence and report Writing—Tata McGraw-Hill Publishing Company Limited, New Delhi, 2014

Instructions to the Paper Setter:

The question paper shall be of 50 and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee.

Department of English

Semester II

Course Nomenclature: English -II

Course Code:

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1- Understanding NON-FICTION as a literary genre
- CO2- Enhancing grammatical competence through essays/articles/speeches
- CO3- Appreciation of life as reflected in selected essays/prose
- CO4- Learning paragraph writing using cohesion and coherence
- CO5- Promoting national integration through essays on iconic figures

Unit I

A Brief Introduction to Literature – NON-FICTION for Semester - II

Various Genres of Literature under Study (Semesters 1-6) will be introduced briefly to the students along with the names of the famous propagators of concerned genres. In Semester II, students will be introduced to Non-Fiction. (Matter Prescribed)

Note: This Chapter is restricted to MCQs only.

Non-Fiction – 4 Essays

1. 'Attitude is Everything' by Brian Cavanaugh
(SumanDalal (ed.), *Effective English I*, BPSMV)
2. 'How to Live to be 200' by Stephen Leacock
(Stephen Leacock, "How to Live to be 200", *Literary Lapses*, Zinc Read, 2023.)
3. 'What Everybody Wants' by Dale Carnegie
(Dale Carnegie, "What Everybody Wants", *How to Win Friends and Influence People*, Rupa Publications India, 2016.)
4. 'How to Avoid an Argument' by Sam Horn
(Amrita Sharma (ed.), *Effective English IV*, BPSMV)

Department of English

Unit II

Non-Fiction – 4 Essays/Speeches (Indian Writers)

1. 'What is the Mind' by J. Krishnamurti
(J.Krishnamurti, "What is the Mind", *What are You Doing With Your Life*, Rider, 2018.)
2. 'Address to the Students of IIT-Hyderabad' by APJ Abdul Kalam (<http://www.youthconnect.in>)
3. 'The Responsibility of Young Men' by LalBahadurShastri
(Loveleen Mohan, RandeepRana, JaiveerHooda (ed.) *Language and Literature I*, Orient BlackSwan)
4. 'Everything is Perfect' by Yusuf Merchant
(Yusuf Merchant, "Everything is Perfect", *Happyness: Life Lessons from a Creative Addict*, Westland India, 2018.)

Unit III

Grammar

1. Tenses
2. Articles

Unit IV

Vocabulary & Writing

1. Words Describing Weather (List Prescribed)
2. Words Describing Feelings (List Prescribed)
3. Report Writing with Hints (Reports on events and incidents such as a function in college, an accident you saw on the way etc.)
4. Letter Writing – Formal Letters, Informal Letters

Suggested /Recommended Reading for Semester I & II

- 1) Asha Kadyan (ed.), *Chronicles of Time*, O.U.P.
- 2) Dinesh Kumar and V.B. Abrol (ed.), *Ideas Aglow, Publication Bureau*, K.U.Kurukshetra
- 3) Raymond Murphy, *Murphy's English Grammar*, C.U.P
- 4) N. Krishnaswamy, *Modern English*, Macmillan India
- 5) *Oxford Advanced Learners' Dictionary*, O.U.P.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English

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Instructions for External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Note: The student will be required to attempt 5 Questions in all, one from each of the 4 Sections (A,B,C,D).

Question No. 1 (inclusive of all 4 Units) is compulsory.

Question No. 1

The Students will be required to attempt 12 Multiple Choice Questions (Each of One Mark) from all the 4 Units. (12 Marks)

SECTION – A

Question No. 2

- i) Explanation with reference to the context. The Students will be required to attempt one passage from the prescribed essays. (8)
- ii) Short Answer Type questions based on the essays prescribed. (8)

Question No. 3

- i) Comprehension questions based on a paragraph from the prescribed essays. (8)
- ii) One long (essay type) question of about 150 words from the prescribed essays. (8)

SECTION – B

Question No. 4

- i) Explanation with reference to the context. The Students will be required to attempt one passage from the prescribed essays. (8)
- ii) Short Answer Type questions based on the essays prescribed. (8)

Question No. 5

- i) Comprehension questions based on a paragraph from the prescribed essays. (8)
- ii) One long (essay type) question of about 150 words from the prescribed essays. (8)

SECTION – C

Question No. 6

- Exercise on Tenses (07)
Exercise on Articles (06)

SECTION – D

Question No. 7

- Exercise on Words Describing Weather and Feelings- Prescribed (05) Report Writing (04)
Letter Writing (04)

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

G. Phool Singh

- 1080 -

Department of English

Course Nomenclature: English Proficiency

Course Code:
Total Credits: 2
L-T-P
1-1-0

External Theory Marks: 35
Internal Assessment Marks: 15
Time Allowed: 3hrs

Course Outcomes: The course will help students to:-

1. enhance comprehension skills and enrich vocabulary through the reading of short and simple passages with suitable tasks built around these.
2. introduce simple syntactical structures and basic grammar to students through contextualized settings and ample practice exercises so that they can engage in short independent compositions.
3. introduce the sounds of the language and the essentials of English pronunciation to students in order to remove the inhibitions experienced by them while speaking English.
4. acquaint students with social formulae used to perform various everyday functions so that they can converse in English in simple situations.

Unit 1

Reading and Comprehension & Learning about words:

- Short and simple passages from the prescribed books
- These texts are to be used to enhance reading and comprehension skills of learners through various textual tasks such as reading aloud, sentence completion, true / false activities, re-ordering jumbled sentences, identifying central ideas, supplying alternative titles, attempting short comprehension questions, etc.
- Learners are encouraged to exploit the recommended books beyond the prescribed sections
- The end-semester examination will include the testing of the comprehension of an unseen passage of an equivalent level
- Students cultivate the habit of using a dictionary to learn about words - their spelling, pronunciation, meaning, grammatical forms, usage, etc. Students are introduced to word associations, the relationships between words – synonyms, antonyms, homonyms, homophones. They learn the use of prefixes and suffixes; commonly confused words; phrasal verbs and idioms

Department of English

Unit II

Writing Skills & Basic Grammar Rules:

- This section will introduce students to the structure of a paragraph; they will write a short guided composition of up to 100 words. These skill is to be practiced through activities such as supplying topic sentences to given paragraphs, completing given paragraphs, expressing given facts or information from tables and expressing it in paragraphs, re-ordering jumbled sentences, and then re-writing them as connected paragraphs, using suitable linking devices etc.
- Subject-verb agreement; tenses; modals; articles; prepositions; conjunctions

Recommended Readings:

1. A Foundation English Course for Undergraduates: Reader I, Delhi: Oxford University Press, 1991, pp. 1 - 36 Units 1 – 6
2. Everyday English Delhi: Pearson, 2005, pp. 1 - 15 Units 1 - 3 & 21 - 31 Units 5 – 6
3. Everyday English Delhi: Pearson, 2005, pp. 36 - 43 Unit 8
4. Developing Language Skills I, Delhi: Manohar, 1997, pp. 186 - 195 & 206 - 209 Units 2 3 & 5 of the 'Grammar' section
5. Everyday English, Delhi: Pearson, 2005, pp. 21 - 31 Units 5 – 6
6. English at the Workplace, Delhi: Macmillan, 2006

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The question paper shall be of 35 marks and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

Department of English

Course Nomenclature: Business and Communication Skills –II

Course Code:

Total Credits: 3

L-T-P

2-1-0

External Theory Marks :50

Internal Assessment Marks: 25

Time Allowed: 2hrs

Course Outcomes:

- CO1. Shape the linguistic ability of students in a business environment.
- CO2. Train both written and spoken communication of students.
- CO3. Train students in day-to-day practical application of language.
- CO4. Hone fluency and guide speaking practices of the learners.
- CO5. Train students to face interviews and participate in group discussions.

UNIT I

Negotiating and Presentations

1. Introducing a Topic Effectively
2. Framing Your Argument
3. Linking and Sequencing Ideas
4. Responding to Questions
5. Negotiating with Suppliers/Customers/Strangers
6. Concluding

UNIT II

Social English

7. The First Five minutes
8. Small talk
9. Turn Talking
10. Business conventions

UNIT III

Interviews

11. Group Discussion
12. Preparing for an Interview
13. Types of Interviews – Selection, Appraisal, Grievance, Exit
14. Meetings -Drafting of Notice, Agenda and Resolutions

w.e.f. Academic Session 2024-25

Chairperson

Department of English

Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Chairperson
Date 02-02-2024

P. Phool Singh

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English

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Recommended Readings:

1. *Communicative Skills for Engineers and Scientists*. Delhi PHI, 2009.
2. Courtland L. Bovee's *Business Communication Today*, 10th edition, Pearson, 2010
3. Sinha, K.K. *Business Communication*, Galgotia Publishing Company, New Delhi, 2012
4. Sharma, R.C. and Krishna Mohan *Business Correspondence and Report Writing*—Tata McGraw-Hill Publishing company limited, New Delhi, 2014

Instructions for the External Theory Paper setter/ Examiner

The question paper shall be of 50 marks (Unit I and II of 15 marks each and Unit III carrying 20 marks) must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee.

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Chairperson
Date: 02-02-2024
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

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Department of English

Semester III

Course Nomenclature: English -III

Course Code:

Total Credits: 4

L-T-P

3-1-0

Course Outcomes

CO1-Understanding POETRY as a literary genre

CO2- Enhancing aesthetic competence through poetry

CO3- Understanding use of figurative devices

CO4- Developing poetry writing as one of the hobbies

CO5- Enhancing grammatical competence through poetry

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Unit I

A Brief Introduction to Literature: POETRY for Semester - III

Various Genres of Literature under Study (Semesters 1-6) will be introduced briefly to the students along with the names of the famous propagators of concerned genres. In Semester III, students will be introduced to Poetry. (Matter Prescribed)

Note: This Chapter is restricted to MCQs only.

Poetry– 4 Poems

1. 'Let Me Not to the Marriage of True Minds' by William Shakespeare
(“Let Me Not to the Marriage of True Minds”, William Shakespeare, *A Shade of Shakespeare: A Book of Sonnets* by Ron S King, Lulu.com, 2012.)
2. 'Stopping by Woods on a Snowy Evening' by Robert Frost
(“Stopping by Woods on a Snowy Evening”, Robert Frost, *A Collection of Poems* by Robert Frost, Canterbury Classics, 2019.)
3. 'My Last Duchess' by Robert Browning
Robert Browning, “My Last Duchess”, *My Last Duchess and Other Poems*, Dover Publications India, 2000.)
4. 'Still I Rise' by Maya Angelou
(Maya Angelou, “Still I Rise”, *And Still I Rise: A Book of Poems*, Random House, 1978)

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Department of English

Unit II

Poetry– 4 Poems (Indian Poets)

1. 'Waiting' by Rabindranath Tagore
(Rabindranath Tagore, "Waiting", *Gitanjali* Translated by William Radice, Penguin India, 2012.)
2. 'The Bangle Sellers' by Sarojini Naidu
(Sarojini Naidu, "The Bangle Sellers" *The Bird of Time: Songs of Life, Death and the Spring*, Read Books India, 2020)
3. 'I have Fallen in Love' by Akka Mahadevi
(Akka Mahadevi, "I have Fallen in Love", *Music of the Sky: An Anthology of Spiritual Poetry*, World Wisdom, 2004.)
4. 'Evil' by Dinesh Kumar (P.Gopichand&P.Nagasuseela (ed.) *A Posy of Poesy*, DDS Multimedia, Guntur)

Unit III

Grammar

1. Active Voice and Passive Voice
2. Prepositions

Unit IV

Vocabulary & Writing

1. Idioms – Related to Colours (List Prescribed)
2. Idioms – Related to Culture (List Prescribed)
3. Letter Writing –Enquiries, Orders, and Complaints
4. Writing Agendas of a Meeting

Suggested /Recommended Reading for Semester III & IV

- 1) Amrita Sharma (ed.), *Effective English IV*, BPSMV
- 2) S.S. Sangwan (ed.), *Sounds of Stillness*, O.U.P.
- 3) C.Rajgopalachari, *Mahabharata*, Bharatiya Vidya Bhavan
- 4) S.K.Sharma (ed.), *Snapshots*, O.U.P.
- 5) Raymond Murphy, *Murphy's English Grammar*, C.U.P.
- 6) N. Krishnaswamy, *Modern English*, Macmillan India
- 7) *Oxford Advanced Learners' Dictionary*, O.U.P.

Department of English

Instructions for External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Note: The student will be required to attempt 5 Questions in all, one from each of the 4 Sections (A,B,C,D).

Question No. 1 (inclusive of all 4 Units) is compulsory.

Question No. 1

The Students will be required to attempt 12 Multiple Choice Questions (Each of One Mark) from all the 4 Units. (12 Marks)

SECTION – A

Question No. 2

- i) Explanation with reference to the context. The Students will be required to attempt one stanza from the prescribed poems. (8)
- ii) Short Answer Type questions based on the poems prescribed. (8)

Question No. 3

- iii) Comprehension questions based on a stanza from the prescribed poems. (8)
- iv) One long (essay type) question of about 150 words from the prescribed poems. (8)

SECTION – B

Question No. 4

- i) Explanation with reference to the context. The Students will be required to attempt one stanza from the prescribed poems. (8)
- ii) Short Answer Type questions based on the poems prescribed. (8)

Question No. 5

- i) Comprehension questions based on a stanza from the prescribed poems. (8)
- ii) One long (essay type) question of about 150 words from the prescribed poems. (8)

SECTION – C

Question No. 6

- i) Exercise on Active and Passive Voice (6)
- ii) Exercise on Prepositions (6)

SECTION – D

Question No. 7

- i) Exercise on Idioms (Colour and Culture) (4)
- ii) Letter Writing (Orders and Complaints) (5)
- iii) Writing Agendas (5)

Department of English

Course Nomenclature
English Language Fluency and Proficiency
Course Code:

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

This course is intended for students who possess basic grammatical and vocabulary skills in English but may not be able to effectively communicate in their everyday contexts. The course aims to equip them with skills that will help them interact with people around their personal, institutional, and social spaces. The course will help students to:-

- CO1. Describe or express their opinions on topics of personal interest such as their experiences of events, their hopes and ambitions
- CO2. Read and understand information on topical matters and explain the advantages and disadvantages of a situation
- CO3. Write formal letters, personal notes, blogs, reports, and texts on familiar matters; comprehend and analyze texts in English
- CO4. Organize and write paragraphs and short essays in a variety of rhetorical styles
- CO5. Introduce simple syntactical structures and basic grammar to students through contextualized settings and ample practice exercises so that they can engage in short independent compositions.
- CO6. Enhance comprehension skills and enrich vocabulary through the reading of short and simple passages with suitable tasks built around these.

Unit 1

In the University and Public Places:

- Introducing oneself -- Note-making (Introduce yourselves as individuals and as groups -- group discussion exercise. Take notes on your fellow students' introductions)
- Pronunciation Intonation – Nouns, Verbs, Articles (Introduce characters from the text you are reading via posters)
- CV Job applications (Write the CV of a fictional character)
- Tenses and concord (Write the perfect job application for your dream job)

R. Phool Singh

Department of English

Unit II

In the Domestic Sphere and in the State:

- Diary/ Blog writing (Write a diary entry and convert it into a blog post)
- Modifiers, Prepositions, Conjunctions (Convert a transcript/ script/ piece of dialogue into a diary entry/ blog post)
- Research -- Filing an FIR, making an RTI request, submitting a consumer complaint (Find out what the procedure is for making a complaint about trees being cut in your neighborhood)
- Active & Passive voice; idioms (Draft a formal letter requesting information about the disbursal of funds collected by a residents' welfare association)

Unit III

Interface with Technology

- Book/film reviews (Write a review of a text you have read in class)
- Punctuation (Record a collaborative spoken-word review of the latest film your group have all seen)

Unit-IV

Basic Grammar Rules & Learning about words

- Subject-verb agreement; tenses; modals; articles; prepositions; conjunctions.
- Students cultivate the habit of using a dictionary to learn about words - their spelling, pronunciation, meaning, grammatical forms, usage, etc. Students are introduced to word associations, the relationships between words – synonyms, antonyms, homonyms, homophones. They learn the use of prefixes and suffixes; commonly confused words; phrasal verbs and idioms.

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English

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Recommended Readings:

1. *Tales of Historic Delhi* by Premola Ghose Zubaan. 2011
2. *'The Lost Word'* by Esther Morgan From *New Writing*, ed. Penelope Lively and George Szirtes, Picador India, New Delhi, 2001.
3. *Squiggle Gets Stuck: All About Muddled Sentences*: Natasha Sharma. Puffin Young Zubaan. 2016.
4. *'Amalkanti'* by Nirendranath Chakrabarti From *Oxford Anthology of Modern Indian Poetry*, ed. Vinay Dharwadkar and A.K. Ramanujan, OUP, New Delhi, 1994, pp 52-3.
5. Extract from *Bhimayana* Srividya Natarajan and S. Anand. Navayana Publications. pp 60-71.
6. *Where the Wild Things Are* by Maurice Sendak Random House UK, 2000.
7. consumerhelpline.gov.in/consumer-rights.php
8. *A Foundation English Course for Undergraduates: Reader I*, Delhi: Oxford University Press, 1991, pp. 1 - 36 Units 1 – 6
9. *Everyday English Delhi*: Pearson, 2005,
10. *Developing Language Skills I*, Delhi: Manohar, 1997
11. *Everyday English*, Delhi: Pearson, 2005
12. *English at the Workplace*, Delhi: Macmillan, 2006

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The question paper shall be of 70 marks (Unit I, II and IV of 20 marks each and unit III of 10marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinees. The questions may have sub-parts.

Department of English

Course Nomenclature: Developing Writing Skills

Course Code:

Total Credits: 4

L-T-P

2-1-0

External Theory Marks: 50

Internal Assessment Marks: 25

Time Allowed: 3hrs

Course Outcomes:

- CO1. Prepare student with writing skills needed in academic and the professional World,
- CO2. Give them the opportunity to learn techniques, forms and traditions of various types of writing.
- CO3. Learn drafting and proof reading
- CO 4. Learners shall develop writing skill competence enhancing their employability

Unit 1

- Introduction to writing;
- Introduction and importance of writing skills;
- Types of writing: Descriptive, Expository, Narrative, Argumentative and Analytic

Unit II

- Writing & Discourse Analysis:
- Analysis of Various Texts (literary and non-literacy)
- Paragraph development: basic structure of Paragraph, Paragraph unity etc.
- Use of Figurative language.

Unit III

- Creative & Professional Writing:
- Newsletter & Magazines Writing
- Writing Articles, Features and Editorials:
- Web – Content Writing
- Writing Book Reviews

Department of English

Recommended Readings:

1. Goatly, Andrew. *An Introductory Course book; Critical Reading and Writing*, London Routledge, 2000.
2. McLoughlin, Linda. *The Language of Magazines*. London and New York Routledge, 2000. (Reprint 2006)
3. Reah, Danuta. *The Language of Newspapers*. London and New York Routledge, 2004.
4. Goddard, Angela. *The Language of Advertising*. London and New York Routledge, 2005.
5. Booher, Dianna. *E-Writing; 21st Century Tools for Effective Communication*. New Delhi McMillan 2007.
6. Boardman, Mark. *The Language of Website* London and New York: Routledge, 2005
7. Mills, Sara. *Discourse*. London and New York: Routledge 1997.
8. Salkie, Raphael. *Text and Discourse Analysis*. London and New York: Routledge, 1995.
9. Butcher, Judith. *Copy Editing Cambridge: CUP* (Third Edition).
10. Gibaldi, Joseph. *MLA Handbook for writers of research papers*. New Delhi: EWP 2000 (6th Editing).
11. Baran Stanley, J. and Dennis K. Davis. *Mass Communication Theory: Foundations, Ferment, and future*. Thomson Press, 2007 (Indian reprint).
12. Child, Peter. *Texts: Contemporary Cultural Texts and Critical Approaches*. Edinburgh: Edinburgh UP, 2006.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 50 marks.

The question paper shall be of 50 marks (Unit I and II of 15 marks each and Unit III carrying 20 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

Department of English

Semester IV
Course Nomenclature: English -IV
Course Code:

Total Credits: 4

L-T-P

3-1-0

Course Outcomes

- CO1-Understanding One Act Play as a literary genre
- CO2- Enhancing grammatical competence through dialogues
- CO3- Learning dramatic devices and techniques
- CO4- Promoting Inter-cultural aesthetics through plays in translation
- CO5- Plays as a potent tool for communication

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Unit I

A Brief Introduction to Literature: DRAMA/PLAY for Semester - IV

Various Genres of Literature under Study (Semesters 1-6) will be introduced briefly to the students along with the names of the famous propagators of concerned genres. In Semester IV, students will be introduced to Drama. (Matter Prescribed)

Note: This Chapter is restricted to MCQs only.

One Act Plays – 3 Plays

- 1) 'Refund' by Fritz Karinthy (Ravi Bhushan (ed.), *Effective English III*, BPSMV)
- 2) 'Never-Never Nest' by Cedric Mount (Ravi Bhushan (ed.), *Effective English III*, BPSMV)
- 3) 'Möther's Day' by J.B. Priestly (S.K.Sharma (ed.), *Snapshots*, O.U.P.)

Unit II

One Act Plays – 3 Plays (Indian Playwrights)

1. 'Chandalika' by Rabindranath Tagore (Satish Gupta (ed.) *Five One Act Plays*, Natraj Publishing House, Karnal)
2. 'The Envoy' (Duta Vakyam) by Bhasa(Bhasa*The Shattered Thigh and Other Plays*, Translated by A.N.D. Haksar, Penguin Books, 2008)
3. 'ASOKA: The King Who Turned Non-Violent' by Christine Ribeiro (Christine Ribeiro, *Eight Moral Plays*, BYB, Mumbai, 2006)

Unit III

Grammar

1. Narration (Direct and Indirect Speech)
2. Conjunctions

Department of English

Unit IV

Vocabulary & Writing

1. Homonyms- (Homophones and Homographs) Commonly Used (List Prescribed)
2. Recommendations and Suggestions on current Social Problems (Problems like Domestic violence, Smoking in Public Places, Indiscipline Among Students, Female Foeticide etc.)
3. Writing Minutes of a Meeting

Suggested /Recommended Reading for Semester III & IV

- 1) Amrita Sharma (ed.), *Effective English IV*, BPSMV
- 2) S.S. Sangwan (ed.), *Sounds of Stillness*, O.U.P.
- 3) C.Rajgopalachari, *Mahabharata*, Bharatiya Vidya Bhavan
- 4) Dinesh Kumar, Sunita Siroha, Sukhvinder Singh (ed.) *Fragrances*, Orient Black Swan
- 5) Raymond Murphy, *Murphy's English Grammar*, C.U.P.
- 6) N. Krishnaswamy, *Modern English*, Macmillan India
- 7) *Oxford Advanced Learners' Dictionary*, O.U.P.

Instructions for External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Note: The student will be required to attempt 5 Questions in all, one from each of the 4 Sections (A,B,C,D).

Question No. 1 (inclusive of all 4 Units) is compulsory.

Question No. 1

The Students will be required to attempt 12 Multiple Choice Questions (Each of One Mark) from all the 4 Units. (12 Marks)

Question No. 2.

SECTION – A

- i) Explanation with reference to the context. The Students will be required to attempt one passage from the prescribed plays. (8)
- ii) Short Answer Type questions based on the plays prescribed. (8)

Question No. 3

- i) Comprehension questions based on a paragraph from the prescribed plays. (8)
- ii) One long (essay type) question of about 150 words from the prescribed plays. (8)

Department of English

SECTION – B

Question No. 4

- i) Explanation with reference to the context. The Students will be required to attempt one passage from the prescribed plays. (8)
- ii) Short Answer Type questions based on the plays prescribed. (8)

Question No. 5

- i) Comprehension questions based on a paragraph from the prescribed plays. (8)
- ii) One long (essay type) question of about 150 words from the prescribed plays. (8)

SECTION – C

Question No. 6

- i) Exercise on Direct and Indirect Speech (6)
- ii) Exercise on Conjunctions (6)

SECTION – D

Question No. 7

- i) Exercise on Homonyms (Prescribed) (6)
 - ii) Recommendations/Suggestions on a given Social Problem (5)
 - iii) Writing Minutes (5)
-

Department of English

Semester V

Course Nomenclature: English -V

Course Code:

Total Credits: 4

L-T-P

3-1-0

Course Outcomes

CO1-Understanding NOVEL as a literary genre

CO2- Enhancing grammatical competence through novels

CO3- Tracing the growth of novel as the social discourse

CO4- Fostering reading habits through novels

CO5- Developing Novel writing as one of the hobbies

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Unit I

- I. A brief introduction to phonetic symbols and transcription (Monosyllabic)
- II. Novel – *The Last Queen* by Chitra Banerjee Divakaruni (First Two sections-Girl, Bride)
(*The Last Queen*, Chitra Banerjee Divakaruni, Harper Collins India, 2021.)

Unit II

- Novel – *The Last Queen* by Chitra Banerjee Divakaruni (Last Two Sections- Queen, and Rebel)
(*The Last Queen*, Chitra Banerjee Divakaruni, Harper Collins India, 2021.)

Unit III

Grammar Common Errors –

1. SV Agreement
2. Use of Pronouns
3. Parallelism
4. Comparatives

Unit IV

Vocabulary & Writing

1. Prefixes and Suffixes
2. Précis Writing
3. Writing an Email

Department of English

Suggested /Recommended Reading for Semester V & VI

- 1) Daisy (ed.), *Effective English VI*, BPSMV
- 2) M.K. Bhatnagar (ed.), *Spectrum of Life: A selection of Modern Essays*, O.U.P.
- 3) William Shakespeare, *Macbeth*, Macmillan
- 4) Raymond Murphy, *Murphy's English Grammar*, C.U.P.
- 5) N. Krishnaswamy, *Modern English*, Macmillan India
- 6) John Eastwood, *Oxford Guide to English Grammar*, O.U.P.
- 7) Bansal and Harrison, *Spoken English for India*, Macmillan
- 8) R.O.Neil, *English in Situation*, O.U.P.
- 9) *Oxford Advanced Learners' Dictionary*, O.U.P.

Instructions for External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Note: The student will be required to attempt 5 Questions in all, one from each of the 4 Sections (A,B,C,D).

Question No. 1 (inclusive of all 4 Units) is compulsory.

Question No. 1

The Students will be required to attempt 12 Multiple Choice Questions (Each of One Mark) from all the 4 Units. (12 Marks)

SECTION – A

Question No. 2

- i) Short Answer Type questions based on the novel prescribed with internal choice. (8)
- ii) One long (essay type) question of about 150 words from the prescribed novel with internal choice. (8)

SECTION – B

Question No. 3

- i) Short Answer Type questions based on the novel prescribed with internal choice. (8)
- ii) One long (essay type) question of about 150 words from the prescribed novel with internal choice. (8)

SECTION – C

Question No. 4

Exercise on Common Errors-

1. Comparatives (3)
2. SV Agreement (3)
3. Use of Pronouns (3)
4. Parallelism (3)

Department of English

SECTION – D

Question No. 5

1. Exercise on Prefixes and Suffixes (4)
 2. Précis Writing (5)
 3. Email Writing (5)
-

Department of English

Semester VI

Course Nomenclature: English -VI

Course Code:

Total Credits: 4

L-T-P

3-1-0

Course Outcomes

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1-Understanding DRAMA as a literary genre
- CO2- Enhancing grammatical competence through Drama
- CO3- Revisiting Cultural ethos through select drama
- CO4- Drama tools and techniques
- CO5- Developing theatre skills

Unit I

- I. **Phonetic Transcription**(bi-syllabic words) -for one word answers only
- II. *Nagamandalam* by Girish Karnad (Act -I)
(Karnad,Girish. 2005. *Collected Plays*. Vol.1. New Delhi: Oxford Printing Press.)

Unit II

- Drama – *Nagamandalam*** by Girish Karnad(Act-II)
(Karnad,Girish. 2005. *Collected Plays*. Vol.1. New Delhi: Oxford Printing Press.)

Unit III

Grammar

Clauses (Coordinate and Subordinate)

Unit IV

Vocabulary & Writing

- 1. One Word Substitution (List Prescribed)
- 2. Preparing Resume/Curriculum Vitae (CV)
- 3. Writing an application/ Applying for vacant post

Department of English

Suggested /Recommended Reading for Semester V & VI

- 1) Daisy (ed.), *Effective English VI*, BPSMV
- 2) M.K. Bhatnagar (ed.), *Spectrum of Life: A selection of Modern Essays*, O.U.P.
- 3) William Shakespeare, *Macbeth*, Macmillan
- 4) Raymond Murphy, *Murphy's English Grammar*, C.U.P.
- 5) N. Krishnaswamy, *Modern English*, Macmillan India
- 6) John Eastwood, *Oxford Guide to English Grammar*, O.U.P.
- 7) Bansal and Harrison, *Spoken English for India*, Macmillan
- 8) R.O.Neil, *English in Situation*, O.U.P.
- 9) *Oxford Advanced Learners' Dictionary*, O.U.P.

Instructions for External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Note: The student will be required to attempt 5 Questions in all, one from each of the 4 Sections (A,B,C,D).

Question No. 1 (inclusive of all 4 Units) is compulsory.

Question No. 1

The Students will be required to attempt 12 Multiple Choice Questions (Each of One Mark) from all the 4 Units. (12 Marks)

SECTION – A

Question No. 2

- iii) Short Answer Type questions based on the drama prescribed with internal choice. (8)
- iv) One long (essay type) question of about 150 words from the prescribed drama with internal choice. (8)

SECTION – B

Question No. 3

- iii) Short Answer Type questions based on the drama prescribed with internal choice. (8)
- iv) One long (essay type) question of about 150 words from the prescribed drama with internal choice.(8)

SECTION – C

Question No. 4

Exercise on Clauses (12)

SECTION – D

Question No. 5

4. Exercise on One Word Substitution (2)
5. Resume Writing (5)
6. Application for a Post (5)

Department of English

Course Nomenclature: Indian Literature

Course Code:

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Introducing students to major movements and figures of Indian literature through the study of selected texts.
- CO2. Instilling values and human concern in students through exposure to literary texts.
- CO3. Understanding distinctive features of Indian literature through texts and contexts of prose and poetry.
- CO4. Advancing the understanding with regards to the social structure that Indian society stands upon

UNIT I

Gurdial Singh *The Last Flicker (Marhi da Deeva)*

UNIT II

Girish Karnad *Nagamandalam*

UNIT III

Nissim Ezekiel "The Patriot" "Night of the Scorpion",
"Goodbye Party for Ms. Pushpa T."

Namdeo Dhasal "Speculations On A Shirt", "Poetry Notebook"

UNIT IV

Rahi Masoom Raza *Adha Gaon*

Recommended Reading:

1. Drewett, M.E. *The Modern Indian Novel in English: A Comparative Approach*. Brussels, 1966.
2. Iyengar, K.R. Srinivasa. *Indian Writing in English*. 4th Ed. New Delhi, 1984.
3. Mukherjee, M. *The Twice-Born Fiction: Themes and Techniques of the Indian Novel in English*. New Delhi, 2001 edition.
4. Mund, S.K. *The Indian Novel in English: Its Birth and Development*. New Delhi and Bhubaneswar, 1997.
5. Walsh, W. *Indian Literature in English*. London: Longman, 1990.

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Department of English

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

The questions shall be set on all the four units. The examiner will set three questions from each unit. The questions may have sub parts. The students shall attempt seven questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

-1/02 ✓

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonbar, Haryana

Bhagat Phool Singh

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
SCHEME AND CURRICULUM OF SANSKRIT SUBJECT FOR 4 – YEAR UNDERGRADUATE
PROGRAMME (MULTIDISCIPLINARY) TO BE OFFERED w.e.f. 2024-25

Scheme of Examination for the 1st Semester

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT –DSC-101	DSC	नीतिसाहित्य एवं संस्कृत व्याकरण I	3	0	1	4	30	70	100
2	B-SKT –MDC1-102	MDC	वेद, यज्ञ प्रक्रिया एवं गीता	2	0	1	3	25	50	75
3	B-SKT –MIC1-103	MIC	संस्कृत भाषा प्रवेशिका	2	0	0	2	15	35	50
4	B-SKT –AEC-103	AEC	संस्कृत भाषा एवं भारतीय संस्कृति बोध-1	2	0	0	2	15	35	50
5	B-SEC-112	SEC	योग एवं व्यक्तित्व-विकास	2	0	1	3	25	50	75

Scheme of Examination for the 2nd Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT –DSC-201	DSC	श्रीमद्भगवद्गीता, प्राचीन भारतीय संस्कृति एवं संस्कृत व्याकरण I	3	0	1	4	30	70	100
2	B-SKT –MDC2-202	MDC	योग एवं भारतीय संस्कृति	2	0	1	3	25	50	75
3	B-SKT –MIC2-203	MIC	व्यावहारिक संस्कृत	2	0	0	2	15	35	50
4	B-SKT –AEC2-203	AEC	संस्कृत भाषा एवं भारतीय संस्कृति बोध-2	2	0	0	2	15	35	50
5	B-SEC-212	SEC	संयुक्त जीवन पद्धति एवं आयुर्वेद	2	0	1	3	25	50	75

Chairperson

Date

Chairperson
Date

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SCHEME AND CURRICULUM OF SANSKRIT SUBJECT FOR 4 – YEAR UNDERGRADUATE
PROGRAMME (MULTIDISCIPLINARY) TO BE OFFERED w.e.f. 2024-25

2

Scheme of Examination for the 3rd Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-301	DSC	ऐतिहासिक महाकाव्य, प्राचीन भारतीय संस्कृति एवं आचरण	3	0	1	4	30	70	100
2	B-SKT-*MDC- 304	MDC	संस्कृत साहित्य में राष्ट्रवाद	2	0	1	3	25	50	75
3	B-SKT- MIC-303	MIC	उपजीव्य महाकाव्य एवं उनके प्रमुख पात्र	3	0	1	4	30	70	100

Scheme of Examination for the 4th Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B- SKT - DSC-401	DSC	महाकाव्य वेदांग व्याकरण एवं शब्द प्रक्रिया	3	0	1	4	30	70	100
2	B-SKT- MIC(Voc)-402	MIC (Voc)	कथा साहित्य का इतिहास एवं महत्त्व। पंचतंत्र (अपरीक्षित कारक)	3	0	1	4	30	70	100

w.e.f. Academic Session 2024-25

Shiv

Chairperson
Date

5/11

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SCHEME AND CURRICULUM OF SANSKRIT SUBJECT FOR 4 - YEAR UNDERGRADUATE
PROGRAMME (MULTIDISCIPLINARY) TO BE OFFERED w.e.f. 2024-25

3

Scheme of Examination for the 5th Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-501	DSC	संस्कृत नाट्य साहित्य एवं व्याकरण (विभाजित)	3	0	1	4	30	70	100
2	B-SKT- MIC5(Voc)-502	MIC(Voc)	महाकाव्य (भगवद्गीता एवं बृहदारणित)		0		4	30	70	100

Scheme of Examination for the 6th Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-601	DSC	उपनिषद् साहित्य एवं व्याकरण (विभाजित)	3	0	1	4	30	70	100
2	B-SKT- MIC5(Voc)-605	MIC	बौद्ध, जैन एवं चार्वाक दर्शन		0		4	30	70	100

w.e.f. Academic Session 2024-25

Shriya

R

Chairperson
Date

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SCHEME AND CURRICULUM OF SANSKRIT SUBJECT FOR 4 – YEAR UNDERGRADUATE
PROGRAMME (MULTIDISCIPLINARY) TO BE OFFERED w.e.f. 2024-25

4

Scheme of Examination for the 7th Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-HI-701	DSC	वेद एवं वेदांग	3	0	1	4	30	70	100
2	B-SKT-DSC- H2-702	DSC	पद्य साहित्य	3	0	1	4	30	70	100
3	B-SKT- DSC- H3-703	DSC	भाषा विज्ञान एवं व्याकरण	3	0	1	4	30	70	100
4	B-SKT-DSC- H4-704	DSC	आधुनिक संस्कृत साहित्य-1 (कथा)	3	0	1	4	30	70	100
5	B-SKT- DSC- H5-705	DSC	संस्कृति एवं धर्मदर्शन	3	0	1	4	30	70	100
6	B-SKT-MIC7-706	MIC	भारतीय नीतिशास्त्र	3		1	4	30	70	100
				18	00	06	24			600

w.e.f. Academic Session 2024-25

Sharma

R

Chairperson
Date

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
SCHEME AND CURRICULUM OF SANSKRIT SUBJECT FOR 4 – YEAR UNDERGRADUATE
PROGRAMME (MULTIDISCIPLINARY) TO BE OFFERED w.e.f. 2024-25

Scheme of Examination for the 8th Semester

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC- H6-801	DSC	नाट्य साहित्य	3	0	1	4	30	70	100
2	B-SKT-DSC- H7 802	DSC	काव्य प्रकाश एवं साहित्य दर्पण	3	0	1	4	30	70	100
3	B-SKT- DSC- H8-803	DSC	भारतीय दर्शन	3	0	1	4	30	70	100
4	B-SKT-DSC- H9-804	DSC	आधुनिक संस्कृत साहित्य-2 (नाटक)	3	0	1	4	30	70	100
5	B-SKT-DSC- H10-805	DSC	संस्कृत साहित्य में योग,आयुर्वेद एवं विज्ञान	3	0	1	4	30	70	100
6	B-SKT-MIC8-806	MIC	संतुलित जीवन तथा शोच्य संस्कार	3		1	4	30	70	100
				18	00	06	24			600

w.e.f. Academic Session 2024-25

Sheela

RS

Chairperson
Date

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
SCHEME AND CURRICULUM OF SANSKRIT SUBJECT FOR 4 – YEAR UNDERGRADUATE
PROGRAMME (MULTIDISCIPLINARY) TO BE OFFERED w.e.f. 2024-25

Scheme of Examination for the 8th Semester (Hons. With Research)

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-H6-801	DSC OPTION-I	नाट्य साहित्य	3	0	1	4	30	70	100
2	B-SKT-DSC-H7-802	DSC OPTION-II	काव्य प्रकार एवं साहित्य दर्पण	3	0	1	4	30	70	100
3.	B-SKT-MIC8 -803	MIC	शोका संस्कार : महत्त्व एवं परित्याग	3	0	1	4	30	70	100
4.	Project/ Disertation B-SKT-RP-808	Research Project					12			300
							24			600

w.e.f. Academic Session 2024-25

Shiv

Shiv

Chairperson
Date

Shiv

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

Semester- 1

Course Nomenclature: नीति साहित्य एवं संस्कृत व्याकरण

Course Code : B-SKT-DSC-101

Total Credits : 4

L-T-P

3-1-0

External Theory Marks:70

Internal Theory Marks:30

Time Allowed: 3 Hours

Course Outcomes:

छात्र हितोपदेश, पंचतन्त्र, गीता महाभारत आदि में निहित उपदेशात्मक पद्यों और शिक्षाप्रद कहानियों से छात्रों के नैतिक मूल्यों का विकास करना। छात्राएँ संस्कृत व्याकरण में सर्वनाम शब्द रूपों का तीनों लिंगों के प्रयोग सीखेंगी तथा संस्कृत- अनुवाद हेतु विभक्तियों और धातुओं का यथार्थ प्रयोग सीखेंगी।

Unit -I

1. हितोपदेश(1) प्रस्तावना एवं मित्रलाभ की कथासंख्या 1-4 तक) 14अंक
प्रस्तावना के प्रथम श्लोक (सिद्धि:साध्ये.....से 45वें श्लोक 'समुद्रमासाद्य
भवन्त्यपेयाः' तक)में से सूचित/श्लोक की सप्रसंग व्याख्या।

Unit -II

2. हितोपदेश(2) प्रस्तावना एवं मित्रलाभ की कथासंख्या 1-4 तक 14अंक
कथासार/रचनाकार/पाठ्य सामग्री पर आधारित आलोचनात्मक प्रश्न।

Unit -III

3. (क)शब्द रूप:- राम, कवि, भानु, लता, नदी, फल। 14अंक
(ख)धातुरूप: भू, हस, नम्, गम् (लट्, लृट्, लोट्, लङ्, एवं विधिलिग पाँच लकारों में)

Unit -IV

4. (क)स्वर संधि (दीर्घ, गुण, वृद्धि, यण, अयादि) 14अंक
केवल संधि/विच्छेद पूछा जाएगा।
(ख) कण्ठस्थ दो श्लोकों का शुद्ध लेखन।

Recommended Books/e-resources/LMS:

1. हितोपदेश- कृष्णानन्द शास्त्री, भारतीय संस्कृत भवन, जालन्धर -2007।
2. संस्कृत व्याकरण प्रवेशिका- चौखम्मा संस्कृत सीरीज, वाराणसी।
3. रूपचंद्रिका-पं० रामचन्द्र झा, चौखम्मा संस्कृत सीरीज, वाराणसी।
4. संस्कृत साहित्य का इतिहास- आचार्य बलदेव उपाध्याय, शारदा निकेतन, वाराणसी।
5. बृहत् अनुवाद चन्द्रिका:-लेखक चक्रधर नौटियाल 'हस' शास्त्री मोतीलाल बनारसी दास वाराणसी।

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2

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल 5 प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न (14/चौदह) अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएंगे। प्रत्येक लघूत्तरात्मक प्रश्न 3.5 अंको का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। तथा प्रत्येक घटक से प्रश्न का उत्तर लिखना अनिवार्य होगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

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Chairperson
Date

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3

Semester- 1

Course Nomenclature: वेद,यज्ञ प्रक्रिया एवं गीता
Course Code : B-SKT—MDC1-102

Total Credits : 3
L-T-P
2-1-0

External Theory Marks:50
Internal Theory Marks:25
Time Allowed: 2 Hours

Course Outcomes: इस घटक से छात्रों को प्राचीन भारतीय ज्ञान, वैदिक संस्कृत भाषा एवं तत्कालीन सभ्यता एवं संस्कृति का ज्ञान होगा। वे यज्ञों के विविध स्वरूप एवं महत्त्व से अवगत होंगे। छात्रों को प्रकृति एवं पर्यावरण का महत्त्व समझने में भी सहायता होगी। श्रीमद्भगवद् गीता के 'सांख्ययोग' नामक द्वितीय अध्याय को पढ़कर छात्र जीवन के वास्तविक रहस्य एवं नैतिक मूल्यों को समझते हुए निष्काम कर्म करने की प्रेरणा प्राप्त करेंगे।

Unit –I

1. वेदों का सामान्य परिचय।
वर्ण्यविषय / विशेषताएँ / महत्त्व आदि।

10अंक

Unit –II

2. यज्ञ की व्युत्पत्ति, अर्थ एवं परिभाषा। यज्ञ के लाभ, यज्ञकुण्ड, यज्ञशाला, यज्ञपात्र एवं जीवन में यज्ञ की उपयोगिता।

10अंक

Unit –III

3. यज्ञ सामग्री के वैज्ञानिक गुण तथा पर्यावरण पर प्रभाव।

10अंक

Unit –IV

4. श्रीमद्भगवद्गीता के द्वितीय अध्याय का 1-38 श्लोक।
कण्ठस्थ दो श्लोकों का तात्पर्य-बोध एवं शुद्ध लेखन।

10अंक

Recommended Books/e-resources/LMS:

1. वैदिक साहित्य का इतिहास—वाचस्पति गौरीला।
2. वैदिक साहित्य का इतिहास—डॉ० बलदेव उपाध्याय।
3. यज्ञ विमर्श—एक वैज्ञानिक अध्ययन, डॉ० रामप्रकाश।
4. श्रीमद्भगवद्गीता—गीताप्रेस गोरखपुर।
5. गीताप्रबचन—विनोबा भावे, चौखम्मा संस्कृत सीरीज, वाराणसी 2008।

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Date

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4

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 50 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न दस (10) अंकों का होगा। प्रश्न-पत्र हल करने का समय दो (2) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार (4) प्रश्न पूछे जाएँ। प्रत्येक लघूत्तरात्मक प्रश्न 2.5 अंकों का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।







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CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

5

Semester- 1

Course Nomenclature: संस्कृत भाषा प्रवेशिका
Course Code : B-SKT—MIC1-103

Total Credits : 2
L-T-P
2-0-0

External Theory Marks:35
Internal Theory Marks:15
Time Allowed: 1.5 Hours

Course Outcomes: इस घटक से छात्रों को भारतीय ज्ञान,सभ्यता एवं संस्कृति का बोध होगा तथा व्यावहारिक शब्दों, फलों / सज्जियों आदि के संस्कृत नाम तथा अव्यय शब्दों का पता चलने से उनका शब्दकोश समृद्ध होगा। गीता के श्लोकों का शुद्ध लेखन एवं पठन सीखेंगे। वे जीवन के वास्तविक रहस्य एवं मूल्यों को समझते हुए निष्काम कर्म करने की प्रेरणा प्राप्त करेंगे। पशु-पक्षियों पर आधारित छोटी-छोटी कथाओं के माध्यम से जीवन के मर्म को समझ कर कर्मोद्योगी बनेंगे।

Unit -I

1.संस्कृत चयनिका (पद्यभाग-पाठ 1 से 4) 7अंक
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. संस्कृत चयनिका (गद्यभाग-पाठ 1,3-5) 7अंक
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -III

3. संस्कृत व्याकरण: अव्यय शब्द का बोध। 7अंक
(निम्नलिखित सूची में उल्लिखित अध्ययनों के केवल शब्दार्थ पूछे जाएंगे)
अव्यय शब्द :अकस्मात्, अग्रतः, अग्रे, अचिरम्,अपि,च,अजस्रम्, अतः,अतीव,अत्र, अथ, अद्य,अपरम्, अधस्तात्, अपरेद्युः, अधुना, अर्वाक्,अनिषम्,अस्थाने, अन्तरेण,अन्तरा,अन्तरे, अन्यश्च, अन्यत्र, अन्यथा, अभितः, अभीक्षणम्, अलम्, असकृत्, असांप्रतम्, उच्चैः, आरात्, इतः, इतस्ततः,इति, इत्थम्,इदानीम्, इह,ईषत्, उभयतः, ऋतम्, ऋते, एकत्र,एकदा, एकधा, एकपदे,एतर्हि, एव, एवम्, कथम्, कदा, कदाचित्, कदापि, चिरम्, कामम्, किंच, किमुत्, किम्वा, किल, कुतः,कुत्र,कुत्रचित्,कृतम्, क्व, क्वचित्, खलु, जातु, ज्ञाति,ततः,तदानीम्, तथा, तस्मात्, तर्हि, तावत्, तूष्णीम्, दिवा, दिष्ट्या,दोषा,द्राक्, ध्रुवम्, नक्तम्, वरम्, निकषा, नितराम्, नूनम्,परश्वः,परितः,परेद्युः, पुरः, पुरतः,यत्र, पुरस्तात्,पुरा, पृथक्, मुधा, प्रकामम्, प्रत्युत्, प्रसह्य,प्राक्, प्रेत्य, बलात्, बहिः, बहुधा, भूयः, भृशम्, मनाक्,मिश्रः,मुहुः।

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Unit -IV

4. (क) फलों एवं सब्जियों के नाम संस्कृत में।

7अंक

फलों के नाम:- अंजीर, आम, अमरूद,ककड़ी, तरबूज, नारियल, जामुन, बेर, सेब, शहतूत, खीरा, खरबूजा, अनार, संतरा, कटहल, लीची, सिंघाड़ा, गन्ना, अखरोट, आड़ू, छुहारा, चिरौंजी, मखाना, आलूबुखारा, किशमिश, खजूर, गूलर, बादाम, फालसा, बेल, मुसम्मी, मकोय, करौंदा, नीबू, मुनक्का, अंगूर।

सब्जियों के नाम:- अदरक, आलू, इमली, कटहल, कद्दू, करेला, कुंदरू, टिंडा, गोभी, टमाटर, तोरई, धनिया, पालक, प्याज, बथुआ, मिर्च, भिंडी, परंवर, बैंगन, मटर, मूली, लहसुन, लौकी, शलगम, सलाद, साग, सेम।

(ख) गीता के कण्ठस्थ किन्हीं दो श्लोकों का शुद्ध लेखन।

Recommended Books/e-resources/LMS:

1. संस्कृत चयनिका—परमानन्द शास्त्री
2. संस्कृत चयनिका प्रबोधिका—देवी चन्द्र शर्मा / डॉ० दिनेश कुमार सिंहल
3. वृहद् अनुवाद चन्द्रिका—चक्रधर नौटियाल, मोतीलाल बनारसी दास, दिल्ली 2003।
4. वैदिक प्रेयर फॉर नॉलेज, पीस एंड कोएविजस्टेंस — प्रो० बी. बी. चौबे।
5. श्रीमद्भगवद्गीता — गीताप्रेस गोरखपुर।

प्रश्नपत्र—निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात (7) अंको का होगा। प्रश्न-पत्र हल करने का समय डेढ़ (1.5) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाएं। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित सात (7) प्रश्न पूछे जाएं। प्रत्येक लघूत्तरात्मक प्रश्न एक अंक (1) का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

Semester- 2

Course Nomenclature: श्रीमद्भगवद्गीता, प्राचीन भारतीय संस्कृति एवं संस्कृत व्याकरण।

Course Code : B-SKT –DSC-201

Total Credits : 4
L-T-P
3-1-0

External Theory Marks:70
Internal Theory Marks:30
Time Allowed: 3 Hours

Course Outcomes:

श्रीमद्भगवद्गीता तथा प्राचीन भारतीय संस्कृति में निहित ज्ञानवर्धक तथ्यों के माध्यम से छात्रों के व्यक्तित्व का सर्वांगीण विकास होगा तथा छात्र शब्द रूपों का यथार्थ तात्पर्य/उपयोगिता एवं ध्येय वाक्यों के प्रयोग का औचित्य सीखेंगे।

Unit –I

- 1.श्रीमद्भगवद् गीता, द्वितीय अध्याय (1--50 श्लोक) 14अंक
(क) दो श्लोकों का सरलार्थ। (8 अंक)
(ख) एक आलोचनात्मक प्रश्न। (6अंक)

Unit –II

- 2.शिवसंकल्प सूक्त (यजुर्वेद,अध्याय 34/1-6)।
(क) एक मन्त्र की व्याख्या— (4 अंक) 14अंक
संराश/महत्त्व/विशेषता (5 अंक)
(ख) अधोलिखित ध्येय वाक्य :- (5 अंक)

- 1.धर्मचक्रप्रवर्तनाय। 2.अस्माकं वीरा उत्तरे भवन्तु। 3.सत्यमेव जयते। 4. विज्ञानं ब्रह्म।
5.यतो धर्मस्ततो जयः। 6.बहुजनहिताय बहुजनसुखाय। 7.योगक्षेमं वहाम्यहम्। 8.अहर्निशं सेवामहे।
9.योगःकर्मसु कौशलम्। 10.ज्ञानं विज्ञानं विमुक्तये। 11.जननी जन्मभूमिश्च स्वर्गादपि गरीयसी।
12.कृष्वन्तो विश्वमार्यम्। 13.योगस्थः कुरु कर्माणि।14.सत्यं शिवम् सुन्दरम्।
15.सर्वे भद्राणि पश्यन्तु मा कश्चिद् दुःखभाग्भवेत्।16.श्रम एव जयते। 17.भिन्नेष्वेकस्य दर्शनम्।
18.सेवा अस्माकं धर्मः।19.नभः स्पृशं दीप्तम्। 20.शं नो वरुणः।21.विद्ययाऽमृतमश्नुते।22.तत् त्वं पूषन्नपावृणु।
23.तेजस्विनावधीतमस्तु। 24.असतो मा सद् गमय।25.निष्ठा धृतिः सत्यम्।25.धर्मो रक्षति रक्षितः।
(तात्पर्य, चयन करने का उद्देश्य एवं शिक्षा संबन्धित प्रश्न पूछे जाएँगे)

Unit –III

- 3.(क) प्राचीन भारतीय संस्कृति की विशेषताएँ:- 14अंक
चार आश्रम/चार पुरुषार्थ/चार वर्णों/त्रिविध कर्म (प्रारब्ध,संचित,क्रियमाण)के सिद्धान्त का संक्षिप्त परिचय। (8 अंक)
(ख) श्रीमद्भगवद् गीता के दो श्लोकों का शुद्ध लेखन। (6अंक)

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CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

Unit -IV

4.संस्कृत व्याकरण:

14अंक

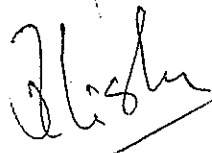
- (क) शब्द रूप— अस्मद्,युष्मद्,यत् (तीनों लिंगों में)। (7अंक)
(ख) संस्कृत से हिंदी में अनुवाद। (7अंक)

Recommended Books/e-resources/LMS:

1. श्रीमद्भगवद्गीता— गीताप्रेस गोरखपुर
2. श्रीमद् भगवद्गीता —मधुसूदन शास्त्री, चौखम्भा संस्कृत सीरीज , वाराणसी।
3. गीताप्रवचन—विनोबा भावे, चौखम्भा संस्कृत सीरीज ,वाराणसी 2008 ।
4. रचनानुवादकौमुदी— कपिलदेव द्विवेदी,विश्वविद्यालय प्रकाशन वाराणसी।
5. वैदिक प्रेयर फॉर नॉलेज एंड पीस— प्रो० बी. बी. चौबे।
6. भारतीय संस्कृति का वृहत् इतिहास (भाग -1)—डॉ० एस्. एल. नागोरी।

प्रश्नपत्र—निर्माण के लिये निर्देशः—

- 1.प्रश्न पत्र में कुल (5) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न 14/चौदह अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
- 2.प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएंगे।प्रत्येक लघूत्तरात्मक प्रश्न 3.5 अंको का होगा।
- 3.द्वितीय,तृतीय,चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम,द्वितीय,तृतीय,चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा तथा प्रत्येक घटक से प्रश्न का उत्तर लिखना अनिवार्य होगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।



w.e.f. Academic Session 2024-25

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CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

11

Semester- 2

Course Nomenclature: योग एवं भारतीय संस्कृति
Course Code : B-SKT—MDC2-202

Total Credits : 3
L-T-P
2-1-0

External Theory Marks:50
Internal Theory Marks:25
Time Allowed: 2 Hours

Course Outcomes: इस घटक से छात्रों को प्राचीन भारतीय परम्परा एवं वर्तमान जीवन में अष्टांग योग का महत्त्व ज्ञात होगा। विभिन्न आसनों के माध्यम से छात्रों को शारीरिक—मानसिक स्वास्थ्य लाभ हेतु प्रेरणा मिलेगी। विविध भाषाओं की प्रकृति एवं तत्कालीन संस्कृति का भी बोध होने के साथ—साथ ईश्वर स्तुति/ प्रार्थनोपासना परक मन्त्रों का ज्ञान होने पर उन्हें जीवन के वास्तविक सुख एवं आनन्द की प्राप्ति होगी।

Unit –I

1. अष्टांग योग का परिचय। (पातंजलयोगदर्शनम्) 10अंक
- यमनियमासनप्राणायामप्रत्याहारधारणाध्यानसमाधयोऽष्टावंगानि।
 - अहिंसासत्यास्तेयब्रह्मचर्यापरिग्रहाः यमाः।
 - शौचसन्तोषतपः स्वाध्यायेश्वरप्रणिधानानि नियमाः।
 - स्थिरसुखमासनम्।
 - श्वासप्रश्वासयोगोर्गतिविच्छेदः प्राणायामः।
 - स्वविषयासंप्रयोगे चित्तस्वरूपानुकार इवेन्द्रियाणां प्रत्याहारः।
 - देशबन्धचित्तस्य धारणा।
 - तत्र प्रत्ययैकतानता ध्यानम्।
 - तदेवार्थमात्रनिर्भासं स्वरूपशून्यमिव समाधिः।

Unit –II

2. आसन एवं प्राणायाम। 10अंक
- पद्मासन, वज्रासन, ताड़ासन, धनुरासन, गोमुखसन, सर्वांगासन, शवासन।
- प्राणायाम—
कुम्भक, रेचक, पूरक।

Unit –III

3. प्राचीन भारतीय संस्कृति की विशेषताएँ— 10अंक
- चार आश्रम/चार पुरुषार्थ/चार वर्णों/त्रिविध कर्म(प्रारब्ध, संचित, कियमाण)के सिद्धान्त का संक्षिप्त परिचय।

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Unit -IV

4.(क)संस्कृत मन्त्र एवं श्लोक :-

10अंक

- गायत्री मंत्र
- महामृत्युंजय मंत्र
- शान्ति मंत्र (ॐ द्यौ शान्ति...)
- संगच्छध्वम्.....
- अयं निजः परोवेति
- सर्वे भवन्तु सुखिनः...
- कर्मण्येवा.....
- योगस्थः कुरु कर्माणि....
- ध्यायतो विषयान्...
- क्रोधाद्भवति संमोहः.....
- ॐ सहनाववतु सह नौ....
- यत्र नार्यस्तु पूज्यन्ते...

(ख)उपर्युक्त में से कण्ठस्थ दो श्लोकों / मंत्रों का शुद्ध लेखन
एक श्लोक/मंत्र का सरलार्थ।

Recommended Books/e-resources/LMS:

1. पातंजलयोगदर्शनम् – डॉ० देवी सहाय पाण्डेय।
2. योगासन एवं योगसाधना—डॉ० सत्यपाल, चौखम्भा संस्कृत संस्थान, वाराणसी।
3. प्राचीन भारत की संस्कृति और सभ्यता – दामोदर धर्मानन्द कोसम्बी।
4. भारतीय संस्कृति की रूपरेखा—पृथ्वी कुमार अग्रवाल।
5. वैदिक प्रेरण फॉर नॉलेज, पीस एंड कोएक्जिस्टेंस – प्रो० बी. बी. चौबे।
6. भारतीय संस्कृति का वृहत् इतिहास (भाग -1)—डॉ० एस. एल. नागोरी।

प्रश्नपत्र—निर्माण के लिये निर्देशः—

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 50 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न दस (10) अंको का होगा। प्रश्न-पत्र हल करने का समय दो (2) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएँ। प्रत्येक लघूत्तरात्मक प्रश्न 2.5 अंको का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

w.e.f. Academic Session 2024-25

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Sharma

Chairperson
Date

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Semester- 2

Course Nomenclature: व्यावहारिक संस्कृत
Course Code : B-SKT—MIC2-203

Total Credits : 2
L-T-P
2-0-0

External Theory Marks:35
Internal Theory Marks:15
Time Allowed: 1.5Hours

Course Outcomes: छात्रों को पशु-पक्षियों पर आधारित छोटी छोटी कथाओं से जीवन के मर्म का ज्ञान होगा एवं कर्म करने की प्रेरणा प्राप्त होगी। गिनती तथा पशु- पक्षियों, सगे-संबन्धियों आदि के नाम (संस्कृत में) जानने से छात्रों का शब्द भण्डार बढ़ेगा। ईश्वर-स्तुति / प्रार्थनोपासना मन्त्रों/श्लोकों के लेखन एवं पठन से भारतीय जीवन पद्धति एवं मूल्यों में उनका विश्वास दृढ़ होगा।

Unit -I

1. संस्कृत चयनिका (पद्यभाग-पाठ 5 से 8) 7अंक
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. संस्कृत चयनिका (गद्यभाग-पाठ 6सेतक9) 7अंक
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -III

- 3.संस्कृत व्याकरण: 7अंक
(क)संस्कृत में पशुओं एवं संबन्धियों के नाम।

पशुओं के नाम:- बकरा, बकरी, बैल,भेड़,हाथी,शेर, कुतिया, ऊँट,गाय,भैंस, चीता, भालू, खरगोश, घोड़ा,गधा, बन्दर,भेड़िया,भैंसा,मकड़ी,लोमड़ी,कुत्ता, गीदड़,गोह, गैंडा,चूहा, छिपकली, तेंदुआ,नेवला,बाघ, बिच्छू, बिल्ला,बिल्ली, सुअर,हिरन।

सम्बन्धियों के नाम:- पिता,माता,दादा,दादी, पति,पत्नी,नाना,नानी,चाचा, चाची,लड़का,लड़की,पोता,पोती, भाई,बड़ाभाई,छोटाभाई,भानजा,भाभी,भतीजा, मित्र,सखी,नौकर, सास,नौकरानी,दामाद,मामी, मामा,ससुर,साला,मालिक, जीजा,दुश्मन,ननद,नाती, परदादा,परदादी,समधी,समधिन, फूआ,फूफा,सगाभाई,चचेराभाई,मौसा, बहन मौसी।

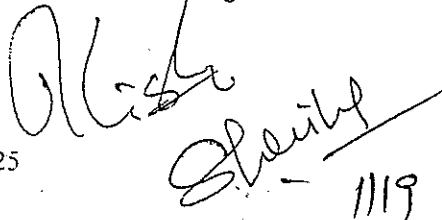
(ख) 1-30 तक गिनती संस्कृत में।

Unit -IV

4. (क)कण्ठस्थ किन्हीं दो श्लोकों का शुद्ध लेखन। 7 अंक

(ख)शान्तिमंत्र, गायत्री मंत्र, महामृत्युंजय मंत्र लेखन एवं अनुवाद।

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Chairperson
Date

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS IN SANSKRIT

Recommended Books/e-resources/LMS:

1. संस्कृत चयनिका-परमानन्द शास्त्री
2. संस्कृत चयनिका प्रबोधिका-देवी चन्द्र शर्मा/डॉ० दिनेश कुमार सिंहल
3. वृहद् अनुवाद चन्द्रिका-चक्रधर नौटियाल, मोतीलाल बनारसी दास, दिल्ली 2003।
4. वैदिक प्रेयर फॉर नॉलेज, पीस एंड कोएविजस्टेंस - प्रो० बी. बी. चौबे।
5. नीति शतक (भृगुहरी)-प्रो० राजेश्वर प्रसाद मिश्र, बलरामपुर हाउस, प्रयागराज-2।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात (7) अंकों का होगा। प्रश्न-पत्र हल करने का समय डेढ़ (1.5) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघु उत्तर वाले विकल्परहित सात (7) प्रश्न पूछे जाएंगे। प्रत्येक लघूत्तरात्मक प्रश्न एक (1) अंक का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के क्रमशः प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाए। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

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Alisha

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Chairperson
Date

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

CURRICULUM OF BACHELAR OF ARTS MUSIC (VOCAL)

Scheme of Examination for the 1st Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-101	DSC	Musicology	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-MDC-1-103	MDC	Basic concepts of Music	2	0	0	2	20	35	55
		Practical	0	2	0	1	05	15	20
B-MLV-MIC-1-101	MIC	Introductory knowledge of Music	1	0	0	1	10	20	30
		Practical	0	2	0	1	05	15	20
						2	15	35	50

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Smriti Dinesh

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Date

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CURRICULUM OF BACHELOR OF ARTS MUSIC (VOCAL)

Scheme of Examination for the IInd Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-201	DSC	Historical Study of Music	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-MDC-2-203	MDC	Applied Basic terms	2	0	0	2	20	35	55
		Practical	0	2	0	1	05	15	20
B-MUV-MIC-2-202	MIC	General terms of Music	1	0	0	1	10	20	30
		Practical	0	2	0	1	05	15	20
						2	15	35	50

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Sushma Dikwah

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Chairperson
Date

CURRICULUM OF BACHELAR OF ARTS MUSIC (VOCAL)

Scheme of Examination for the IIIrd Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-301	DSC	Applied Music Theory	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-MDC-3-303	MDC	Historical Study of Music	2	1	0	2	20	35	55
		Practical				1	05	15	20
						3	20	55	75

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CURRICULUM OF BACHELAR OF ARTS/MUSIC (VOCAL)

Scheme of Examination for the IVth Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-401	DSC	History and Technical Uses of Music	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
						4	30	70	100

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Sunil Kumar


Chairperson
Date

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELAR OF ARTS MUSIC (VOCAL)

Scheme of Examination for the Vth Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-501	DSC	Inter-Relation of Music with Various Subject	2	0	0	2	15	35	50
			0	4	0		2	15	35
		Practical				4	30	70	100

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CURRICULUM OF BACHELAR OF ARTS MUSIC (VOCAL)

Scheme of Examination for the VIth Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-601	DSC	Music Education System	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
						4	30	70	100

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Shubhinder

Asst

S. Simran

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CURRICULUM OF BACHELAR OF ARTS MUSIC (VOCAL)

Scheme of Examination for the VIIth Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-701	DSC	Theoretical Study of Indian Music	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-DSC-702	DSC	Principles and Techniques of Stage Performance	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-DSC-703	DSC	Applied Theory of Performing Arts	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-DSC-704	DSC	Basic Training of Stage and Sound Arrangement and Music Appreciation	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-DSC-705	DSC	Vocal Stage Performance	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50
B-MUV-MIC-706	MIC	Research Methodology	2	0	0	2	15	35	50
		Practical	0	4	0	2	15	35	50

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K. Srinivasulu

S. Srinivasulu

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELAR OF ARTS MUSIC (VOCAL)

Scheme of Examination for the VIIIth Semester

Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
			L	P	T		Internal	External	Total
B-MUV-DSC-801	DSC	Historical Development of Indian Music Practical	2	0	0	2	15	35	50
B-MUV-DSC-802	DSC	Principles and Techniques of Stage Performance and Recording Studio Works Practical	2	0	0	2	15	35	50
B-MUV-DSC-803	DSC	Aesthetical Study of Indian Music Practical	2	0	0	2	15	35	50
B-MUV-DSC-804	DSC	Digital Era, Recording Techniques and Application of Music Practical	2	0	0	2	15	35	50
B-MUV-DSC-805	DSC	Principles of Vocal Stage Performance Practical	2	0	0	2	15	35	50
B-MUV-MIC-806	MIC	Essay and Biography Practical	2	0	0	2	15	35	50
			0	4	0	4	30	70	100

Shubish
S. Suman

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester I

Course Nomenclature: Musicology

Course Code: B-MUV-DSC- 101

Total Credits: 4

L-P-T

2-4-0

External Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

After completing this course, the learner will be able to:

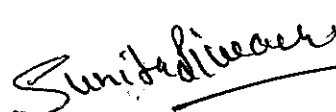
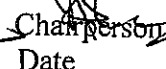
1. describe the Ragas of North Indian Classical Music.
2. gain knowledge about Talas.
3. describe the various theoretical aspects of Indian Music.

Weightage for Internal and External Evaluation

Max. Marks	100 (Internal 30 + External 70)
Class test / Minor Test / Sessional Test:	15 Marks
Lec-Dem Presentation:	10 Marks
Attendance:	05 Marks
Total:	30 Marks
External Theory:	35 marks
External Practical:	35 Marks
Total:	70 Marks

Unit	Topic
1.	1.1 Definition of Classical Music 1.2 Detailed description of the Ragas prescribed in the syllabus. i. Kafi ii. Bhupali
2.	2.1 Definition of Tala and its importance in Music 2.2 Ability to write the Talas in Ekgun and Dugun i. Kehrava ii. Teental
3.	3.1 Detailed study of Khyal Gayan Shelly 3.2 Short notes on the following: Sangeet, Swar, Alankar, Saptak, Rag, That, Jati, vadi, Samvadi, vivadi, Anuvadi.
4.	4.1 History of Indian Music of Vedic Period 4.2 Contribution towards music by the following: i. V.N. Bhatkhande ii. V.D. Pluskar

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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical

1. Ability to sing five basic Alankaras in Shudh Swaras.
2. Ability to perform Drut Khyal in Rag Kafi and Bhupali.
3. Ability to demonstrate the following Talas in Ebgun and Dugun Layakaries. Teental Kehrava.
4. Ability to sing one Sargam Geet and Lokgeet Learning Resources.

Recommended Books/E-Resources

1. *Kramik Pustak Malika*- Pt V.N. Bhatkhande
2. *Sangeet Bodh*- Sharachchander Pranjpai
3. *Hamare Sangeet Ratan*- Pt. Laxmi Narayan Garg
4. *Rag Parichay Part 1-2*- Harish Chander Shri Vastav
5. *Shastriya Sangeet Ka Vikas*- Dr. Amita Sharma

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains seven objective type questions of one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting atleast one question from each unit.

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Sunita Siwach,

Chairperson
Date

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester II**Course Nomenclature: Historical Study of Music****Course Code: B-MUV-DSC- 201****Total Credits: 4****L-P-T****2-4-0****External Marks: 70****Internal Assessment Marks: 30****Time Allowed: 3hrs****Course Outcomes:**

After completing this course, the learner will be able to:

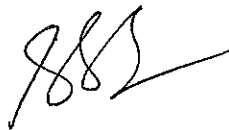
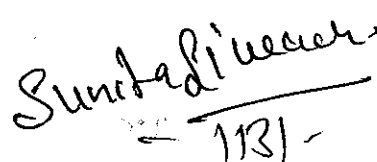
1. describe the Ragas of North Indian Classical Music
2. play the Talas on hand.
3. learn the rich history of Indian Music.

Weightage for Internal and External Evaluation

Max. Marks	100 (Internal 30 + External 70)
Class test / Minor Test / Sessional Test:	15 Marks
Lec-Dem Presentation:	10 Marks
Attendance:	05 Marks
Total:	30 Marks
External Theory:	35 marks
External Practical:	35 Marks
Total:	70 Marks

Unit	Topic
1.	1.1 Detailed description of the Ragas prescribed in the syllabus. i. Vrindavani Sarang ii. Yaman 1.2 Ability to write the Talas on hand with Ekgun and Dugun i. Rupak Tal ii. Ektal
2.	2.1 Short notes of the following: Nad, Shruti, Varn, Avartan Alap, Lakshan Geet, Laya 3.2 Classification of Indian Classical Instruments
3.	3.1 Haryana Ka Lok Sangeet, Punjab ka Lok Sangeet 3.2 Short notes on Indian Classical Dance Kathak, Kathkali, Bharat Natyam, Manipuri
4.	4.1 Merits and Demerits of Gayak 4.2 Life Sketch of the following musicians: i. Pt. Omkar Nath Thakur ii. Acharya KCD Brihaspati

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Chairperson
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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical

1. Ability to perform Drut Khyal in following Ragas:
 - a. Vrindavani sarang b. Yaman
2. Ability to sing Alankaras in Vikrit Swaras.
3. Ability to play following Talas on Hand in Ekgun and Dugun
 - a. Rupak Tal
 - b. Ektal
4. One Devotional Song (Bhajan/Shabad/Sufi/Geeta Shlokas etc.) with instruments or Karaoke
5. Ability to recognize the bol of Talas on Tabla.

Recommended Books/E-Resources.

1. *Kramik Pustak Malika*- Pt V.N. Bhatkhande
2. *Hamare Sangeet Ratan* – Pt. Laxmi Narayan Garg
3. *Rag Parichaya* – Sh. Harish Chander Shrivastav
4. *Shartriya Sangeet ka Vikas* – Dr. Amita Sharma
5. *Sangeet Bodh* – Sharad Chander Paranjpay
6. *Bhartiya Sangeetaga and Sangeet Granth*- Dr. Shradhya Malviya
7. *Rajasthan ke Seemavarti Kshetron me Loksangeet* – Dr. Sunita Siwach
8. *Tal Aur Kal* – Shri Anoop Lathar

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains seven objective type questions of one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting at least one question from each unit.



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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester III

Course Nomenclature: Applied Music Theory

Course Code: B-MUV-DSC- 301

Total Credits: 4

L-P-T

2-4-0

External Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

After completing the course, the students will:

1. gain knowledge about singing style of Ragas.
2. know about Talas.
3. gain knowledge about different Gayan Shellies

Weightage for Internal and External Evaluation

Max. Marks	100 (Internal 30 + External 70)
Class test / Minor Test / Sessional Test:	15 Marks
Lec-Dem Presentation:	10 Marks
Attendance:	05 Marks
Total:	30 Marks
External Theory:	35 marks
External Practical:	35 Marks
Total:	70 Marks

Unit	Topic
1.	1.1 Detailed description of the Ragas prescribed in the syllabus. i. Bhairav ii. Jonpuri 1.2 Classification of Ragas.
2.	2.1 Ten essentials of Ragas Grah, Ansh, Nayas etc. prescribed in the syllabus. 2.2 Write about the following: Thumri, Tappa 2.3 Margi and Deshi Sangeet
3.	3.1 Notation of prescribed Ragas Bhairav, Jonpuri
4.	4.1 Contribution of the following scholars towards music. Amir Khusro, Tansen 4.2 Description of the prescribed Talas in Ekgun and Dugun: Dadra, Sultal

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Sundera Singh

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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical

1. Two detailed Ragas with alaps and tans.
 - a. Jonpuri
 - b. Bhairav
2. Ability to demonstrate Dadra and Sultal by reciting bols on hand with Dugun.
3. One Geet/ Gazal/Bhajan with instruments or Karaoke.
4. Singing of National Anthem.

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains seven objective type questions of one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting at least one question from each unit.



Sunita Dhwani

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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester IV**Course Nomenclature: History and Technical Uses of Music****Course Code: B-MUV-DSC- 401****Total Credits: 4****L-P-T****2-4-0****External Marks: 70****Internal Assessment Marks: 30****Time Allowed: 3hrs****Course Outcomes:**

After completing the course the students will:

1. gain knowledge about singing Ragas and Talas.
2. know the importance of Music in various aspects.
3. know about the folk music.

Weightage for Internal and External Evaluation

Max. Marks	100 (Internal 30 + External 70)
Class test / Minor Test / Seasonal Test:	15 Marks
Lec-Dem Presentation:	10 Marks
Attendance:	05 Marks
Total:	30 Marks
External Theory:	35 marks
External Practical:	35 Marks
Total:	70 Marks

Unit	Topic
1.	1.1 Detailed description of the Ragas prescribed in the syllabus. i. Des ii. Malkauns 1.2 Uses of the E-resources in Music (Merits and Demerits)
2.	2.1 Pt. Vishnu Narayan Bhatkhande Notation System 2.2 Contribution of Music at devotional place, Temples, Masjid, Gurudwaras. 2.3 Folk Music of Rajasthan
3.	3.1 Notation of prescribed Ragas in the syllabus Des, Malkauns
4.	4.1 Contribution of the following scholars towards music a. Tyagraj b. Shyama Shastri 4.2 Description of the prescribed Talas in Ekgun and Dugun Jhaptal and Chautal

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Chairperson
Date

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical

1. One slow khayal form the syllabus of 1st, 2nd, and 3rd Sem or 4th sem. With alaps and tans.
2. Two detailed Ragas: Des and Malkauns
3. Ability to demonstrate Talas on hand in Ekgun and Dugun.
4. Singing of one Geet/Gazal/Bhajan/film song based on classical music with instruments or karaoke.

Recommended Books/E-Resources

1. *Kramik Pustak Malika*- Pt V.N. Bhatkhande
2. *Sangeet Bodh* – Sharad Chander Pranjpai
3. *Hamare Sangeet Ratan* – Pt. Laxmi Narayan garg
4. *Rag Parichaya* – Sh. Harish Chander Shrivastav
5. *Shartriya Sangeet ka Vikas* – Dr. Amrita Sharma
6. *Tal aur Kal* – Sh. Anoop Lather
7. *Bandishavali* – Dr. Kala Shri Khande
8. *Bhartiya Lokgeeton me Haryana ka Yogdan* – Dr. Rama Kanta
9. *Rajasthan ke Semavarti Kshetrom me Loksangeet* – Dr. Sunita Siwach

Instructions for the paper setters


1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains seven objective type questions of one mark each.
5. All questions carry equal marks.



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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester I

Course Nomenclature: Introductory Knowledge of Music

Course Code: B-MUV-MIC1- 102

Total Credits: 2

L-P-T

1-2-0

External Marks: 35

Internal Assessment Marks: 15

Time Allowed: 1hr 30 min

Course Outcomes:

After completing the course the students will:

1. gain introductory knowledge of music.
2. gain knowledge about Talas.

Weightage for Internal and External Evaluation

Max. Marks 50

Theory Internal: 10 Marks (Class Test/Seminar/Group Discussion) 5 marks
+ Attendance) 5 marks

Practical Internal: 05 Marks

Theory Internal: 20 Marks

Practical External: 15 Marks

Total: 50 Marks


Theory Exam Duration: 1 hr 30 min

Unit	Topic
1.	1.1 origin of Music and its Importance 1.2 Introduction of Classical Music 1.3 Introduction of Folk Music 1.4 Introduction of Light Music
2.	2.1 Kehrava tal with Ekgun and Dugun 2.2 Definition of Swars, Types of Swars 2.3 Definition of Tals, Khali, Avartan, Sam
3.	3.1 Contribution of Lata Mangeshkar ji in Indian Music 3.2 Contribution of Smrat Tansen ji in Indian Classical Music 3.3 Short notes on Vadi, Samvadi, Anuvadi, Laya, Tal 3.4 Rules for singing National Anthem
4.	4.1 Saptak: Types of Saptak, 4.2 Folk Music of Haryana and Pubjab 4.3 Definition of Swar, Types of Swars

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 Chairperson



 Chairperson

Date

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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical

1. Five Alankar of Shudh Swars.
2. Ability to sing any Geet/Bhajan/Lokgeet
3. Ability to play Kehrava tal in Ekgun and Dugun on hand.
4. One Saraswati Vandana.

Recommended Books/E-Resources

Book Recommended:

1. *Bhatkhande Sangeet Shastra*: V.N. Bhatkhande
2. *Punjab ke Lokgeet*: Dr. Ashok Sharma
3. *Haryana ka Loksangeet*: Geeta Khankhar
4. *Tal Aur Kal*: Sh. Anoop Lather
5. *Hamare Sangeet Ratan*: Pt. Laxmi Narayan Garg
6. *Sangeet Bodh*: Sharad Chander Pranjpai
7. *Rajasthan ke Seemavarti Kshetron me Lok Sangeet*: Dr. Sunita Siwach.

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains four or eight questions (Objective type) of half or one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting atleast one question from each unit.

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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester II

Course Nomenclature: General Terms of Music

Course Code: B-MUV-MIC2- 202

Total Credits: 2
L-P-T
1-2-0

External Marks: 35
Internal Assessment Marks: 15
Time Allowed: 1hr 30 min

Course Outcomes:

After completing the course the students will gain introductory knowledge of Rag and Talas.

Weightage for Internal and External Evaluation

Max. Marks 50

Theory Internal : 10 Marks (Class Test/Seminar/Group Discussion) 5 marks
+ Attendance) 5 marks

Practical Internal : 05 Marks

Theory Internal : 20 Marks

Practical External: 15 Marks

Total: 50 Marks

Theory Exam Duration: 1 hr 30 min

Unit	Topic
1.	1.1 Saptak and its types. 1.2 Laya and its types. 1.3. Five Alankars with Sudh Swars
2.	2.1 Merits and Demerits of Gayak 2.2 Folk Music of Rajasthan 2.3 Contribution of Music in National Integration.
3.	3.1 Teental with Ekgun and Dugun 3.2 Rag Description of Kafi 3.3 Short notes on Indian Classical Instruments. 1. Tantri Vadya 2. Avnadh Vadya 3. Sushir Vadya 4. Ghan Vadya 3.4 Short notes on Indian classical Dances. 1. Bharat Natyam 2. Kathak 3. Kathkali 4. Manipuri
4.	4.1 Contribution of Pt. Jasraj in Music 4.2 Contribution of Pt. Ravi Shankar in Music

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Sunita Siroach
Chairperson
Date 11/3/25

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical

1. One Drut Khyal in Rag Kafi.
2. One Sargam Geet in Rag Kafi.
3. Teental on Hand with Ekgun and Dugun.
4. Singing of Geet/Gazal/Bhajan with Instruments or Karoka.

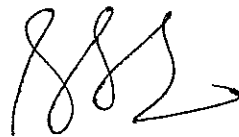
Learning Resources

Recommended Books/E-Resources

1. *Rag Parichaya Part 1-2-3* – Harish Chander Shri Vastav
2. *Kramik Pustak Malika* – Pt. V.N. Bhatkhande
3. *Sangeet Bodh* – Dr. Shachander Pranypay
4. *Hamare Sangeet Ratan* – Pt. Laxmi Narayan Garg
5. *Rajasthan Ke Seemavarti Kshetron me Lok Sangeet* – Dr. Sunita Siwach

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains four or eight questions (Objective type) of half or one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting atleast one question from each unit.



Sunita Siwach

w.e.f. Academic Session 2024-25

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Chairperson
Date

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester I

Course Nomenclature: Basic Concepts of Music

Course Code: B-MUV-MDC1- 103

Total Credits: 3

L-P-T

2-2-0

External Marks: 50

Internal Assessment Marks: 25

Time Allowed: 2 hrs

Course Outcomes:

After completing this course the learner will be able to:

1. know different types of music
2. understands the various basic terms of music
3. enhance the knowledge about Talas
4. know about the contribution of great scholars of Indian classical music
5. develop her confidence to perform the given content.

Weightage for Internal and External Evaluation

Max. Marks 75 (Theory 50 + Practical 25)

Internal Assessment : Class test/ Seminar/Group Discussion etc. 15 Marks

Attendance: 05 Marks

Practical Internal: 05 Marks

Theory External: 35 Marks

Practical External: 15 Marks

Total: 75 Marks

Theory Exam Duration: 2 hrs.

Unit	Topic
1.	1.1 Definition of Alankara. Five Alankaras of Shudh Swaras 1.2 Definition of Swaras, Types of Swaras 1.3 Music and its types, classical music, semi classical, folk music and light music
2.	2.1 Definition of Tal 2.2 Definition of Sam, Tali, Khali, Aavartan 2.3 Kehrava Tala
3.	3.1 Contribution of Pt. Vishnu Narayan Bhatkhande in Indian classical music. 3.2 Contribution of Pt. Vishnu Digambar pluskar in Indian classical music.
4.	4.1 Music and Science 4.2 Folk music of Haryana and Punjab 4.3 Contribution of music in national integration.

w.e.f. Academic Session 2024-25



Sunja Siroach
- 11/1

Chairperson
Date

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical

1. Five Alankars of Shudh Swars.
2. Ability to sing any Geet/Lokgeet or Bhajan.
3. Ability to play Kehrava tal with Dugun on hand.
4. One Saraswati Vandana.

Learning Resources

Recommended Books/E-Resources

1. *Sangeet Bodh* – Sharad Chander Pranjpay
2. *Hamare Sanjeet Ratan* – Laxmi Narayan Garg
3. *Tal Aur Kal* – Sh. Anoop Lather
4. *Rajasthan ke Simavarti Kshetron me Lok Sangeet ki Sthiti* – Dr. Sunita Siwach
5. *Shastriya Sangeet ka Vikas* – Dr. Amrita Sharma
6. *Rag Parichaya Part 1-2* – Pt. Harish Chander Shrivastav

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains seven objective type questions of one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting atleast one question from each unit.

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Sunita Siwach

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Semester II**Course Nomenclature: Applied Basic Terms of Music****Course Code: B-MUV-MDC2- 203****Total Credits: 3****L-P-T****2-2-0****External Marks: 50****Internal Assessment Marks: 25****Time Allowed: 3hrs****Course Outcomes:**

After completing this course the learner will be able to:

1. elaborate about Indian classical music
2. demonstrate the terms of music
3. demonstrate the Talas
4. perform a small performance on stage.

Weightage for Internal and External Evaluation

Max. Marks 75 (Theory 50 + Practical 25)

Internal Assessment: Class test/ Seminar/Group Discussion etc. 15 Marks

Attendance: 05 Marks

Practical Internal: 05 Marks

Theory External: 35 Marks

Practical External: 15 Marks

Total: 75 Marks

Theory Exam Duration: 3 hrs.

Unit	Topic
1.	1.1 Saptak and it types. 1.2 Laya and its types. 1.3. Definition of Vadi, Samvadi, Anuvadi, Vivadi, Aroh, Avroh, Pakad, Samprakritik Rag, Varan.
2.	2.1 Teental on hand with Ekgun and Dugun 2.2 Jaties of Ragas 2.3 Music in the cultural traditions of Rajasthan.
3.	3.1 Contribution of Lata Mangeshkar in music with her life sketch. 3.2 Contribution of Pt. Tansen in Indian classical music with his life stkech. 3.3 Definition of Nad and Shruti, Thata
4.	4.1 Short notes on Raga, Alap and Tana 4.2 Description of Raga, Kafi 4.3 Notation of Drut Khayal in Raga, Kafi

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

Syllabus for Practical:

1. One non detailed Rag in Kafi.
2. 5 Alankars of vikrit swars and practice of Tivra Madhyam.
3. One Patriotic song
4. One Sargam Geet in any Rag which is not mentioned in the syllabus.
5. Teental on hand with Ekgun and Dugun Layakaries.

Learning Resources

Recommended Books/E-Resources

1. *Sangeet Bandishavli* – Dr. Kala Shri Khande
2. *Tal Aur Kal* – Sh. Anoop Lather
3. *Hamare Sangeet Ratan* – Pt. Laxmi Narayan Garg.
4. *Rajasthan ke Seemavarti Kshetro me Lok Sangeet ki Sthiti* : Dr. Sunita Siwach.
5. *Rag Parichaya Part 1-2-3*: Pt. Harish Chander Shrivastav.
6. *Kramik Pustak Malika* – Pt. V.N. Bhatkhande Part 1-2-3.

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains seven objective type questions of one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting at least one question from each unit.



Sunita Siwach

w.e.f. Academic Session 2024-25

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Chairperson
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CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)**Semester III****Course Nomenclature: Historical Study of Music****Course Code: B-MUV-MDC3- 303****Total Credits: 3****L-P-T****2-2-0****External Theory Marks: 50****Internal Assessment Marks: 25****Time Allowed: 2 hrs****Course Outcomes:**

After completing this course the learner will be able to:

1. understand the various theoretical aspects of Indian classical music.
2. illustrate the historical knowledge of Indian classical music.
3. gain knowledge of Talas and Ragas and also can perform Ragas with Talas.

Weightage for Internal and External Evaluation

Max. Marks 75 (Theory 50 + Practical 25)

Internal Assessment:	Class test/ Seminar/Group Discussion etc. 15 Marks
Attendance:	05 Marks
Practical Internal:	05 Marks
Theory External:	35 Marks
Practical External:	15 Marks
Total:	75 Marks
Theory Exam Duration:	3 hrs.

Unit	Topic
1.	1.1 Music in following treatise: Natya Shastra, Sangeet Ratnakar 1.2 Music in Ramayan and Mahabharat 1.3 Development of Indian classical music in modern period
2.	2.1 Classification of Indian classical instruments 2.2 Detailed study of Indian classical dances 2.3 Detailed note on Tarana gayan Shelly
3.	3.1 Description of Rag Bhimplasi 3.2 Rupak Tal and Dadra Tal on hand in Ekgun and Dugun 3.3 Parmel Prवेशक Rag
4.	4.1 Definition of Ghrana, Detail of following two Ghranas: Kirana Ghrana, Patiala Ghrana 4.2 Contribution of music students: Bach, Mozart, Pt. Om Karnath Thakur 4.3 Contribution of music in our society

Syllabus for Practical;

w.e.f. Academic Session 2024-25

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Sunder Dineen
11/5Chairperson
Date

CURRICULUM OF BACHELAR OF ARTS IN MUSIC (VOCAL)

1. Ability to perform Drut Khyal in Rag: Bhimplasi.
2. One Tarana in any Rag.
3. One Geet/Gazal/Bhajan with instruments or Karaoke.
4. Ability to play Rupak Tal and Dadra Tal on hand with its Dugun.

Learning Resources

Recommended Books/E-Resources

1. *Bhartiya Lok Vadya* – Dr. Koshal Kumari
2. *Bhartiya Sangeet ka Itihas* – Dr. Sunita Sharma
3. *Bhartiya Sangitagya and Sangeet Granth* – Dr. Shradha Malviya
4. *Film Aur Filmkar* – Dr. C. Bhaskar Rav
5. *Rag Parichaya Part 2.3.4* – Pt. Harish Chander Shri Vastav
6. *Sangeet ke Ghrano ki Charcha* – Sh. Sushil Kumar Chaubey
7. *Kramik Pustak Malika* – Pt. Vishnu Narayan Bhatkhande ji

Instructions for the paper setters

1. There shall be nine questions in all.
2. The question paper will be divided into four units.
3. Paper setter has to set two questions from each unit of syllabus given below.
4. The question no. one will be compulsory question and will cover the whole syllabus it contains seven objective type questions of one mark each.
5. All questions carry equal marks.
6. The candidate will have to attempt five questions in all selecting atleast one question from each unit.



Sande Dhwani


Chairperson
Date

Scheme of Examination of the Course along with POs, PSOs, COs and Mapping Matrix

अपेक्षित पाठ्यक्रम परिणाम:

- हिंदी भाषा और साहित्य की सामान्य जानकारी अर्जित करना।
- इतिहास के प्रति आलोचनात्मक विश्लेषणत्मक ज्ञान के द्वारा हिंदी भाषा और साहित्य को संतुलित रूप से प्रस्तुत कर सकने योग्य बनाना।
- आधुनिक आवश्यकताओं के अनुरूप राजभाषा, राष्ट्रभाषा तथा संपर्क भाषा की जानकारी हासिल करना।
- हिंदी भाषा और साहित्य की सामान्य जानकारी विकसित करना।
- हिंदी विषय में प्रासंगिक अवधारणा और सिद्धांतों की व्यापक समझ पैदा करना।
- वर्तमान में अर्जित ज्ञान को प्रभावी ढंग से लागू करने के लिए व्यावहारिक कौशल व तकनीकी विशेषज्ञता हासिल करने योग्य बनाना।
- जटिल समस्याओं के हल करने व उचित निर्णय लेने के लिए अर्जित ज्ञान और कौशल को लागू करने हेतु।
- मौखिक और लिखित संवाद में प्रभावी क्षमता पैदा करने योग्य क्षमता विकसित करना।
- विवेचन विश्लेषण तथा मूल्यांकन हेतु महत्वपूर्ण कौशल लागू करना।
- नैतिकता और सामाजिक दायित्व के निर्वहन योग्य बनाना।
- अनुसंधान की विभिन्न विधियों में दक्षता विकसित करने योग्य बनाना।
- प्रामाणिक साक्ष्य के आधार पर जटिल समस्याओं को समाधान करने योग्य समझ पैदा करना।





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Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan
SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTIDISCIPLINARY) W.E.F. 2024-25

Semester	Course Type	Course Code	Nomenclature of Paper	Contact Hours			Credit	Internal Marks	External Marks	Total Marks	Duration in Hrs.
				L	T	P					
First	DSC-1	B-HIN-DSC-101	मध्यकालीन हिंदी काव्य-I	3	1	0	4	30	70	100	3
	MIC-1	B-HIN-MIC-102	हिंदी गद्य (नाटक)-I	2	0	0	2	15	35	50	1.5
	MDC-1	B-HIN-MDC-103	हिंदी गद्य (कहानी)-I	2	1	0	3	25	50	75	2
Second	DSC-2	B-HIN-DSC-201	हिंदी गद्य-II	3	1	0	4	30	70	100	3
	MIC-2	B-HIN-MI-202	हिंदी गद्य विधाएं -II	2	0	0	2	15	35	50	1.5
	MDC-2	B-HIN-MDC-203	हिंदी पद्य -II	2	1	0	3	25	50	75	2

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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE
PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

THIRD	DSC-3	B-HIN- DSC-301	छायावादीकाव्य	3	1	0	4	30	70	100	3
	MIC-3	B-HIN-MIC-302	हिंदीभाषाऔरसम्प्रेषण	3	1	0	4	30	70	100	3
	MDC-3	B-HIN- MDC-303	हिंदीनाटकसाहित्य	3	1	0	3	25	50	75	2
	AEC-2	B-AEC 303	कम्प्यूटरऔरहिंदी	2	0	0	2	15	35	50	1.5

FOURTH	DSC-4	B-HIN- DSC-401	समकालीनगद्य-साहित्य		1	0	4	30	70	100	3
	MIC-4	B-HIN-MIC-402	समकालीन-कविता	3	1	0	4	30	70	100	3
	AEC-3	B-HIN- AEC-403	मीडियालेखन	2	0	0	2	15	35	50	1.5

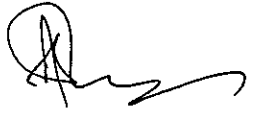

FIFTH	DSC-5	B-HIN- DSC-501	समकालीनहिंदी-कविता	3	1	0	4	30	70	100	3
	MIC-5	B-HIN-MIC-502	सृजनात्मकलेखन	3	1	0	4	30	70	100	3



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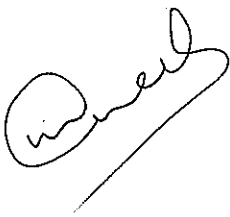
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PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

SIXTH	DSC-6	B-HIN-DSC-601	लोक-साहित्य	3	1	0	4	30	70	100	3
	MIC-6	B-HIN-MIC-602	हिन्दी-पत्रकारिता	3	1	0	4	30	70	100	3
SEVENTH	DSC-7	B-HIN-DSC-701	कामायनी (चयनित अंश)	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-702	हिंदीनाटक-साहित्य	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-703	हिंदीउपन्यास-साहित्य	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-704	भाषा-विज्ञान	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-705	साहित्यिक-निबन्ध	3	1	0	4	30	70	100	3
	MIC-7	B-HIN-MIC7-706	हिन्दीआलोचना	3	1	0	4	30	70	100	3



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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE
PROGRAMME (MULTI-DISCIPLINARY) W.E.F. 2024-25

EIGHTH	DSC-8	B-HIN-DSC-801	भारतीय काव्यशास्त्र	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-802	कालजयीकहानियाँ	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-803	हिन्दीनिबन्ध साहित्य	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-804	कबीर	3	1	0	4	30	70	100	3
	DSC	B-HIN-DSC-805	हिंदी गद्य विधाएँ	3	1	0	4	30	70	100	3
	MIC-8	B-HIN-MIC8-806	संसारमयिकनिबन्ध	3	1	0	4	30	70	100	3

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SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTIDISCIPLINARY) W.E.F. 2024-25

Semester-1	
मध्यकालीन हिंदी कविता-1	Course Code: B-HIN-DSC-101
Level of the Course	100-199
Credits 04	Theory-3 Tutorial -1 Total- 4
Contact Hours per week	3 + 1 = 4
Suggested Evaluation Method	
Internal Assessment: 30 Marks	Class Participation 05 Seminar/Presentation/Assignment/Quiz/Class Test etc. -10 Mid Term Exam: 15
पाठ्यक्रम परिणाम CO1 भाषा के उद्भव और विकासक्रम का ज्ञान होगा। CO2 कविता की व्याख्या व आलोचनात्मक समझ होगी। CO3 साहित्य इतिहास का ज्ञान होगा। CO4 कवियों के विषय में जानकारी होगी। “हिंदी भाषा एवम् मध्यकालीन काव्य” निर्धारित पाठ्य पुस्तक (काव्य- कुंज संपा० डा राम सजन पांडे) इकाई 1:- हिंदी भाषा का उद्भव और विकास हिंदी भाषा की विविध बोलियां :- बृज, अवधी, भोजपुरी, हरियाणवी हिंदी भाषा के विविध रूप :- राजभाषा हिंदी, राष्ट्रभाषा हिंदी, मानक भाषा हिंदी, संपर्क भाषा हिंदी। इकाई 2:- हिंदी भाषा का साहित्य इतिहास :- (आदिकाल) आदिकाल का नामकरण एवम् काल विभाजन आदिकाल की परिस्थितियां आदिकालीन साहित्य की प्रवृत्तियां आदिकालीन रासो साहित्य आदिकालीन धार्मिक साहित्य	

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इकाई 3:- अन्य प्राचीन कवियों का संक्षिप्त साहित्यिक परिचय
विद्यापति, अमीर खुसरो, नामदेव, सरहपाद ।

इकाई 4:- भक्तिकालीन कवि:-

कबीर:- 1 से 51 साखियां

जायसी:- मानसरोदक खंड, बनिजारा खंड

तुलसीदास :- 1 से 4 (कवितावली), 5 से 9 बालकाण्ड, 10 से 14 अयोध्याकांड

सूरदास:- 1 से 26 पद

मीराबाई :- 1 से 20 तक

निर्धारित कवियों से संबंधित आलोचनात्मक प्रश्न:-

कबीर की सामाजिक चेतना

जायसी की प्रेम भावना

तुलसी की भक्ति भावना

सूरदास का वात्सल्य वर्णन

मीरा की विरह भावना

संदर्भ ग्रंथ सूची:-

- हिंदी साहित्य का इतिहास:- रामचंद्र शुक्ल
- हिंदी साहित्य का आदिकाल:- हजारी प्रसाद द्विवेदी
- हिंदी साहित्य का इतिहास:- डॉ नगेंद्र
- हिंदी साहित्य का विकास:- डॉ वासुदेव शर्मा
- कबीर ग्रंथावली:- संपादक हजारी प्रसाद द्विवेदी




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- जायसी का मूल्यांकन:- आचार्य रामचंद्र शुक्ल
- हिंदी निबंध के आधार स्तंभ:- डॉ० हरिमोहन
- तुलसी काव्य मीमांसा :- उदय भानु सिंह
- हिंदी साहित्य का बृहत इतिहास:-पंडित राहुल सांकृत्यायन
- निबंध और निबंध:- डा विश्वनाथ प्रसाद
- भाषा विज्ञान और मानक हिंदी:- डा नरेश मिश्र
- शुद्ध लेखन और हिंदी का मानक रूप:- डॉ० हरिश्चंद्र वर्मा
- www.encyclopedia.centre.com
- www.wikipedia.com
- www.culturepedia.com
- [www.archive.org\(hindishabdsagar\)](http://www.archive.org(hindishabdsagar))

आवश्यक निर्देश:-

- 1 इकाई एक में से चार प्रश्न दिए जाएंगे जिसमें से विद्यार्थी को तीन प्रश्न लिखने हैं। कुल अंक पंद्रह होंगे।
- 2 इकाई चार में से चार पद्यांश दिए जाएंगे, जिनमें से दो की सप्रसंग व्याख्या लिखनी होगी। कुल अंक चौदह होंगे।
- 3 इकाई चार में से कवियों से संबंधित आलोचनात्मक प्रश्नों में दो प्रश्न दिए जाएंगे। जिसमें से विद्यार्थी को एक का उत्तर देना होगा। कुल अंक दस होंगे।
- 4 इकाई 2 में से तीन प्रश्न दिए जाएंगे जिसमें से विद्यार्थी को दो लिखने होंगे। प्रत्येक प्रश्न आठ अंक का होगा। कुल अंक सोलह होंगे।
- 5 इकाई 3 में से दो प्रश्न दिए जाएंगे जिसमें से एक का उत्तर देना होगा। कुल अंक पांच होंगे।
- 6 समस्त पाठ्यक्रम में से सभी लघु प्रश्नों के उत्तर अनिवार्य होंगे। इसमें दस प्रश्न दिए जाएंगे। कुल अंक दस होंगे।



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5/11/24

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan
SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTIDISCIPLINARY) W.E.F. 2024-25

Course Code- B-HIN-MIC-102		Hindi	Gadya	(Natak)
Level of the Course	100-199			
Credits 02	Theory-2	Tutorial -0		
Contact Hours per week	2	+	1	= 3
Suggested Evaluation Method				
Internal Assessment: 15 Marks	External marks: 35 Marks			
पाठ्यक्रम परिणाम CO1 नाटक के रंगमंचीय तत्वों का ज्ञान होगा। CO2 नाटक की व्याख्या और आलोचनात्मक समझ पैदा होगी। CO3 प्रयोजनमूलक हिंदी की जानकारी होगी। CO4 प्रयोजनमूलक हिंदी में रोजगार की संभावनाओं का ज्ञान होगा। इकाई 1:- आषाढ़ का एक दिन:- व्याख्या और प्रश्न <ul style="list-style-type: none">● मोहन राकेश की नाट्यकला● आषाढ़ का दिन का प्रतिपाद्य● आषाढ़ का एक दिन में इतिहास और कल्पना● आषाढ़ का एक दिन की रंगमंचीयता● आषाढ़ का एक दिन में चरित्र चित्रण इकाई 2:- प्रयोजनमूलक हिंदी:- रोजगार परक हिंदी:- विज्ञापन, सृजनात्मक लेखन (अनुच्छेद लेखन, रिपोर्ट लेखन आदि) अनुवाद कला:- परिभाषा, प्रकार, अनुवाद की आवश्यकता, अच्छे अनुवाद के गुण।				





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सहायक ग्रंथ सूची

- आषाढ़ का एक दिन:- संपादक, आशीष तिवारी, राजपाल एंड संस 2019 ।
- आषाढ़ का एक दिन:- सुमन तिवारी, इंटर यूनिवर्सिटी प्रेस, प्राइवेट लिमिटेड, 2019
- आषाढ़ का एक दिन, मोहन राकेश, राजकमल प्रकाशन 2023 डा नरेश मिश्र, प्रयोजन मूलक हिंदी मानक हिंदी व्याकरण:- डा हरदेव बाहरी
- मानक हिंदी व्याकरण तथा रचना, da Kamal सत्यार्थी
- www.encyclopedia.centre.com
- www.wikipedia.com
- www.culturepedia.com
- [www.archive.org\(hindishabdsagar\)](http://www.archive.org(hindishabdsagar))
- नाट्य कला, रघुवंश

आवश्यक निर्देश

- 1 इकाई एक में से दो गद्यांश पूछे जाएंगे, जिसमें से विद्यार्थी को दो की सप्रसंग व्याख्या लिखनी होगी। कुल अंक बारह होंगे।
- 2 आषाढ़ का एक दिन में निर्धारित प्रश्नों में से दो प्रश्न पूछे जाएंगे, जिसमें से एक का उत्तर देना होगा। कुल अंक बारह होंगे।
- 3 इकाई दो में से चार प्रश्न पूछे जाएंगे जिनमें से दो प्रश्नों के उत्तर देने होंगे। कुल अंक ग्यारह होंगे।

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3/15/24

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan
SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTIDISCIPLINARY) W.E.F. 2024-25

हिंदी गद्य (कहानी)			
Course Code- B-HIN-MDC-103			
Level of the Course	100-199		
Credits 03	Theory-2	Tutorial -1	Total- 3
Contact Hours	2 per week	1 per week	3 per week
Suggested Evaluation Method			
Total Marks:	75	75	
Internal Assessment: 25 Marks	Class Participation		05
	Seminar/Presentation/Assignment/Quiz/Class Test etc.		07
	Mid Term Exam:		13
Term-End Examination. (External) 50 Marks	50		
पाठ्यक्रम परिणाम			
CO1 कहानी के तत्वों का ज्ञान होगा।			
CO2 कहानी की व्याख्यात्मक और आलोचनात्मक जानकारी होगी			
CO3 भाषा की व्याकरण का ज्ञान होगा।			
CO4 कहानी लेखन में अभिरुचि पैदा होगी।			
इकाई1:-			
1 सुदर्शन :- हार की जीत			
2 प्रेमचंद: ईदगाह			
3 प्रसाद :- ग्राम			
4 मोहन राकेश:- मलबे का मालिक			
5 फणीश्वर नाथ रेणु:- तीसरी कसम			
6 भीष्म साहनी:- चीफ़ की दावत			
7 पुष्पा मैत्रेयी:- फैसला			
8 डा रोहिणी अग्रवाल:- आओ मां परी बन जाएं			

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इकाई - 2

निर्धारित कहानीकारों का साहित्यिक परिचय एवं कहानियों पर आधारित आलोचनात्मक प्रश्न।

इकाई 3 :- व्याकरण

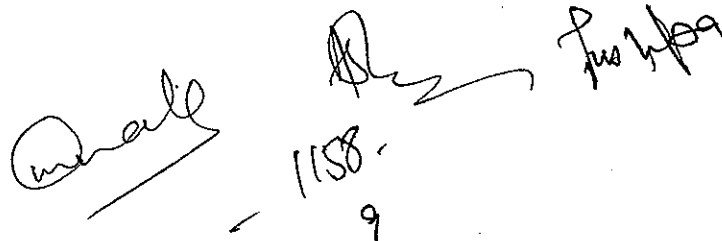
कारक, उपसर्ग, प्रत्यय, वाक्य रचना, पद परिचय।

सहायक ग्रंथ सूची

- प्रेमचंद और उनका युग:- रामविलास शर्मा, राजकमल प्रकाशन, नई दिल्ली
- डॉ० नामवर सिंह, नई कहानी, राजकमल प्रकाशन, दिल्ली
- कहानी आंदोलन की भूमिका, डॉ० बलराज पांडे, अनामिका प्रकाशन, इलाहाबाद
- विजय मोहन, आज की हिंदी कहानी
- नई कहानी:- संदर्भ और प्रकृति, देवी शंकर अवस्थी
- भाषा विज्ञान और हिंदी भाषा:- डा नरेश मिश्र, अभिनव प्रकाशन, दिल्ली
- www.encyclopedia.centre.com
- www.wikipedia.com
- www.culturepedia.com
- [www.archive.org\(hindishabdsagar\)](http://www.archive.org(hindishabdsagar))

आवश्यक निर्देश:-

- 1 निर्धारित कहानियां में से चार गद्यांश दिए जाएंगे जिनमें से दो गद्यांशों की सप्रसंग व्याख्या करनी होगी कुल अंक 14 होंगे।
- 2 निर्धारित कहानियों पर आधारित दीर्घ आलोचनात्मक दो प्रश्न पूछे जाएंगे, जिसमें से एक का उत्तर देना होगा। कुल अंक 12 होंगे।
- 3 निर्धारित कहानियों में से चार लघु प्रश्न पूछे जाएंगे, जिसमें से दो के उत्तर देने होंगे। कुल अंक 6 होंगे।
- 4 इकाई तीन में से चार प्रश्न पूछे जाएंगे, जिसमें से दो के उत्तर देने होंगे। कुल अंक 8 होंगे।
- 5 समस्त पाठ्यक्रम में से 10 प्रश्न वैकल्पिक पूछे जाएंगे कुल अंक 10 होंगे।


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Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan
SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTIDISCIPLINARY) W.E.F. 2024-25

Semester-II			
हिंदी गद्य		Course Code-B-HIN-DSC-201	
Credits	Theory-3	Tutorial -1	Total- 4
Contact Hours	3 per week	1 per week	4 per week
Suggested Evaluation Method			
Total Marks:	100		100
Internal Assessment: 30 Marks	Class Participation		05
	Seminar/Presentation/Assignment/Quiz/Class Test etc.		10
	Mid Term Exam:		15
Term-End Examination. (External)	Marks 70		
पाठ्यक्रम परिणाम			
CO1 काव्य शास्त्र के तत्वों का ज्ञान होगा।			
CO2 कहानी की व्याख्या व आलोचनात्मक समझ होगी।			
CO3 साहित्य इतिहास का ज्ञान होगा।			
CO4 अन्य कथाकारों के विषय में जानकारी होगी।			
इकाई 1:-			
काव्यांग परिचय:-रस, छंद, अलंकार			
रस की परिभाषा, रस के अंग, रस के भेद			
अलंकार:- अनुप्रास, यमक, श्लेष, उपमा, उत्प्रेक्षा, मानवीकरण, रूपक, अतिशयोक्ति			
छंद:- दोहा, सोरठा, चौपाई, कुंडलियां, छप्पय, बरवै, सवैया, कवित।			

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इकाई 2:- कहानियां

- 1 सुदर्शन:-हार की जीत
- 2 मुंशी प्रेमचंद:- कफ़न
- 3 मोहन राकेश:- मलबे का मालिक
- 4 फणीश्वर नाथ रेणु:- ठेस
- 5 मैत्रेयी पुष्पा:- फ़ैसला
- 6 डा रोहिणी अग्रवाल:- आओ मां परी बन जाएं
- 7 ओमप्रकाश वाल्मीकि:- पच्चीस चौका डेढ़ सौ

इकाई 3 अन्य कहानीकार (संक्षिप्त साहित्यिक परिचय)

सैयद इंशा अल्लाह खां, जयशंकर प्रसाद, अज्ञेय, यशपाल, कमलेश्वर।

इकाई 4:- भक्तिकालीन इतिहास

भक्ति काल की परिस्थितियां

संत काव्य परंपरा

सूफी काव्य परंपरा

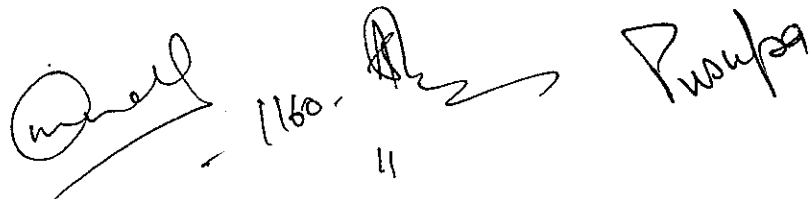
कृष्ण काव्य परंपरा

राम काव्य परंपरा

भक्तिकाल:- एक स्वर्ण युग

संदर्भ ग्रंथ सूची

- हिंदी साहित्य का इतिहास:- रामचंद्र शुक्ल
- हिंदी साहित्य का इतिहास:- डॉ नगेंद्र
- हिंदी साहित्य का विकास:- डॉ वासुदेव शर्मा

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- हिंदी निबंध के आधार स्तंभ:- डॉ० हरिमोहन
- देवी शंकर अवस्थी, नई कहानी संदर्भ और प्रकृति
- डा० नामवर सिंह, नई कहानी, राजकमल प्रकाशन, नई दिल्ली।
- रामविलास शर्मा, प्रेमचंद और उनका युग, राजकमल प्रकाशन, नई दिल्ली।
- निबंध और निबंध:- डा विश्वनाथ प्रसाद
- हिंदी साहित्य का वैज्ञानिक इतिहास:- डा० गणपति चन्द्र गुप्त
- www.encyclopedia.centre.com
- www.wikipedia.com
- www.culturepedia.com
- [www.archive.org\(hindishabdsagar\)](http://www.archive.org(hindishabdsagar))

आवश्यक निर्देश:-

- 1 इकाई एक में से चार प्रश्न दिए जाएंगे जिसमें से विद्यार्थी को तीन प्रश्न लिखने हैं। कुल अंक पंद्रह होंगे।
- 2 इकाई दो में से चार गद्यांश दिए जाएंगे, जिनमें से दो की सप्रसंग व्याख्या लिखनी होगी। कुल अंक चौदह होंगे।
- 3 कहानियों से संबंधित आलोचनात्मक प्रश्नों में दो प्रश्न दिए जाएंगे। जिसमें से विद्यार्थी को एक का उत्तर देना होगा कुल अंक दस होंगे।
- 4 इकाई तीन में से दो प्रश्न दिए जाएंगे, जिसमें से विद्यार्थी को एक लिखना होगा। कुल अंक पांच होंगे।
- 5 इकाई चार में से चार प्रश्न दिए जाएंगे जिसमें से दो का उत्तर देना होगा कुल अंक सोलह होंगे।
- 6 समस्त पाठ्यक्रम में से सभी लघु प्रश्नों के उत्तर अनिवार्य होंगे। इसमें दस प्रश्न दिए जाएंगे। कुल अंक दस होंगे।



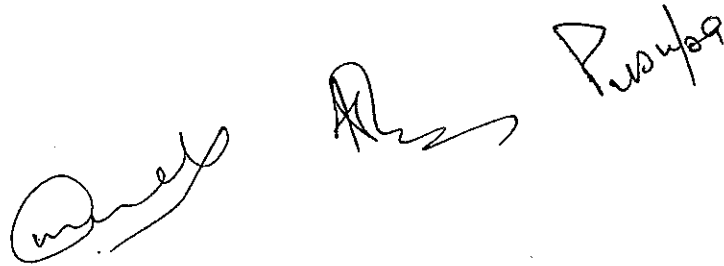


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Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan
SCHEME AND SYLLABUS OF HINDI FOR 4-YEAR UNDERGRADUATE PROGRAMME
(MULTIDISCIPLINARY) W.E.F. 2024-25

हिंदी			
Course Code- B-HIN-MIC-202			
Level of the course	100-199		
Credits	Theory-2	Tutorial -0	Total- 3
Contact Hours	2 per week	0-per week	2 per week
Suggested Evaluation Method			
Total Marks:	50	50	
Internal Assessment: 15 Marks	Class Participation		04
	Seminar/Presentation/Assignment/Quiz/Class Test etc.		04
	Mid Term Exam:		07
Term-End Examination. (External) 35 Marks	35		
<p>पाठ्यक्रम परिणाम</p> <p>CO1 भाषा के उद्भव और विकासक्रम का ज्ञान होगा। CO2 कविता की व्याख्या व आलोचनात्मक की समझ होगी। CO3 साहित्य इतिहास का ज्ञान होगा। CO4 साहित्यकारों के विषय में जानकारी होगी। CO 5 हिंदी व्याकरण का ज्ञान होगा।</p> <p>इकाई 1 :- हिंदी कहानियां 1 हार की जीत :- सुदर्शन 2 कफन:- प्रेमचंद 3 मलबे का मालिक:- मोहन राकेश 4 घीसा:- महादेवी वर्मा 5 गेहूं और गुलाब:- रामवृक्ष बेनीपुरी 6 अधिकार का रक्षक:- उपेंद्रनाथ अशक 7 फैसला :- पुष्पा मैत्रेयी</p>			



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इकाई 2:- व्याकरण

कारक, उपसर्ग, प्रत्यय, वाक्य- रचना, पद परिचय।

सहायक ग्रंथ सूची

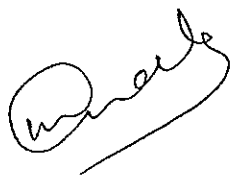
- नई कहानी संदर्भ और प्रकृति, देवीशंकर अवस्थी
- हिंदी व्याकरण, डा कामता प्रसाद गुरु
- हिंदी भाषा की संरचना, भोलानाथ तिवारी
- हिंदी भाषा संरचना के विविध आयाम, रवींद्रनाथ श्रीवास्तव
- निबन्ध और निबन्ध, डा विश्वनाथ प्रसाद
- मानक हिन्दी का स्वरूप, डा भोलानाथ तिवारी।
- www.encyclopedia.centre.com
- www.wikipedia.com
- www.culturepedia.com
- [www.archive.org\(hindishabdsagar\)](http://www.archive.org(hindishabdsagar)) प्रसाद का काव्य शास्त्रीय अध्ययन, सुरेंद्रनाथ सिंह

आवश्यक निर्देश:-

निर्धारित गद्य विधाओं में से व्याख्या के चार गद्यांश पूछे जाएंगे, जिसमें से विद्यार्थी को दो की सप्रसंग व्याख्या लिखनी होगी। कुल अंक 12 होंगे।

2 निर्धारित गद्य विधाओं के उद्देश्य से संबंध प्रश्न पूछे जाएंगे, जिसमें से विद्यार्थी को एक का उत्तर देना होगा 12

3 इकाई दो में से चार प्रश्न पूछे जाएंगे जिसमें से विद्यार्थी को दो का उत्तर देना होगा। कुल अंक 11 होंगे।

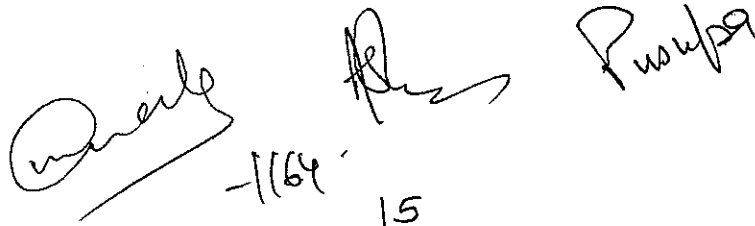






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मध्यकालीन काव्य-II			
Course Code-B-HIN- MDC-203			
Level of the Course	100-199		
Credits	Theory-2	Tutorial -1	Total- 3
Contact Hours	2per week	+ 1 per week	= 3 per week
Suggested Evaluation Method			
Total Marks:	75		
Internal Assessment 25	Class Participation		05
	Seminar/Presentation/Assignment/Quiz/Class Test etc.		07
	Mid Term Exam:		13
Term-End Examination (External)	50 Marks		
पाठ्यक्रम परिणाम			
CO1 भाषा के उद्भव और विकासक्रम का ज्ञान होगा।			
CO2 कविता की व्याख्या व आलोचनात्मक की समझ होगी।			
CO3 साहित्य इतिहास का ज्ञान होगा।			
CO4 कवियों के विषय में जानकारी होगी।			
CO 5 हिंदी पत्रकारिता की जानकारी होगी।			
इकाई 1:- मध्यकालीन कवि			
निर्धारित पुस्तक:- (काव्य कुंज सपा0 डा राम सजन पांडे)			
1 कबीर:- 1 से 51 साखियां			
2 तुलसी:- 1 से 4 कवितावली, 5 से 9 बालकाण्ड, 10 से 14 अयोध्याकांड			
3 सूरदास:- 1 से 25 पद			
4 मीरा:- 1 से 25 पद			
5 रसखान :-1से 25 पद			
इकाई 2			
आलोचनात्मक प्रश्न			
कबीर की सामाजिकता,			
तुलसी की भक्ति भावना,			
सूरदास का वात्सल्य वर्णन,			
मीरा की प्रेम भावना,			
रसखान का काव्य सौंदर्य।			


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इकाई 3:- प्रयोजन मूलक हिंदी

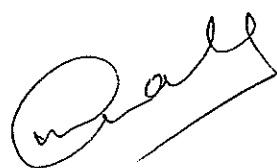
पत्रकारिता स्वरूप और महत्व,
संवाददाता के गुण,
साक्षात्कार,
समाचार के स्रोत एवं प्रकार।

सहायक ग्रंथ सूची :-

- हिंदी साहित्य का इतिहास:- रामचंद्र शुक्ल
- हिंदी साहित्य का आदिकाल:- हजारी प्रसाद द्विवेदी
- हिंदी साहित्य का इतिहास:- डॉ नगेंद्र
- हिंदी साहित्य का विकास:- डॉ वासुदेव शर्मा
- कबीर ग्रंथावली:- संपादक हजारी प्रसाद द्विवेदी
- जायसी का मूल्यांकन:- आचार्य रामचंद्र शुक्ल
- हिंदी निबंध के आधार स्तंभ:- डॉ० हरिमोहन
- तुलसी काव्य मीमांसा :- उदय भानु सिंह
- हिंदी साहित्य का बृहत् इतिहास:-पंडित राहुल सांकृत्यायन
- निबंध और निबंध:- डा विश्वनाथ प्रसाद
- भाषा विज्ञान और मानक हिंदी:- डा नरेश मिश्र
- शुद्ध लेखन और हिंदी का मानक रूप:- डॉ० हरिश्चंद्र वर्मा
- www.encyclopedia.centre.com
- www.wikipedia.com
- www.culturepedia.com
- [www.archive.org\(hindishabdsagar\)](http://www.archive.org(hindishabdsagar))
- हिंदी भाषा और कम्प्यूटर, संतोष गोयल

आवश्यक निर्देश:-

- 1 निर्धारित कविताओं में से चार पद्यांश दिए जाएंगे जिनमें से दो पद्यांशों की सप्रसंग व्याख्या करनी होगी कुल अंक 14 होंगे।
- 2 निर्धारित कविताओं पर आधारित दीर्घ आलोचनात्मक दो प्रश्न पूछे जाएंगे। जिसमें से एक का उत्तर देना होगा। कुल अंक 12 होंगे।
- 3 निर्धारित कविताओं में से चार लघु प्रश्न पूछे जाएंगे। जिसमें से दो के उत्तर देने होंगे। कुल अंक 6 होंगे।
- 4 इकाई 3 में से चार प्रश्न पूछे जाएंगे, जिसमें से दो के उत्तर देने होंगे। कुल अंक 8 होंगे।
- 5 समस्त पाठ्यक्रम में से 10 प्रश्न वैकल्पिक पूछे जाएंगे कुल अंक 10 होंगे।




- 1165 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of **Physics** Subject for 4 Year UG Programme
Bachelor of Physical Science
w.e.f. Academic session 2024-25

Scheme of Examination for 1 st semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-PHY-101	DSC	Mechanics	3	2	0	4	20	10	50	20	100	
2	B-PHY-102	MIC	Elementary Mechanics	2	0	0	2	15	0	35	0	50	
3	B-PHY-103	MDC	Physics Fundamentals-I	2	2	0	3	15	10	35	15	75	

Scheme of Examination for 2 nd semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-PHY-201	DSC	Electricity and Magnetism & EM Theory	3	2	0	4	20	10	50	20	100	
2	B-PHY-202	MIC	Elementary Electricity and Magnetism & EM Theory	2	0	0	2	15	0	35	0	50	
3	B-PHY-203	MDC	Physics Fundamentals-II	2	2	0	3	15	10	35	15	75	

Full

Scheme of Examination for 3 rd semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-301	DSC	Thermodynamics & Statistical Physics	3	2	0	4	20	10	50	20	100
2	B-PHY-302	MIC	Semiconductor Devices	3	2	0	4	20	10	50	20	100
3	B-PHY-303	MDC	Elements of Modern Physics	2	2	0	3	15	10	35	15	75

Scheme of Examination for 4 th semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-401	DSC	Waves and Optics	3	2	0	4	20	10	50	20	100
2	B-PHY-402	MIC (VOC)	Introduction of quantum mechanics	3	2	0	4	20	10	50	20	100

Scheme of Examination for 5 th semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-501	DSC	Atomic Spectroscopy	3	2	0	4	20	10	50	20	100
2	B-PHY-502	MIC-VOC	Physics of Nano Materials	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 6th semester

Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-PHY-601	DSC	Nuclear Physics	3	2	0	4	20	10	50	20	100	
2	B-PHY-602	MIC	Laser Physics	3	2	0	4	20	10	50	20	100	
3	B-PHY-603	MIC (VOC)	Modern Physics	3	2	0	4	20	10	50	20	100	

Scheme of Examination for 7th semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-PHY-701	DSC-H1	Advanced Mathematical Physics	3	2	0	4	20	10	50	20	100	
2	B-PHY-702	DSC-H2	Digital Electronics	3	2	0	4	20	10	50	20	100	
3	B-PHY-703	DSC-H3	Quantum Mechanics	3	2	0	4	20	10	50	20	100	
4	B-PHY-704	DSC-H4	Molecular Physics	3	2	0	4	20	10	50	20	100	
5	B-PHY-705	DSC-H5	Condensed Matter Physics-1	3	2	0	4	20	10	50	20	100	
6	B-PHY-706	MIC	Renewable Energy and Energy Harvesting	3	2	0	4	20	10	50	20	100	

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Scheme of Examination for 8 th semester (4 year UG Hons.)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-801	DSC-H6	Electrodynamics and Plasma Physics	3	2	0	4	20	10	50	20	100
2	B-PHY-802	DSC-H7	Advance Quantum Mechanics	3	2	0	4	20	10	50	20	100
3	B-PHY-803	DSC-H8	Material Science	3	2	0	4	20	10	50	20	100
4	B-PHY-804	DSC-H9	Solid State Physics-	3	2	0	4	20	10	50	20	100
5	B-PHY-805	DSC-H10	Characterization Techniques	3	2	0	4	20	10	50	20	100
6	B-PHY-806	MIC	Sensors and Transducers	3	2	0	4	20	10	50	20	100

Scheme of Examination for 8 th semester (4 years UG Hon. with Research)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-801	DSC-H6	Material Science	4	0	0	4	30	0	70	0	100
2	B-PHY-802	DSC-H7	Modern Characterization Techniques	4	0	0	4	30	0	70	0	100
3	B-PHY-803	MIC	Research Methodology	4	0	0	4	30	0	70	0	100
4	B-PHY-804	Dissertation	Research Project/ Dissertation				12					300

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Mechanics
B-PHY-101

Total Credits: 4
L - T - P
3 - 0 - 2

External Theory Marks: 50
Internal Assessment Marks: 20
Time allowed: 3Hrs

Course outcomes:

CO1: Understand the dynamics of system of particles, conservation of energy and momentum application of both translational and rotational dynamics motions simultaneously in rolling with slipping

CO2: Differentiate between elastic and plastic body. Elastic constants, determination and their physical significance. Torque and its significance.

CO3: Familiar about the special theory of relativity and its applications. Michelson's Morley experiments and its finding.

CO4: Analyze the two body Central Force problem and its application.

Unit - I

Fundamentals of Dynamics: Rigid body, Moment of Inertia, Radius of Gyration, Theorems of perpendicular and parallel axis (with proof), Moment of Inertia of ring, Disc, Angular Disc, Solid cylinder, Solid sphere, Hollow sphere, Rectangular plate, Square plate, Solid cone, Triangular plate, Torque, Rotational Kinetic Energy, Angular momentum, Law of conservation of angular momentum, Rolling motion, condition for pure rolling, acceleration of body rolling down an inclined plane, Fly wheel, Moment of Inertia of an irregular body.

Unit - II

Elasticity: Deforming force, Elastic limit, stress, strain and their types, Hooke's law, Modulus of rigidity, Relation between shear angle and angle of twist, elastic energy stored/volume in an elastic body, Elongation produced in heavy rod due to its own weight and elastic potential energy stored in it, Tension in rotating rod, Poisson's ratio and its limiting value, Elastic Constants and their relations. Torque required for twisting cylinder, Hollow shaft is stiffer than solid one. Bending of beam, bending moment and its magnitude, Flexural rigidity, Geometrical moment of inertia for beam of rectangular cross-section and circular cross-section. Bending of cantilever (loaded by a weight W at its free end), weight of cantilever uniformly distributed over its entire length. Dispersion of a centrally loaded beam supported at its ends, determination of elastic constants for material of wire by Searle's method.

Unit - III

Special Theory of Relativity: Michelson's Morley experiment and its outcomes, Postulates of special theory of relativity, Lorentz Transformations, Simultaneity and order of events, Lorentz contraction, Time dilation, Relativistic transformation of velocity, relativistic addition of velocities, variation of mass-energy equivalence, relativistic Doppler effect, relativistic kinematics, transformation of energy and momentum, transformation of force, Problems of relativistic dynamics.

Unit - IV

Gravitation and central force motion: Law of gravitation, Potential and field due to spherical shell and solid sphere. Motion of a particle under central force field, Two body problem and its reduction to one body problem and its solution, compound pendulum or physical pendulum in form of elliptical lamina and expression of time period, determination

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of g by means of bar pendulum, Normal coordinates and normal modes, Normal modes of vibration for given spring mass system, possible angular frequencies of oscillation of two identical simple pendulums of length (l) and small bob of mass (m_0) joined together with spring of spring constant (k).

Instructions for External Theory Paper Setter/Examiner:

Nine questions will be set in total. Question no. 1 will be compulsory and based on the conceptual aspects of the entire syllabus. This question may have 4 parts and the answer should be in brief but not in Yes/No. Four more questions are to be attempted, selecting one question out of two questions set from each unit. Each question may contain two or more parts. All questions will carry equal marks. 20% numerical problems are to be set.

Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Mechanics "Berkeley Physics Course Vol. I", Charles Kittel, Tata McGraw-Hill
2. Mechanics, D.S. Mathur, S. Chand and Company Limited, 2000
3. Elements of Properties of Matter, D.S. Mathur, S. Chand & Com. Pt. Ltd., New Delhi
4. Physics, Resnick, Halliday & Walker, Wiley
5. An introduction to mechanics, D. Kleppner, R.J. Kolenkow, 1973, McGraw-Hill.
6. Properties of Matter, R. Murgeshan, S. Chand & Com. Pt. Ltd., New Delhi
7. Classical Mechanics, J.C. Upadhyaya, Himalaya Publishing House.
8. B.Sc. Practical Physics, C.L. Arora, S. Chand Publisher, New Delhi
9. Advanced Level Practical Physics, M. Nelkon and Ogborn, Henemann Education Books Ltd., New Delhi
10. Practical Physics, S.S. Srivastava and M.K. Gupta, Atma Ram & Sons, Delhi
11. Practical Physics, S.L. Gupta and V. Kumar, Pragati Prakashan Meerut
12. Modern Approach to Practical Physics, R.K. Singla, Modern Publishers, Jalandha

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Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of Mechanics.

Practical

1. Measurement of length (or diameter) using Vernier Caliper, screwgauge and travelling microscope.
2. To study the random error in observations.
3. To determine the area of window using a sextant.
4. Moment of Inertia of a Fly Wheel
5. Moment of Inertia of irregular body using a Torsion Pendulum.
6. Young's Modulus by Bending of Beam.
7. Modulus of rigidity of material of wire by Maxwell's Needle.
8. Elastic constants by Searle's method.
9. To determine the value of 'g' by using Bar pendulum.
10. To find the Poisson ratio of rubber by Rubber tube method.
11. To compare Moment of Inertia of a solid Sphere, Hollow Sphere and solid Disc of same mass with the help of Torsion Pendulum.
12. To determine the bending moment of a cantilever beam with uniformly distributed load, uniformly varying load and point load.

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least six experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot four practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

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Elementary Mechanics
B-PHY-102

Total Credits : 2

L - T - P

2- 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed : 1.5 Hrs

Course outcomes:

CO1: Understand the dynamics of system of particles, Determination of moment of inertia using Theorems of parallel and perpendicular axis.

CO2: Familiar about the special theory of relativity and its applications. Michelson's Morley experiment and its findings. Learn to present observations, results, analysis and different concepts related to experiments of Mechanics.

Unit – I

Fundamentals of Dynamics: Rigid body, Moment of Inertia, Radius of Gyration, Theorems of perpendicular and parallel axis (with proof), Moment of Inertia of ring, Disc, Angular Disc, Solid cylinder. Newton's laws of motion. Universal law of gravitation and its importance, acceleration due to gravity and free fall of a body; mass and weight of an object on earth and moon, Measurement of length (or diameter) using vernier caliper, screwgauge.

Unit – II

Special Theory of Relativity: Michelson's Morley experiment and its outcomes, Postulates of special theory of relativity, Lorentz Transformations, Lorentz contraction, Time dilation, Relativistic transformation of velocity, relativistic addition of velocities, variation of mass-energy equivalence

Instructions for External Theory Paper Setter/Examiner :

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question of 11 marks by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Mechanics, D.S. Mathur, S. Chand and Company Limited, 2000
2. Elements of Properties of Matter, D.S. Mathur, S. Chand & Com. Pt. Ltd., New Delhi
3. Physics, Resnick, Halliday & Walker, Wiley
4. Physics for scientists and Engineers with Modern Phys., J.W. Jewett, R.A. Serway, 2010, Cengage Learning
5. An introduction to mechanics, D. Kleppner, R.J. Kolenkow, 1973, McGraw-Hill.
6. Properties of Matter, R. Murgeshan, S. Chand & Com. Pt. Ltd., New Delhi
7. Classical Mechanics, J.C. Upadhyaya, Himalaya Publishing House
8. B.Sc. Practical Physics, C.L. Arora, S. Chand Publisher, New Delhi
9. Advanced Level Practical Physics, M. Nelkon and Ogborn, Henemann Education Books Ltd., New Delhi
10. Practical Physics, S.S. Srivastava and M.K. Gupta, Atma Ram & Sons, Delhi

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Physics Fundamentals -1
B-PHY-103

Total Credits : 3
L - T - P
2 - 0 - 2

External Theory Marks: 35
Internal Assessment Marks : 15
Time allowed : 2 Hrs

Course outcomes:

- CO1:** Have knowledge about the nature, scope and impact of physics on technological Development of the society.
- CO2:** Understand and describe motion of an object in onedimension. Understand and describe the laws of motion and their applications in daily life.
- CO3:** Understand and appreciate the importance of laws of gravitation and the physics behind floating of objects.

Unit – I

Physics-Nature, scope & excitement, Major discoveries in physics, major contribution by Indian Physicists, Fundamental physical constants, Physics in relation to other sciences, impact of physics on society and on latest development in science & technology.

System of Measuring Units-Need for measurement, measuring process, concept of mass, length, time; Fundamental and derive units, system of units, concepts of error, types of error (only definition), Accuracy and precision in measurement, least count and applications of measuring instruments -Vernier caliper, Screw Gauge.

Unit – II

Motion of objects in one dimension- position of the object, origin/reference point, frame of reference, definitions and examples of motion in one, two and three dimension, Scalar and Vector quantities, description of motion along a straight line- distance and displacement, uniform motion and non- uniform motion, average and instantaneous speed, average and instantaneous velocity, acceleration; graphical analysis of straight line motion- distance- time graph, velocity-time graph, equation of motions and their applications.

Unit – III

Causes of motion- concept of force, Newton's 1st law of motion, inertia and mass; Newton's 2nd law of motion, momentum and force; 3rd law of motion, daily life applications of Newton's laws of motion.

Universal law of gravitation and its importance, acceleration due to gravity and free fall of a body; mass and weight of an object on earth and moon, concept of thrust and pressure and importance in daily life, buoyancy and Archimedes principle-the physics behind floating of objects on water.

Instructions for External Theory Paper Setter/Examiner :

The examiner will set 7 questions asking two questions of 09 marks from each unit and one compulsory question of 08 marks by taking course learning outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 04 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Modern Physics (2nd edition), by S.L. Kakani and Shubhra Kakani, Viva Books, New Delhi.

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2. Physics for Scientists and Engineers with Modern Physics, 7th edition, by Raymond A. Serway and John W. Jewett, Jr., Thomson Higher Education 10 Davis Drive Belmont, CA94002-3098 USA.
3. Physics For You, Fifth Edition, by Keith Johnson, OUP Oxford; 5th edition (23 June 2016).
4. B.Sc Practical Physics, C. L. Arora, R Chand & Co. New Delhi
5. B.Sc Practical Physics, Harnam Singh and Dr. P.S. Hemne, S Chand & Company Ltd.

Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of Physics Fundamentals.

Practical

1. To measure the diameter of a small spherical / cylindrical body Vernier caliper
2. To measure the length, width and height of the given rectangular block.
3. Use of screw gauge: (i) to measure diameter of a given wire and (ii) to measure thickness of a given sheet.
4. To determine radius of curvature of a given spherical surface by a spherometer.
5. To find the weight of a given body using parallelogram law of vectors.
6. Verification of Archimedes principle.
7. Verification of Work-energy theorem.
8. Acceleration due to gravity (g) by bar pendulum.
9. To determine the moment of Inertia of a fly-wheel.
10. Study of law of conservation of linear momentum and Kinetic Energy.

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least four experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot three practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

Set

Electricity, Magnetism and EM Theory
B-PHY-201

Total Credits: 4

L - T - P

3 - 0 - 2

Course outcomes:

- CO1:** Explain and differentiate the vector and scalar formalisms of electrostatics. Also be able to apply Gauss's Divergence & Stokes theorem to solve various problems in electrostatics
- CO2:** Describe the magnetic materials & important properties of magnetic field. Understand the properties and theories of dia-, para- & ferromagnetic materials.
- CO3:** Derive Maxwell equations and their physical significance and familiar about the propagation of electromagnetic waves i.e. boundary conditions at the interface between different media. The students will also be able to have basic idea about the propagation of electromagnetic waves in free space and in medium.
- CO4:** Understand D.C. and A.C. circuits, able to apply and analyse using networks. Analyze DC/AC circuits consisting of parallel and/or series combinations of voltage sources and resistors and to describe the graphical relationship of resistance, capacitor and inductor.

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs

Unit – I

Vector Background and Electric Field : Gradient of a scalar and its physical significance, Line, Surface and Volume integrals of a vector and their physical significance, Flux of a vector field, Divergence and curl of a vector and their physical significance, Gauss's divergence theorem, Stoke's theorem. Conservative nature of Electrostatic Field, Electrostatic Potential, Potential as line integral of field, potential difference Derivation of electric field E from potential as gradient. Derivation of Laplace and Poisson equations. Electric flux, Gauss's Law, Differential form of Gauss's law and applications of Gauss's law. Mechanical force of charged surface, Energy per unit volume.

Unit – II

Magnetic Field: Biot-Savart law and its simple applications: straight wire and circular loop, Current Loop as a Magnetic Dipole and its Dipole Moment, Ampere's Circuital Law and its applications to (1) Solenoid and

(2) Toroid, properties of B: curl and divergence,

Magnetic Properties of Matter: Force on a dipole in an external field, Electric currents in Atoms, Electron spin and Magnetic moment, types of magnetic materials, Magnetization vector (M), Magnetic Intensity (H), Magnetic Susceptibility and permeability, Relation between B, H and M, Electronic theory of dia and paramagnetism, Domain theory of ferromagnetism (Langevin's theory), Cycle of Magnetization- B-H curve and hysteresis loop: Energy dissipation, Hysteresis loss and importance of Hysteresis Curve.

Unit – III

Time varying electromagnetic fields: Electromagnetic induction, Faraday's laws of induction and Lenz's Law, Self-inductance, Mutual inductance, Energy stored in a Magnetic field, Derivation of Maxwell's equations, Displacement current, Maxwell's equations in differential and integral form and their physical significance.

Electromagnetic Waves: Electromagnetic waves, Transverse nature of electromagnetic wave, energy transported by electromagnetic waves, Poynting vector, Poynting's theorem. Propagation of Plane electromagnetic waves in free space & Dielectrics.

Unit – IV

PU - 1176 -

DC current Circuits: Electric current and current density, Electrical conductivity and Ohm's law (Review), Kirchhoff's laws for D.C. networks, Network theorems: Thevenin's theorem, Norton theorem, Superposition theorem.

Alternating Current Circuits: A resonance circuit, Phasor, Complex Reactance and Impedance, Analysis for RL, RC and LC Circuits, Series LCR Circuit: (1) Resonance, (2) Power Dissipation (3) Quality Factor and (4) Band Width, Parallel LCR Circuit.

Instructions for External Theory Paper Setter/Examiner :

Nine questions will be set in total. Question no. 1 will be compulsory and based on the conceptual aspects of the entire syllabus. This question may have 4 parts and the answer should be in brief but not in Yes/No. Four more questions are to be attempted, selecting one question out of two questions set from each unit. Each question may contain two or more parts. All questions will carry equal marks. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Mechanics "Berkeley Physics Course Vol. I", Charles Kittel, Tata McGraw-Hill
2. Mechanics, D.S. Mathur, S. Chand and Company Limited, 2000
3. Elements of Properties of Matter, D.S. Mathur, S. Chand & Com. Pt. Ltd., New Delhi
4. Physics, Resnick, Halliday & Walker, Wiley
5. An introduction to mechanics, D. Kleppner, R.J. Kolenkow, 1973, McGraw-Hill.
6. Properties of Matter, R. Murgeshan, S. Chand & Com. Pt. Ltd., New Delhi
7. Classical Mechanics, J.C. Upadhyaya, Himalaya Publishing House.
8. B.Sc. Practical Physics, C.L. Arora, S. Chand Publisher, New Delhi
9. Advanced Level Practical Physics, M. Nelkon and Ogborn, Henemann Education Books Ltd., New Delhi
10. Practical Physics, S.S. Srivastava and M.K. Gupta, Atma Ram & Sons, Delhi
11. Practical Physics, S.L. Gupta and V. Kumar, Pragati Prakashan Meerut
12. Modern Approach to Practical Physics, R.K. Singla, Modern Publishers, Jalandhar

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of Electricity and Magnetism.

Practical

1. Use of Multimeter for measuring Resistance, A.C. and D.C. Voltage and Current, checking of electrical fuses.
2. Low resistance by Carey Foster's bridge with calibration.
3. Determination of Impedance of an A.C. circuit and its verification.
4. Frequency of A.C. mains using an electromagnet.
5. Frequency of A.C. mains Electrical vibrator.

6. High resistance by substitution method.
7. To study the Characteristics of a Series RC Circuit.
8. To study a series LCR circuit and determine its (a) Resonant frequency, (b) Quality factor.
9. To study a parallel LCR circuit and determine its (a) Anti-resonant frequency and (b) Quality factor.
10. To verify the Thevenin and Norton theorems.
11. To verify the Superposition and Maximum Power Transfer Theorems.
12. Self-inductance by Anderson's bridge.
13. Verification of laws of electromagnetic induction.
14. Study of B-H curves of various materials using C.R.O, and determination of various parameters.
15. To find the capacitance of capacitor using flashing and quenching of Neon Lamp

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least six experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot four practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

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Elementary Electricity, Magnetism & EM Theory
B-PHY-202

Total Credits: 2
L - T - P
2- 0- 0

External Theory Marks: 35
Internal Assessment Marks : 15
Time allowed : 1.5 Hrs

Course outcomes:

CO1: Explain and differentiate the vector and scalar formalisms of electrostatics. Also be able to apply Gauss's Divergence & Stokes theorem to solve various problems in electrostatics..

CO2: Describe the magnetic materials & important properties of magnetic field. Understand the properties and theories of dia-, para- & ferromagnetic materials.

Unit – I

Vector background and electric field: Gradient of a scalar and its physical significance, Line, Surface and Volume integrals of a vector and their physical significance, Flux of a vector field, Divergence and curl of a vector and their physical significance, Gauss's divergence theorem, Stoke's theorem.

Unit – II

Magnetic field and magnetic properties : Magnetic induction, Magnetic flux, Solenoidal nature of vector field of induction, properties of B (i) $\nabla \cdot B = 0$ (ii) $\nabla \times B = \mu_0 J$, Magnetic Materials, types, Hysteresis curve and importance of Hysteresis Curve.

Instructions for External Theory Paper Setter/Examiner :

The examiner will set 5 questions asking two questions 12 marks from each unit and one compulsory question of 11 marks by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Electricity and Magnetism (Berkeley, Phys. Course 2), Edward M. Purcell, 1986 McGraw-Hill Education
2. Electricity and Magnetism: A.S. Mahajan & A.A. Rangwala (Tata- McGraw Hill), 1988.
3. Electricity, Magnetism & Electromagnetic Theory, S. Mahajan and Choudhury, 2012, TataMcGraw
4. Introduction to Electrodynamics, D.J. Griffiths, 3rd Edn., 1998, Benjamin Cummings.
5. Feynman Lectures Vol.2, R.P. Feynman, R.B. Leighton, M. Sands, 2008, PearsonEducation
6. Elements of Electromagnetics, M.N.O. Sadiku, 2010, Oxford University Press.
7. Electricity and Magnetism, J.H.Fewkes & J.Yarwood. Vol. I, 1991, Oxford Univ. Press.

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Physics Fundamentals -II
B-PHY-203

Total Credits: 3
L - T - P
2 - 0 - 2

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 2 Hrs

Course outcomes:

- CO1:** Have basic knowledge about nature of light, the associated phenomena and their importance in daily life
- CO2:** Understand and describe the working of important optical instruments through the learning of image formation by mirrors and lenses.
- CO3:** Have basic knowledge about electric current, electric circuit, electric components, and practical utility of heating and magnetic effects of electric current

Unit – I

Light and optics-Nature and properties of light, its speed, frequency and wavelength; Reflection of light-types of reflection and their importance in daily life, laws of reflection, multiple reflection by mirrors and their applications.

Refraction of light- laws of refraction, refractive index, refraction of light through prism (dispersion of light), formation Rainbow, twinkling of stars, advance Sunrise and delayed Sunset; Scattering of light and blue colour of the sky; apparent depth, total internal reflection and its important applications.

Unit – II

Image formation through reflection-images formed by plane mirrors, multiple images formed by two flat mirrors and optical illusions; images formed by parabolic mirrors and spherical mirrors- Concave and convex mirrors, ray diagrams, mirror equation and magnification; applications of plane and curved mirrors in daily life.

Image formation through refraction- images by convex and concave lenses, ray diagrams and lens equation.

Optical instruments- Camera, eye, telescope and microscope.

Unit – III

Electricity- electric charge, types of charges, unit of charge, frictional electricity, electricity by conduction and electric current, units of electric current, measurement of current, conductors and insulators; resistance, resistivity and Ohm's law, electric potential and potential difference, emf; Electric circuit- resistor, capacitor, battery, ammeter and voltmeter; Series and parallel combinations of resistors, electrical wiring in houses and electrical safety (fuse, hot wire, neutral, ground and short circuit), electric power and electric power transmission; Heating effect of current and its practical applications. Magnetic effect of electric current- Magnetic field and field lines, bar magnet, magnetic field and direction of field due to a current- through straight conductor and through a circular loop; solenoid, electromagnet.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions 09 marks from each unit and one compulsory question of 08 marks by taking course learning outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 04 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

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1. Essential University Physics, Vol.-1 &2 by Richard Wolfson, Pearson Education, Patparganj, Delhi, India.
2. Concept of Physics by H.C. Verma, Bharti Bhawan, Ansari Road, Daryaganj, New Delhi, India.
3. Modern Physics (2nd edition), by S.L. Kakani and Shubhra Kakani, Viva Books, New Delhi.
4. Physics for Scientists and Engineers with Modern Physics, 7th edition, by Raymond A. Serway and John W. Jewett, Jr., Thomson Higher Education 10 Davis Drive Belmont, CA 94002-3098 USA.
5. Physics For You (Fifth Edition) by Keith Johnson.
6. B.Sc Practical Physics, C. L. Arora, R Chand & Co. New Delhi

Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of experiments of light & optics.

Practicals

1. To find the focal length of a convex mirror using a convex lens.
2. To find the value of v for different values of u in the case of a concave mirror and to find the focal length
3. To find the focal length of a concave lens using a convex lens.
4. To determine the refractive index of a glass slab
5. To find the refractive index of a liquid using a convex lens and plane mirror
6. To determine the resistivity of different wires by plotting a graph for potential difference versus current.
7. To verify Ohm's law for metallic conductor and to determine its resistance.
8. To find the frequency of AC mains with a sonometer.
9. Use of Multimeter for measuring Resistance, A.C. and D.C. Voltage and Current, checking of electrical fuses.
10. Use of Multimeter to check the working condition of diode, an LED, a resistor and a capacitor.

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least four experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot three practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Chemistry Subject for 4 Year UG Programme
Common for Bachelor of Life Science and Bachelor of Physical Science
w.e.f. Academic session 2024-25

Scheme of Examination for 1st Semester

First Year: 1 st Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CHE-101	DSC	Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-102	MIC	Minor Chemistry - I	2	0	0	2	15	0	35	0	50
3	B-CHE-103	MDC	Introductory Chemistry-I	2	2	0	3	15	10	35	15	75

Scheme of Examination for 2nd Semester

First Year: 2 nd Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CHE-201	DSC	Chemistry-II	3	2	0	4	20	10	50	20	100
2	B-CHE-202	MIC	Minor Chemistry - II	2	0	0	2	15	0	35	0	50
3	B-CHE-203	MDC	Introductory Chemistry-II	2	2	0	3	15	10	35	15	75

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Scheme of Examination for 3rd Semester

Second Year: 3 rd Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-301	DSC	Chemistry-III	3	2	0	4	20	10	50	20	100
2	B-CHE-302	MIC	Minor Chemistry - III	3	2	0	4	20	10	50	20	100
3	B-CHE-303	MDC	Introductory Chemistry-III	2	2	0	3	15	10	35	15	75

Scheme of Examination for 4th Semester

Second Year: 4 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-401	DSC	Chemistry-IV	3	2	0	4	20	10	50	20	100
2	B-CHE-402	MIC (VOC)	Chemistry of Fertilizers and Pesticides	3	2	0	4	20	10	50	20	100

Scheme of Examination for 5th Semester

Third Year: 5 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-501	DSC	Chemistry-V	3	2	0	4	20	10	50	20	100
2	B-CHE-502	MIC (VOC)	Green Chemistry	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 6th Semester

Third Year: 6 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CHE-601	DSC	Chemistry-VI	3	2	0	4	20	10	50	20	100
2	B-CHE-602	MIC	Minor Chemistry-IV	3	2	0	4	20	10	50	20	100
3	B-CHE-603	VOC	Chemistry of Cosmetics and Perfumes	3	2	0	4	20	10	50	20	100

Scheme of Examination for 7th semester

Fourth Year: 7 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CHE-701	DSC-C1	Organic Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-702	DSC-C2	Organic Chemistry-II	3	2	0	4	20	10	50	20	100
3	B-CHE-703	DSC-C3	Physical Chemistry-I	3	2	0	4	20	10	50	20	100
4	B-CHE-704	DSC-C4	Physical Chemistry-II	3	2	0	4	20	10	50	20	100
5	B-CHE-705	DSC-C5	Inorganic Chemistry-I	3	2	0	4	20	10	50	20	100
6	B-CHE-706	MIC	Inorganic Chemistry-II	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th Semester(4 year UG Hon.)

Fourth Year: 8 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-801	DSC-C6	Advanced Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-802	DSC-C7	Advanced Chemistry-II	3	2	0	4	20	10	50	20	100
3	B-CHE-803	DSC-C8	Organic Chemistry-III	3	2	0	4	20	10	50	20	100
4	B-CHE-804	DSC-C9	Physical Chemistry-III	3	2	0	4	20	10	50	20	100
5	B-CHE-805	DSC-C10	Inorganic Chemistry-III	3	2	0	4	20	10	50	20	100
6	B-CHE-806	MIC	Biochemistry	3	2	0	4	20	10	50	20	100

Scheme of Examination for 8th semester (4 years UG Hon. with Research)

Fourth Year: 8 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-801	DSC-C6	Advanced Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-802	DSC-C7	Advanced Chemistry-II	3	2	0	4	20	10	50	20	100
3	B-CHE-803	MIC	Research Methodology	4	0	0	4	30	0	70	0	100
4	B-CHE-804	Dissertation	Research Project/ Dissertation				12					300

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Chemistry-I
B-CHE-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 hrs

Course outcomes:

After completing this course, the learner will be able to:

- CO1** Enable to understand the basis of quantum mechanics and structural idea and relevance in describing shapes of s, p and d orbitals.
 - CO2** To learn about role of temperature and pressure to establish the state of gases and describe the concept of critical constants of real gases.
 - CO3** Get knowledge about the electrophile/nucleophile and its role in mechanism of preparation of organic compounds.
 - CO4** To know the physical properties, morphology and crystalline study of liquid and different type of solids.
-

Unit – I

Atomic Structure: Dual behaviour of matter and radiation, de Broglie's relation, Heisenberg's uncertainty principle, concept of atomic orbitals, significance of quantum numbers, radial and angular wave functions, normal and orthogonal wave functions, significance of Ψ and Ψ^2 , shapes of s, p, d, f orbitals, Rules for filling electrons in various orbitals, effective nuclear charge, Slater's rules.

Periodic table and atomic properties: Classification of periodic table, definition of atomic and ionic radii, ionisation energy, electron affinity and electronegativity, trend in periodic table (in s and p-block elements), Pauling, Mulliken, Allred Rachow and Mulliken Jaffe's electronegativity scale, Sanderson's electron density ratio.

Unit – II

Gaseous State: Kinetic theory of gases, Maxwell's distribution of velocities and energies (derivation excluded) Calculation of root mean square velocity, average velocity, and most probable velocity. Collision diameter, collision number, collision frequency and mean free path (Derivations excluded), Deviation of Real gases from ideal behaviour, Derivation of Vander Waal's Equation of State, its application in the calculation of Boyle's temperature (compression factor)

Critical Phenomenon: Concept of Critical temperature, critical pressure, critical volume, relationship between critical constants and Van der Waal's constants (Derivation excluded).

Unit – III

Structure and Bonding: Localized and delocalized chemical bond, Van der Waals interactions. Concept of resonance and its applications, hyperconjugation, inductive effect, Electromeric effect and their comparison.

Mechanism of Organic Reactions: Curved arrow notation, homolytic and heterolytic bond fission. Types of reagents: electrophiles and nucleophiles. Types of organic reactions: Substitution, Addition, Condensation, Elimination, Rearrangement, Isomerization and Pericyclic reactions. Reactive intermediates: Carbocations, carbanions, free radicals, carbenes (structure & stability).

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Unit - IV

Liquid State: Structure of liquids, Properties of liquids – surface tension, refractive index, viscosity, vapour pressure and optical rotation.

Solid State: Classification of solids, Law of constancy of interfacial angles, law of rational indices, Miller indices, elementary ideas of symmetry and symmetry elements, seven crystal systems and fourteen Bravais lattices; X-ray diffraction, Bragg's law, a simple account of Laue method, rotating crystal method and powder pattern method.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Books/e-resources/LMS:

1. Lee, J.D.; (2010), Concise Inorganic Chemistry, Wiley India.
2. Kapoor, K.L. (2015), A Textbook of Physical Chemistry, Vol 1, 6th Edition, McGraw Hill Education.
3. Clayden, J.; Greeves, N.; Warren, S. (2012), Organic Chemistry, Oxford.
4. Morrison, R. N.; Boyd, R. N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

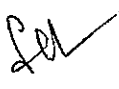
CO1: Hand on practice in preparation of solutions, compounds

CO2: Estimation and determination of physical properties of some compounds.

-
1. Acid/Base titration: Determination of strength of NaOH using oxalic acid.
 2. Redox titrations: Determination of Fe^{2+} ions using KMnO_4 .
 3. To determine the surface tension of given liquid using Stalagmometer by drop no. methods.
 4. Preparation of *m*-Dinitrobenzene from Nitrobenzene (use 1:2 conc. HNO_3 - H_2SO_4 mixture if fuming HNO_3 is not available).
 5. Preparation of *p*-Bromoacetanilide from Acetanilide

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

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Minor Chemistry – I
B-CHE-102

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course Outcomes:

After completing this course, the learner will be able to:

- CO1** To understand the basics of Covalent bonding in simple molecules and to get the basics of rates of chemical reactions and factors affecting it.
- CO2** To learn about the nomenclature, classification and methods of preparation of alkenes and conductors, semiconductors and insulator.

Unit - I

Covalent Bond: Valence bond theory approach, shapes of simple inorganic molecules and ions based on valence shell electron pair repulsion (VSEPR) theory and hybridization with suitable examples of linear, trigonal planar, square planar, tetrahedral, trigonalbipyramidal and octahedral arrangements. Molecular orbital theory of homonuclear (N_2 , O_2) and heteronuclear (CO and NO) diatomic molecules, dipole moment and percentage ionic character in covalent bond.

Chemical Kinetics: Concept of reaction rates, rate equation, factors influencing the rate of reaction, Order and molecularity of a reaction, integrated rate expression for zero, first, second order reactions (for equal conc. of reactants), Half-life period of a reaction

Unit - II

Alkanes (upto 5 carbon atoms): Alkanes, nomenclature, classification of carbon atoms in alkanes. Isomerism in alkanes, sources, methods of formation: Wurtz reaction, Kolbe reaction, Corey-House reaction and decarboxylation of carboxylic acids, physical properties. Mechanism of free radical halogenation of alkanes: reactivity and selectivity.

Metallic Bond and semiconductors: Metallic bond – Qualitative idea of valence bond and Band theories of metallic bond (conductors, semiconductors, insulators). Semiconductors – Introduction, types, and applications.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Dhawan S.N., Organic Chemistry, Vol 1 Pardeep Publication.
2. J.D. Lee, Concise Inorganic Chemistry (4th Edition), Chapman and hall Publications.

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Introductory Chemistry-I
B-CHE-103

Total Credits: 3
L - T - P
2 - 0 - 2

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 2 hrs

Course Outcomes:

After completing this course, the learner will be able to:

- CO1** To get knowledge about structure and bonding.
- CO2** To learn about hydrocarbons and their applications.
- CO3** To get aware about different polymers and preservative.

UNIT-I

Atomic Structure and Bonding: Introduction, Elementary introduction of atomic structure and chemical bonding, Representation of elements/ atoms, Lewis structure, electronic configurations.

UNIT-II

Carbon and Its Compounds: Introduction, Tetravalency of Carbon, allotropes of carbon and their properties, hydrocarbons, nomenclature (linear compounds), Applications of hydrocarbons.

UNIT-III

Polymers: Introduction, elementary idea of synthetic and natural polymers, Homo polymers and copolymers, uses and properties (Natural rubber, Vulcanized rubber, Polyethene, PVC, Styrene, Teflon, PAN, Nylon-66).

Food Preservatives: Elementary idea of natural and synthetic food preservatives, rancidity, uses and properties, different food preservation processes (pickle, Jam), artificial sweeteners, uses and properties.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Books/e-resources/LMS:

1. Lee, J.D.; (2010), Concise Inorganic Chemistry, Wiley India.
2. Morrison, R. N.; Boyd, R. N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
3. B. Sivasankar, Food processing and preservation, Prentice Hall India learning private limited.
4. ManasChanda, 2013, Introduction to Polymer Science and Chemistry 2nd Edition, Making Rayon Fiber - Artificial silk, chemical experiment.
5. Neelam Seedher, Basic Concepts: Physical Chemistry Experiments, Kindley Edition

PM

Practical

External Practical Marks: 15

Internal Assessment Marks: 10

Time allowed: 2 hrs

Course Outcomes:

CO1: To get knowledge about experiments related to daily life.

1. Identify the pH of the given samples through pH strip.
2. Experiments related to persevering food items.
3. Preparation of Artificial Silk.
4. To synthesize some polymers as per available resources.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results

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Chemistry-II
B-CHE-201

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 hrs

Course Outcomes:

- CO1** Able to understand the theories which governs the shape, structure and ionic behavior, polarizability, ionic structures and concept of Lattice energy of crystals of molecules.
- CO2** To know the basics of rates of chemical reactions, the laws and solubility behavior of solutes in different compositions of solvents
- CO3** To know about alkanes, alkene, cycloalkanes and their chemical reactions.
- CO4** To understand about weak interactions and bonding in metals.
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UNIT-I

Ionic Solids: Ionic structures (NaCl, CsCl, ZnS (Zinc blende), CaF₂) size effects, radius ratio rule and its limitations, Concept of Lattice energy, Born- Haber cycle, Solvation energy and its relationship with solubility of Ionic solids, Polarizing power and Polarisability of ions, Fajan's rule.

UNIT-II

Chemical Kinetics: Concept of reaction rates, rate equation, factors influencing the rate of reaction, Order and molecularity of a reaction, integrated rate expression for zero, first, Half-life period of a reaction, Arrhenius equation.

Distribution Law: Nernst distribution law – its thermodynamic derivation, Nernst distribution law after association and dissociation of solute in one of the phases, of distribution law: (i) Determination of degree of hydrolysis and hydrolysis constant of aniline hydrochloride

UNIT-III

Alkanes and Cycloalkanes: Nomenclature, classification of carbon atoms in alkanes and its structure. Isomerism in alkanes, sources. Methods of formation: Wurtz reaction, Kolbe reaction, Corey- House reaction and decarboxylation of carboxylic acids, physical properties. Mechanism of free radical halogenation of alkanes: reactivity and selectivity: Nomenclature of Cycloalkanes, Baeyer's strain theory and its limitations, theory of strainless rings.

Alkenes: Nomenclature of alkenes and its structure. Methods of formation: dehydration of alcohols, dehydrohalogenation of alkyl halide, Hofmann elimination and their mechanism. The Saytzeff rule and relative stabilities of alkenes. Chemical reactions: electrophilic and free radical additions, addition of halogens, halogen acids, hydroboration-oxidation, oxymercuration-reduction, ozonolysis and hydration, Markownikoff's rule of addition.

UNIT-IV

Hydrogen Bonding and Van der Waals forces Hydrogen Bonding – Definition, types, effects of hydrogen bonding on properties of substances, application and Brief discussion of various types of Van der Waals forces.

Metallic Bond and semiconductors: Metallic bond – Qualitative idea of valence bond and Band theories of metallic bond (conductors, semiconductors, insulators), Semiconductors – Introduction, types, and applications.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

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Recommended Books/e-resources/LMS:

1. Lee, J.D.; (2010), Concise Inorganic Chemistry, Wiley India.
2. Kapoor, K.L. (2015), A textbook of Physical Chemistry, Vol1, 6th Edition, McGraw Hill Education.
3. Clayden, J.; Greeves, N.; Warren, S. (2012), Organic Chemistry, Oxford.
4. Morrison, R.N.; Boyd, R.N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education)
5. Khosla, B.D. ; Garg, V.C.; Gulati, A. (2015), Senior Practical Physical Chemistry, R. Chand & Co, New Delhi.
6. Jeffery, G.H.; Bassett, J.; Mendham, J.; Denney, R.C. (1989), Vogel's Textbook of Quantitative Chemical Analysis, John Wiley and Sons.

Practical

External Practical Marks: 20

Internal Assessment Marks: 10

Time allowed: 2 hrs

Course Outcomes:

CO1: Hand on practice for estimation and determination of viscosity, specific refractivity properties of some compounds.

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1. Complexometric titrations: Determination of Mg^{2+} by EDTA.
 2. Paper Chromatography: Qualitative Analysis of any one of the following Inorganic cations and anions by paper chromatography (Pb^{2+} , Cu^{2+} , Ni^{2+} , Cl^- , Br^- , and PO_4^{3-} and NO_3^-).
 3. To determine the viscosity of given liquid using Ostwald's Viscometer.
 4. To determine the specific refractivity of at least two liquids by Refractometer.
 5. Separation of mixture of two Organic Compounds by TLC.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results

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Minor Chemistry II
B-CHE-202

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course Outcomes:

After completing this course, the learner will be able to:

CO1 To know the basics of periodic properties, hybridization and Ionic Solids.

CO2 Get the knowledge of metallic bonds and stereochemistry of simple organic molecules.

UNIT – I

Periodictable and atomic properties

Atomic properties: atomic and ionic radii, ionisation energy, electron affinity and electronegativity definition, methods of determination or evaluation, trend in periodic table, effective nuclear charge, Slater's rules. Directional characteristics of covalent bond, various type of hybridisation and shapes of simple inorganic molecules and ions (BeF_2 , BF_3 , CH_4 , PF_5 , SF_6 , IF_7 , SO_4^{-2} , CO_3^{-2} , NO_3^{-1})

Ionic Solids: Stoichiometric and Non-stoichiometric defects in crystals, Lattice energy and Born- Haber cycle, Solvation energy and its relationship with solubility of Ionic solids, Polarizing power and Polarisability of ions, Fajan's rule. Metallic bond – Qualitative idea of valence bond and Band theories of metallic bond (conductors, semiconductors, insulators)

UNIT – II

Metallic Bond

Localized and delocalized chemical bond, Van der Waal's interactions, resonance: conditions, resonance effect and its applications, hyperconjugation, inductive effect, Electromeric effect & their comparison.

Stereochemistry of Organic Compounds

Concept of isomerism. Types of isomerism. Optical isomerism, elements of symmetry, enantiomers, stereogenic centre, optical activity, properties of enantiomers, chiral and achiral molecules (upto two stereogenic centres), diastereomers, threo and erythro-diastereomers, meso compounds Relative and absolute configuration, sequence rules, R & S systems of nomenclature, Geometrical isomerism. Determination of configuration of geometric isomers.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Huheey, J.E.; Keiter, E.A.; Keiter, R.L.; Medhi, O.K. (2009), Inorganic Chemistry-Principles of Structure and Reactivity, Pearson Education.
2. Atkins, P.W.; Paula, J.de. (2014), Atkin's Physical Chemistry Ed., 10th Edition, Oxford University Press.
3. Kapoor, K.L. (2015), A Textbook of Physical Chemistry, Vol1, 6th Edition, McGraw Hill Education.
4. Nasipuri, D. (2018), Stereochemistry of Organic Compounds: Principles and Applications, 3rd Edition, New Age International.
5. Gunstone, F.D. (1975), Guidebook to Stereochemistry, Prentice Hall Press.

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Introductory Chemistry-II
B-CHE-203

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 hrs

Course Outcomes:

After completing this course, the learner will be able to:

- CO1 To learn about role of Indian scientists in the upliftment of research
 - CO2 To learn about classification of elements with their properties
 - CO3 To learn about three states of matter and role of fertilizers in fertility of soil
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UNIT-I

Renowned Indian Scientists

Brief Biography of Renowned Indian Scientists (Hargobind Khurana, Dr. P.C. Ray, Sir C.V. Raman, Dr. A.P.J. Abdul Kalam, C. N. R. Rao, Dr. Vikram Sara Bhai, Dr. Homi Jahangir Bhabha, Dr. J.C. Bose, Dr. S. N. Bose)

UNIT-II

Metal and Non-Metals

Periodic table, classification of elements, physical and chemical aspects of metals and non-metals, Ore and Minerals of Iron, Copper, Aluminium, alloys

UNIT-III

Physical Properties of Matter

Classification of matter, properties, uses, ideal gas equation, real gas equation, some important compounds (baking soda, washing soda, plaster of Paris, gypsum, glass)

Soil and fertilizers

Green revolution, soil: types of soil and their components for fertility, grow condition, pH, irrigation, bio-fertilizers, chemical fertilizers and their uses, acid rain.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions of 7 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will be of 7 marks covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Chemistry In Daily Life: Third Edition by Kirpal Singh, PHI Learning
2. General Chemistry: Principles, Patterns, and Applications, Bruce Averill, Strategic Energy Security Solution, Patricia Eldredge, R.H. Hand, LLC, Copyright Year: 2011
3. The Great Indian Scientists Paperback-1 January 2017, Cengage Learning India

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Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2 hrs

Course Outcomes:

CO1: To learn about acid- base reaction in daily life

1. To prepare Plaster of Paris
2. To prepare Potash Alum
3. To study the effect of acid on Baking and washing soda
4. To perform the action of water on quick lime and identify the nature of reaction (Exo/Endothermic)

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Computer Sciences Subject for 4 Year UG Programme
Bachelor of Physical Sciences
w.e.f. Academic session- 2024-25

First Year: First Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-101	DSC	Computer Fundamental and Programming Methodology	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-102	MIC	Basics of Computer	2	0	0	2	15	0	35	0	50
3.	B-CSC-103	MDC	Fundamentals of Computer Science	2	2	0	2+1=3	15	10	35	15	75

First Year: Second Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC - 201	DSC	Programming with C	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC - 202	MIC	Basic of IT Tools	2	0	0	2	15	0	35	0	50
3.	B-CSC-203	MDC	Web Designing with HTML	2	2	0	2+1=3	15	10	35	15	75

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Second Year: Third Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-301	DSC	Data and File Structure Using C	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-302	MIC	Logical Organization of Computer	4	0	0	4	30	0	70	0	100
3.	B-CSC-303	MDC	Advance IT Skills	2	2	0	2+1=3	15	10	35	15	75

Second Year: Fourth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-401	DSC	Object Oriented Programming with C++	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-402	MIC	Advanced Data and File Structure	4	0	0	4	30	0	70	0	100

Third Year: Fifth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-501	DSC	Data Base Management System	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-502	MIC	Operating System	4	0	0	4	30	0	70	0	100

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Third Year: Six Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1.	B-CSC-601	DSC	Programing in Python	3	2	0	3+1=4	20	10	50	20	100	
2.	B-CSC-602	MIC	Software Engineering	4	0	0	4	30	0	70	0	100	
3.	B-CSC-603	MIC(VOC)	E-Commerce	4	0	0	4	30	0	70	0	100	

Fourth Year: Seventh Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1.	B-CSC-701	DSC-C1	Computer Networks	3	2	0	3+1=4	20	10	50	20	100	
2.	B-CSC-702	DSC-C2	Artificial Intelligence	4	0	0	4	30	0	70	0	100	
3.	B-CSC-703	DSC-C3	Cloud Computing	4	0	0	4	30	0	70	0	100	
4.	B-CSC-704	DSC-C4	Cyber Security	3	2	0	3+1=4	20	10	50	20	100	
5.	B-CSC-705	DSC-C5	Data Mining & Warehousing	4	0	0	4	30	0	70	0	100	
6.	B-CSC-706	MIC	Emerging Trends in Information Security	3	2	0	3+1=4	20	10	50	20	100	

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Fourth Year: Eighth Semester(4 Year UG Hon.)

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-801	DSC-C6	Visual Basic Programming	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-802	DSC-C7	Programming in JAVA	3	2	0	3+1=4	20	10	50	20	100
3.	B-CSC-803	DSC-C8	Digital Marketing	4	0	0	04	30	0	70	0	100
4.	B-CSC-804	DSC-C9	Big Data	4	0	0	4	30	0	70	0	100
5.	B-CSC-805	DSC-C10	Internet of Things	3	2	0	3+1=4	20	10	50	20	100
6.	B-CSC-806	MIC	Principles of Design and Analysis of algorithms	4	0	0	4	30	0	70	0	100

Fourth Year: Eighth Semester(4 Year UG Hon. With Research)

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-801	DSC-C6	Visual Basic Programming	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-802	DSC-C7	Programming in JAVA	3	2	0	3+1=4	20	10	50	20	100
3.	B-CSC-806	MIC	Principles of Design and Analysis of algorithms	4	0	0	4	30	0	70	0	100
4.	B-CSC-807	SEC	Research Project/ Dissertation	12	0	0	12					300

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Computer Fundamental and Programming Methodology
B-CSC-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3hrs

Course outcomes: After completing this course, the learner will be able to:

CO1. Understand the basics of computer

CO2. Learn about I/O devices and operating systems

CO3. Understand memory and email.

CO4. Learn about the threats and security concepts on computers

Unit – I

Computer Fundamentals: Evolution of Computers through generations, Characteristics of Computers, Strengths and Limitations of Computers, Classification of Computers, Functional Components of a Computer System, Applications of computers in Various Fields. Types of Software: System software, Application software, Utility Software, Shareware, Freeware, Firmware, Free Software.

Unit – II

I/O Devices: I/O Ports of a Desk Top Computer, Device Controller, Device Driver. Input Devices: classification and use, keyboard, pointing devices - mouse, touch pad and track ball, joystick, magnetic stripes, scanner, digital camera, and microphone Output Devices: speaker, monitor, printers: classification, laser, ink jet, dot-matrix. Plotter.

Introduction to Operating System: Definition, Functions, Features of Operating System, Icon, Folder, File, Start Button, Task Bar, Status Buttons, Folders, Shortcuts, Recycle Bin, Desktop, My Computer, My Documents, Windows Explorer, Control Panel.

Unit – III

Memory Systems: Concept of bit, byte, word, nibble, storage locations and addresses, measuring units of storage capacity, access time, concept of memory hierarchy. Primary Memory - RAM, ROM, PROM, EPROM. Secondary Memory - Types of storage devices, Magnetic Tape, Hard Disk, Optical Disk, Flash Memory.

Electronic Mail: Introduction, advantages and disadvantages, User Ids, Passwords, e-mail addresses, message components, message composition, mailer features. Browsers and search engines.

Unit – IV

Planning the Computer Program: Concept of problem solving, concept of programming, program design, Debugging, Types of error, Techniques of problem solving: algorithms and flowcharting, pseudo code, decision table, concept of structured programming Programming methodologies-Top-Down and bottom up programming. Computer languages: Machine, assembly, high level language, compiler, interpreter, assembler.

Recommended Readings:

1.Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB.

2.Dromey, R.G., How to Solve it By Computer, PHI.

3.Norton, Peter, Introduction to Computer, McGraw-Hill.

4.Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World.

5.Rajaraman, V., Fundamentals of Computers, PHI.

6.Gill,NasibS.:Essentials of Computer and Network Technology, Khanna Book Publishing Co.,New Delhi.

7.Gill Nasib Singh: Computing Fundamentals and Programming in C, Khanna Books Publishing Co.,New Delhi.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

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Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/ discussed in the lab during the initial period of the semester.

Laboratory:

Students are advised to do laboratory/practical practice not limited to, but including the following types of problems:

Computer Basics:

Identify the various computer hardware
Understanding the working of computer
Understanding various types of software

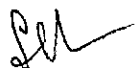
Operating System:

Starting with basics of Operating Systems and its functionalities

Internet and E-mail:

Using Internet for various tasks
Creating and using e-mail.

MS-Word, MS-PowerPoint



**Basics of Computer
B-CSC-102**

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30hrs

Course Outcomes:

CO1: To introduce to the students, the basic understanding of the working of a computer system and familiar with the basic internet technology and concepts.

CO2: To familiarize the students with the various types of software.

UNIT-I

Introduction to Computers: Definition of Computers, History and Generations of Computers, Characteristics of computer, Classification of Computers. Fundamental Block diagram of Computer: CPU, Input & Output Unit. Networking: Concept, Basic Elements of a Communication System, Data Transmission Media, LAN, MAN, WAN.

Introduction of Internet and WWW, Basic working of a Web Browser, Introduction to popular web browsers

UNIT-II

Software: Definition of Software, Types of Software-System software, Application software and Utility software. Types of Computer Languages, Assemblers, Interpreters, Compiler.

Introduction to Operating Systems: Types of Operating System, Functions of Operating System.

Recommended Readings:

1. Fundamentals of Computers, V. Rajaraman 6th edition PHI Learning Private Limited 2014.
2. Peter Norton: Computing Fundamentals. 6th Edition, McGraw Hill-Osborne, 2007
3. Alexis Leon and Marthews Leon: Introduction to Computers, Leon Vikas, 1999.
4. Internet Basics. E. Douglas Comer PHI.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

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Fundamental of Computer Science
B-CSC- 103

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 hrs

Course Outcomes: A successful completion of this course, the students will be able to:

CO1. Understand the basic concepts of computer systems

CO2. Understand the basic concepts of memory and I/O.

CO3. Understand the basic concepts of Operating System.

Unit -I

Computer Fundamentals: Evolution of Computers through generations, Characteristics of Computers, Strengths and Limitations of Computers, Classification of Computers, Functional Components of a Computer System, Applications of computers in Various Fields. Types of Software: System software, Application software, Utility Software.

Unit-II

Memory Systems: Concept of bit, byte, word, nibble, storage locations and addresses, measuring units of storage capacity, access time, concept of memory hierarchy. Primary Memory - RAM, ROM, PROM, EPROM. Secondary Memory - Types of storage devices, Magnetic Tape, Hard Disk, Optical Disk, Flash Memory.

I/O Devices: I/O Ports of a Desk Top Computer, Device Controller, Device Driver. Input Devices: classification and use, keyboard, pointing devices - mouse, touch pad and track ball, joystick, magnetic stripes, scanner, digital camera, and microphone Output Devices: speaker, monitor, printers: classification, laser, ink jet, dot-matrix. Plotter.

Unit-III

Introduction to Operating System: Definition, Functions, Features of Operating System, Icon, Folder, File, Start Button, Task Bar, Status Buttons, Folders, Shortcuts, Recycle Bin, Desktop, My Computer, My Documents, Windows Explorer, Control Panel.

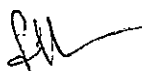
Recommended Readings:

1. Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB.
2. Dromey, R.G., How to Solve it By Computer, PHI.
3. Norton, Peter, Introduction to Computer, McGraw-Hill.
4. Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World.
5. Rajaraman, V., Fundamentals of Computers, PHI.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question





Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/ discussed in the lab during the initial period of the semester.

Laboratory:

Students are advised to do laboratory/practical practice not limited to, but including the following types of problems:

Computer Basics:

Identify the various computer hardware
Understanding the working of computer
Understanding various types of software

Operating System:

Starting with basics of Operating Systems and its functionalities

Instructions for External Practical Paper Setter/Examiner:

1. The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration.
2. Equal weightage will be given to both the questions.
3. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

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Programing with C
B-CSC-201

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50
Internal Assessment Marks: 20
Time allowed: 3 hrs

Course Outcomes:

CO1: Understand the concepts of structure of C program and the basics of C programming along with various I/O functions

CO2: Understand various operators

CO3: Understand various loops and branching statements in C

CO4: Understand function defining, functions call and arrays in C

UNIT-I

Overview of C: History, Importance, Structure of C Program, Character Set, Constants and Variables, Identifiers and Keywords, Data Types, Assignment Statement, Symbolic Constant. Input/output: Unformatted & Formatted I/O Function, Input Functions viz. scanf(), getch(), getche(), getchar(), gets(), output functions viz. printf(), putchar(), puts().

UNIT-II

Operators & Expression: Arithmetic, Relational, Logical, Bitwise, Unary, Assignment, Conditional Operators and Special Operators Operator Hierarchy & Associativity. Arithmetic Expressions, Evaluation of Arithmetic Expression, Type Casting and Conversion

UNIT-III

Decision making with if statement, if-else statement, nested if statement, else-if ladder, switch and break statement, goto statement. Looping: for, while, and do-while loop, jumps in loops.

UNIT-IV

Functions: definition, prototype, function call, passing arguments to a function: call by value, call by reference, recursive functions. Arrays: Definition, types, Initialization, multidimensional arrays, Processing on Arrays.

Recommended Readings:

1. Gottfried, Byron S., Programming with C, Tata McGraw Hill.
2. Balagurusamy, E., Programming in ANSI C, Tata McGraw-Hill.
3. Jeri R. Hanly & Elliot P. Koffman, Problem Solving and Program Design in C, Addison Wesley.
4. Yashwant Kanetker, Let us C, BPB.
5. Rajaraman, V., Computer Programming in C, PHI.
6. Yashwant Kanetker, Working with C, BPB
7. Gill Nasib Singh: Computing Fundamentals and Programming in C, Khanna Books Publishing Co., New Delhi.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

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Practical

External Practical Marks: 20

Internal Assessment Marks: 10

Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/discussed in the lab during the initial period of the semester.

Programming Lab:

- Write a C Program to read three numbers and find the sum.
- Write a C Program to read length and breadth and find area and perimeter of a rectangle.
- Write a C Program to read three numbers and find the biggest of three
- Write a C Program to demonstrate library functions in math.h (at least 5)
- Write a C Program to read a number, find the sum of the digits, reverse the number and check it for palindrome
- Write a C Program to find the simple interest.
- Write a C Program to read percentage of marks and to display appropriate grade (using switch case)
- Program to find whether a year is leap or not.
- Write a C Program to find the roots of quadratic equation (if else ladder)
- Write a C program to print triangle of star.
- Write a C Program to check a number for even or odd.
- Program to perform addition and subtraction of Matrices
- Write a C Program to print first 10 natural numbers using for loop.
- Write a C Program to find the sum of two numbers using function.
- Write a C Program to print the Fibonacci series.

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- 1206

**Basic of IT Tools
B-CSC-202**

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course Outcomes:

CO1: Identify the basic components of computers and computer networks, browser.

CO2: Understand and use of email and social networking.

UNIT – I

Introduction to Computer: Computer and Latest IT gadgets, Evolution of Computers & its applications, Basics of Hardware and Software, Application Software, Systems Software, Utility Software. Central Processing Unit, Input devices, Output devices, Computer Memory & storage, Mobile App
Introduction to Internet and World Wide Web, Basic of Computer Networks, Local Area Network (LAN), Wide Area Network (WAN), Network Topology, Internet, Applications of Internet, Website Address and URL, Popular Web Browsers (Internet Explorer/Edge, Chrome, Mozilla Firefox, Opera etc.), Popular Search Engines, Searching on the Internet.

UNIT-II

E-mail: Using E-mails, Opening Email account, Mailbox: Inbox and Outbox, Creating and Sending a new E-mail, replying to an E-mail message, forwarding an E-mail message, searching emails, and Attaching files with email, Email Signature. Social Networking: Facebook, Twitter, LinkedIn, Instagram, Instant Messaging (WhatsApp, Facebook Messenger, Telegram), Introduction to Blogs, Digital Locker.

Recommended Readings:

1. Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB
2. Dromey, R.G., How to Solve it By Computer, PHI
3. Norton, Peter, Introduction to Computer, McGraw-Hill
4. Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World
5. Rajaraman, V., Fundamentals of Computers, PHI
6. Ram, B., Computer Fundamentals, Architecture & Organization, New Age International (P)Ltd.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

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Web Designing with HTML
B-CSC- 203

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 hrs

Course Outcomes: A successful completion of this course, the students will be able to:

CO1: Understand the fundamental concepts of web development

CO2: Understand the image and hyperlink.

CO3: Understand the basic tags of HTML

Unit -I

Web Programming Introduction: Architecture of a website, Different technologies in making the website; Introduction to HTML: History of HTML, Basic structure of an HTML document, Introduction to Static and Dynamic Websites.

Unit-II

HTML Tag vs Element, HTML Attributes; HTML-Basic Formatting Tags; Grouping Using Div and Span, HTML-Lists: Unordered Lists, Ordered Lists, Definition list; Image and Image Mapping, Hyperlink.

Unit-III

HTML-Table: < table >, <th>, <tr>, < td >, < caption >, <thead>, <tbody>, <tfoot>, <colgroup>, <col>; Colspan & Rowspan

HTML-Iframe: Iframe attributes, Using Iframe as the Target; HTML-Form: Form attributes, Form elements; < input >, <textarea>. <button>, < select >, < label >, <fieldset>, <legend>etc.

Recommended Readings:

1. Deitel H.M., Deitel P.J., Internet & World Wide Web: How to program, Pearson Education.
2. Jackson, Web Technologies, Pearson Education

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question

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Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/ discussed in the lab during the initial period of the semester.

Laboratory:

Students are advised to do laboratory/practical practice not limited to, but including the following types of problems:

Web Designing:

Starting with introduction to WWW

HTML:

- Write a HTML document to print "Hello World" in bold and Italic Format.
- Design a page having suitable background colour and text colour with title "My First Web Page" using all the attributes of the Font tag.
- Write HTML code to design a page containing some text in a paragraph by giving suitable heading style.
- Write HTML code to display three images at LEFT, RIGHT and CENTER respectively in web browser.
- Write HTML code which contains Hyperlinks.
- Program based on HTML form and frames
- Design a HTML table with the use of colspan and rowspan

Full

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Mathematics Subject for 4 Year UG Programme
Common for Bachelor of Arts and Bachelor of Physical Science
w.e.f. Academic session- 2024-25

Scheme of Examination for 1st semester

First Year: 1 st Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-101	DSC	Calculus	3	2	0	4	20	10	50	20	100
2	B-MAT-102	MIC	Basic Algebra	2	0	0	2	15	0	35	0	50
3	B-MAT-103	MDC	Introductory Mathematics	3	0	0	3	25	0	50	0	75

Scheme of Examination for 2nd Semester

First Year: 2 nd Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-201	DSC	Algebra and Number Theory	3	2	0	4	20	10	50	20	100
2	B-MAT-202	MIC	Vector Calculus	2	0	0	2	15	0	35	0	50
3	B-MAT-203	MDC	Mathematics for commerce and Social Sciences	3	0	0	3	25	0	50	0	75

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Scheme of Examination for 3rd semester

Second Year: Third Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-MAT-301	DSC	Analytical Geometry & Vector Calculus	3	2	0	4	20	10	50	20	100	
2	B-MAT-302	MIC	Business Mathematics	4	0	0	4	30	0	70	0	100	
3	B-MAT-303	MDC	Mathematics for All	3	0	0	3	25	0	50	0	75	

Scheme of Examination for 4th semester

Second Year: Fourth Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-MAT-401	DSC	Differential Equations	3	2	0	4	20	10	50	20	100 ✓	
2	B-MAT-402	MIC (VOC)	Mathematical Computing using Python	3	2	0	4	20	10	50	20	100 ✓	

Scheme of Examination for 5th semester

Third Year: Fifth Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-MAT-501	DSC	Advanced Calculus	3	2	0	4	20	10	50	20	100	
2	B-MAT-502	MIC (VOC)	Data Structure using C	3	2	0	4	20	10	50	20	100	

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Scheme of Examination for 6th semester

Third Year: Sixth Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-MAT-601	DSC	Sequences and Series	3	2	0	4	20	10	50	20	100	
2	B-MAT-602	MIC	Probability Theory and Statistics	4	0	0	4	30	0	70	0	100	
3	B-MAT-603	MIC (VOC)	Linear Programming	4	0	0	4	30	0	70	0	100	

Scheme of Examination for 7th semester

Fourth Year: Seventh Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-MAT-701	DSC-M1	Groups and Rings	4	0	0	4	30	0	70	0	100	
2	B-MAT-702	DSC-M2	Real Analysis-I	4	0	0	4	30	0	70	0	100	
3	B-MAT-703	DSC-M3	Complex Analysis	4	0	0	4	30	0	70	0	100	
4	B-MAT-704	DSC-M4	Special functions and integral transforms	4	0	0	4	30	0	70	0	100	
5	B-MAT-705	DSC-M5	Discrete Mathematics	4	0	0	4	30	0	70	0	100	
6	B-MAT-706	MIC	Programming in C and Numerical Methods	3	2	0	4	20	10	50	20	100	

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Scheme of Examination for 8th semester (4 years UG Hon.)

Fourth Year: Eighth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-801	DSC-M6	Linear Algebra	4	0	0	4	30	0	70	0	100
2	B-MAT-802	DSC-M7	Real Analysis-II	4	0	0	4	30	0	70	0	100
3	B-MAT-803	DSC-M8	Mechanics	4	0	0	4	30	0	70	0	100
4	B-MAT-804	DSC-M9	Topology	4	0	0	4	30	0	70	0	100
5	B-MAT-805	DSC-M10	Theory of Ordinary Differential Equations	4	0	0	4	30	0	70	0	100
6	B-MAT-806	MIC	Numerical Analysis	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th semester (4 years UG Hon. with Research)

Fourth Year: Eighth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-MAT-301	DSC-M6	Linear Algebra	4	0	0	4	30	0	70	0	100
2	B-MAT-802	DSC-M7	Real Analysis-II	4	0	0	4	30	0	70	0	100
3	B-MAT-803	MIC	Research Methodology and Statistics	4	0	0	4	30	0	70	0	100
4	B-MAT-804	Dissertation	Research Project/ Dissertation				12					300

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Calculus
B-MAT-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs

Course outcomes:

CO1: Gain knowledge of the concepts and theory of limit, continuity and differentiability of functions. Attain skills of calculating the limit of functions and examining the continuity and differentiability of different types of functions and perform successive differentiation of functions. To apply the procedural knowledge to obtain the series expansions of functions which find multidisciplinary applications.

CO2: Understand concepts of asymptotes and curvature, the geometrical meaning of these terms and to have procedural knowledge to solve related problems.

CO3: Determine singular points of a curve and classify them. Understand the concept of rectification of curves and derive the reduction formulae.

CO4: Have theoretical knowledge and practical skills to evaluate the area bounded by the curves and volume and surface area of solids formed by revolution of curves.

Unit – I

$\epsilon - \delta$ definition of limit and continuity of a real valued function, basic properties of limits, types of discontinuities. Differentiability of functions. Application of L'Hospital rule to indeterminate forms. Successive differentiation. Leibnitz theorem, Taylor's and Maclaurin's series expansion with different forms of remainder.

Unit – II

Asymptotes: Horizontal, vertical and oblique asymptotes for algebraic curves, asymptotes for polar curves, Intersection of a curve and its asymptotes, Curvature and radius of curvature of curves (cartesian, parametric, polar & intrinsic forms), Newton's method, Centre of curvature and circle of curvature.

Unit – III

Multiple points, Node, Cusp, conjugate points. Tests for concavity and convexity, Points of inflection. Tracing of curves. Reduction formulae.

Unit – IV

Rectification, intrinsic equation of a curve, Quadrature, Area bounded by closed curves. Volumes and surfaces of solids of revolution.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Howard Anton, I. Bivens & Stephan Davis (2021). Calculus (12th edition). J. Wiley & Sons.
2. Gabriel Klambauer (1986). Aspects of Calculus (4th edition). Springer.

- 1915. *Full*

3. Wie Jaw Krawcewicz & Bindhyachal Rai (2003). Calculus with Maple Labs. Alpha Science Int'l Ltd.
4. Gorakh Prasad (2016). Differential Calculus (19th edition). Pothishala Pvt. Ltd.
5. George B. Thomas Jr., Joel Hass, Christopher Heil & Maurice D. Weir (2018). (14th edition). Pearson Education.
6. Monty J. Strauss, Gerald L. Bradley & Karl J. Smith (2002). Calculus (3rd edition). Dorling Kin Jersley (India) Pvt. Ltd

Practical

External Practical Marks: 20

Internal Assessment Marks: 10

Time allowed: 3 Hrs

Course Outcomes:

CO1: Attain cognitive and technical skills required for solving different problems of calculus associated with tracing of curves, determination of curvature and rectification of curves, volume and surface area of solids of revolution.

CO2: Have technical and practical skills of solving calculus problems related to differentiation and integration of functions by using MAXIMA software.

(A) **Problem Solving-** Questions related to the following problems will be solved and their record will be maintained in the Practical Notebook:

1. Problems of curve tracing when equation is given in Cartesian coordinates.
2. Problems of curve tracing when equation is given in Parametric form.
3. Problems of curve tracing when equation is given in Polar coordinates.
4. Problem of determination of length of a curve expressed in Cartesian coordinates.
5. Problem of determination of length of a curve expressed in Polar coordinates.
6. Problem of determination of radius of curvature expressed in Cartesian coordinates.
7. Problem of determination of radius of curvature expressed in Polar coordinates.
8. Problem of determination of radius of curvature expressed in Parametric form.
9. Problem of determination of volumes and surfaces of solids of revolution for Cartesian curve.
10. Problem of determination of volumes and surfaces of solids of revolution for parametric curve.
11. Problem of determination of volumes and surfaces of solids of revolution for Polar curve.

(B) **The following practicals will be done using MAXIMA software and their record will be maintained in the practical note book:**

1. Learn to use basic operators and functions in Maxima software.
2. Simplify algebraic expressions and expressions containing radicals, logarithms, exponentials and trigonometric functions.
3. Expand algebraic, rational, trigonometric and logarithmic expressions.
4. Find derivatives of algebraic, trigonometric, exponential and logarithmic functions.
5. Find derivatives of functions involving above mentioned functions.
6. Problems of successive differentiation.

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C

Basic Algebra
B-MAT-102

Total Credits: 2
L - T - P
2 - 0 - 0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1:30 Hrs

Course Outcomes:

CO₁: Gain knowledge of the concepts of symmetric, skew-symmetric, Hermitian, skew-Hermitian, Orthogonal and Unitary matrices.

CO₂: Have knowledge of procedure and cognitive skills used in calculating rank of a matrix, row rank and column rank of a matrix.

CO₃: Gain knowledge of the concepts of eigen values, characteristic equation, minimal polynomial of a matrix and technical skills used in solving problems based on Cayley- Hamilton theorem.

CO₄: Acquire knowledge of Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations and theorems on consistency of a system of linear equations.

UNIT-I

Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices. Elementary Operations on matrices. Rank of a matrices. Inverse of a matrix. Linear dependence and independence of rows and columns of matrices. Row rank and column rank of a matrix.

UNIT-II

Eigenvalues, eigenvectors and the characteristic equation of a matrix. Minimal polynomial of a matrix. Cayley Hamilton theorem and its use in finding the inverse of a matrix. Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations. Theorems on consistency of a system of linear equations. Unitary and Orthogonal Matrices.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. H.S. Hall and S.R. Knight: Higher Algebra, H.M. Publications 1994.
2. Shanti Narayan: A Text Books of Matrices.
- 3 Chandrika Prasad: Text Book on Algebra and Theory of equations, Pothishala Private Ltd., Allahabad.
4. Khurosh: Higher Algebra (Mir Publication)

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- 1217 -

Introductory Mathematics
B-MAT-103

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 Hrs

Course Outcomes:

CO₁: Gain the knowledge of set theory, types of sets and operations on sets. Understand various concepts of matrices and determinants.

CO₂: Acquire the cognitive skills to apply different operations on matrices and determinants.

Gain the knowledge of the concepts of Arithmetic progression, Geometric progression and Harmonic progression, and find A.M., G.M. and H.M. of given numbers.

CO₃: Have the conceptual knowledge of straight lines and circles. Find out the slope of a line, angle between two lines, and know about various forms of a straight line and the standard form of a circle.

UNIT-I

Sets and their representations, Empty set, Finite and infinite sets, Subsets, Equal sets, Power sets, Universal set, Union and intersection of sets, Difference of two sets, Complement of a set, Venn diagram, De-Morgan's laws and their applications. An introduction to matrices and their types, Operations on matrices, Symmetric and skew-symmetric matrices, Minors, Co-factors. Determinant of a square matrix, Adjoint and inverse of a square matrix.

UNIT-II

Arithmetic progression, Geometric progression, Harmonic progression, Arithmetic mean (A.M.), Geometric mean (G.M.), Harmonic mean (H.M.), Relation between A.M., G.M. and H.M.

UNIT-III

Straight lines: Slope of a line and angle between two lines, Different forms of equation of a line: Parallel to co-ordinate axes, Point-slope form, Slope-intercept form, Two-point form, General form; Distance of a point from a straight line. Standard form of a circle and its properties.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. C. Y. Young (2021). Algebra and Trigonometry. Wiley.
2. S.L. Loney (2016). The Elements of Coordinate Geometry (Cartesian Coordinates) (2nd Edition). G.K. Publication Private Limited.
3. Seymour Lipschutz and Marc Lars Lipson (2013). Linear Algebra. (4th edition) Outline Series, McGraw-Hill.
4. C.C. Pinter (2014). A Book of Set Theory. Dover Publications.
5. J. V. Dyke, J. Rogers and H. Adams (2011). Fundamentals of Mathematics (10th edition), Brooks/Cole.
6. A. Tussy, R. Gustafson and D. Koenig (2010). Basic Mathematics for College Students (4th Edition). Brooks Cole.

Full = 1218 ✓

Algebra and Number Theory
B-MAT-201

Total Credits: 4
L - T - P
3 - 0 - 2

External Theory Marks: 50
Internal Assessment Marks: 20
Time allowed: 3 Hrs

Course Outcomes:

CO₁: Have knowledge of the concepts used in solving problems based on relations between the roots and coefficients of general polynomial equation in one variable, solutions of polynomial equations having conditions on roots, common roots and multiple roots.

CO₂: Understand Descarte's rule of signs and learn cognitive and technical skills required in assessing nature of the roots of an equation and solving problems based on these.

CO₃: Have deeper and procedural knowledge required for solving cubic and biquadratic equations used in Mathematics as well as many other learning fields of study. To understand the basic concepts of number theory and their applications in problem solving and life- long learning.

CO₄: Have knowledge of concepts, facts, principles and theories of Linear Congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse, Chinese Remainder theorem. Attain cognitive skills used in solving linear Diophantine equations in two variables.

UNIT-I

Relations between the roots and coefficients of general polynomial equation in one variable, Solutions of polynomial equations having conditions on roots, Common roots and multiple roots, Transformation of equations.

UNIT-II

Solution of cubic equations (Cardon's method). Biquadratic equations and their solutions. Nature of the roots of an equation, Descarte's Rule of signs.

UNIT-III

Divisibility, Greatest common divisor (gcd), Least common multiple (lcm), Prime numbers, Fundamental theorem of arithmetic.

UNIT-IV

Linear congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse, Chinese Remainder theorem, Linear Diophantine equations in two variables.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

- 1) Stephen H. Friedberg, Arnold J. Insel & Lawrence E. Spence (2022). Linear Algebra (5th edition). Prentice Hall of India Pvt. Ltd.
- 2) K. B. Dutta (2004). Matrix and Linear Algebra. Prentice Hall of India Pvt. Ltd.
- 3) Vivek Sahai & Vikas Bist (2013). Linear Algebra (2nd edition). Narosa Publishing House.

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- 4) Seymour Lipschutz and Marc Lars Lipson (2013). Linear Algebra(4thEdition)OutlineSeries, McGraw-Hill.
- 5) I. Niven (1991). An Introduction to the Theory of Numbers (5th edition). John Wiley & Sons.
- 6) H.S. Hall and S.R. Knight (2023). Higher Algebra (7th edition). Arihant Publications.
- 7) Leonard Eugene Dickson (2009). First Course in the Theory of Equations. The Project Gutenberg EBook (<http://www.gutenberg.org/ebooks/29785>).

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

CO₁: Attain cognitive and technical skills required to formulate and solve practical problems involving Cardon's method, Ferrari's method and Descarte's method.

CO₂: Have technical and practical skills required for solving algebraic equations by using built in functions of MAXIMA software.

A) Problem Solving: Questions related to the following problems will be worked out and record of those will be maintained in the Practical Notebook:

1. Problems of solving cubic equations by Cardon's method.
2. Problems of solving biquadratic equations by Descarte's method.
3. Problems of solving biquadratic equations by Ferrari's method.
4. Problems to find GCD and LCM of two integers.
5. Problems to find solution of linear congruence using Euler's theorem.
6. Problems to find solution of linear congruence using Wilson's theorem.
7. Problems to find common solution of congruences using Chinese remainder theorem.

B) The following practicals will be done using MAXIMA Software and their record will be maintained in the practicalnote Book:

1. To find roots of algebraic equations using MAXIMA.
2. To find multiple roots of algebraic equations using MAXIMA.
3. Problems of solving cubic equations by Cardon's method using MAXIMA.
4. Problems of solving biquadratic equations by Descarte's method using MAXIMA.
5. Problems to find GCD and LCM of two or more integers using MAXIMA.
6. Problems of solving biquadratic equations by Ferrari's method using MAXIMA.

Instructions for External Practical Paper Setter/Examiner:

The practical component of the course has two parts, Problem Solving and Practical using MAXIMA software. The examiner will set 4 questions at the time of practical examination asking two questions from the part (A) and two questions from the part (B) by taking course learning outcomes (CLOs) into consideration. The examinee will be required to solve one problem from the part (A) and to execute one problem successfully from the part (B). Equal weightage will be given to both the parts. The evaluation will be done on the basis of practical record, viva-voce, write up and execution of the program.

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Vector Calculus
B-MAT-202

Total Credits: 2
L - T - P
2 - 0 - 0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1:30 Hrs

Course Outcomes:

CO₁: Gain the knowledge of Scalar and vector product of multiple vectors.

CO₂: Acquire the knowledge of vector differentiation and derivative along a curve.

CO₃: Gain the knowledge of the concepts of gradient of a scalar point function, divergence and curl of vector point function

CO₄: Have the conceptual knowledge of properties of gradient, divergence, curl and Laplacian operator.

UNIT – I

Scalar and vector product of three vectors, product of four vectors. Reciprocal vectors. Vector differentiation. Scalar Valued point functions, vector valued point functions, derivative along a curve, directional derivatives.

UNIT-II

Gradient of a scalar point function, geometrical interpretation of $\text{grad } \phi$, character of gradient as a point function. Divergence and curl of vector point function, characters of $\text{Div. } \vec{f}$ and $\text{Curl } \vec{f}$ as point function, examples. Gradient, divergence and curl of sums and product and their related vector identities. Laplacian operator.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions 12 marks from each unit and one compulsory question of 11 marks by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. J.E. Marsden and A. Tromba, Vector Calculus, W.H. Freeman & Co. Ltd., 6th Edition.
2. Murray R. Spiegel, Vector Analysis, Schaum's outlines, McGraw Hill Education, New York.
3. N. Saran and S.N. Nigam, Introduction to Vector Analysis, Pothishala Pvt. Ltd., Allahabad.
4. Shanti Narayna, A Text Book of Vector Calculus. S. Chand & Co., New Delhi.

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Mathematics for Commerce and Social Sciences
B-MAT-203

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 Hrs

Course Outcomes:

CO₁: Understand and have the procedural knowledge of the concepts of differentiation. Gain the knowledge to find derivatives and integration of simple functions related to commerce and social sciences. Acquire skills to make use of derivatives and integration in realistic problems of the discipline.

CO₂: Have the conceptual knowledge of compound interest, annuity, loan, debenture and sinking funds and attain skills to use these concepts in problem solving.

CO₃: Gain the knowledge and understanding of the concepts of Linear programming and develop skills of formulating and solving linear programming problems based on real world problems.

UNIT-I

Differentiation, Derivatives of simple functions and other functions having applications in business and social studies, Maxima and minima of a function and their applications to Revenue, Cost, Demand, Production, Profit functions and other functions related to commercial and social Problems. Integration of simple functions and its applications in commercial and economic problems.

UNIT-II

Simple interest and compound interest. Annuities: Types of annuities, Present value and amount of an annuity (including the case of continuous compounding), Valuation of simple loans and debentures, Problems related to sinking funds.

UNIT-III

Linear Programming: Formulation of linear programming problems (LPP) and their solution by graphical and Simplex methods. Applications of linear programming in solving social science and business problems.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. E.T. Dowling (2020). Schaum's outlines of Calculus for Business, Economics and the Social Sciences. McGraw Hill.
2. S.C. Gupta and V.K. Kapoor (2014). Fundamentals of Mathematical Statistics. S.Chand & Sons, Delhi.
3. D.C. Sancheti and V.K. Kapoor (2011). Business Mathematics. Sultan Chand and Sons.
4. Holden (2010). Introductory Mathematics for Business and Economics. Ane/pal Exclusive.
5. E.T. Dowling (2009). Schaum outlines of Mathematical methods for Business and Economics. McGraw Hill.
6. E. Don and J. Lerner (2009). Schaum's outline of Basic Business Mathematics (2nd Edition). McGraw Hill.
7. L. N. Paul (2002). Linear Programming: an introductory analysis. Tata McGraw Hill. New Delhi.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of **Physics** Subject for 4 Year UG Programme
Bachelor of Physical Science
w.e.f. Academic session 2024-25

Scheme of Examination for 1 st semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-101	DSC	Mechanics	3	2	0	4	20	10	50	20	100
2	B-PHY-102	MIC	Elementary Mechanics	2	0	0	2	15	0	35	0	50
3	B-PHY-103	MDC	Physics Fundamentals-I	2	2	0	3	15	10	35	15	75

Scheme of Examination for 2 nd semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-201	DSC	Electricity and Magnetism & EM Theory	3	2	0	4	20	10	50	20	100
2	B-PHY-202	MIC	Elementary Electricity and Magnetism & EM Theory	2	0	0	2	15	0	35	0	50
3	B-PHY-203	MDC	Physics Fundamentals-II	2	2	0	3	15	10	35	15	75

PH

Scheme of Examination for 3 rd semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-301	DSC	Thermodynamics & Statistical Physics	3	2	0	4	20	10	50	20	100
2	B-PHY-302	MIC	Semiconductor Devices	3	2	0	4	20	10	50	20	100
3	B-PHY-303	MDC	Elements of Modern Physics	2	2	0	3	15	10	35	15	75

Scheme of Examination for 4 th semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-401	DSC	Waves and Optics	3	2	0	4	20	10	50	20	100
2	B-PHY-402	MIC (VOC)	Introduction of quantum mechanics	3	2	0	4	20	10	50	20	100

Scheme of Examination for 5 th semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-501	DSC	Atomic Spectroscopy	3	2	0	4	20	10	50	20	100
2	B-PHY-502	MIC-VOC	Physics of Nano Materials	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 6 th semester												
Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-601	DSC	Nuclear Physics	3	2	0	4	20	10	50	20	100
2	B-PHY-602	MIC	Laser Physics	3	2	0	4	20	10	50	20	100
3	B-PHY-603	MIC (VOC)	Modern Physics	3	2	0	4	20	10	50	20	100

Scheme of Examination for 7 th semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-701	DSC-H1	Advanced Mathematical Physics	3	2	0	4	20	10	50	20	100
2	B-PHY-702	DSC-H2	Digital Electronics	3	2	0	4	20	10	50	20	100
3	B-PHY-703	DSC-H3	Quantum Mechanics	3	2	0	4	20	10	50	20	100
4	B-PHY-704	DSC-H4	Molecular Physics	3	2	0	4	20	10	50	20	100
5	B-PHY-705	DSC-H5	Condensed Matter Physics-1	3	2	0	4	20	10	50	20	100
6	B-PHY-706	MIC	Renewable Energy and Energy Harvesting	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8 th semester (4 year UG Hons.)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-801	DSC-H6	Electrodynamics and Plasma Physics	3	2	0	4	20	10	50	20	100
2	B-PHY-802	DSC-H7	Advance Quantum Mechanics	3	2	0	4	20	10	50	20	100
3	B-PHY-803	DSC-H8	Material Science	3	2	0	4	20	10	50	20	100
4	B-PHY-804	DSC-H9	Solid State Physics-	3	2	0	4	20	10	50	20	100
5	B-PHY-805	DSC-H10	Characterization Techniques	3	2	0	4	20	10	50	20	100
6	B-PHY-806	MIC	Sensors and Transducers	3	2	0	4	20	10	50	20	100

Scheme of Examination for 8 th semester (4 years UG Hon. with Research)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHY-801	DSC-H6	Material Science	4	0	0	4	30	0	70	0	100
2	B-PHY-802	DSC-H7	Modern Characterization Techniques	4	0	0	4	30	0	70	0	100
3	B-PHY-803	MIC	Research Methodology	4	0	0	4	30	0	70	0	100
4	B-PHY-804	Dissertation	Research Project/ Dissertation				12					300

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Mechanics
B-PHY-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3Hrs

Course outcomes:

CO1: Understand the dynamics of system of particles, conservation of energy and momentum application of both translational and rotational dynamics motions simultaneously in rolling with slipping

CO2: Differentiate between elastic and plastic body. Elastic constants, determination and their physical significance. Torque and its significance.

CO3: Familiar about the special theory of relativity and its applications. Michelson's Morley experiments and its finding.

CO4: Analyze the two body Central Force problem and its application.

Unit – I

Fundamentals of Dynamics: Rigid body, Moment of Inertia, Radius of Gyration, Theorems of perpendicular and parallel axis (with proof), Moment of Inertia of ring, Disc, Angular Disc, Solid cylinder, Solid sphere, Hollow sphere, Rectangular plate, Square plate, Solid cone, Triangular plate, Torque, Rotational Kinetic Energy, Angular momentum, Law of conservation of angular momentum, Rolling motion, condition for pure rolling, acceleration of body rolling down an inclined plane, Fly wheel, Moment of Inertia of an irregular body.

Unit – II

Elasticity: Deforming force, Elastic limit, stress, strain and their types, Hooke's law, Modulus of rigidity, Relation between shear angle and angle of twist, elastic energy stored/volume in an elastic body, Elongation produced in heavy rod due to its own weight and elastic potential energy stored in it, Tension in rotating rod, Poisson's ratio and its limiting value, Elastic Constants and their relations. Torque required for twisting cylinder, Hollow shaft is stiffer than solid one. Bending of beam, bending moment and its magnitude, Flexural rigidity, Geometrical moment of inertia for beam of rectangular cross-section and circular cross-section. Bending of cantilever (loaded by a weight W at its free end), weight of cantilever uniformly distributed over its entire length. Dispersion of a centrally loaded beam supported at its ends, determination of elastic constants for material of wire by Searle's method.

Unit – III

Special Theory of Relativity: Michelson's Morley experiment and its outcomes, Postulates of special theory of relativity, Lorentz Transformations, Simultaneity and order of events, Lorentz contraction, Time dilation, Relativistic transformation of velocity, relativistic addition of velocities, variation of mass-energy equivalence, relativistic Doppler effect, relativistic kinematics, transformation of energy and momentum, transformation of force, Problems of relativistic dynamics.

Unit – IV

Gravitation and central force motion: Law of gravitation, Potential and field due to spherical shell and solid sphere. Motion of a particle under central force field, Two body problem and its reduction to one body problem and its solution, compound pendulum or physical pendulum in form of elliptical lamina and expression of time period, determination

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of g by means of bar pendulum, Normal coordinates and normal modes, Normal modes of vibration for given spring mass system, possible angular frequencies of oscillation of two identical simple pendulums of length (l) and small bob of mass (m_0) joined together with spring of spring constant (k).

Instructions for External Theory Paper Setter/Examiner:

Nine questions will be set in total. Question no. 1 will be compulsory and based on the conceptual aspects of the entire syllabus. This question may have 4 parts and the answer should be in brief but not in Yes/No. Four more questions are to be attempted, selecting one question out of two questions set from each unit. Each question may contain two or more parts. All questions will carry equal marks. 20% numerical problems are to be set.

Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Mechanics "Berkeley Physics Course Vol. I", Charles Kittel, Tata McGraw-Hill
2. Mechanics, D.S. Mathur, S. Chand and Company Limited, 2000
3. Elements of Properties of Matter, D.S. Mathur, S. Chand & Com. Pt. Ltd., New Delhi
4. Physics, Resnick, Halliday & Walker, Wiley
5. An introduction to mechanics, D. Kleppner, R.J. Kolenkow, 1973, McGraw-Hill.
6. Properties of Matter, R. Murgeshan, S. Chand & Com. Pt. Ltd., New Delhi
7. Classical Mechanics, J.C. Upadhyaya, Himalaya Publishing House.
8. B.Sc. Practical Physics, C.L. Arora, S. Chand Publisher, New Delhi
9. Advanced Level Practical Physics, M. Nelkon and Ogborn, Henemann Education Books Ltd., New Delhi
10. Practical Physics, S.S. Srivastava and M.K. Gupta, Atma Ram & Sons, Delhi
11. Practical Physics, S.L. Gupta and V. Kumar, Pragati Prakashan Meerut
12. Modern Approach to Practical Physics, R.K. Singla, Modern Publishers, Jalandha

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Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of Mechanics.

Practical

1. Measurement of length (or diameter) using Vernier Caliper, screwgauge and travelling microscope.
2. To study the random error in observations.
3. To determine the area of window using a sextant.
4. Moment of Inertia of a Fly Wheel
5. Moment of Inertia of irregular body using a Torsion Pendulum.
6. Young's Modulus by Bending of Beam.
7. Modulus of rigidity of material of wire by Maxwell's Needle.
8. Elastic constants by Searle's method.
9. To determine the value of 'g' by using Bar pendulum.
10. To find the Poisson ratio of rubber by Rubber tube method.
11. To compare Moment of Inertia of a solid Sphere, Hollow Sphere and solid Disc of same mass with the help of Torsion Pendulum.
12. To determine the bending moment of a cantilever beam with uniformly distributed load, uniformly varying load and point load.

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least six experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot four practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

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Elementary Mechanics
B-PHY-102

Total Credits : 2
L - T - P
2- 0 - 0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed : 1.5 Hrs

Course outcomes:

CO1: Understand the dynamics of system of particles, Determination of moment of inertia using Theorems of parallel and perpendicular axis.

CO2: Familiar about the special theory of relativity and its applications. Michelson's Morley experiment and its findings. Learn to present observations, results, analysis and different concepts related to experiments of Mechanics.

Unit – I

Fundamentals of Dynamics: Rigid body, Moment of Inertia, Radius of Gyration, Theorems of perpendicular and parallel axis (with proof), Moment of Inertia of ring, Disc, Angular Disc, Solid cylinder. Newton's laws of motion. Universal law of gravitation and its importance, acceleration due to gravity and free fall of a body; mass and weight of an object on earth and moon, Measurement of length (or diameter) using vernier caliper, screwgauge.

Unit – II

Special Theory of Relativity: Michelson's Morley experiment and its outcomes, Postulates of special theory of relativity, Lorentz Transformations, Lorentz contraction, Time dilation, Relativistic transformation of velocity, relativistic addition of velocities, variation of mass-energy equivalence

Instructions for External Theory Paper Setter/Examiner :

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question of 11 marks by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Mechanics, D.S. Mathur, S. Chand and Company Limited, 2000
2. Elements of Properties of Matter, D.S. Mathur, S. Chand & Com. Pt. Ltd., New Delhi
3. Physics, Resnick, Halliday & Walker, Wiley
4. Physics for scientists and Engineers with Modern Phys., J.W. Jewett, R.A. Serway, 2010, Cengage Learning
5. An introduction to mechanics, D. Kleppner, R.J. Kolenkow, 1973, McGraw-Hill.
6. Properties of Matter, R. Murgeshan, S. Chand & Com. Pt. Ltd., New Delhi
7. Classical Mechanics, J.C. Upadhyaya, Himalaya Publishing House
8. B.Sc. Practical Physics, C.L. Arora, S. Chand Publisher, New Delhi
9. Advanced Level Practical Physics, M. Nelkon and Ogborn, Henemann Education Books Ltd., New Delhi
10. Practical Physics, S.S. Srivastava and M.K. Gupta, Atma Ram & Sons, Delhi

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Physics Fundamentals -1
B-PHY-103

Total Credits : 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks : 15

Time allowed : 2 Hrs

Course outcomes:

CO1: Have knowledge about the nature, scope and impact of physics on technological Development of the society.

CO2: Understand and describe motion of an object in one dimension. Understand and describe the laws of motion and their applications in daily life.

CO3: Understand and appreciate the importance of laws of gravitation and the physics behind floating of objects.

Unit – I

Physics-Nature, scope & excitement, Major discoveries in physics, major contribution by Indian Physicists, Fundamental physical constants, Physics in relation to other sciences, impact of physics on society and on latest development in science & technology. System of Measuring Units-Need for measurement, measuring process, concept of mass, length, time; Fundamental and derive units, system of units, concepts of error, types of error (only definition), Accuracy and precision in measurement, least count and applications of measuring instruments -Vernier caliper, Screw Gauge.

Unit – II

Motion of objects in one dimension- position of the object, origin/reference point, frame of reference, definitions and examples of motion in one, two and three dimension, Scalar and Vector quantities, description of motion along a straight line- distance and displacement, uniform motion and non- uniform motion, average and instantaneous speed, average and instantaneous velocity, acceleration; graphical analysis of straight line motion- distance- time graph, velocity-time graph, equation of motions and their applications.

Unit – III

Causes of motion- concept of force, Newton's 1st law of motion, inertia and mass; Newton's 2nd law of motion, momentum and force; 3rd law of motion, daily life applications of Newton's laws of motion.

Universal law of gravitation and its importance, acceleration due to gravity and free fall of a body; mass and weight of an object on earth and moon, concept of thrust and pressure and importance in daily life, buoyancy and Archimedes principle-the physics behind floating of objects on water.

Instructions for External Theory Paper Setter/Examiner :

The examiner will set 7 questions asking two questions of 09 marks from each unit and one compulsory question of 08 marks by taking course learning outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 04 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Modern Physics (2nd edition), by S.L. Kakani and Shubhra Kakani, Viva Books, New Delhi.

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2. Physics for Scientists and Engineers with Modern Physics, 7th edition, by Raymond A. Serway and John W. Jewett, Jr., Thomson Higher Education 10 Davis Drive Belmont, CA94002-3098 USA.
3. Physics For You, Fifth Edition, by Keith Johnson, OUP Oxford; 5th edition (23 June 2016).
4. B.Sc Practical Physics, C. L. Arora, R Chand & Co. New Delhi
5. B.Sc Practical Physics, Harnam Singh and Dr. P.S. Hemne, S Chand & Company Ltd.

Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of Physics Fundamentals.

Practical

1. To measure the diameter of a small spherical / cylindrical body Vernier caliper
2. To measure the length, width and height of the given rectangular block.
3. Use of screw gauge: (i) to measure diameter of a given wire and (ii) to measure thickness of a given sheet.
4. To determine radius of curvature of a given spherical surface by a spherometer.
5. To find the weight of a given body using parallelogram law of vectors.
6. Verification of Archimedes principle.
7. Verification of Work-energy theorem.
8. Acceleration due to gravity (g) by bar pendulum.
9. To determine the moment of Inertia of a fly-wheel.
10. Study of law of conservation of linear momentum and Kinetic Energy.

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least four experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot three practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

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Electricity, Magnetism and EM Theory
B-PHY-201

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs

Course outcomes:

- CO1:** Explain and differentiate the vector and scalar formalisms of electrostatics. Also be able to apply Gauss's Divergence & Stokes theorem to solve various problems in electrostatics
- CO2:** Describe the magnetic materials & important properties of magnetic field. Understand the properties and theories of dia-, para- & ferromagnetic materials.
- CO3:** Derive Maxwell equations and their physical significance and familiar about the propagation of electromagnetic waves i.e. boundary conditions at the interface between different media. The students will also be able to have basic idea about the propagation of electromagnetic waves in free space and in medium.
- CO4:** Understand D.C. and A.C. circuits, able to apply and analyse using networks. Analyze DC/AC circuits consisting of parallel and/or series combinations of voltage sources and resistors and to describe the graphical relationship of resistance, capacitor and inductor.

Unit – I

Vector Background and Electric Field : Gradient of a scalar and its physical significance, Line, Surface and Volume integrals of a vector and their physical significance, Flux of a vector field, Divergence and curl of a vector and their physical significance, Gauss's divergence theorem, Stoke's theorem. Conservative nature of Electrostatic Field, Electrostatic Potential, Potential as line integral of field, potential difference Derivation of electric field E from potential as gradient. Derivation of Laplace and Poisson equations. Electric flux, Gauss's Law, Differential form of Gauss's law and applications of Gauss's law. Mechanical force of charged surface, Energy per unit volume.

Unit – II

Magnetic Field: Biot-Savart law and its simple applications: straight wire and circular loop, Current Loop as a Magnetic Dipole and its Dipole Moment, Ampere's Circuital Law and its applications to (1) Solenoid and

(2) Toroid, properties of B: curl and divergence,

Magnetic Properties of Matter: Force on a dipole in an external field, Electric currents in Atoms, Electron spin and Magnetic moment, types of magnetic materials, Magnetization vector (M), Magnetic Intensity (H), Magnetic Susceptibility and permeability, Relation between B, H and M, Electronic theory of dia and paramagnetism, Domain theory of ferromagnetism (Langevin's theory), Cycle of Magnetization- B-H curve and hysteresis loop: Energy dissipation, Hysteresis loss and importance of Hysteresis Curve.

Unit – III

Time varying electromagnetic fields: Electromagnetic induction, Faraday's laws of induction and Lenz's Law, Self-inductance, Mutual inductance, Energy stored in a Magnetic field, Derivation of Maxwell's equations, Displacement current, Maxwell's equations in differential and integral form and their physical significance.

Electromagnetic Waves: Electromagnetic waves, Transverse nature of electromagnetic wave, energy transported by electromagnetic waves, Poynting vector, Poynting's theorem. Propagation of Plane electromagnetic waves in free space & Dielectrics.

Unit – IV

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DC current Circuits: Electric current and current density, Electrical conductivity and Ohm's law (Review), Kirchoff's laws for D.C. networks, Network theorems: Thevenin's theorem, Norton theorem, Superposition theorem.

Alternating Current Circuits: A resonance circuit, Phasor, Complex Reactance and Impedance, Analysis for RL, RC and LC Circuits, Series LCR Circuit: (1) Resonance, (2) Power Dissipation (3) Quality Factor and (4) Band Width, Parallel LCR Circuit.

Instructions for External Theory Paper Setter/Examiner :

Nine questions will be set in total. Question no. 1 will be compulsory and based on the conceptual aspects of the entire syllabus. This question may have 4 parts and the answer should be in brief but not in Yes/No. Four more questions are to be attempted, selecting one question out of two questions set from each unit. Each question may contain two or more parts. All questions will carry equal marks. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Mechanics "Berkeley Physics Course Vol. I", Charles Kittel, Tata McGraw-Hill
2. Mechanics, D.S. Mathur, S. Chand and Company Limited, 2000
3. Elements of Properties of Matter, D.S. Mathur, S. Chand & Com. Pt. Ltd., New Delhi
4. Physics, Resnick, Halliday & Walker, Wiley
5. An introduction to mechanics, D. Kleppner, R.J. Kolenkow, 1973, McGraw-Hill.
6. Properties of Matter, R. Murgeshan, S. Chand & Com. Pt. Ltd., New Delhi
7. Classical Mechanics, J.C. Upadhyaya, Himalaya Publishing House.
8. B.Sc. Practical Physics, C.L. Arora, S. Chand Publisher, New Delhi
9. Advanced Level Practical Physics, M. Nelkon and Ogborn, Henemann Education Books Ltd., New Delhi
10. Practical Physics, S.S. Srivastava and M.K. Gupta, Atma Ram & Sons, Delhi
11. Practical Physics, S.L. Gupta and V. Kumar, Pragati Prakashan Meerut
12. Modern Approach to Practical Physics, R.K. Singla, Modern Publishers, Jalandhar

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of Electricity and Magnetism.

Practical

1. Use of Multimeter for measuring Resistance, A.C. and D.C. Voltage and Current, checking of electrical fuses.
2. Low resistance by Carey Foster's bridge with calibration.
3. Determination of Impedance of an A.C. circuit and its verification.
4. Frequency of A.C. mains using an electromagnet.
5. Frequency of A.C. mains Electrical vibrator.

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6. High resistance by substitution method.
7. To study the Characteristics of a Series RC Circuit.
8. To study a series LCR circuit and determine its (a) Resonant frequency, (b) Quality factor.
9. To study a parallel LCR circuit and determine its (a) Anti-resonant frequency and (b) Quality factor.
10. To verify the Thevenin and Norton theorems.
11. To verify the Superposition and Maximum Power Transfer Theorems.
12. Self-inductance by Anderson's bridge.
13. Verification of laws of electromagnetic induction.
14. Study of B-H curves of various materials using C.R.O, and determination of various parameters.
15. To find the capacitance of capacitor using flashing and quenching of Neon Lamp

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least six experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot four practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

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8

Elementary Electricity, Magnetism & EM Theory
B-PHY-202

Total Credits: 2
L - T - P
2- 0- 0

External Theory Marks: 35
Internal Assessment Marks : 15
Time allowed : 1.5 Hrs

Course outcomes:

CO1: Explain and differentiate the vector and scalar formalisms of electrostatics. Also be able to apply Gauss's Divergence & Stokes theorem to solve various problems in electrostatics..

CO2: Describe the magnetic materials & important properties of magnetic field. Understand the properties and theories of dia-, para- & ferromagnetic materials.

Unit – I

Vector background and electric field: Gradient of a scalar and its physical significance, Line, Surface and Volume integrals of a vector and their physical significance, Flux of a vector field, Divergence and curl of a vector and their physical significance, Gauss's divergence theorem, Stoke's theorem.

Unit – II

Magnetic field and magnetic properties : Magnetic induction, Magnetic flux, Solenoidal nature of vector field of induction, properties of B (i) $\nabla \cdot \mathbf{B} = 0$ (ii) $\nabla \times \mathbf{B} = \mu_0 \mathbf{J}$, Magnetic Materials, types, Hysteresis curve and importance of Hysteresis Curve.

Instructions for External Theory Paper Setter/Examiner :

The examiner will set 5 questions asking two questions 12 marks from each unit and one compulsory question of 11 marks by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

1. Electricity and Magnetism (Berkley, Phys. Course 2), Edward M. Purcell, 1986 McGraw-Hill Education
2. Electricity and Magnetism: A.S. Mahajan & A.A. Rangwala (Tata- McGraw Hill), 1988.
3. Electricity, Magnetism & Electromagnetic Theory, S. Mahajan and Choudhury, 2012, TataMcGraw
4. Introduction to Electrodynamics, D.J. Griffiths, 3rd Edn., 1998, Benjamin Cummings.
5. Feynman Lectures Vol.2, R.P. Feynman, R.B. Leighton, M. Sands, 2008, PearsonEducation
6. Elements of Electromagnetics, M.N.O. Sadiku, 2010, Oxford University Press.
7. Electricity and Magnetism, J.H.Fewkes & J.Yarwood. Vol. I, 1991, Oxford Univ. Press.

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Physics Fundamentals -II
B-PHY-203

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 Hrs

Course outcomes:

CO1: Have basic knowledge about nature of light, the associated phenomena and their importance in daily life

CO2: Understand and describe the working of important optical instruments through the learning of image formation by mirrors and lenses.

CO3: Have basic knowledge about electric current, electric circuit, electric components, and practical utility of heating and magnetic effects of electric current

Unit – I

Light and optics-Nature and properties of light, its speed, frequency and wavelength; Reflection of light-types of reflection and their importance in daily life, laws of reflection, multiple reflection by mirrors and their applications.

Refraction of light- laws of refraction, refractive index, refraction of light through prism (dispersion of light), formation Rainbow, twinkling of stars, advance Sunrise and delayed Sunset; Scattering of light and blue colour of the sky; apparent depth, total internal reflection and its important applications.

Unit – II

Image formation through reflection-images formed by plane mirrors, multiple images formed by two flat mirrors and optical illusions; images formed by parabolic mirrors and spherical mirrors- Concave and convex mirrors, ray diagrams, mirror equation and magnification; applications of plane and curved mirrors in daily life.

Image formation through refraction- images by convex and concave lenses, ray diagrams and lens equation.

Optical instruments- Camera, eye, telescope and microscope.

Unit – III

Electricity- electric charge, types of charges, unit of charge, frictional electricity, electricity by conduction and electric current, units of electric current, measurement of current, conductors and insulators; resistance, resistivity and Ohm's law, electric potential and potential difference, emf; Electric circuit- resistor, capacitor, battery, ammeter and voltmeter; Series and parallel combinations of resistors, electrical wiring in houses and electrical safety (fuse, hot wire, neutral, ground and short circuit), electric power and electric power transmission; Heating effect of current and its practical applications. Magnetic effect of electric current- Magnetic field and field lines, bar magnet, magnetic field and direction of field due to a current- through straight conductor and through a circular loop; solenoid, electromagnet.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions 09 marks from each unit and one compulsory question of 08 marks by taking course learning outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 04 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question. 20% numerical problems are to be set. Use of scientific (non-programmable) calculator is allowed.

Recommended Readings:

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1. Essential University Physics, Vol.-1 &2 by Richard Wolfson, Pearson Education, Patparganj, Delhi, India.
2. Concept of Physics by H.C. Verma, Bharti Bhawan, Ansari Road, Daryaganj, New Delhi, India.
3. Modern Physics (2nd edition), by S.L. Kakani and Shubhra Kakani, Viva Books, New Delhi.
4. Physics for Scientists and Engineers with Modern Physics, 7th edition, by Raymond A. Serway and John W. Jewett, Jr., Thomson Higher Education 10 Davis Drive Belmont, CA 94002-3098 USA.
5. Physics For You (Fifth Edition) by Keith Johnson.
6. B.Sc Practical Physics, C. L. Arora, R Chand & Co. New Delhi

Practical

External Practical Marks: 15

Internal Assessment Marks: 10

Time allowed: 2 Hrs

Course Outcomes:

CO1: Learn to present observations, results, analysis and different concepts related to experiments of experiments of light & optics.

Practicals

1. To find the focal length of a convex mirror using a convex lens.
2. To find the value of v for different values of u in the case of a concave mirror and to find the focal length
3. To find the focal length of a concave lens using a convex lens.
4. To determine the refractive index of a glass slab
5. To find the refractive index of a liquid using a convex lens and plane mirror
6. To determine the resistivity of different wires by plotting a graph for potential difference versus current.
7. To verify Ohm's law for metallic conductor and to determine its resistance.
8. To find the frequency of AC mains with a sonometer.
9. Use of Multimeter for measuring Resistance, A.C. and D.C. Voltage and Current, checking of electrical fuses.
10. Use of Multimeter to check the working condition of diode, an LED, a resistor and a capacitor.

Instructions for External Practical Paper Setter/Examiner:

Student will perform at least four experiments in complete semester. Practical group consists of 15 students for B.Sc 1st & 20 students for B.Sc. II, III, IV, V.

The examiner will allot three practical at the time of end term examination. Out of four students should perform one experiment allotted by examiner.

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4 Year Bsc Computer Science

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Computer Sciences Subject for 4 Year UG Programme

~~Bachelor of Physical Sciences~~

w.e.f. Academic session- 2024-25

First Year: First Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-101	DSC	Computer Fundamental and Programming Methodology	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-102	MIC	Basics of Computer	2	0	0	2	15	0	35	0	50
3.	B-CSC-103	MDC	Fundamentals of Computer Science	2	2	0	2+1=3	15	10	35	15	75

First Year: Second Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC - 201	DSC	Programming with C	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC - 202	MIC	Basic of IT Tools	2	0	0	2	15	0	35	0	50
3.	B-CSC-203	MDC	Web Designing with HTML	2	2	0	2+1=3	15	10	35	15	75

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Second Year: Third Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-301	DSC	Data and File Structure Using C	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-302	MIC	Logical Organization of Computer	4	0	0	4	30	0	70	0	100
3.	B-CSC-303	MDC	Advance IT Skills	2	2	0	2+1=3	15	10	35	15	75

Second Year: Fourth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-401	DSC	Object Oriented Programming with C++	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-402	MIC	Advanced Data and File Structure	4	0	0	4	30	0	70	0	100

Third Year: Fifth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-501	DSC	Data Base Management System	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-502	MIC	Operating System	4	0	0	4	30	0	70	0	100

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Third Year: Six Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-601	DSC	Programing in Python	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-602	MIC	Software Engineering	4	0	0	4	30	0	70	0	100
3.	B-CSC-603	MIC(VOC)	E-Commerce	4	0	0	4	30	0	70	0	100

Fourth Year: Seventh Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1.	B-CSC-701	DSC-C1	Computer Networks	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-702	DSC-C2	Artificial Intelligence	4	0	0	4	30	0	70	0	100
3.	B-CSC-703	DSC-C3	Cloud Computing	4	0	0	4	30	0	70	0	100
4.	B-CSC-704	DSC-C4	Cyber Security	3	2	0	3+1=4	20	10	50	20	100
5.	B-CSC-705	DSC-C5	Data Mining & Warehousing	4	0	0	4	30	0	70	0	100
6.	B-CSC-706	MIC	Emerging Trends in Information Security	3	2	0	3+1=4	20	10	50	20	100

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Fourth Year: Eighth Semester(4 Year UG Hon.)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1.	B-CSC-801	DSC-C6	Visual Basic Programming	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-802	DSC-C7	Programming in JAVA	3	2	0	3+1=4	20	10	50	20	100
3.	B-CSC-803	DSC-C8	Digital Marketing	4	0	0	04	30	0	70	0	100
4.	B-CSC-804	DSC-C9	Big Data	4	0	0	4	30	0	70	0	100
5.	B-CSC-805	DSC-C10	Internet of Things	3	2	0	3+1=4	20	10	50	20	100
6.	B-CSC-806	MIC	Principles of Design and Analysis of algorithms	4	0	0	4	30	0	70	0	100

Fourth Year: Eighth Semester(4 Year UG Hon. With Research)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1.	B-CSC-801	DSC-C6	Visual Basic Programming	3	2	0	3+1=4	20	10	50	20	100
2.	B-CSC-802	DSC-C7	Programming in JAVA	3	2	0	3+1=4	20	10	50	20	100
3.	B-CSC-806	MIC	Principles of Design and Analysis of algorithms	4	0	0	4	30	0	70	0	100
4.	B-CSC-807	SEC	Research Project/ Dissertation	12	0	0	12					300

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Computer Fundamental and Programming Methodology
B-CSC-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3hrs

Course outcomes: After completing this course, the learner will be able to:

CO1. Understand the basics of computer

CO2. Learn about I/O devices and operating systems

CO3. Understand memory and email.

CO4. Learn about the threats and security concepts on computers

Unit – I

Computer Fundamentals: Evolution of Computers through generations, Characteristics of Computers, Strengths and Limitations of Computers, Classification of Computers, Functional Components of a Computer System, Applications of computers in Various Fields. Types of Software: System software, Application software, Utility Software, Shareware, Freeware, Firmware, Free Software.

Unit – II

I/O Devices: I/O Ports of a Desk Top Computer, Device Controller, Device Driver. Input Devices: classification and use, keyboard, pointing devices - mouse, touch pad and track ball, joystick, magnetic stripes, scanner, digital camera, and microphone Output Devices: speaker, monitor, printers: classification, laser, ink jet, dot-matrix. Plotter.

Introduction to Operating System: Definition, Functions, Features of Operating System, Icon, Folder, File, Start Button, Task Bar, Status Buttons, Folders, Shortcuts, Recycle Bin, Desktop, My Computer, My Documents, Windows Explorer, Control Panel.

Unit – III

Memory Systems: Concept of bit, byte, word, nibble, storage locations and addresses, measuring units of storage capacity, access time, concept of memory hierarchy. Primary Memory - RAM, ROM, PROM, EPROM. Secondary Memory - Types of storage devices, Magnetic Tape, Hard Disk, Optical Disk, Flash Memory.

Electronic Mail: Introduction, advantages and disadvantages, User Ids, Passwords, e-mail addresses, message components, message composition, mailer features. Browsers and search engines.

Unit – IV

Planning the Computer Program: Concept of problem solving, concept of programming, program design, Debugging, Types of error, Techniques of problem solving: algorithms and flowcharting, pseudo code, decision table, concept of structured programming Programming methodologies-Top-Down and bottom up programming. Computer languages: Machine, assembly, high level language, compiler, interpreter, assembler.

Recommended Readings:

1.Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB.

2.Dromey, R.G.; How to Solve it By Computer, PHI.

3.Norton, Peter, Introduction to Computer, McGraw-Hill.

4.Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World.

5.Rajaraman, V., Fundamentals of Computers, PHI.

6.Gill,NasibS.:EssentialsofComputerandNetworkTechnology,KhannaBookPublishingCo.,New Delhi.

7.Gill Nasib Singh: Computing Fundamentals and Programming in C, Khanna Books Publishing Co.,New Delhi.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

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Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/ discussed in the lab during the initial period of the semester.

Laboratory:

Students are advised to do laboratory/practical practice not limited to, but including the following types of problems:

Computer Basics:

Identify the various computer hardware
Understanding the working of computer
Understanding various types of software

Operating System:

Starting with basics of Operating Systems and its functionalities

Internet and E-mail:

Using Internet for various tasks
Creating and using e-mail.

MS-Word, MS-PowerPoint

SL

**Basics of Computer
B-CSC-102**

Total Credits: 2

L - T - P

2 - 0 - 0

Course Outcomes:

CO1: To introduce to the students, the basic understanding of the working of a computer system and familiar with the basic internet technology and concepts.

CO2: To familiarize the students with the various types of software.

**External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1:30hrs**

UNIT-I

Introduction to Computers: Definition of Computers, History and Generations of Computers, Characteristics of computer, Classification of Computers. Fundamental Block diagram of Computer: CPU, Input & Output Unit. **Networking:** Concept, Basic Elements of a Communication System, Data Transmission Media, LAN, MAN, WAN.

Introduction of Internet and WWW, Basic working of a Web Browser, Introduction to popular web browsers

UNIT-II

Software: Definition of Software, Types of Software-System software, Application software and Utility software. Types of Computer Languages, Assemblers, Interpreters, Compiler.

Introduction to Operating Systems: Types of Operating System, Functions of Operating System.

Recommended Readings:

1. Fundamentals of Computers, V. Rajaraman 6th edition PHI Learning Private Limited 2014.
2. Peter Norton: Computing Fundamentals. 6th Edition, McGraw Hill-Osborne, 2007
3. Alexis Leon and Marthews Leon: Introduction to Computers, Leon Vikas, 1999.
4. Internet Basics. E. Douglas Comer PHI.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

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Fundamental of Computer Science
B-CSC- 103

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 hrs

Course Outcomes: A successful completion of this course, the students will be able to:

CO1. Understand the basic concepts of computer systems

CO2. Understand the basic concepts of memory and I/O.

CO3. Understand the basic concepts of Operating System.

Unit -I

Computer Fundamentals: Evolution of Computers through generations, Characteristics of Computers, Strengths and Limitations of Computers, Classification of Computers, Functional Components of a Computer System, Applications of computers in Various Fields. Types of Software: System software, Application software, Utility Software.

Unit-II

Memory Systems: Concept of bit, byte, word, nibble, storage locations and addresses, measuring units of storage capacity, access time, concept of memory hierarchy. Primary Memory - RAM, ROM, PROM, EPROM. Secondary Memory - Types of storage devices, Magnetic Tape, Hard Disk, Optical Disk, Flash Memory.

I/O Devices: I/O Ports of a Desk Top Computer, Device Controller, Device Driver. Input Devices: classification and use, keyboard, pointing devices - mouse, touch pad and track ball, joystick, magnetic stripes, scanner, digital camera, and microphone Output Devices: speaker, monitor, printers: classification, laser, ink jet, dot-matrix. Plotter.

Unit-III

Introduction to Operating System: Definition, Functions, Features of Operating System, Icon, Folder, File, Start Button, Task Bar, Status Buttons, Folders, Shortcuts, Recycle Bin, Desktop, My Computer, My Documents, Windows Explorer, Control Panel.

Recommended Readings:

1. Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB.
2. Dromey, R.G., How to Solve it By Computer, PHI.
3. Norton, Peter, Introduction to Computer, McGraw-Hill.
4. Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World.
5. Rajaraman, V., Fundamentals of Computers, PHI.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question

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Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/ discussed in the lab during the initial period of the semester.

Laboratory:

Students are advised to do laboratory/practical practice not limited to, but including the following types of problems:

Computer Basics:

Identify the various computer hardware
Understanding the working of computer
Understanding various types of software

Operating System:

Starting with basics of Operating Systems and its functionalities

Instructions for External Practical Paper Setter/Examiner:

1. The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration.
2. Equal weightage will be given to both the questions.
3. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

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**Basic of IT Tools
B-CSC-202**

Total Credits: 2

L - T - P

2 - 0 - 0

Course Outcomes:

CO1: Identify the basic components of computers and computer networks, browser.

CO2: Understand and use of email and social networking.

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

UNIT - I

Introduction to Computer: Computer and Latest IT gadgets, Evolution of Computers & its applications, Basics of Hardware and Software, Application Software, Systems Software, Utility Software. Central Processing Unit, Input devices, Output devices, Computer Memory & storage, Mobile App
Introduction to Internet and World Wide Web, Basic of Computer Networks, Local Area Network (LAN), Wide Area Network (WAN), Network Topology, Internet, Applications of Internet, Website Address and URL, Popular Web Browsers (Internet Explorer/Edge, Chrome, Mozilla Firefox, Opera etc.), Popular Search Engines, Searching on the Internet.

UNIT-II

E-mail: Using E-mails, Opening Email account, Mailbox: Inbox and Outbox, Creating and Sending a new E-mail, replying to an E-mail message, forwarding an E-mail message, searching emails, and Attaching files with email, Email Signature. Social Networking: Facebook, Twitter, LinkedIn, Instagram, Instant Messaging (WhatsApp, Facebook Messenger, Telegram), Introduction to Blogs, Digital Locker.

Recommended Readings:

1. Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB
2. Dromey, R.G., How to Solve it By Computer, PHI
3. Norton, Peter, Introduction to Computer, McGraw-Hill
4. Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World
5. Rajaraman, V., Fundamentals of Computers, PHI
6. Ram, B., Computer Fundamentals, Architecture & Organization, New Age International (P)Ltd.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Full

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Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/ discussed in the lab during the initial period of the semester.

Laboratory:

Students are advised to do laboratory/practical practice not limited to, but including the following types of problems:

Web Designing:

Starting with introduction to WWW

HTML:

- Write a HTML document to print "Hello World" in bold and Italic Format.
- Design a page having suitable background colour and text colour with title "My First Web Page" using all the attributes of the Font tag.
- Write HTML code to design a page containing some text in a paragraph by giving suitable heading style.
- Write HTML code to display three images at LEFT, RIGHT and CENTER respectively in web browser.
- Write HTML code which contains Hyperlinks.
- Program based on HTML form and frames
- Design a HTML table with the use of colspan and rowspan

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Web Designing with HTML
B-CSC- 203

Total Credits: 3
L - T - P
2 - 0 - 2

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 2 hrs

Course Outcomes: A successful completion of this course, the students will be able to:

CO1: Understand the fundamental concepts of web development

CO2: Understand the image and hyperlink.

CO3: Understand the basic tags of HTML

Unit -I

Web Programming Introduction: Architecture of a website, Different technologies in making the website; Introduction to HTML: History of HTML, Basic structure of an HTML document, Introduction to Static and Dynamic Websites.

Unit-II

HTML Tag vs Element, HTML Attributes; HTML-Basic Formatting Tags; Grouping Using Div and Span, HTML-Lists: Unordered Lists, Ordered Lists, Definition list; Image and Image Mapping, Hyperlink.

Unit-III

HTML-Table: < table >, <th>, <tr>, < td >, < caption >, <thead>, <tbody>, <tfoot>, <colgroup>, <col>; Colspan & Rowspan

HTML-Iframe: Iframe attributes, Using Iframe as the Target; HTML-Form: Form attributes, Form elements: < input >, <textarea>, <button>, < select >, < label >, <fieldset>, <legend>etc.

Recommended Readings:

1. Deitel H.M., Deitel P.J., Internet & World Wide Web: How to program, Pearson Education.
2. Jackson, Web Technologies, Pearson Education

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question

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Basic of IT Tools
B-CSC-202

Total Credits: 2

L - T - P

2 - 0 - 0

Course Outcomes:

CO1: Identify the basic components of computers and computer networks, browser.

CO2: Understand and use of email and social networking.

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

UNIT - I

Introduction to Computer: Computer and Latest IT gadgets, Evolution of Computers & its applications, Basics of Hardware and Software, Application Software, Systems Software, Utility Software. Central Processing Unit, Input devices, Output devices, Computer Memory & storage, Mobile App
Introduction to Internet and World Wide Web, Basic of Computer Networks, Local Area Network (LAN), Wide Area Network (WAN), Network Topology, Internet, Applications of Internet, Website Address and URL, Popular Web Browsers (Internet Explorer/Edge, Chrome, Mozilla Firefox, Opera etc.), Popular Search Engines, Searching on the Internet.

UNIT-II

E-mail: Using E-mails, Opening Email account, Mailbox: Inbox and Outbox, Creating and Sending a new E-mail, replying to an E-mail message, forwarding an E-mail message, searching emails, and Attaching files with email, Email Signature. Social Networking: Facebook, Twitter, LinkedIn, Instagram, Instant Messaging (WhatsApp, Facebook Messenger, Telegram), Introduction to Blogs, Digital Locker.

Recommended Readings:

1. Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB
2. Dromey, R.G., How to Solve it By Computer, PHI
3. Norton, Peter, Introduction to Computer, McGraw-Hill
4. Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World
5. Rajaraman, V., Fundamentals of Computers, PHI
6. Ram, B., Computer Fundamentals, Architecture & Organization, New Age International (P)Ltd.

Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

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Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

The following activities be carried out/discussed in the lab during the initial period of the semester.

Programming Lab:

- Write a C Program to read three numbers and find the sum.
- Write a C Program to read length and breadth and find area and perimeter of a rectangle.
- Write a C Program to read three numbers and find the biggest of three
- Write a C Program to demonstrate library functions in math.h (at least 5)
- Write a C Program to read a number, find the sum of the digits, reverse the number and check it for palindrome
- Write a C Program to find the simple interest.
- Write a C Program to read percentage of marks and to display appropriate grade (using switch case)
- Program to find whether a year is leap or not.
- Write a C Program to find the roots of quadratic equation (if else ladder)
- Write a C program to print triangle of star.
- Write a C Program to check a number for even or odd.
- Program to perform addition and subtraction of Matrices
- Write a C Program to print first 10 natural numbers using for loop.
- Write a C Program to find the sum of two numbers using function.
- Write a C Program to print the Fibonacci series.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Mathematics Subject for 4 Year UG Programme
Common for Bachelor of Arts and Bachelor of Physical Science
w.e.f. Academic session- 2024-25

Scheme of Examination for 1st semester

First Year: 1 st Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-101	DSC	Calculus	3	2	0	4	20	10	50	20	100
2	B-MAT-102	MIC	Basic Algebra	2	0	0	2	15	0	35	0	50
3	B-MAT-103	MDC	Introductory Mathematics	3	0	0	3	25	0	50	0	75

Scheme of Examination for 2nd Semester

First Year: 2 nd Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-201	DSC	Algebra and Number Theory	3	2	0	4	20	10	50	20	100
2	B-MAT-202	MIC	Vector Calculus	2	0	0	2	15	0	35	0	50
3	B-MAT-203	MDC	Mathematics for commerce and Social Sciences	3	0	0	3	25	0	50	0	75

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Scheme of Examination for 3rd semester

Second Year: Third Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-301	DSC	Analytical Geometry & Vector Calculus	3	2	0	4	20	10	50	20	100
2	B-MAT-302	MIC	Business Mathematics	4	0	0	4	30	0	70	0	100
3	B-MAT-303	MDC	Mathematics for All	3	0	0	3	25	0	50	0	75

Scheme of Examination for 4th semester

Second Year: Fourth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-401	DSC	Differential Equations	3	2	0	4	20	10	50	20	100 ✓
2	B-MAT-402	MIC (VOC)	Mathematical Computing using Python	3	2	0	4	20	10	50	20	100 ✓

Scheme of Examination for 5th semester

Third Year: Fifth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-501	DSC	Advanced Calculus	3	2	0	4	20	10	50	20	100
2	B-MAT-502	MIC (VOC)	Data Structure using C	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 6th semester

Third Year: Sixth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-601	DSC	Sequences and Series	3	2	0	4	20	10	50	20	100
2	B-MAT-602	MIC	Probability Theory and Statistics	4	0	0	4	30	0	70	0	100
3	B-MAT-603	MIC (VOC)	Linear Programming	4	0	0	4	30	0	70	0	100

Scheme of Examination for 7th semester

Fourth Year: Seventh Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-701	DSC-M1	Groups and Rings	4	0	0	4	30	0	70	0	100
2	B-MAT-702	DSC-M2	Real Analysis-1	4	0	0	4	30	0	70	0	100
3	B-MAT-703	DSC-M3	Complex Analysis	4	0	0	4	30	0	70	0	100
4	B-MAT-704	DSC-M4	Special functions and integral transforms	4	0	0	4	30	0	70	0	100
5	B-MAT-705	DSC-M5	Discrete Mathematics	4	0	0	4	30	0	70	0	100
6	B-MAT-706	MIC	Programming in C and Numerical Methods	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th semester (4 years UG Hon.)

Fourth Year: Eighth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-MAT-801	DSC-M6	Linear Algebra	4	0	0	4	30	0	70	0	100
2	B-MAT-802	DSC-M7	Real Analysis-II	4	0	0	4	30	0	70	0	100
3	B-MAT-803	DSC-M8	Mechanics	4	0	0	4	30	0	70	0	100
4	B-MAT-804	DSC-M9	Topology	4	0	0	4	30	0	70	0	100
5	B-MAT-805	DSC-M10	Theory of Ordinary Differential Equations	4	0	0	4	30	0	70	0	100
6	B-MAT-806	MIC	Numerical Analysis	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th semester (4 years UG Hon. with Research)

Fourth Year: Eighth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-MAT-801	DSC-M6	Linear Algebra	4	0	0	4	30	0	70	0	100
2	B-MAT-802	DSC-M7	Real Analysis-II	4	0	0	4	30	0	70	0	100
3	B-MAT-803	MIC	Research Methodology and Statistics	4	0	0	4	30	0	70	0	100
4	B-MAT-804	Dissertation	Research Project/ Dissertation				12					300

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Calculus
B-MAT-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs

Course outcomes:

CO1: Gain knowledge of the concepts and theory of limit, continuity and differentiability of functions. Attain skills of calculating the limit of functions and examining the continuity and differentiability of different types of functions and perform successive differentiation of functions. To apply the procedural knowledge to obtain the series expansions of functions which find multidisciplinary applications.

CO2: Understand concepts of asymptotes and curvature, the geometrical meaning of these terms and to have procedural knowledge to solve related problems.

CO3: Determine singular points of a curve and classify them. Understand the concept of rectification of curves and derive the reduction formulae.

CO4: Have theoretical knowledge and practical skills to evaluate the area bounded by the curves and volume and surface area of solids formed by revolution of curves.

Unit – I

$\epsilon - \delta$ definition of limit and continuity of a real valued function, basic properties of limits, types of discontinuities. Differentiability of functions. Application of L'Hospital rule to indeterminate forms. Successive differentiation. Leibnitz theorem, Taylor's and Maclaurin's series expansion with different forms of remainder.

Unit – II

Asymptotes: Horizontal, vertical and oblique asymptotes for algebraic curves, asymptotes for polar curves, Intersection of a curve and its asymptotes, Curvature and radius of curvature of curves (cartesian, parametric, polar & intrinsic forms), Newton's method, Centre of curvature and circle of curvature.

Unit – III

Multiple points, Node, Cusp, conjugate points. Tests for concavity and convexity, Points of inflection. Tracing of curves. Reduction formulae.

Unit – IV

Rectification, intrinsic equation of a curve, Quadrature, Area bounded by closed curves. Volumes and surfaces of solids of revolution.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Howard Anton, I. Bivens & Stephan Davis (2021). Calculus (12th edition). J. Wiley & Sons.
2. Gabriel Klambauer (1986). Aspects of Calculus (4th edition). Springer.

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3. Wiesław Krawcewicz & Bindhyachal Rai (2003). Calculus with Maple Labs. Alpha Science Int'l Ltd.
4. Gorakh Prasad (2016). Differential Calculus (19th edition). Pothishala Pvt. Ltd.
5. George B. Thomas Jr., Joel Hass, Christopher Heil & Maurice D. Weir (2018). (14th edition). Pearson Education.
6. Monty J. Strauss, Gerald L. Bradley & Karl J. Smith (2002). Calculus (3rd edition). Dorling Kinlersley (India) Pvt. Ltd

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

- CO1: Attain cognitive and technical skills required for solving different problems of calculus associated with tracing of curves, determination of curvature and rectification of curves, volume and surface area of solids of revolution.
- CO2: Have technical and practical skills of solving calculus problems related to differentiation and integration of functions by using MAXIMA software.

(A) **Problem Solving-** Questions related to the following problems will be solved and their record will be maintained in the Practical Notebook:

1. Problems of curve tracing when equation is given in Cartesian coordinates.
2. Problems of curve tracing when equation is given in Parametric form.
3. Problems of curve tracing when equation is given in Polar coordinates.
4. Problem of determination of length of a curve expressed in Cartesian coordinates.
5. Problem of determination of length of a curve expressed in Polar coordinates.
6. Problem of determination of radius of curvature expressed in Cartesian coordinates.
7. Problem of determination of radius of curvature expressed in Polar coordinates.
8. Problem of determination of radius of curvature expressed in Parametric form.
9. Problem of determination of volumes and surfaces of solids of revolution for Cartesian curve.
10. Problem of determination of volumes and surfaces of solids of revolution for parametric curve.
11. Problem of determination of volumes and surfaces of solids of revolution for Polar curve.

(B) The following practicals will be done using MAXIMA software and their record will be maintained in the practical note book:

1. Learn to use basic operators and functions in Maxima software.
2. Simplify algebraic expressions and expressions containing radicals, logarithms, exponentials and trigonometric functions.
3. Expand algebraic, rational, trigonometric and logarithmic expressions.
4. Find derivatives of algebraic, trigonometric, exponential and logarithmic functions.
5. Find derivatives of functions involving above mentioned functions.
6. Problems of successive differentiation.

Full - 1259

Basic Algebra
B-MAT-102

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 Hrs

Course Outcomes:

CO₁: Gain knowledge of the concepts of symmetric, skew-symmetric, Hermitian, skew-Hermitian, Orthogonal and Unitary matrices.

CO₂: Have knowledge of procedure and cognitive skills used in calculating rank of a matrix, row rank and column rank of a matrix.

CO₃: Gain knowledge of the concepts of eigen values, characteristic equation, minimal polynomial of a matrix and technical skills used in solving problems based on Cayley- Hamilton theorem.

CO₄: Acquire knowledge of Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations and theorems on consistency of a system of linear equations.

UNIT-I

Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices. Elementary Operations on matrices. Rank of a matrices. Inverse of a matrix. Linear dependence and independence of rows and columns of matrices. Row rank and column rank of a matrix.

UNIT-II

Eigenvalues, eigenvectors and the characteristic equation of a matrix. Minimal polynomial of a matrix. Cayley Hamilton theorem and its use in finding the inverse of a matrix. Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations. Theorems on consistency of a system of linear equations. Unitary and Orthogonal Matrices.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. H.S. Hall and S.R. Knight: Higher Algebra, H.M. Publications 1994.
2. Shanti Narayan: A Text Books of Matrices.
- 3 Chandrika Prasad: Text Book on Algebra and Theory of equations, Pothishala Private Ltd., Allahabad.
4. Khurosh: Higher Algebra (Mir Publication)

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**Introductory Mathematics
B-MAT-103**

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 Hrs

Course Outcomes:

CO₁: Gain the knowledge of set theory, types of sets and operations on sets. Understand various concepts of matrices and determinants.

CO₂: Acquire the cognitive skills to apply different operations on matrices and determinants.

Gain the knowledge of the concepts of Arithmetic progression, Geometric progression and Harmonic progression, and find A.M., G.M. and H.M. of given numbers.

CO₃: Have the conceptual knowledge of straight lines and circles. Find out the slope of a line, angle between two lines, and know about various forms of a straight line and the standard form of a circle.

UNIT-I

Sets and their representations, Empty set, Finite and infinite sets, Subsets, Equal sets, Power sets, Universal set, Union and intersection of sets, Difference of two sets, Complement of a set, Venn diagram, De-Morgan's laws and their applications. An introduction to matrices and their types, Operations on matrices, Symmetric and skew-symmetric matrices, Minors, Co-factors. Determinant of a square matrix, Adjoint and inverse of a square matrix.

UNIT-II

Arithmetic progression, Geometric progression, Harmonic progression, Arithmetic mean (A.M.), Geometric mean (G.M.), Harmonic mean (H.M.), Relation between A.M., G.M. and H.M.

UNIT-III

Straight lines: Slope of a line and angle between two lines, Different forms of equation of a line: Parallel to co-ordinate axes, Point-slope form, Slope-intercept form, Two-point form, General form; Distance of a point from a straight line. Standard form of a circle and its properties.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. C. Y. Young (2021). Algebra and Trigonometry. Wiley.
2. S.L. Loney (2016). The Elements of Coordinate Geometry (Cartesian Coordinates) (2nd Edition). G.K. Publication Private Limited.
3. Seymour Lipschutz and Marc Lars Lipson (2013). Linear Algebra. (4th edition). Outline Series, McGraw-Hill.
4. C.C. Pinter (2014). A Book of Set Theory. Dover Publications.
5. J. V. Dyke, J. Rogers and H. Adams (2011). Fundamentals of Mathematics (10th edition), Brooks/Cole.
6. A. Tussy, R. Gustafson and D. Koenig (2010). Basic Mathematics for College Students (4th Edition). Brooks Cole.

Full ← 1261 -

Algebra and Number Theory
B-MAT-201

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs

Course Outcomes:

CO₁: Have knowledge of the concepts used in solving problems based on relations between the roots and coefficients of general polynomial equation in one variable, solutions of polynomial equations having conditions on roots, common roots and multiple roots.

CO₂: Understand Descarte's rule of signs and learn cognitive and technical skills required in assessing nature of the roots of an equation and solving problems based on these.

CO₃: Have deeper and procedural knowledge required for solving cubic and biquadratic equations used in Mathematics as well as many other learning fields of study. To understand the basic concepts of number theory and their applications in problem solving and life- long learning.

CO₄: Have knowledge of concepts, facts, principles and theories of Linear Congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse, Chinese Remainder theorem. Attain cognitive skills used in solving linear Diophantine equations in two variables.

UNIT-I

Relations between the roots and coefficients of general polynomial equation in one variable, Solutions of polynomial equations having conditions on roots, Common roots and multiple roots, Transformation of equations.

UNIT-II

Solution of cubic equations (Cardon's method). Biquadratic equations and their solutions. Nature of the roots of an equation, Descarte's Rule of signs.

UNIT-III

Divisibility, Greatest common divisor (gcd), Least common multiple (lcm), Prime numbers, Fundamental theorem of arithmetic.

UNIT-IV

Linear congruences, Fermat's theorem, Euler's theorem, Wilson's theorem and its converse, Chinese Remainder theorem, Linear Diophantine equations in two variables.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

- 1) Stephen H. Friedberg, Arnold J. Insel & Lawrence E. Spence (2022). Linear Algebra (5th edition). Prentice Hall of India Pvt. Ltd.
- 2) K. B. Dutta (2004). Matrix and Linear Algebra. Prentice Hall of India Pvt. Ltd.
- 3) Vivek Sahai & Vikas Bist (2013). Linear Algebra (2nd edition). Narosa Publishing House.

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- 4) Seymour Lipschutz and Marc Lars Lipson (2013). Linear Algebra(4thEdition)OutlineSeries, McGraw-Hill.
- 5) I. Niven (1991). An Introduction to the Theory of Numbers (5th edition). John Wiley & Sons.
- 6) H.S. Hall and S.R. Knight (2023). Higher Algebra (7th edition). Arihant Publications.
- 7) Leonard Eugene Dickson (2009). First Course in the Theory of Equations. The Project Gutenberg EBook (<http://www.gutenberg.org/ebooks/29785>).

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 3 Hrs

Course Outcomes:

CO₁: Attain cognitive and technical skills required to formulate and solve practical problems involving Cardon's method, Ferrari's method and Descarte's method.

CO₂: Have technical and practical skills required for solving algebraic equations by using built in functions of MAXIMA software.

A) Problem Solving: Questions related to the following problems will be worked out and record of those will be maintained in the Practical Notebook:

1. Problems of solving cubic equations by Cardon's method.
2. Problems of solving biquadratic equations by Descarte's method.
3. Problems of solving biquadratic equations by Ferrari's method.
4. Problems to find GCD and LCM of two integers.
5. Problems to find solution of linear congruence using Euler's theorem.
6. Problems to find solution of linear congruence using Wilson's theorem.
7. Problems to find common solution of congruences using Chinese remainder theorem.

B) The following practicals will be done using MAXIMA Software and their record will be maintained in the practicalnote Book:

1. To find roots of algebraic equations using MAXIMA.
2. To find multiple roots of algebraic equations using MAXIMA.
3. Problems of solving cubic equations by Cardon's method using MAXIMA.
4. Problems of solving biquadratic equations by Descarte's method using MAXIMA.
5. Problems to find GCD and LCM of two or more integers using MAXIMA.
6. Problems of solving biquadratic equations by Ferrari's method using MAXIMA.

Instructions for External Practical Paper Setter/Examiner:

The practical component of the course has two parts, Problem Solving and Practicals using MAXIMA software. The examiner will set 4 questions at the time of practical examination asking two questions from the part (A) and two questions from the part (B) by taking course learning outcomes (CLOs) into consideration. The examinee will be required to solve one problem from the part (A) and to execute one problem successfully from the part (B). Equal weightage will be given to both the parts. The evaluation will be done on the basis of practical record, viva-voce, write up and execution of the program.

Full ← 1263-

Vector Calculus
B-MAT-202

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 Hrs

Course Outcomes:

CO₁: Gain the knowledge of Scalar and vector product of multiple vectors.

CO₂: Acquire the knowledge of vector differentiation and derivative along a curve.

CO₃: Gain the knowledge of the concepts of gradient of a scalar point function, divergence and curl of vector point function

CO₄: Have the conceptual knowledge of properties of gradient, divergence, curl and Laplacian operator.

UNIT - I

Scalar and vector product of three vectors, product of four vectors. Reciprocal vectors. Vector differentiation. Scalar Valued point functions, vector valued point functions, derivative along a curve, directional derivatives.

UNIT-II


Gradient of a scalar point function, geometrical interpretation of $\text{grad } \phi$, character of gradient as a point function. Divergence and curl of vector point function, characters of $\text{Div. } \vec{f}$ and $\text{Curl } \vec{f}$ as point function, examples. Gradient, divergence and curl of sums and product and their related vector identities. Laplacian operator.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions 12 marks from each unit and one compulsory question of 11 marks by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. J.E. Marsden and A. Tromba, Vector Calculus, W.H. Freeman & Co. Ltd., 6th Edition.
2. Murray R. Spiegel, Vector Analysis, Schaum's outlines, McGraw Hill Education, New York.
3. N. Saran and S.N. Nigam, Introduction to Vector Analysis, Pothishala Pvt. Ltd., Allahabad.
4. Shanti Narayna, A Text Book of Vector Calculus. S. Chand & Co., New Delhi.



1264.

Mathematics for Commerce and Social Sciences
B-MAT-203

Total Credits: 3

L - T - P

3 - 0 - 0

Course Outcomes:

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2 Hrs

CO₁: Understand and have the procedural knowledge of the concepts of differentiation. Gain the knowledge to find derivatives and integration of simple functions related to commerce and social sciences. Acquire skills to make use of derivatives and integration in realistic problems of the discipline.

CO₂: Have the conceptual knowledge of compound interest, annuity, loan, debenture and sinking funds and attain skills to use these concepts in problem solving.

CO₃: Gain the knowledge and understanding of the concepts of Linear programming and develop skills of formulating and solving linear programming problems based on real world problems.

UNIT-I

Differentiation, Derivatives of simple functions and other functions having applications in business and social studies, Maxima and minima of a function and their applications to Revenue, Cost, Demand, Production, Profit functions and other functions related to commercial and social Problems. Integration of simple functions and its applications in commercial and economic problems.

UNIT-II

Simple interest and compound interest. Annuities: Types of annuities, Present value and amount of an annuity (including the case of continuous compounding), Valuation of simple loans and debentures, Problems related to sinking funds.

UNIT-III

Linear Programming: Formulation of linear programming problems (LPP) and their solution by graphical and Simplex methods. Applications of linear programming in solving social science and business problems.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. E.T. Dowling (2020). Schaum's outlines of Calculus for Business, Economics and the Social Sciences. McGraw Hill.
2. S.C. Gupta and V.K. Kapoor (2014). Fundamentals of Mathematical Statistics. S.Chand & Sons, Delhi.
3. D.C. Sancheti and V.K. Kapoor (2011). Business Mathematics. Sultan Chand and Sons.
4. Holden (2010). Introductory Mathematics for Business and Economics. Ane/pal Exclusive.
5. E.T. Dowling (2009). Schaum outlines of Mathematical methods for Business and Economics. McGraw Hill.
6. E. Don and J. Lerner (2009). Schaum's outline of Basic Business Mathematics (2nd Edition). McGraw Hill.
7. L. N. Paul (2002). Linear Programming: an introductory analysis. Tata Mcgraw Hill. New Delhi.

Full - 1265

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Botany Subject of 4 Year UG Programme

Bachelor of Life Science (Multidisciplinary)

W.e.f. Academic session 2024-25

Scheme of Examination for 1st Semester

First Year: First Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-101	DSC	Cell & Molecular Biology	3	2	0	4	20	10	50	20	100
2	B-BOT-102	MIC	Fundamentals of Biochemistry	2	0	0	2	15	0	35	0	50
3	B-BOT-103	MDC	Fundamentals of Botany	2	2	0	3	15	10	35	15	75

Scheme of Examination for 2nd Semester

First Year: Second Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-201	DSC	Diversity of Microbes & Cryptogams	3	2	0	4	20	10	50	20	100
2	B-BOT-202	MIC	Plant Ecology	2	0	0	2	15	0	35	0	50
3	B-BOT-203	MDC	Plants for Human Welfare	2	2	0	3	15	10	35	15	75

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Scheme of Examination for 3rd semester

First Year: Third Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-301	DSC	Diversity of Archegoniate and Seed Plants-I	3	2	0	4	20	10	50	20	100
2	B-BOT-302	MIC	Microbiology	3	2	0	4	20	10	50	20	100
3	B-BOT-103	MDC	Horticulture	2	2	0	3	15	10	35	15	75

Scheme of Examination for 4th Semester

First Year: Forth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-401	DSC	Plant Anatomy and Reproduction	3	2	0	4	20	10	50	20	100
2	B-BOT-402	MIC (VOC)	Organic Farming	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 5th semester

First Year: Fifth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-501	DSC	Plant Taxonomy	3	2	0	4	20	10	50	20	100
2	B-BOT-502	MIC (VOC)	Gardening & Floriculture	3	2	0	4	20	10	50	20	100

Scheme of Examination for 6th semester:

First Year: Sixth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-601	DSC	Plant Physiology	3	2	0	4	20	10	50	20	100
2	B-BOT-602	MIC	Economic Botany	3	2	0	4	20	10	50	20	100
3	B-BOT-603	MIC (VOC)	Mushroom Cultivation	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 7th semester

First Year: Seventh Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-701	DSC-B1	Plant Development	3	2	0	4	20	10	50	20	100
2	B-BOT-702	DSC-B2	Plant Genetics	3	2	0	4	20	10	50	20	100
3	B-BOT-703	DSC-B3	Plant Biotechnology	3	2	0	4	20	10	50	20	100
4	B-BOT-704	DSC-B4	Plant Pathology	3	2	0	4	20	10	50	20	100
5	B-BOT-705	DSC-B5	Computational Biology	3	2	0	4	20	10	50	20	100
6	B-BOT-706	MIC	Ethnobotany	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th semester (4 Year UG Hon.)

First Year: 8 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-801	DSC-B6	Research Methodology	4	0	0	4	30	0	70	0	100
2	B-BOT-802	DSC-B7	Tools & Techniques	3	2	0	4	20	10	50	20	100
3	B-BOT-803	DSC-B8	Biostatistics	3	2	0	4	20	10	50	20	100
4	B-BOT-804	DSC-B9	Plant Breeding	3	2	0	4	20	10	50	20	100
5	B-BOT-805	DSC-B10	Stress Physiology	3	2	0	4	20	10	50	20	100
6	B-BOT-806	MIC	Biodiversity & Conservation	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th semester (4 Year UG Hon. with Research)

First Year: Eighth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-BOT-801	DSC- B6	Research Methodology	4	0	0	4	30	0	70	0	100
2	B-BOT-802	DSC- B7	Tools & Techniques	3	2	0	4	20	10	50	20	100
3	B-BOT-806	MIC	Biodiversity & Conservation	3	2	0	4	20	10	50	20	100
4	B-BOT-807	Dissertation	Research Project/ Dissertation				12					300

DM

**Cell and Molecular Biology
B-BOT-101**

L - T - P
3 0 2

**Total Credits: 4
External Marks: 50
Internal Marks: 20
Time allowed: 3 hrs**

Course Outcomes:

- CO1.** Students will get knowledge about prokaryotic and Eukaryotic cells and the structure and functions of Cell Organelles.
- CO2.** By understanding the working of cells in healthy and diseased state, students will be helped in further research areas for higher studies.
- CO3.** It helps in understanding the pattern of inheritance of various life forms, DNA Structure and functions of genes.
- CO4.** It helps in understanding chromosomal structure and alterations, mutations and genetic engineering etc.

Unit- I

Basic cell structure, composition and cell division:- Prokaryotic & Eukaryotic cell system, Cell division: Amitosis, Mitosis & Meiosis.

Cell Envelops:- Structure and functions of cell wall and plasma membrane.

Unit- II

Cell Organelles:- Ultrastructure and function of nucleus, Golgi apparatus, Endoplasmic reticulum, Ribosomes

Unit- III

Cell Organelles:- Ultrastructure and functions of Chloroplast, Mitochondria, Lysosomes, Peroxisomes and Vacuoles.

Unit -IV

Biomolecules:- General account of Carbohydrate, Proteins and Lipids.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:-

1. Alberts, B. Bary, D. Lewis, J. Raff, M., Roberts, K. and Watson, I.D. 1999. Molecular Biology of Cell. Garland Publishing Co., Inc, New York. US.
2. Gupta , P.K. 1999 . A Text Book of Cell and Molecular Biology. Rastogi Publication, Meerut, India.
3. Kleinsmith L.J. and Kish, V.M. 1995. Principles of Cell and Molecular Biology (2nd Edition). Harper Collins College Publisher, New York, USA.



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4. Lodish, H., Berk, A Zipursky, S.L. Matsudaira. P., Baltimore, D. and Darnell, J.2000. Molecular Biology, W.H. Freeman and Co., New York., USA.
5. Powar, C.B. 1983. Cell Biology.(3rd Edition). Himalaya Publishing House.
6. Lehninger , A.L. , Nelson , D.K. and Cox , M.M. 1993. Principles of Biochemistry , CBS Publishers and Distributors , New Delhi.

Practical

External Marks: 20

Internal Marks: 10

Time Allowed: 2 hrs

Course Outcomes:

- CO1.** Students will learn about to prepare the slides of cell division and will be able to practically understand the cell division.
- CO2.** Students will understand the structure and functions of important biomolecules.

-
1. Slide preparation from Onion root tips & identification of various mitotic stages
 2. Study of meiosis from onion flower buds and identification of major stages.
 3. Study of permanent slides of Mitosis and Meiosis.
 4. Qualitative estimation of carbohydrates, proteins and lipids.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

PM

Fundamentals of Biochemistry
B- BOT-102

Total Credits: 2

L - T - P

2 0 0

External Marks: 35

Internal Marks: 15

Time Allowed: 1.5 hrs

Course Outcomes:

CO1. Students will study and know about important plant biomolecules.

CO2. Students will know about enzymology, nitrogen and lipid metabolism to understand various biological mechanisms.

Unit- I

Lipid metabolism- Structure and function of lipids, fatty acid biosynthesis; beta-oxidation; saturated and unsaturated fatty acids; storage and mobilization of fatty acids.

Nitrogen metabolism- Biology of nitrogen fixation; importance of nitrate reductase and its regulation; ammonium-assimilation.

Unit- II

Basics of Enzymes:-Discovery and nomenclature; characteristics of enzymes; concept of holoenzyme, apoenzyme, coenzyme and co factor, regulation of enzyme activity; mechanism of action.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Lehninger, A.L. Nelson, D.V. and Cox M.M. (1993). Principles of Biochemistry. C.B.S. Publishers and distributors, New Delhi.
2. Lea, P.J. and Leegood, R.C. 1999. Plant biochemistry and Molecular Biology, John Wiley and Sons, Chichester, England.
3. Trehan, Keshav 1990, Biochemistry, Wiley, Eastern New Delhi

Full

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Fundamentals of Botany
B-BOT-103

Total Credits: 3

L – T – P

2 0 2

External Marks: 35

Internal Marks: 15

Time Allowed: 2 hrs

Course Outcomes:

- CO1.** Students will gain a foundational understanding of the biology of microorganisms, algae, fungi and lichens.
- CO2.** Students will develop a conceptual understanding of bryophytes and pteridophytes.
- CO3.** Students will acquire knowledge about the fundamental characteristics of gymnosperms and the challenges related to their propagation. Students will acquire a basic understanding of angiosperm morphology.

Unit I

General characteristics and economic importance of viruses, bacteria algae, fungi and lichens.

Unit II

General characteristics and economic importance of Bryophytes and Pteridophytes.

Unit III

General characteristics and economic importance Gymnosperms and Angiosperms.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions of 9 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will be of 8 marks covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Wiley, J.M., Sherwood, L.M. and Woolverton, C.J. (2019) Prescott's Microbiology. 11th Edition. McGraw Hill International.
2. Lee, R.E. (2018) Phycology. 5th Edition. Cambridge University Press.
3. Ahluwalia, A.S. (2020). Phycology: Principles, Processes and Applications. Daya Publishing House, New Delhi.
4. Dube, H.C. (2012). An Introduction to Fungi, Vikas Publishing House Pvt. Ltd., Delhi. 4th edition.
5. Mehrotra, R.S. and Aggarwal, Ashok (2013) Fundamentals of Plant Pathology, Tata McGraw-Hill Publishing company Ltd, New Delhi
6. Pelczar, M.J. (2001) Microbiology, 5th edition, Tata McGraw-Hill Co, New Delhi.
7. Sethi, I.K. and Walia, S.K. (2011). Text book of Fungi & Their Allies, MacMillan Publishers Pvt. Ltd., Delhi.
8. Raven, P.H., Johnson, G.B., Losos, J.B., Singer, S.R. (2005). Biology. Tata McGraw Hill, Delhi, India.
9. Sharma, O.P. (2017). Text Book of Pteridophyta, McMillan India Ltd.

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10. Thakur, A.K. and Bassi, S.K. (2008). Diversity of Microbes and Cryptogams. S. Chand & Co., Delhi.
11. Vanderpoorten, A. & Goffinet, B. (2009) Introduction to Bryophytes. Cambridge University Press.
12. Vashishta, P.C., Sinha, A.K., Kumar, A., (2010). Pteridophyta, S. Chand. Delhi, India
13. Vashishta, P.C., Sinha, A.K., Kumar, A., (2010). Gymnosperms, S. Chand. Delhi, India
14. Pandey, B.P. (2001). A Textbook of Botany-Angiosperms, S. Chand. Delhi, India

Practical

External Marks: 15

Internal Marks: 10

Time Allowed: 2 hrs

Course Outcomes:

CO1. Students will be able to learn the practical aspects of microorganisms, algae and fungi.

CO2. Students will be able to identify the major groups of plants and compare the characteristics of lower plants (bryophytes and pteridophytes) and higher plants (angiosperms and gymnosperms).

1. Cynobacteria & Algae: Study of slides of *Nostoc* and *Volvox* through permanent slides.
2. *Penicillium*: Asexual stage and sexual structures through permanent slides.
3. *Agaricus*: Specimens of button stage and full grown mushroom.
4. *Marchantia* & *Funaria*- morphology of thallus through permanent slides.
5. *Selaginella* & *Equisetum*- morphology specimen study.
6. *Cycas* & *Pinus* - morphology specimen study.
7. Study of vegetative and floral characters of the one or two members of some important families
8. Excursion Report: Report on excursion tours with photographs, collection, preservation and preparation of herbarium sheets and specimens related to Archegoniates and Angiosperms. Mounting of a collected, properly dried and pressed specimen of minimum 20 wild plants with herbarium label.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

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Diversity of Microbes and Cryptogams

B- BOT-201

Total Credits: 4

L - T - P

3 0 2

External Marks: 50

Internal Marks: 20

Time allowed: 3 hrs

Course Objectives:

- CO1. Students will be able to understand the general characteristics of bacteria and viruses.
- CO2. Students will develop a conceptual understanding of phycology.
- CO3. Students will develop a conceptual understanding of fungi.
- CO4. Students will be able to understand about the lichens, their dual nature and role in succession.

Unit- I

Bacteria- Structure, Nutrition Multiplication, and Economic Importance.

Algae - General Characters, Classification and economic importance.

Unit- II

Algae- Important features and Life History of Chlorophyceae (*Volvox*, *Chara*)

Xanthophyceae (*Vaucheria*), Pheophyceae (*Ectocarpus*), Rhodophyceae (*Polysiphonia*).

Unit- III

Viruses - General account of Virus including structure of TMV and Bacteriophage.

Fungi- General Characters, Classification by Alexopoulos et al. (1996) and economic importance.

Unit- IV

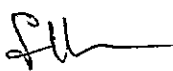
Fungi- Important Features and Life History of Mastigomycotina- (*Phytophthora*), Zygomycotina (*Mucor*), Ascomycotina (*Penicillium*), Basidiomycotina (*Puccinia*), Deuteromycotina (*Colletotrichum*). Brief account of Lichens.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:-

1. Biswas S. B., Biswas Amita 1984. An Introduction to Viruses. Vikas Publishing House PVT LTD.
2. Smith, G.M. 1971. Cryptogamic Botany Vol. 1. Algae & Fungi. Tata Mc Graw Hill Publishing Co., New Delhi.
3. Sharma, O.P. 1992. Text Book of Thallophytes, McGraw Hill Publishing Co.
4. Sharma, P.D. 1991. The Fungi. Rastogi & Co Meerut.
5. Clifton, A. 1958. Introduction to the Bacterial. McGraw Hill & Co. New York.
6. Alexopoulos, C.J., C.W. M. Mims, 1996. Introductory Mycology, 4th ed., John Wiley and Sons Inc.
7. Dube, H.C. 1990. An Introduction to Fungi, Vikas Publishing House PVT. LTD. Delhi.

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Practical

External Marks: 20

Internal Marks: 10

Time Allowed: 2 hrs

Course Outcomes:

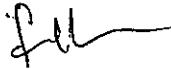
CO1. Students will gain the knowledge of practical aspects of microorganisms and algae.

CO2. Students will gain the knowledge of practical aspects of fungi and Lichens.

1. Preparation of temporary slides of various members of Algae and Fungi (as per Syllabus) to study vegetative and reproductive structure.
2. Study of Permanent Slides of algae, fungi and lichens.
3. Collection of the Algae, diseased plants and fungi.
4. Preparation of Collection Report.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.



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Plant Ecology
B-BOT-202

Total Credits: 2

L – P – T

2 0 0

External Marks: 35

Internal Marks: 15

Time Allowed: 1.5 hrs

Course Outcomes:

CO1. Students study about importance of resource allocation, energy conservation, global warming, ozone depletion and pollution.

CO2. Ecological studies emphasize on organisms needs, their peaceful existence in environment and necessary steps towards its improvement.

Unit I

Introduction to Ecology: Definition scope and importance, level of organization

Environment: - Introduction; Environmental Factors-Climatic, edaphic factors, Biotic factors, topography.

Ecological Adaptations:-Morphological, Anatomical and Physiological responses of plants to water (hydrophytes & Xerophytes).

Population Ecology: - Growth curves, Species interactions, Ecotypes, Ecological indicators.

Community Ecology:-Community characteristics, frequency, density, cover, life and growth forms, Ecological succession.

Unit II

Ecosystem: Structure, abiotic & biotic components, food chain, food web, ecological pyramids, energy flow, biogeochemical cycles of carbon, nitrogen, phosphorous and water.

Environmental Pollution: Types of pollution, pollutants, acid rain and its effects, effects of pollution on plants

Global Warming: Greenhouse gases & their effect, depletion of ozone layer and climate change.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Odum, E.P. 1983. Basic Ecology, Saunders, Philadelphia.
2. Kormondy, E.J. 1996. Concepts of Ecology, Prentice-Hall of India Pvt. Ltd. New Delhi.
3. Sharma, P.D. (1993) Ecology and Environment. Rastogi Publications, Meerut.
4. Khopkar, S.M. 1993. Environmental Pollution Analysis Wiley Eastern Ltd. New Delhi.
5. Misra, R. 1968. Ecology Workbook, Oxford and IBH Publishing Co. New Delhi.
6. Drummond, J.M.F. 2004. Ecology and Plant Diversities. Agrobios India.
7. Purohit, S.S. 2004. Environmental Pollution Causes, Effects and Control. Agrobios India.
8. Deo, P.P.2006. Plant Ecology . Egrobios India.

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Plants for Human Welfare

B- BOT-203

Total Credits: 3

L – T – P

2 0 2

External Marks: 35

Internal Marks: 15

Time Allowed: 2 hrs

Course Outcomes:

- CO1. Students will acquire a foundational understanding of plant diversity. Students will develop a conceptual grasp of plants utilized for human welfare.
- CO2. Students will gain knowledge about the origins of certain cultivated plants.
- CO3. Students will acquire a conceptual understanding of the utilization of fruits, nuts, and other plant components for human welfare. Students will acquire the knowledge about the economic valuable plants and their products

Unit I

Food Plants; economic importance of food plants – **Cereals-** (Rice, Wheat).
Pulses – (Grams and Pea).

Unit II

Fruits and nuts: Important fruit crops (Mango,Coconut) and their commercial importance.
Spices and condiments: (Coriander, Turmeric).
Wood and its uses (Shisham,Teak).

Unit III

Beverages: Important plants (Tea,Coffee) and their uses.
Medicinal Plants: Important Medicinal Plants (Neem, Sargandha) and their uses.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions of 9 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will be of 8 marks covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Singh, V., Pande, P.C., Jain, D.K. 2018. Economic Botany, Rastogi Publications.
2. Kocchar, S.L. 2016. Economic Botany: A Comprehensive Study, 5 Ed, Cambridge India.
3. Wickens, G.E. 2001. Economic Botany: Principles and Practices, Springer.
4. Singh, V., Pande, P.C., Jain, D.K. 2018. Economic Botany, Rastogi Publications.
5. Daubenmire, R.F. Plants & Environment (2nd Edn.,) John Wiley & Sons., New York 22
6. Odum E.P. 2005. Fundamentals of Ecology (5nd Edn.,) Saunders & Co., Philadelphia
7. S. Sundar Rajan-2007. College Botany Vol-V, Part 1: Taxonomy and Economic Botany Himalaya Publishing House.
8. Susil Kumar Mukharjee-2004. College Botany Vol-III. New Central Book agency, London

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Practical

External Mark: 15
Internal Marks: 10
Time Allowed: 2 hrs

Course Outcomes

CO1. Students will acquire a foundational understanding of plant diversity.
CO2. Students will acquire the knowledge about the economic valuable plants and their products.

1. Identification and study of some important medicinal plants.
2. Identification and study of some common ornamental plants.
4. Identification and study of some important cereals.
5. Identification and study of some important pulses.
6. Identification and study of some important spice yielding plants.
7. Study of different types of woods.
8. Study of different fruit types.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Scheme and Syllabus of Zoology Subject for 4 Year UG Programme
Department of Life Science (Multidisciplinary)
W.e.f. Academic session: 2024-25

Scheme of Examination for 1st semester

Sr. No	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-101	DSC	Cell Biology and Immunology	3	2	0	4	20	10	50	20	100
2	B-ZOO-102	MIC	Biomolecules	2	0	0	2	15	0	35	0	50
3	B-ZOO-103	MDC	Basics of Zoology-I	2	2	0	3	15	10	35	15	75

Scheme of Examination for 2nd Semester

Sr. No	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-201	DSC	Diversity of Non-Chordates-I	3	2	0	4	20	10	50	20	100
2	B-ZOO-202	MIC	Ecology	2	0	0	2	15	0	35	0	50
3	B-ZOO-203	MDC	Basics of Zoology-II	2	2	0	3	15	10	35	15	75

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Scheme of Examination for 3rd Semester

Sr. No.	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-301	DSC	Diversity of Non-Chordates -II	3	2	0	4	20	10	50	20	100
2	B-ZOO-302	MIC	Entomology	3	2	0	4	20	10	50	20	100
3	B-ZOO-303	MDC	Vermiculture	2	2	0	3	15	10	35	15	75

Scheme of Examination for 4th Semester

Sr. No.	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-401	DSC	Diversity of Chordates-I	3	2	0	4	20	10	50	20	100
2	B-ZOO-402	MIC (VOC)	Economic Zoology	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 5th semester:

Sr. No.	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-501	DSC	Diversity of Chordates-II	3	2	0	4	20	10	50	20	100
2	B-ZOO-502	MIC (VOC)	Ethology	3	2	0	4	20	10	50	20	100

Scheme of Examination for 6th Semester:

Sr. No.	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-601	DSC	Mammalian Physiology	3	2	0	4	20	10	50	20	100
2	B-ZOO-602	MIC	Fundamentals of Epidemiology	3	2	0	4	20	10	50	20	100
3	B-ZOO-603	MIC (VOC)	Biodiversity conservation and Wildlife management	3	2	0	4	20	10	50	20	100

Full

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Scheme of Examination for 7th Semester:

Sr. No.	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-701	DSC-Z1	Developmental Biology	3	2	0	4	20	10	50	20	100
2	B-ZOO-702	DSC-Z2	Evolutionary Biology	3	2	0	4	20	10	50	20	100
3	B-ZOO-703	DSC-Z3	Genetics	3	2	0	4	20	10	50	20	100
4	B-ZOO-704	DSC-Z4	Molecular Biology	3	2	0	4	20	10	50	20	100
5	B-ZOO-705	DSC-Z5	Endocrinology	3	2	0	4	20	10	50	20	100
6	B-ZOO-706	MIC	Forensic science	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th Semester (4 Year UG Hon.)

Sr. No.	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-801	DSC-Z 6	Research Methodology	4	0	0	4	30	0	70	00	100
2	B-ZOO-802	DSC-Z 7	Tools and Techniques	3	2	0	4	20	10	50	20	100
3	B-ZOO-803	DSC-Z 8	Animal Biotechnology	3	2	0	4	20	10	50	20	100
4	B-ZOO-804	DSC-Z 9	Biostatistics and Bioinformatics	3	2	0	4	20	10	50	20	100
5	B-ZOO-805	DSC-Z 10	Microbiology	3	2	0	4	20	10	50	20	100
6	B-ZOO-806	MIC	Biosafety and Bioethics	3	2	0	4	20	10	50	20	100

Scheme of Examination for 8th Semester (4 Year UG Hon. with Research)

Sr. No.	Course Code	Course Type	Course Title	Work Load			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-ZOO-801	DSC-Z 6	Research Methodology	4	0	0	4	30	0	70	0	100
2	B-ZOO-802	DSC-Z 7	Tools and Techniques	3	2	0	4	20	10	50	20	100
3	B-ZOO-806	MIC	Biosafety and Bioethics	3	2	0	4	20	10	50	20	100
4	B-ZOO-807	Dissertation	Research Project/Dissertation				12					300

Full - 1286 -

Cell Biology and Immunology
B-ZOO-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs

Course Outcomes:

CO1: Students will understand the nature and basic concept of cell biology.

CO2: Students will be able to apply the knowledge of internal structure of cell and their role in many metabolic function of organism.

CO3: Students will be able to understand the basics of immunology.

CO4: Students will get knowledge about common disorders and their antibiotics and vaccines.

Unit I

General structure of animal cell, Plasma Membrane: Fluid mosaic model, various modes of transport across the membrane, mechanism of active and passive transport, endocytosis and exocytosis, Structure and functions of Endoplasmic reticulum(ER), Golgi complex, Ribosomes, Lysosomes, Mitochondria, cilia and Flagella

Unit II

Ultrastructure and functions of Nucleus, fine structure of chromosomes, Types of chromosomes, Euchromatin and heterochromatin, Animal Tissue: Epithelial, Connective, muscular and neural tissue, Cell division

Unit III

Overview of immune system, cells of immune system

Innate and of acquired immunity, Antigen and its types, Antibody and its types, B-cell epitopes, Lymphoid organs and their types, Antigen presenting cells (APCs), Major Histocompatibility complex (MHC)

Unit IV

Immune disorders (infectious and non-infectious), Auto - immune disorder, Antibiotics, vaccines

Cancer Biology: Types of cancer, an elementary idea of cell transformation, Cancer: Types of Tumor, Therapy of cancer

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Molecular Cell, Biology, J. Darnell, H. Lodish and D. Baltimore Scientific American Book, Inc., USA.

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2. Molecular Biology of the Cell, B. Alberts, D. Bray, J. Lewis, M. Raff, K. Roberts and J.D. Watson. Garland Publishing Inc., New York.
3. Cell Biology and Genetics by P.K. Gupta.
4. Cell Biology and Genetics by Veer Bala Rastogi.
5. Immunology; Kubey
6. Cellular and Molecular Immunology, Andrew H. Lichtman, 1991
7. Immunobiology, Charles Janeway, 1994

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 2 Hrs

Course Outcomes:

CO1: Students will understand the practical aspect of cell biology.

CO2: Students will be able to understand the antigen-antibody interactions and will get to know how the vaccines work in our body systems.

1. Cell division: Prepare slides of stages of mitosis and meiosis.
2. To study the Salivary gland and polytene chromosomes of *Drosophila/ Chironomus*
3. To study the antigen-antibody interactions.
4. To examine the percentage of HB in the blood sample.
5. Examine the blood group system by performing blood typing.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.



1288.

Biomolecules
B-ZOO-102

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 Hrs.

Course Outcomes:

CO1: Students will be able to understand the role of biological molecules in body systems.

CO2: Students will be able to understand the mechanisms of action of hormones and enzymes in our body systems.

Unit I

Introduction, classification, structure, function and general properties of proteins, carbohydrates, lipids

Unit II

Hormones and their mechanism of action, Vitamins, Enzymes: Nomenclature, classification and mechanisms of enzyme action; Enzyme Kinetics, factors affecting enzyme activity, inhibition of enzymes

Cancer Biology: Types of cancer, an elementary idea of cell transformation, Cancer : Types of Tumor, Therapy of cancer

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Agarwal R A, Srivastava A. K., Kumar K. Animal Physiology and Biochemistry; S Chand Publishing; Twenty Third edition, 1978.
2. Vasantika Kashyap (2021) A Text-Book of Animal Physiology and Biochemistry; Kedar Nath Ram Nath Publisher.

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1209

Basics of Zoology-I
B-ZOO-103

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 Hrs.

Course Outcome:

CO1: Student will be able to learn about Kingdom Animalia.

CO2: Students will be capable to understand the role of non-chordates in their surroundings.

CO3: Students will be able to understand General characters of Arthropoda and Mollusca.

Unit I

Zoology: Definition and scope, introduction to Animal Kingdom, Animal characters, Non-Chordates and Invertebrates with examples, Invertebrate Phyla, General characters of Protozoa and Porifera; Study of Amoeba and sponges with special reference to its structure and economic importance.

Unit II

General characters of Coelentrata and Annelida; Ecological importance of corals; Morphology of earthworm and its ecological role; Economic importance of Leech.

Unit III

General characters of Arthropoda and Mollusca; Study of basic characters of insects and snails; Insects as pest: Grasshopper, Economic importance of Honey Bee; Snails as pest in Paddy fields, General characters of Echinodermata.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions of 9 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will be of 8 marks covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Jordan, E.L and P.S. Verma. 2009. Invertebrate Zoology, S. Chand and Co. Ltd. New Delhi.
2. Ayyar, E. K and T. Anantha krishnan. 1992. Manual of Zoology Vol. 1 Invertebrates Part I and II, S.Viswanathan Printers and Publishers Pvt. Ltd. Madras.
3. Kotpal, R.L. 2021. Zoology Invertebrates. Rastogi Publications, Meerut.
4. Rastogi V.B. 2021. Invertebrate Zoology. Kedar Nath Ram Nath, Meerut
5. Lal S.S. (2019) Practical Zoology Invertebrates. Rastogi Publications, Meerut

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Practical

External Practical Marks: 15

Internal Assessment Marks: 10

Time allowed: 2 Hrs

Course Outcomes:

CO1: Students will be able to learn about Kingdom Animalia.

CO2: Students will be capable to understand the role of non-chordates in their surroundings.

1. To study the non-chordates from pond water.
2. To study the different parts of Insects by examining House fly, butter fly, beetles.
3. To study the characters of burrowing non-chordates e.g. Earthworm.
4. To study the life cycle of Butterfly/Mosquito.
5. To study various minor phyla as connecting link.
6. Identifications of Non-Chordates specimens of various phyla.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

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Diversity of Non-Chordates-I
B-ZOO-201

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 Hrs.

Course Outcomes:

CO1: Students will be able to understand classify, identify, diversity of lower animals.

CO2: Knowing these students may engage themselves as a protector preserver and Promoter of life.

CO3: Students will be well equipped to become very competent in research or teaching fields.

Unit-I

General Characters and Classification up to Class level with examples, economic importance of Protozoa, Type study of *Plasmodium vivax*

Unit-II

Porifera- General characters and classification up to class level with examples, Type study - Sycon

Coelenterata- General characters and classification up to class level with examples, Type study- Obelia, Corals, Polymorphism in Coelenterates.

Unit-III

Platyhelminthes- General characters and classification up to class level with examples, Type study - Fasciola hepatica

Aschelminthes- General characters and classification up to class level with examples, Type study – Ascaris, Helminthes in general.

Unit-IV

Annelida- General characters and classification up to class level with examples, Type study – Hirudinaria. Economic importance of Annelids.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Jordan, E.L and P.S. Verma. 2009. Invertebrate Zoology, S. Chand and Co. Ltd. New Delhi.
2. Ayyar, E. K and T. Anantha krishnan. 1992. Manual of Zoology Vol. 1 Invertebrates Part I and II, S. Viswanathan Printers and Publishers Pvt. Ltd. Madras.
3. Kotpal, R.L. 2021. Zoology Invertebrates. Rastogi Publications, Meerut.
4. Rastogi V.B. 2021. Invertebrate Zoology. Kedar Nath Ram Nath, Meerut.
5. Lal S.S. (2019) Practical Zoology Invertebrates. Rastogi Publications, Meerut

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Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 2 Hrs

Course Outcomes:

CO1: Students will be well equipped to become very competent in research or teaching fields.

CO2: Students will be capable to understand the role of non-chordates in their surroundings.

CO3: Students will get to know about internal structures of lower animals through permanent slides.

1. Classification up to orders with ecological notes and economic importance of the following animals.
2. Protozoan Slides: Amoeba, Euglena, Trypanosomna. Noctiluca, Paramecium (Binary fission and Conjugation), Opalina, Vorticella, Balantidium, Nictothrus, Radularian and foraminiferan ooze.
3. Porifera Specimens: Sycon, Grantia, Euplectella. Hyalonema, Spongilla, and Euspongia.
4. Cnidaria Specimens: Porpita, Velella. Physalia. Aurelia Rhizostoma, Metridium, Millipora and Alcyonium, Tubipora, Madrepora and Astraea
5. Cnidaria Slides: Hydra (W.M.), Hydra with buds, Obelia (colony and medusa), Sertularia, Bougainvillea and Aurelia
6. Platyhelminthes Specimens: Dugesia, Fasciola, Taenia and Echinococcus.
7. Platyhelminthes Slides: Miracidium, Sporocyst, Redia, Ceraria of Fasciola, Scolex and Proglotids of Taenia (mature and gravid)
8. Aschelminthes: Ascaris (male and female), Trichinella and Ancylostoma.
9. Annelida: Pheretima, Nereis, Heteronereis, Hirudinaria, Chaetopterus, Arenicola, Tubifix and Potobdella.
10. Study of permanent slides: Study of T.S. through pharynx, gizzard and typhlosole, intestine of earthworm; T.S. through Pharynx and crop of leech.
11. L. S. and T.S. Sycon
12. T.S. of Ascaris (Male & Female)

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

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Ecology
B-ZOO-202

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 Hrs.

Course Outcomes:

CO1: Students will know about basics of ecological science. Students will understand various strategies for research and development on ecological succession and dynamics.

CO2: Students will improve their knowledge about conservation science. Students will describe about various conservation projects.

Unit I

Environmental components: biotic and abiotic components and their interactions. Concept of habitat and niche; Major terrestrial biomes; Bio-geographical zones of India,

Population Ecology: Characteristics of a population; life history strategies (r and K selection); concept of meta-population, **Species Interactions:** Types of interactions, interspecific competition, **Community Ecology:** Nature of communities; community structure and attributes; edges and ecotones.

Unit II

Ecosystem: structure and function; energy flow and mineral cycling (C, N, P); productivity, decomposition, **Ecological Successions**, **Environmental pollution;** biodiversity and its conservation; Project Tiger, Biosphere reserves.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

- 1.H.R. Singh & Neeraj Kumar (2014) "Ecology and Environmental Science" Vishal Publishing Co.
2. P D Sharma (2017) "Ecology and Environment" Rastogi Publications
3. Eugene Odum (2017) "Fundamentals of Ecology" Cengage India Private Limited Publishers, Noida
4. Pranav Kumar and Usha Mina (2021) "Fundamentals of Ecology And Environment" 3 rd Edition, Pathfinder Academy
5. N. Arumugam "Concepts of Ecology" Saras Publication.

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Basics of Zoology II

B-ZOO-203

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 Hrs.

Course Outcomes:

CO1: Students will be able to learn about Kingdom Animalia.

CO2: Students will be able to learn about Chordates.

CO3: Students will be capable to understand the role of chordates in their surroundings.

Unit I

Basics of Chordates: Define and Salient features of chordates, Difference between non-chordates and chordates. Characters of protochordates

Pisces (Fishes): Characteristic features of fresh water and marine fishes, Edible fishes of India, Composite fish culture.

Unit II

Class Amphibia: Features of amphibians, Parental care in amphibians, Role of amphibians in ecosystem, Identification of turtles and tortoise, Frog and Toad

Class Reptilia: Features of Reptiles, Common reptiles of India, Identification of Poisonous and non-poisonous snakes, Difference between crocodile and Gharial.

Unit III

Class Aves: Characteristic features of birds, Common birds of India, Flight Adaptations in birds, Commercial uses of birds, Role of birds in agriculture.

Class Mammals: Characters and economic importance of mammals.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 4 questions asking two questions of 9 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will be of 8 marks covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. R.L. Kotpal. Modern Textbook of Zoology.
2. E.L. Jordan and Verma. Chordate Zoology.
3. Barrington, E. J.W. The Biology of Hemichordata and Protochordata. Oliver and Boyd, Edinburgh.
4. Walters, H.E. and Sayles, L.D. Biology of vertebrates. Mac Millan & Co., New York.
5. Kent, C.G. Comparative anatomy of vertebrates.
6. S.S. Lal. Practical Zoology Vertebrate

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Practical

External Practical Marks: 15

Internal Assessment Marks: 10

Time allowed: 2 Hrs

Course Outcomes:

- CO1:** Students will understand various strategies for research and development on ecological succession and dynamics.
 - CO2:** Students will improve their knowledge about conservation science.
 - CO3:** Students will describe about various conservation projects.
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1. Identify feature of different class of chordates
2. Study of connecting links in chordates
3. Study of different types of feathers.
4. Study of different local species of fishes
5. Study of nesting pattern of some local birds, mammals

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Scheme and Syllabus of Chemistry Subject for 4 Year UG Programme
Common for **Bachelor of Life Science** and Bachelor of Physical Science
w.e.f. Academic session 2024-25

Scheme of Examination for 1st Semester

First Year: 1 st Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CHE-101	DSC	Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-102	MIC	Minor Chemistry - I	2	0	0	2	15	0	35	0	50
3	B-CHE-103	MDC	Introductory Chemistry-I	2	2	0	3	15	10	35	15	75

Scheme of Examination for 2nd Semester

First Year: 2 nd Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CHE-201	DSC	Chemistry-II	3	2	0	4	20	10	50	20	100
2	B-CHE-202	MIC	Minor Chemistry - II	2	0	0	2	15	0	35	0	50
3	B-CHE-203	MDC	Introductory Chemistry-II	2	2	0	3	15	10	35	15	75

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Scheme of Examination for 3rd Semester

Second Year: 3 rd Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-CHE-301	DSC	Chemistry-III	3	2	0	4	20	10	50	20	100	
2	B-CHE-302	MIC	Minor Chemistry - III	3	2	0	4	20	10	50	20	100	
3	B-CHE-303	MDC	Introductory Chemistry-III	2	2	0	3	15	10	35	15	75	

Scheme of Examination for 4th Semester

Second Year: 4 th Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-CHE-401	DSC	Chemistry-IV	3	2	0	4	20	10	50	20	100	
2	B-CHE-402	MIC (VOC)	Chemistry of Fertilizers and Pesticides	3	2	0	4	20	10	50	20	100	

Scheme of Examination for 5th Semester

Third Year: 5 th Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-CHE-501	DSC	Chemistry-V	3	2	0	4	20	10	50	20	100	
2	B-CHE-502	MIC (VOC)	Green Chemistry	3	2	0	4	20	10	50	20	100	

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Scheme of Examination for 6th Semester

Third Year: 6 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-601	DSC	Chemistry-VI	3	2	0	4	20	10	50	20	100
2	B-CHE-602	MIC	Minor Chemistry-IV	3	2	0	4	20	10	50	20	100
3	B-CHE-603	VOC	Chemistry of Cosmetics and Perfumes	3	2	0	4	20	10	50	20	100

Scheme of Examination for 7th semester

Fourth Year: 7 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-701	DSC-C1	Organic Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-702	DSC-C2	Organic Chemistry-II	3	2	0	4	20	10	50	20	100
3	B-CHE-703	DSC-C3	Physical Chemistry-I	3	2	0	4	20	10	50	20	100
4	B-CHE-704	DSC-C4	Physical Chemistry-II	3	2	0	4	20	10	50	20	100
5	B-CHE-705	DSC-C5	Inorganic Chemistry-I	3	2	0	4	20	10	50	20	100
6	B-CHE-706	MIC	Inorganic Chemistry-II	3	2	0	4	20	10	50	20	100

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Scheme of Examination for 8th Semester(4 year UG Hon.)

Fourth Year: 8 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-801	DSC-C6	Advanced Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-802	DSC-C7	Advanced Chemistry-II	3	2	0	4	20	10	50	20	100
3	B-CHE-803	DSC-C8	Organic Chemistry-III	3	2	0	4	20	10	50	20	100
4	B-CHE-804	DSC-C9	Physical Chemistry-III	3	2	0	4	20	10	50	20	100
5	B-CHE-805	DSC-C10	Inorganic Chemistry-III	3	2	0	4	20	10	50	20	100
6	B-CHE-806	MIC	Biochemistry	3	2	0	4	20	10	50	20	100

Scheme of Examination for 8th semester (4 years UG Hon. with Research)

Fourth Year: 8 th Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-CHE-801	DSC-C6	Advanced Chemistry-I	3	2	0	4	20	10	50	20	100
2	B-CHE-802	DSC-C7	Advanced Chemistry-II	3	2	0	4	20	10	50	20	100
3	B-CHE-803	MIC	Research Methodology	4	0	0	4	30	0	70	0	100
4	B-CHE-804	Dissertation	Research Project/ Dissertation				12					300

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Chemistry-I
B-CHE-101

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 hrs

Course outcomes:

After completing this course, the learner will be able to:

- CO1** Enable to understand the basis of quantum mechanics and structural idea and relevance in describing shapes of s, p and d orbitals.
 - CO2** To learn about role of temperature and pressure to establish the state of gases and describe the concept of critical constants of real gases.
 - CO3** Get knowledge about the electrophile/nucleophile and its role in mechanism of preparation of organic compounds.
 - CO4** To know the physical properties, morphology and crystalline study of liquid and different type of solids.
-

Unit - I

Atomic Structure: Dual behaviour of matter and radiation, de Broglie's relation, Heisenberg's uncertainty principle, concept of atomic orbitals, significance of quantum numbers, radial and angular wave functions, normal and orthogonal wave functions, significance of Ψ and Ψ^2 , shapes of s, p, d, f orbitals, Rules for filling electrons in various orbitals, effective nuclear charge, Slater's rules.

Periodic table and atomic properties: Classification of periodic table, definition of atomic and ionic radii, ionisation energy, electron affinity and electronegativity, trend in periodic table (in s and p-block elements), Pauling, Mulliken, Allred Rachow and Mulliken Jaffe's electronegativity scale, Sanderson's electron density ratio.

Unit - II

Gaseous State: Kinetic theory of gases, Maxwell's distribution of velocities and energies (derivation excluded) Calculation of root mean square velocity, average velocity, and most probable velocity. Collision diameter, collision number, collision frequency and mean free path (Derivations excluded), Deviation of Real gases from ideal behaviour, Derivation of Vander Waal's Equation of State, its application in the calculation of Boyle's temperature (compression factor)

Critical Phenomenon: Concept of Critical temperature, critical pressure, critical volume, relationship between critical constants and Van der Waal's constants (Derivation excluded).

Unit - III

Structure and Bonding: Localized and delocalized chemical bond, Van der Waals interactions. Concept of resonance and its applications, hyperconjugation, inductive effect, Electromeric effect and their comparison.

Mechanism of Organic Reactions: Curved arrow notation, homolytic and heterolytic bond fission. Types of reagents: electrophiles and nucleophiles. Types of organic reactions: Substitution, Addition, Condensation, Elimination, Rearrangement, Isomerization and Pericyclic reactions. Reactive intermediates: Carbocations, carbanions, free radicals, carbenes (structure & stability).

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Unit - IV

Liquid State: Structure of liquids, Properties of liquids – surface tension, refractive index, viscosity, vapour pressure and optical rotation.

Solid State: Classification of solids, Law of constancy of interfacial angles, law of rational indices, Miller indices, elementary ideas of symmetry and symmetry elements, seven crystal systems and fourteen Bravais lattices; X-ray diffraction, Bragg's law, a simple account of Laue method, rotating crystal method and powder pattern method.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Books/e-resources/LMS:

1. Lee, J.D.; (2010), Concise Inorganic Chemistry, Wiley India.
2. Kapoor, K.L. (2015), A Textbook of Physical Chemistry, Vol 1, 6th Edition, McGraw Hill Education.
3. Clayden, J.; Greeves, N.; Warren, S. (2012), Organic Chemistry, Oxford.
4. Morrison, R. N.; Boyd, R. N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).

Practical

External Practical Marks: 20
Internal Assessment Marks: 10
Time allowed: 2hrs

Course Outcomes:

CO1: Hand on practice in preparation of solutions, compounds

CO2: Estimation and determination of physical properties of some compounds.

-
1. Acid/Base titration: Determination of strength of NaOH using oxalic acid.
 2. Redox titrations: Determination of Fe^{2+} ions using KMnO_4 .
 3. To determine the surface tension of given liquid using Stalagmometer by drop no. methods.
 4. Preparation of *m*-Dinitrobenzene from Nitrobenzene (use 1:2 conc. HNO_3 - H_2SO_4 mixture if fuming HNO_3 is not available).
 5. Preparation of *p*-Bromoacetanilide from Acetanilide

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results.

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Minor Chemistry – I
B-CHE-102

Total Credits: 2
L - T - P
2 - 0 - 0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1:30 hrs

Course Outcomes:

After completing this course, the learner will be able to:

- CO1** To understand the basics of Covalent bonding in simple molecules and to get the basics of rates of chemical reactions and factors affecting it.
- CO2** To learn about the nomenclature, classification and methods of preparation of alkenes and conductors, semiconductors and insulator.

Unit - I

Covalent Bond: Valence bond theory approach, shapes of simple inorganic molecules and ions based on valence shell electron pair repulsion (VSEPR) theory and hybridization with suitable examples of linear, trigonal planar, square planar, tetrahedral, trigonalbipyramidal and octahedral arrangements. Molecular orbital theory of homonuclear (N_2 , O_2) and heteronuclear (CO and NO) diatomic molecules, dipole moment and percentage ionic character in covalent bond.

Chemical Kinetics: Concept of reaction rates, rate equation, factors influencing the rate of reaction, Order and molecularity of a reaction, integrated rate expression for zero, first, second order reactions (for equal conc. of reactants), Half-life period of a reaction

Unit - II

Alkanes (upto 5 carbon atoms): Alkanes, nomenclature, classification of carbon atoms in alkanes. Isomerism in alkanes, sources, methods of formation: Wurtz reaction, Kolbe reaction, Corey-House reaction and decarboxylation of carboxylic acids, physical properties. Mechanism of free radical halogenation of alkanes: reactivity and selectivity.

Metallic Bond and semiconductors: Metallic bond – Qualitative idea of valence bond and Band theories of metallic bond (conductors, semiconductors, insulators). Semiconductors – Introduction, types, and applications.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Dhawan S.N., Organic Chemistry, Vol 1 Pardeep Publication.
2. J.D. Lee, Concise Inorganic Chemistry (4th Edition), Chapman and hall Publications.

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8

Introductory Chemistry-I
B-CHE-103

Total Credits: 3

L - T - P

2 - 0 - 2

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 2 hrs

Course Outcomes:

After completing this course, the learner will be able to:

- CO1** To get knowledge about structure and bonding.
- CO2** To learn about hydrocarbons and their applications.
- CO3** To get aware about different polymers and preservative.

UNIT-I

Atomic Structure and Bonding: Introduction, Elementary introduction of atomic structure and chemical bonding, Representation of elements/ atoms, Lewis structure, electronic configurations.

UNIT-II

Carbon and Its Compounds: Introduction, Tetravalency of Carbon, allotropes of carbon and their properties, hydrocarbons, nomenclature (linear compounds), Applications of hydrocarbons.

UNIT-III

Polymers: Introduction, elementary idea of synthetic and natural polymers, Homo polymers and copolymers, uses and properties (Natural rubber, Vulcanized rubber, Polyethene, PVC, Styrene, Teflon, PAN, Nylon-66).

Food Preservatives: Elementary idea of natural and synthetic food preservatives, rancidity, uses and properties, different food preservation processes (pickle, Jam), artificial sweeteners, uses and properties.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

Recommended Books/e-resources/LMS:

1. Lee, J.D.; (2010), Concise Inorganic Chemistry, Wiley India.
2. Morrison, R. N.; Boyd, R. N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
3. B. Sivasankar, Food processing and preservation, Prentice Hall India learning private limited.
4. ManasChanda, 2013, Introduction to Polymer Science and Chemistry 2nd Edition, Making Rayon Fiber - Artificial silk, chemical experiment.
5. Neelam Seedher, Basic Concepts: Physical Chemistry Experiments, Kindley Edition

PM

-1304-

Practical

External Practical Marks: 15

Internal Assessment Marks: 10

Time allowed: 2 hrs

Course Outcomes:

CO1: To get knowledge about experiments related to daily life.

1. Identify the pH of the given samples through pH strip.
2. Experiments related to persevering food items.
3. Preparation of Artificial Silk.
4. To synthesize some polymers as per available resources.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results

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8

Chemistry-II
B-CHE-201

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 50

Internal Assessment Marks: 20

Time allowed: 3 hrs

Course Outcomes:

- CO1** Able to understand the theories which governs the shape, structure and ionic behavior, polarizability, ionic structures and concept of Lattice energy of crystals of molecules.
- CO2** To know the basics of rates of chemical reactions, the laws and solubility behavior of solutes in different compositions of solvents
- CO3** To know about alkanes, alkene, cycloalkanes and their chemical reactions.
- CO4** To understand about weak interactions and bonding in metals.
-

UNIT-I

Ionic Solids: Ionic structures (NaCl, CsCl, ZnS (Zinc blende), CaF₂) size effects, radius ratio rule and its limitations, Concept of Lattice energy, Born-Haber cycle, Solvation energy and its relationship with solubility of Ionic solids, Polarizing power and Polarisability of ions, Fajan's rule.

UNIT-II

Chemical Kinetics: Concept of reaction rates, rate equation, factors influencing the rate of reaction, Order and molecularity of a reaction, integrated rate expression for zero, first, Half-life period of a reaction, Arrhenius equation.

Distribution Law: Nernst distribution law – its thermodynamic derivation, Nernst distribution law after association and dissociation of solute in one of the phases, of distribution law: (i) Determination of degree of hydrolysis and hydrolysis constant of aniline hydrochloride

UNIT-III

Alkanes and Cycloalkanes: Nomenclature, classification of carbon atoms in alkanes and its structure. Isomerism in alkanes, sources. Methods of formation: Wurtz reaction, Kolbe reaction, Corey-House reaction and decarboxylation of carboxylic acids, physical properties. Mechanism of free radical halogenation of alkanes: reactivity and selectivity: Nomenclature of Cycloalkanes, Baeyer's strain theory and its limitations, theory of strainless rings.

Alkenes: Nomenclature of alkenes and its structure. Methods of formation: dehydration of alcohols, dehydrohalogenation of alkyl halide, Hofmann elimination and their mechanism. The Saytzeff rule and relative stabilities of alkenes. Chemical reactions: electrophilic and free radical additions, addition of halogens, halogen acids, hydroboration-oxidation, oxymercuration-reduction, ozonolysis and hydration, Markownikoff's rule of addition.

UNIT-IV

Hydrogen Bonding and Van der Waals forces Hydrogen Bonding – Definition, types, effects of hydrogen bonding on properties of substances, application and Brief discussion of various types of Van der Waals forces.

Metallic Bond and semiconductors: Metallic bond – Qualitative idea of valence bond and Band theories of metallic bond (conductors, semiconductors, insulators), Semiconductors – Introduction, types, and applications.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

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Recommended Books/e-resources/LMS:

1. Lee, J.D.; (2010), Concise Inorganic Chemistry, Wiley India.
2. Kapoor, K.L. (2015), A textbook of Physical Chemistry, Vol.1, 6th Edition, McGraw Hill Education.
3. Clayden, J.; Greeves, N.; Warren, S. (2012), Organic Chemistry, Oxford.
4. Morrison, R.N.; Boyd, R.N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education)
5. Khosla, B.D. ; Garg, V.C.; Gulati, A. (2015), Senior Practical Physical Chemistry, R. Chand & Co, New Delhi.
6. Jeffery, G.H.; Bassett, J.; Mendham, J.; Denney, R.C. (1989), Vogel's Textbook of Quantitative Chemical Analysis, John Wiley and Sons.

Practical

External Practical Marks: 20

Internal Assessment Marks: 10

Time allowed: 2 hrs

Course Outcomes:

CO1: Hand on practice for estimation and determination of viscosity, specific refractivity properties of some compounds.

1. Complexometric titrations: Determination of Mg^{2+} by EDTA.
2. Paper Chromatography: Qualitative Analysis of any one of the following Inorganic cations and anions by paper chromatography (Pb^{2+} , Cu^{2+} , Ni^{2+} , Cl^- , Br^- , and PO_4^{3-} and NO_3^-).
3. To determine the viscosity of given liquid using Ostwald's Viscometer.
4. To determine the specific refractivity of at least two liquids by Refractometer.
5. Separation of mixture of two Organic Compounds by TLC.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results

Full

Minor Chemistry II
B-CHE-202

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1:30 hrs

Course Outcomes:

After completing this course, the learner will be able to:

CO1 To know the basics of periodic properties, hybridization and Ionic Solids.

CO2 Get the knowledge of metallic bonds and stereochemistry of simple organic molecules.

UNIT – I

Periodictable and atomic properties

Atomic properties: atomic and ionic radii, ionisation energy, electron affinity and electronegativity definition, methods of determination or evaluation, trend in periodic table, effective nuclear charge, Slater's rules. Directional characteristics of covalent bond, various type of hybridisation and shapes of simple inorganic molecules and ions (BeF_2 , BF_3 , CH_4 , PF_5 , SF_6 , IF_7 , SO_4^{2-} , CO_3^{2-} , NO_3^{-1})

Ionic Solids: Stoichiometric and Non-stoichiometric defects in crystals, Lattice energy and Born- Haber cycle, Solvation energy and its relationship with solubility of Ionic solids, Polarizing power and Polarisability of ions, Fajan's rule. Metallic bond – Qualitative idea of valence bond and Band theories of metallic bond (conductors, semiconductors, insulators)

UNIT – II

Metallic Bond

Localized and delocalized chemical bond, Van der Waal's interactions, resonance: conditions, resonance effect and its applications, hyperconjugation, inductive effect, Electromeric effect & their comparison.

Stereochemistry of Organic Compounds


Concept of isomerism. Types of isomerism. Optical isomerism, elements of symmetry, enantiomers, stereogenic centre, optical activity, properties of enantiomers, chiral and achiral molecules (upto two stereogenic centres), diastereomers, threo and erythro-diastereomers, meso compounds Relative and absolute configuration, sequence rules, R & S systems of nomenclature, Geometrical isomerism. Determination of configuration of geometric isomers.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Huheey, J.E.; Keiter, E.A.; Keiter, R.L.; Medhi, O.K. (2009), Inorganic Chemistry-Principles of Structure and Reactivity, Pearson education.
2. Atkins, P.W.; Paula, J.de. (2014), Atkin's Physical Chemistry Ed., 10th Edition, Oxford University Press.
3. Kapoor, K.L. (2015), A Textbook of Physical Chemistry, Vol 1, 6th Edition, McGraw Hill Education.
4. Nasipuri, D. (2018), Stereochemistry of Organic Compounds: Principles and Applications, 3rd Edition, New Age International.
5. Gunstone, F.D. (1975), Guidebook to Stereochemistry, Prentice Hall Press.

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Introductory Chemistry-II
B-CHE-203

Total Credits: 3
L - T - P
2 - 0 - 2

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 2 hrs

Course Outcomes:

After completing this course, the learner will be able to:

- CO1 To learn about role of Indian scientists in the upliftment of research
 - CO2 To learn about classification of elements with their properties
 - CO3 To learn about three states of matter and role of fertilizers in fertility of soil
-

UNIT-I

Renowned Indian Scientists

Brief Biography of Renowned Indian Scientists (Hargobind Khurana, Dr. P.C. Ray, Sir C.V. Raman, Dr. A.P.J. Abdul Kalam, C. N. R. Rao, Dr. Vikram Sara Bhai, Dr. Homi Jahangir Bhabha, Dr. J.C. Bose, Dr. S. N. Bose)

UNIT-II

Metal and Non-Metals

Periodic table, classification of elements, physical and chemical aspects of metals and non-metals, Ore and Minerals of Iron, Copper, Aluminium, alloys

UNIT-III

Physical Properties of Matter

Classification of matter, properties, uses, ideal gas equation, real gas equation, some important compounds (baking soda, washing soda, plaster of Paris, gypsum, glass)

Soil and fertilizers

Green revolution, soil: types of soil and their components for fertility, grow condition, pH, irrigation, bio-fertilizers, chemical fertilizers and their uses, acid rain.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions of 7 marks from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will be of 7 marks covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question.

Recommended Readings:

1. Chemistry In Daily Life: Third Edition by Kirpal Singh, PHI Learning
2. General Chemistry: Principles, Patterns, and Applications, Bruce Averill, Strategic Energy Security Solution, Patricia Eldredge, R.H. Hand, LLC, Copyright Year: 2011
3. The Great Indian Scientists Paperback-1 January 2017, Cengage Learning India

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Practical

External Practical Marks: 15
Internal Assessment Marks: 10
Time allowed: 2 hrs

Course Outcomes:

CO1: To learn about acid-base reaction in daily life

1. To prepare Plaster of Paris
2. To prepare Potash Alum
3. To study the effect of acid on Baking and washing soda
4. To perform the action of water on quick lime and identify the nature of reaction (Exo/Endothermic)

Instructions for External Practical Paper Setter/Examiner:

The examiner will set 2 Experiments at the time of practical examination by taking course outcomes (CO) into consideration. Equal weightage will be given to both the Experiments. The evaluation will be done on the basis of practical record, viva-voce, write up and experimental results

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Scheme of Examination for
Four Year UG Programme
Bachelor of Home Science (Interdisciplinary scheme)
With Effect from the Academic Session 2024-25

First Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-BFN-101	DSC-A	Basic Food & Nutrition Science	3	2	0	4	20	10	50	20	100
2	B-FHD-102	DSC-B	Fundamentals of Human development	3	2	0	4	20	10	50	20	100
3	B-ITX-103	DSC-C	Introduction to Textiles	3	2	0	4	20	10	50	20	100
4	B-ICH-104	MIC	Introductory Chemistry	2	0	0	2	15	0	35	0	50
5	B-IHS-105	MDC	Introductory Home Science-1	3	0	0	3	25	0	50	0	75
6		AEC	To be Selected from Common Pool of AEC				2					50
7		SEC	To be Selected from Common Pool of SEC				3					75
8		VAC	To be Selected from Common Pool of VAC				2					50
Total Credits							24	Total Marks				600

Second Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-ID-201	DSC-A	Interior Decoration	3	2	0	4	20	10	50	20	100
2	B-EEC-202	DSC-B	Extension Education & Communication	3	2	0	4	20	10	50	20	100
3	B-FCC-203	DSC-C	Fundamentals of Clothing Construction	3	2	0	4	20	10	50	20	100
4	B-IP-204	MIC	Introduction to Psychology	2	0	0	2	15	0	35	0	50
5	B-HIS-205	MDC	Introductory Home Science-II	3	0	0	3	25	0	50	0	75
6		AEC	To be Selected from Common Pool of AEC				2					50
7		SEC	To be Selected from Common Pool of SEC				3					75
8		VAC	To be Selected from Common Pool of VAC				2					50
Total Credits							24	Total Marks				600

Third Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CN-301	DSC-A	Community Nutrition	3	2	0	4	20	10	50	20	100
2	B-AD-302	DSC-B	Adulthood Development	3	2	0	4	20	10	50	20	100
3	B-FRM-303	DSC-C	Family Resource Management	3	2	0	4	20	10	50	20	100
4	B-CE-304	MIC	Consumer Education	3	2	0	4	20	10	50	20	100
5	B-IHS-305	MDC	Introductory Home science-III	3	0	0	3	25	0	50	0	75
6		AEC	To be Selected from Common Pool of AEC				2					50
7		SEC	To be Selected from Common Pool of SEC				3					75
Total Credits							24	Total Marks				600

Forth Semester												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				Total Marks
				L	P	T		Internal Marks		External Marks		
								T	P	T	P	
1	B-CD-401	DSC-A	Community Development	3	2	0	4	20	10	50	20	100
2	B-AA-402	DSC-B	Adulthood & Ageing	3	2	0	4	20	10	50	20	100
3	B-TT-403	DSC-C	Traditional Textiles	3	2	0	4	20	10	50	20	100
4	B-FS-404	MIC(VOC)	Food Science	2	4	0	4	15	15	35	35	100
5		AEC	To be Selected from Common Pool of AEC				2					50
6		VAC	To be Selected from Common Pool of VAC				2					50
Total Credits							20	Total Marks				500

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Fifth Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-NN-501	DSC-A	Normal Nutrition	3	2	0	4	20	10	50	20	100	
2	B-ECE-502	DSC-B	Early Childhood Education	3	2	0	4	20	10	50	20	100	
3	B-DPF-503	DSC-C	Dyeing, Printing and Finishing Techniques	3	2	0	4	20	10	50	20	100	
4	B-FM-504	MIC(VOC)	Food Microbiology	2	4	0	4	15	15	35	35	100	
5		Internship	Internship				4					100	
Total Credits							20	Total Marks				500	

Sixth Semester													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-THN-601	DSC-A	Therapeutic Nutrition	3	2	0	4	20	10	50	20	100	
2	B-HHP-602	DSC-B	Hygiene & Human Physiology	3	2	0	4	20	10	50	20	100	
3	B-HSM-603	DSC-C	Housing & Space Management	3	2	0	4	20	10	50	20	100	
4	B-NBC-604	MIC	Nutritional Biochemistry	3	2	0	4	20	10	50	20	100	
5	B-ETT-605	MIC(VOC)	Entrepreneurial Trends & Techniques	2	4	0	4	15	15	35	35	100	
Total Credits							20	Total Marks				500	

Seventh Semester(with Specialization Textile and Apparel designing)													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-TCH-701	DSC-H1	Textile Chemistry	3	2	0	4	20	10	50	20	100	
2	B-ATD-702	DSC-H2	Advanced Textile Designing	3	2	0	4	20	10	50	20	100	
3	B-APM-703	DSC-H3	Advanced Pattern Making & Draping	3	2	0	4	20	10	50	20	100	
4	B-AQA-704	DSC-H4	Apparel Quality Analyses	4	0	0	4	25	0	75	0	100	
5	B-HT-705	DSC-H5	Home Textiles	3	2	0	4	20	10	50	20	100	
6	B-TDI-706	MIC	Textile Design & Illustration	3	2	0	4	20	10	50	20	100	
Total Credits							24	Total Marks				600	

Eighth Semester(4 year UG Hon.) (with Specialization Textile and Apparel designing)													
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks					
				L	P	T		Internal Marks		External Marks		Total Marks	
								T	P	T	P		
1	B-TQC-801	DSC-H6	Textile Testing and Quality Control	3	2	0	4	20	10	50	20	100	
2	B-TAA-802	DSC-H7	Textile Auxiliaries and their Application	3	2	0	4	20	10	50	20	100	
3	B-SAC-803	DSC-H8	Socio-Psychological Aspects of Clothing	4	0	0	4	25	0	75		100	
4	B-FCA-804	DSC-H9	Fabric Construction and woven Fabric Analyses	3	2	0	4	20	10	50	20	100	
5	B-TII-805	DSC-H10	Textile Industry in India	4	0	0	4	30	0	70	0	100	
6	B-EMG-806	MIC	Entrepreneurship Management	4	0	0	4	30	0	70	0	100	
Total Credits							24	Total Marks				600	

Eighth Semester(4 year UG Hon. With Research) (with Specialization Textile and Apparel designing)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-TQC-801	DSC-H6	Textile Testing and Quality Control	3	2	0	4	20	10	50	20	100
2	B-FCA-804	DSC-H9	Fabric Construction and woven Fabric Analyses	3	2	0	4	20	10	50	20	100
3	B-RMS-807	MIC	Research Methodology and Statistics	4	0	0	4	30	0	70	0	100
4			Dissertation				12					300
Total Credits							24	Total Marks				600

7 th Semester (With Specialization in Food and Nutrition)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-DT-701	DSC-H1	Diet Therapy	3	2	0	4	20	10	50	20	100
2	B-AFS-702	DSC-H2	Advance Food Science	3	2	0	4	20	10	50	20	100
3	B-NHP-703	DSC-H3	Nutrition Health and Physical Fitness	3	2	0	4	20	10	50	20	100
4	B-ABC-704	DSC-H4	Advance Nutritional Biochemistry	3	2	0	4	20	10	50	20	100
5	B-HP-705	DSC-H5	Human Physiology	3	2	0	4	20	10	50	20	100
6	B-AN-706	MIC	Ayurvedic Nutrition	3	2	0	4	20	10	50	20	100
Total Credits							24	Total Marks				600

8 th Semester(4 year UG Hon.) (With Specialization in Food and Nutrition)												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-IFA-801	DSC-H6	Introduction to Food Administration	3	2	0	4	20	10	50	20	100
2	B-AFM-802	DSC-H7	Advance Food Microbiology	3	2	0	4	20	10	50	20	100
3	B-FPD-803	DSC-H8	Food Product Development	3	2	0	4	20	10	50	20	100
4	B-HN-804	DSC-H9	Human Nutrition	3	2	0	4	20	10	50	20	100
5	B-PHN-805	DSC-H10	Public Health Nutrition	3	2	0	4	20	10	50	20	100
6	B-EMG-806	MIC	Entrepreneurship Management	4	0	0	4	30		70		100
Total Credits							24	Total Marks				600

8 th Semester (4 year UG Honours with Research) With Specialization in Food and Nutrition												
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks				
				L	P	T		Internal Marks		External Marks		Total Marks
								T	P	T	P	
1	B-PHN-805	DSC-H10	Public Health Nutrition	3	2	0	4	20	10	50	20	100
2	B-HN-804	DSC-H3	Human Nutrition	3	2	0	4	20	10	50	20	100
3	B-RMS-807	MIC	Research Methodology and Statistics	4	0	0	4	30	0	70	0	100
4			Dissertation				12					300
Total Credits							24	Total Marks				600

Basic Food and Nutrition Science
B-BFN-101

Total marks: 70
Internal marks: 20
External marks: 50

Total Credits: 3
Time: 3 Hrs.

Course outcomes: A successful completion of this course, the students will be able to:

CO1: Summarize and critically discuss and understand both fundamental and applied aspects of Food Science and nutrition. To Gain knowledge about different cooking methods.

CO2: Able to explain and select the food among different food groups in maintaining good health.

CO3: To gain the knowledge about the sources and effect of deficiency in the body of different minerals.

CO4: To gain the knowledge about the vitamins and their deficiency diseases.

UNIT I

Basic terms used in food and nutrition and Methods: Definition and Terms used in Food and Nutrition: Health, Food, concept of Nutrition, BMI, BMR, Balanced Diet, Food groups, Functions of Food, Food guide pyramid, Different methods of cooking their merits and demerits, Importance of cooking food and Effect of cooking on different nutrients, Methods of enhancing nutritive value of foods: germination, sprouting and supplementation.

UNIT II

Carbohydrates, Protein and Lipid: Carbohydrates: Classification, functions, sources and daily requirement, effects of deficiency and excess, Protein: Classification, functions, sources and RDA, effects of deficiency and excess, Lipid: Classification, functions, sources and RDA, Effects of deficiency and excess.

UNIT III

Vitamins and Fibre: Classification, functions, sources, Clinical signs and symptoms of deficiency, RDA of: Fat Soluble Vitamins - A, D, E and K, Water Soluble Vitamins-B Complex Vitamins- Thiamine, Riboflavin, Niacin, Pyridoxine, Folic acid, Cyanocobalamin and Vitamin, Fibre -Types, functions, sources, RDA and health benefits, effects of deficiency and excess.

UNIT IV

Minerals and Water: Definition and Classification of minerals: Macro minerals: Functions, Sources, RDA, Effects of deficiency and excess of Calcium, Phosphorus, Magnesium, Sodium and Potassium, Micro Minerals: Functions, sources and RDA, Effects of deficiency and excess of Iron, Iodine Fluorine & Zinc Water: Physiological functions and sources of water for the human body, effects of excess and low intake of water in the human body.

Recommended Readings:

1. Maney S (2008). Foods, Facts and Principles, 3rd Edition Published by Wiley Eastern, New Delhi.
2. Usha Chandrasekhar (2002) Food Science and Application in Indian Cookery, Phoenix Publishing House P. Ltd., New Delhi.
3. Raina U, Kashyap S, Narula V, Thomas S Suvira, VirS, Chopra S (2010) Basic Food Preparation: A Complete Manual, 4th Edition, Orient Black Swan Ltd, Mumbai.
4. Srilakshmi, B. (2017) Nutrition Science, New Age International (P) Ltd., New Delhi,
5. Mahtab, S. Bamji, Kamala Krishnasamy, Brahmam G.N.V (2012) Text Book of Human Nutrition, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
6. Sunetra Roday (2017). Food Science and Nutrition, Oxford University Press, New Delhi.
7. Longvah, T, Ananthan, R., Bhaskarachary, K., Venkaiah, K (2017). Indian Food Composition
8. Tables (IFCT), Indian Council of Medical Research, National Institute of Nutrition, Hyderabad

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal marks.

7 *AM*

- 1317

Practical

Total marks: 30

Internal marks: 10

External marks: 20

Total Credits: 1

Time: 3 Hrs.

Use and Care of Kitchen Equipment. Standard weights and measures. Household measures for raw and cooked food. Sensory and textural evaluation of food items according to source of nutrient. Preparation of recipes rich in: Vitamin A, B, C, D, carbohydrate, protein, fat, fiber, Iron and calcium

Instructions for External Practical Paper Setter/Examiner:

The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration. Equal weightage will be given to both the questions. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

FM

Fundamentals of Human Development
B-FHD-102

Total marks: 70
Internal marks: 20
External marks: 50

Total Credits: 3
Time: 3 Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:

CO1: Explain the need and importance of studying human growth and development across lifespan.

CO2: Identify the biological and environmental factors affecting human development.

CO3: Describe the characteristics, needs and developmental tasks of different stages in human life.

CO4: Learn about the classic human development theories

Unit-I

Prenatal Development and Birth Process, Prenatal Development – stages, factors affecting, diagnostic techniques Birth Process, Stages of birth, Types of delivery, Immediate care of newborn, adjustments made by newborn, Types of feeding - natural and artificial, weaning, Infant and mother mortality and morbidity, Immunization schedule, Factors affecting development.

UNIT-II

Characteristics and developmental tasks of; Physical, Cognitive, Language, social, emotional development of Neonate (birth-1 month), Infancy (1 month-2 years), Early childhood (2-6 years) and Middle childhood (6-11 years)

UNIT-III

Characteristics and developmental tasks of individuals in relation to physical, cognitive, language, social and emotional development in adolescence (12-18 years). Play and its importance and characteristics. Theories of play- surplus energy theory, recreational theory, stages and types of play, role of play in overall development of children.

UNIT-IV

Overview of theories of human development: Freud's theory of psychosexual development, Erikson's theory of psychosocial development and Piaget's theory of cognitive development.

Recommended Readings:

1. Berk, L.E. (2005). *Child development* (5th ed.). New Delhi: Prentice Hall.
2. Bhangaokar, R., & Kapadia, S. (in press). Human Development Research in India: A historical overview. In G. Misra (Ed.), *Hundred years of Psychology in India*. New Delhi: Springer.
3. Feldman, R., & Babu, N. (2009). *Discovering the lifespan*. New Delhi: Pearson
4. Kakar, S. (1998). *The inner world. Psychoanalytic study of childhood and society in India*. Delhi: Oxford University Press.
5. Kapadia, S. (2011). Psychology and human development in India. Country paper. *International Society for the Study of Behavioural Development Bulletin Number 2, Serial No. 60, pp. 37-42*.
6. Keenan, T., Evans, S., & Crowley, K. (2016). *An introduction to child development*. Sage.
7. Lightfoot, C., Cole, M., & Cole, S. (2012). *The development of children* (7th ed.). New York: Worth Publishers.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal mark

Practical

Total marks: 30
Internal marks: 10
External marks: 20

Total Credits: 1
Time: 3 Hrs.

Preparation of an album on developmental milestones of children 2-12 yrs. Plotting growth monitoring chart and interpretation. Observation of motor activities of a toddler. Collection of stories and rhymes for nursery school children. Prepare charts, flash cards, puppets for children 3-6 years. Prepare low-cost play materials/equipments for children 5-10 years. Engaging in games and activities that enhance self-understanding in building professional skills. Interviews of adolescent girls and boys to understand their life style and behavior based on gender and socio-economic status.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration. Equal weightage will be given to both the questions. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

PL

- 1320 -

Introduction to Textiles
B-ITX-103

Total marks: 70
Internal marks: 20
External marks: 50

Total Credits: 3
Time: 3 Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:

- CO1: Develop an understanding of concepts and basics of textile fibers.
CO2: Develop critical understanding of the techniques of yarn manufacturing.
CO3: Identify different weaving methods, weaving, knitting and non-woven fabric.
CO4: Analyse and appropriate use of laundering reagents.

Unit-I

Introduction to Textiles: Definition of textile fibers and terminology. Classification of textile fibers: Physical and Chemical properties of fibers. Natural fibers: Cotton, Silk and Wool, Manufacturing process, properties and end use. Man-made fibers: Nylon and Polyester Manufacturing process, properties and end use.

Unit-II

Yarn and Fabric: Classification of yarns: simple, ply and cord, Types of Yarn: Textured and novelty, Twist in yarn: "s" and "z", number of twists and yarn count, Properties of yarn: strength, extension, fineness, length and diameter.

Unit-III

Woven fabrics: Looms and its part, Classification of weaves: Basic weaves Plain, Twill and Satin, Novelty weaves – Pile, Leno-Gauze, Honeycomb. Knitted fabrics: Types of knitting, Hand knitting and Machine knitting. Introduction of nonwoven fabrics

Unit-IV

Laundry, storage, and care of textiles (cotton, wool, silk and synthetic). Water, Soaps and Detergents. Methods and care during laundering of different textiles (cotton, wool, silk and synthetic).

Recommended Readings:

1. Booth, J.E. (1996). Principles of Textile Testing. New Delhi: CBS Publishers & Distributors Pvt. Ltd.
2. Corbman, P.B. (1983). Textiles: Fibre to Fabric. McGraw-Hill Publishers.
3. Dantyagi, S. (1996). Fundamentals of Textiles and their Care. India: Orient Black swan Private Limited.
4. Greaves, P.H., Saville, B. P. (1995). Microscopy of textile fibres. bios Scientific Publishers
5. Gohl, E., Vile sky, L. (2003), Textile Science: an explanation of fiber properties (2 edition), NewDelhi.
6. Hollen, R. N., Saddler, J., & Langford, A. (1979). Textiles. Macmillan Publishers.
7. Joseph, M. (1992), Introductory Textile Science. Sixth edition, California: Harcourt College Publishers
8. Mahapatra, N.N. (2015). Textile Technology. New Delhi: A.P.H. Publishing Co-orporation.
9. Needles, L.H. (1986). Textile Fibers, Dyes, Finishes, and Processes. USA, New Jersey: Noyes publications.
10. Rastogi, D., & Chopra, S. (2017). Textile Science. India: Orient Blackswan Private Limited.
11. Robert, R. & Mather, R. H. (2015). The Chemistry of Textile Fibers. Cambridge: RSC Publishers.
12. Sekhri, S. (2011). Textbook of Fabric Science: Fundamentals to Finishing. India: PHI Learning Pvt. Ltd.
13. Smith, J.L. (2015). Textile Processing: Printing Dyeing Finishing. Chandigarh: Abhishek Publication.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal marks.

Practical



Total marks: 30
Internal marks: 10
External marks: 20

Total Credits: 1
Time: 3 Hrs.

Practical

Fiber identification: Identification of natural and manmade fibers by following three methods i.e. microscopic test, burning test and solubility test. Make samples of different types of weaves. Study of Yarn count using pick glass. Care of Textiles: Stain removal, mending of textiles and Starching using different types of starches.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration. Equal weightage will be given to both the questions. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

fd

- 1322

Introductory Chemistry
B-ICH- 104

Total marks: 50
Internal marks: 15
External marks: 35

Total Credits: 2
Time: 1:30 Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:

- CO1: Understand with the basic concepts of chemistry
CO2: Understand the molecular structure of elements and compounds
CO3: Develop skills for measurement of physical properties

Unit -I

General Introduction to the structure of atom (electron, proton and neutron), Quantum numbers, Aufbau, s principle, Hund's rule, Pauli's exclusion principle. Electronic configuration of atoms (upto atomic no. 30). Periodic classification of elements (s, p, d and f block). Periodic trends in properties (Atomic radii, Ionisation energy, Electron affinity, Valency). Chemical bonding (Covalent, Ionic, Coordinate and Hydrogen bonding). Chemical equations: balancing and chemical calculations.

UNIT-II

Chemical energetics: exothermic and endothermic reactions, enthalpies of formation, combustion, neutralization, fusion, solution, vaporization and sublimation, Calorific values of foods and fuels. Mole concept and Concentration units: molarity, molality, formality and normality, Concepts of acids and bases: Arrhenious , Bronsted and Lewis concept of acid and bases, Acid base equilibrium, pH, pH Scale and buffer solutions

Recommended Readings:

1. Sienko/ Plane : Chemistry: Principles & Application ,Mc Graw Hill.
2. Robret J. Silbey & Robert A.Albert: Physical Chemistry, John Wiley sons.
3. P.L.Sony: Fundamental of Inorganic Chemistry, S.Chand & Sons.
4. P.L.Soni, O.P.Darmarha: Text book of Physical Chemistry, S.Chand & Sons.
5. S.N.Dhawan: New Course chemistry Vol -I and Vol-II, Pradeep Pub.
6. A.D Chawla: New college practical chemistry Vol -1, Vijaya pub.
7. A.D Chawla: New college practical chemistry Vol -II, Vijaya pub.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

Signature

Introductory Home Science-I
B-IHS-105

Total marks: 75
Internal marks: 25
External marks: 50

Total Credits: 3
Time: 2 Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:

CO1: Understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities.

CO2: Acquire professional and entrepreneurial skills for economic empowerment of self, and community in general.

CO3: To develop pragmatic and comprehensive understanding of applications of Home Sc in community and individual life.

UNIT -I

Important concepts: Objective, Education, formal and informal Home, Home maker, home making, home scientist. Home science education — Definition, Meaning and Objectives Scope and need of home science.

UNIT -II

Structure and areas of home science- Food and nutrition, clothing and textile, home management, human development, extension education, Job opportunities in different areas of home science- Self-employment and Gainful employment

UNIT -III

Institutions offering Home Science under agricultural and conventional/traditional universities, Role of Home Science Education in development of individual, family and communities.

Recommended readings:

1. Blankship, M.L. 1991. Home economics education Boston, Houghton Mifflin company.
2. Chandra, A. 1995. Introduction to home science, new Delhi metropolitan book Co.640 Ar 897 C.
3. Dhama, O.P. and Bhatnagar, O.P. 1991. Communication for development. New Delhi, oxford and IBH Publishing Co.
4. Dhama, O.P. 1986. Extension and rural welfare. Agra, ram Prasad and sons. Directorate of extension 1961. Extension education in community development, new Delhi, ministry of food and agriculture, govt. of India.
5. Devdas, R.P. 1978. Methods of teaching home science, new Delhi, national council of education, research and training.
6. Tikoo santosh, 2018, family resource management, Modern publishers, Gulab bhawan-6, bahadur Shah zafar Marg, New Delhi

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question

PL

-1329-

Interior Decoration
B-ID- 201

Total marks: 70
Internal marks: 20
External marks: 50

Total Credits: 3
Time: 3 Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:

CO1: To encourage experimentation with traditional and contemporary materials, technical processes, and methods

CO2: To develop skills, abilities & knowledge that enable artistic production & creative problem-solving skills.

CO3: To develop and apply concepts of art & design to create aesthetically pleasing interiors.

CO4: To acquire professional and entrepreneurial skills like interior decoration, use of waste material and decorative pieces for economic empowerment.

Unit-I.

Objectives of interior decoration, importance of elements of art in interior decoration. Types of design: structural and decorative and its application. Elements of art: line, form, texture, light, pattern, colour, space and its application in interior decoration.

Unit-II.

Principles of design: Rhythm, balance, proportion, emphasis, harmony and its application in interior decoration. Colour: Properties of colour, psychological effect of colour, color schemes and its application in the interior of a house. Lighting: Types and requirement for various activities, Lighting fixtures in the home.

Unit-III.

Table setting and table manners: Informal and formal table settings (buffet style, Indian style restaurant style, Cafe style). Furniture: Types of furniture, furniture arrangement for different areas (bedroom, drawing room, dining room, kitchen and its types) Factors affecting the selection and purchase of furniture, care and maintenance of furniture.

Unit-IV.

Flower arrangement: Different types of flower arrangement. Accessories used and points to be considered for flower arrangement. Flower decoration for different occasions Furnishings: Soft Furnishing (curtains, cushions, pillow and material for upholstered furniture). Wall treatment and its types, Window treatment and decoration, Types of floor coverings

Recommended Readings:

1. Seetharaman P.(2019), Interior Design And Decoration, India:CBS.
2. M.Pratap Rao (2020), Interior Design: Principles and Practice,India, Standard Publishers and Distributors Pvt Ltd
3. Frida Ramstedt (2020), The Interior Design Handbook: Furnish, Decorate, and Style Your Space,Clarkson Potter publishing.
4. Dr. Bhargava B. (2007), Principles of art,University Book House Pvt. Ltd.
5. Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
6. Riley &Bayen., (2003), The Elements of Design, Mitchell Beazley.
7. Rutt Anna Hong (1961): Home furnishing, Wiley Eastern Pvt.Ltd.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal marks.

PU

Practical

Total marks: 30

Internal marks: 10

External marks: 20

Total Credits: 1

Time: 3 Hrs.

Preparation of house plans for different income groups (manual/computer aided). Floor decoration: Alpana and rangoli. Pottery painting and decoration. Creating various art pieces/accessories using various types of materials and techniques like paper cutting, collage, candle making, stone painting, gift wrapping, greeting cards with decorative envelopes, shopping bags/decorative pouches, accessories for fashion designing including Jewellery making (any 5). Table setting and napkin folding. Flower arrangement for different rooms and occasions. Planning color schemes for different rooms manual/computer aided.

Instructions for External Practical Paper Setter/Examiner:

The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration. Equal weightage will be given to both the questions. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

Extension Education and Communication
B-EEC- 202

Total marks: 70

Total Credits: 3

Internal marks: 20

Time: 3 Hrs.

External marks: 50

Course Outcomes: A successful completion of this course, the students will be able to:

CO1: To understand the concept of extension education and its need.

CO2: To gain knowledge about extension education and its relationship with other social sciences

CO3: Understand the concept and different communication methods.

CO4: Enhance knowledge about audio visual aid and non-projected audio-visual aid in Communication.

UNIT-I

Definition, meaning, objectives and scope of extension education, Need for extension education in India. Principles of extension education, Difference between formal education and non-formal education.

UNIT II

Elements of extension education. Role and qualities of an extension education worker. Extension education and its relationship with other social sciences. Philosophy of extension education.

UNIT III

Definition, concept and scope of communication. Functions and importance of communication. Types and elements of Communication and their characteristics. Problems and barriers of communication.

UNIT-IV

Communication effectiveness. Classification of communication methods: Individual methods- farm and home visit, Farmers call, personal letter and group methods-Study tour, small group training and group meeting, Role of audio-visual aid in Communication: -Television, mobile phone and cinema, Role of non-projected audio-visual aid in Communication: -Drama, Puppet show and Talking doll.

Recommended Readings:

1. Dahama, O.P and Bhatnagar O.P. (1995). Education and Communication for Development. New Delhi: Oxford and IBH Co.
2. Gupta, D. (2007). Development Communication in Rural Sector. New Delhi: Mukhopadhyay Abhijeet Publication
3. Nisha, M. (2006). Understanding Extension Education. New Delhi: Kalpay Publications
4. Reddy, A.A. (2001). Extension Education. Bapatla: Sri Lakshmi Press
5. Rogers Everett, M. (2003). Diffusion of Innovations, 5th Ed. New York: The Free Press
6. Singh, U.K and Nayak, A.K. (2007). Extension Education. New Delhi: Common Wealth Publishers
7. Wilson, M.C., and Gallup, G. (1955). Extension Teaching Methods. Washington: US Department of Agriculture
7. Bhalla, C.L.(2009). Audio Visual Aids in Education. Cornell University
8. Ray, G.L. (2004). Extension education and Management. Kalyani Publisher, New Delhi.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal marks.

fu

Practical

Total marks: 30

Internal marks: 10

External marks: 20

Total Credits: 1

Time: 3 Hrs.

Preparation and use of different Audio-Visual Aids in urban and slum area, chart, poster, leaflets, pamphlets, flash card, flip card. Preparation of puppet as a media of communication and writing drama for puppetry. Field visit to get the field experience of family status (with special reference to women living in rural/urban slum areas). Preparing a skit/role play on any social issue and making a short video to disseminate a message

Instructions for External Practical Paper Setter/Examiner:

The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration. Equal weightage will be given to both the questions. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

-1328-

Fundamentals of Clothing Construction
B-FCC-203

Total marks: 70
Internal marks: 20
External marks: 50

Total Credits: 3
Time: 3Hrs.

Course Outcomes: A successful completion of this course, the students will be able to:

- CO1: Comprehend the importance and function of clothes.
CO2: Gain an insight of various sewing machines and other sewing equipment's available in the market, their functioning & common problems faced while usage.
CO3: Utilize design components in garment construction.
CO4: Understand basic principles of clothing construction.

Unit-I

Introduction: History of Clothing, Origin of Clothing, Use of clothing among primitive people. Functions of clothing in relation to culture, Psychological, sociological, economic, and political aspects. Theories of clothing, Terminology: Clothing, fabric, fashion, fad, silhouette, weaving, knitting, felting,

Unit-II

Sewing Machines: Types of sewing machines, Mechanical Sewing Machine, Electronic Sewing Machine, Computerized or Automated Sewing Machine and Embroidery Machine. Parts of sewing machine: Types and function, Maintenance, Common problems, and its remedies. Tools and equipment used for clothing construction: Measuring tool, drafting tool, marking tool, cutting tool, stitching tool, pressing tool, Needles, threads and their relation to fabric, Types of needles for hand and machine sewing. Types of threads hand and machine sewing, Selection of right thread, needle for the fabric to be sewn.

Unit-III

Introduction to Clothing Construction: Anthropometric measurements, Instruments used for anthropometric measurements. Introduction to drafting and paper pattern. Factors affecting selection of fabrics: Social factors, Economic factors, Psychological factors, Environmental factors.

Unit-IV

Basic Principles of Clothing construction, Harmony, balance, rhythm, emphasis etc. Basic elements of Clothing construction, color, line, texture, shape etc. Relation between elements and principles of design/construction to the Clothing and Fashion Color, line and texture in relation to: Age, Season, Occasion, Figure and Complexion.

Recommended Readings:

1. Armstrong, Pearson. (1995), Pattern making for Fashion Design, Fairchild Publication, New York 1995 (Indian Ed.)
2. Cream, Penelope., (1996), The Complete Book of Sewing - A Practical Step by Step Guide to Sewing Techniques, DK Publishing Book, New York,
3. Dorothy wood, the practical encyclopaedia of sewing, Anneess publishing Ltd, London.
4. Holman, Gillian. (1997), Pattern Cutting Made Easy, BSP.
5. Janace E. Bubonia. (2012), Apparel production terms and processes, Fairchild Books, New York.
6. Kallal, Mary Jo, (1985), Clothing Construction, Mc Millan Publishing Company, New York.
7. Norma Hollen, Jane Saddler, Anna L. Langford & Sara, J.,(1988) Textiles 6th ed., Macmillan Publication, New York
8. Readers, Digest, Complete Guide to Sewing, The Reader's Digest Associations (Canada) Ltd. Montreal, Pleasantville, New York.
9. Thomas, A, (1986), the Art of Sewing UBSPD Publishers Distributors Ltd. New Delhi.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 9 questions asking two questions from each unit and one objective type questions covering the entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions carry equal marks.

Practical

Total marks: 30
Internal marks: 10
External marks: 20
Practical:

Total Credits: 1
Time: 3 Hrs.

Taking measurements directly from body. Preparing sample of: Basic hand stitches- basting, back stitch, hemming visible/invisible, Lock stitch. Seams- plain seams and decorative seams, Fullness, Darts-Single point, Fish darts Tucks- Pin tucks, wide tucks, corded tucks, crossed tucks, Pleats-Knife, box, inverted box, permanent pleat, Gathers – Hand and machine, Shirring, Ruffles and frills, Neckline finishes- Binding and facing, Plackets: Faced and continuous bound, Pockets: Patch, in seam pocket, Snap button and fastener attachment and Stay stitching.

Instructions for External Practical Paper Setter/Examiner:

1. The examiner will set two questions at the time of practical examination by taking course learning outcomes into consideration.
2. Equal weightage will be given to both the questions.
3. The evaluation will be done on the bases of practical record, viva-voce, write up and execution of the practical work done in the class and at the time of the examination.

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**Introduction to Psychology
B-IP-204**

Total marks: 50
Internal marks: 15
External marks: 35

Total Credits: 2
Time: 1: 30 Hrs

Course Outcomes: A successful completion of this course, the students will be able to:

CO1: To understand the basics of human nature

CO2: To make the students understand the different aspects of human behaviour.

Unit-I

Introduction: Nature, scope and methods of psychology. Biological basics of behaviour Nervous system, Endocrine system, Genes and behaviour. learning: Role of motivation in learning, Theories of intelligence, Factors affecting learning. Intelligence: Definition and types, Measurement of intelligence, Theories of intelligence.

Unit-II

Memory: Stages of memory (encoding, decoding and revival), Types of memory: sensory STM, LTM. Causes of forgetting, improving memory. Motivation and Emotion: Nature of motivation, Different types of motives, Theories and characteristics of emotions, physiological correlates of emotion, Personality: Definition, psychoanalytical theory of personality. Types -approaches to personality traits-approach to personality. Determinants of personality: biological factors, environmental factors and Measurement of personality.

Recommended Readings:

1. Kapadia, S. (2011). Psychology and human development in India. Country paper. *International Society for the Study of Behavioural Development Bulletin Number 2, SerialNo. 60, pp.37-42.*
2. Bhangaokar, R., & Kapadia, S. (in press). Human Development Research in India: A historical overview. In G. Misra (Ed.), *Hundred years of Psychology in India*. New Delhi: Springer
3. Arnett, J. J., & Jensen, L. A. (2019). *Human Development: A cultural approach (3rd ed.)*. New York: Pearson.
4. Cavanaugh, J., & Blanchard-Fields, F. (2011). *Adult development and aging (7th ed.)*. Stamford, CT: Cengage Learning.
5. Kakar, S. (Ed.). (1993). *Identity and adulthood*. New Delhi: Oxford University Press.

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 5 questions asking two questions of 12 marks from each unit and one compulsory question by taking course outcomes (CO) into consideration. The compulsory question (Question No. 1) will contain 5 parts of 11 marks covering entire syllabus. The examinee will be required to attempt 3 questions, selecting one question from each unit and the compulsory question.

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Introductory Home Science-II
B-IHS-205

Total marks: 75
Internal marks: 25
External marks: 50

Total Credits: 3
Time: 2 Hrs.

Course Outcomes: After completing this course, the learner will be able to:

CO1: To understand basic concepts of nutrition & importance of various nutrients.

CO2: To aware students regarding the Growth and development phases of Infancy

CO3: To impart knowledge and skills for making different decoration methods and Home Science Extension education.

Unit-I

Definition, Concept and objectives Of Home Science, Basic terminology: Food, nutrients, nutrition, health, balanced diet, Malnutrition, Classification, sources, Function and deficiency of Carbohydrate, Protein, Fat, vitamin and minerals.

Unit-II

Flower arrangement: Importance and Types, Principles and Elements of Art in flower Arrangement
Floor Decoration-Types (Rangoli & Alpana) and methods, Stain – Definition, classification, methods of removing different types of stains.

Unit-III

Human Growth and Development: Meaning and concept, Factors influencing growth & development milestones of infancy (0-2 years) and early childhood (3-6 years): Physical and motor development, Social and emotional development, Cognitive and language development
Home science Extension education: Meaning, Importance and objectives, Qualities of an extension worker

Recommended Readings:

1. Dahama, O.P and Bhatnagar O.P. (1995). Education and Communication for Development. New Delhi: Oxford and IBH Co.
2. Sushma Gupta, Neeru Garg , Amita Aggarwal, Jaspreet kaur and Parminder kaur(2016) text book of Foods and Nutrition and child development by Kalyani Publications.
3. Tikko, Santosh, (2017-2018) physiology, clothing and Textiles, modern publishers ,New Delhi
4. Patni Manju,2007, Extension education, Shiva Publications, Indore

Instructions for External Theory Paper Setter/Examiner:

The examiner will set 7 questions asking two questions from each unit and one compulsory question by taking course outcomes (COs) into consideration. The compulsory question (Question No. 1) will contain 5 parts covering entire syllabus. The examinee will be required to attempt 4 questions, selecting one question from each unit and the compulsory question.

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Scheme of Examination for the 1st Semester:

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG -DSC-101	DSC	Short Stories	3	0	1	4	30	70	100
2	B-ENG -DSC-102-	DSC	Drama I (One Act Plays)	3	0	1	4	30	70	100
3	B-ENG -MIC1-103	MIC	Grammar and Vocabulary	3	0	1	4	30	70	100
4	B-ENG -*MDC1-104	MDC	Business and Communication Skills-1	2	0	1	3	25	50	75
5	B-AEC1-101	AEC		2	0	0	2	15	35	50
6	B-SEC1-101	SEC		2	0	1	3	25	50	75
7	B-VAC1-101	VAC		2			2	15	35	50
				17	0	05	22			550

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

HONS. WITH RESEARCH

2

Scheme of Examination for the 2nd Semester:

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG-DSC-201	DSC	Essays	3	0	1	4	30	70	100
2	B-ENG-DSC-202	DSC	Poetry I	3	0	1	4	30	70	100
3	B-ENG-MIC2-203	MIC	Introduction to Linguistics	3	0	1	4	30	70	100
4	B-ENG-MDC2-204	MDC	Business and Communication Skills-2	2	0	1	3	25	50	75
5	B-AEC2-202	AEC		2	0	0	2	15	35	50
6	B-SEC2-202	SEC		2	0	1	3	25	50	75
7	B-VAC2-202	VAC		2			2	15	35	50
				17	0	05	22			550

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Chairperson

Department of English

Bhagat Phool Singh Mahila Vishwavidyalaya

Khanpur Kalan, Sahiwal, Haryana

Chairperson

Date 2.2.24

Scheme of Examination for the 3rd Semester:

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG- DSC-301	DSC	Poetry-II	3	0	1	4	30	70	100
2	B-ENG-DSC- 302	DSC	Prose Writings	3	0	1	4	30	70	100
3	B-ENG- MIC3-303	MIC	History of English Literature	3	0	1	4	30	70	100
4	B-ENG-*MDC3- 304	MDC	Developing Writing Skills	2	0	1	3	25	50	75
5	B-AEC3-303	AEC		2	0	0	2	15	35	50
6	B-SEC3-303	SEC		2	0	1	3	25	50	75
7	B-VAC3-303	VAC		2			2	15	35	50
				17	00	05	22			550

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

HONS. WITH RESEARCH

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Scheme of Examination for the 4th Semester:

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG- DSC-401	DSC	Drama II	3	0	1	4	30	70	100
2	B-ENG-DSC- 402	DSC	Novel I	3	0	1	4	30	70	100
3	B-ENG- DSC-403	DSC	Background to English Literature	3	0	1	4	30	70	100
4	B-ENG-DSC- 404	DSC	World Literature	3	0	1	4	30	70	100
	B-ENG- MIC4(Voc)-405	MIC (Voc)	*Field Visit		0		4	30	70	100
5	B-AEC4-404	AEC		2	0	0	2	15	35	50
6	B-VAC4-404	VAC		2			2	15	35	50
				16	00	04	24			600

*Field Visit

Students shall visit nearby areas in groups and record narratives/ folk songs/ geets/ folklores and write a report on it and submit it in the department.

Chairperson

Department of English

Bhagat Phool Singh Mahila Vishwavidyalaya

Khanpur Kalan, Solapur, Haryana

Chairperson

Date 2.2.24

w.e.f. Academic Session 2024-25

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Department of English
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH
 / HONS. IN ENGLISH RESEARCH

Scheme of Examination for the 5th Semester:

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG- DSC-501	DSC	Drama III	3	0	1	4	30	70	100
2	B-ENG-DSC- 502	DSC	Novel II	3	0	1	4	30	70	100
3	B-ENG- DSC-503	DSC	Indian Literature	3	0	1	4	30	70	100
4	B-ENG-DSC- 504	DSC	World Classics	3	0	1	4	30	70	100
5	B-ENG- MIC5(Voc)-505	MIC(Voc)	*Field Work		0		4	30	70	100
6			Internship				4			100
				12	00	04	24			600

*Field Work

Students shall visit nearby areas in groups and record narratives/ folk songs/ geets/ folklores and write a report on it and submit it in the department.

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 Department of English
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 Khanpur Kalan, Haryana
 Chairperson

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH (HON. WITH RESEARCH)

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Scheme of Examination for the 6th Semester:

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG- DSC-601	DSC	Novel III	3	0	1	4	30	70	100
2	B-ENG-DSC- 602	DSC	Literary Theory & Criticism	3	0	1	4	30	70	100
3	B-ENG- DSC-603	DSC	Literature and Films	3	0	1	4	30	70	100
4	B-ENG-DSC- 604	DSC	American Literature	3	0	1	4	30	70	100
5	B-ENG- MIC5(Voc)-605	MIC	*LRC		0		4	30	70	100
6	B-SECC-603	SEC		1		1	2	15	35	50
				13	00	05	22			550

*LRC

Students shall be trained to take classes in the Language Resource Centre, BPSMV, Khanpur Kalan, Sonipat.

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Chairperson

Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonipat, Haryana

Chairperson

Date 2.2.24

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

WORK WITH RESEARCH
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Scheme of Examination for the 7th Semester:

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG- DSC-701	DSC	British Drama	3	0	1	4	30	70	100
2	B-ENG-DSC- 702	DSC	British Poetry	3	0	1	4	30	70	100
3	B-ENG- DSC-703	DSC	British Novel	3	0	1	4	30	70	100
4	B-ENG-DSC- 704	DSC	British Prose	3	0	1	4	30	70	100
5	B-ENG- DSC-705	DSC	Language &Linguistics	3	0	1	4	30	70	100
6	B-ENG-MIC7-706	MIC	Contemporary Literary Theory	3		1	4	30	70	100
				18	00	06	24			600

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Khanpur Kalan
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Department of English

CURRICULUM OF BACHELLAR OF ARTS (HONS) IN ENGLISH

HONS. IN ENGLISH RESEARCH

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Scheme of Examination for the 8th Semester

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG- DSC-801	DSC	Folklore and Mythology	3	0	1	4	30	70	100
2	B-ENG-DSC- 802	DSC	South Asian Literature	3	0	1	4	30	70	100
3	B-ENG- DSC-803	DSC	Translation Studies	3	0	1	4	30	70	100
4	B-ENG-DSC- 804	DSC	Applied Linguistics	3	0	1	4	30	70	100
5	B-ENG-DSC-805	DSC	Women Writings	3	0	1	4	30	70	100
6	B-ENG-MIC8-806	MIC	New Literatures	3		1	4	30	70	100
				18	00	06	24			600

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Department of English

Phool Singh Mahila Vishwavidyalaya

Khanpur Kalan, Haryana

Chairperson

Date 2. 3. 24

Department of English
HONS. WITH RESEARCH
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Scheme of Examination for the 8th Semester (Hons. With Research)

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-ENG-DSC-801	DSC OPTION-I	Folklore and Mythology/	3	0	1	4	30	70	100
2	B-ENG-DSC-802	DSC OPTION-II	South Asian Literature	3	0	1	4	30	70	100
3	B-ENG-DSC-803	DSC OPTION-III	Translation Studies	3	0	1	4	30	70	100
4	B-ENG-DSC-804	DSC OPTION-IV	Applied Linguistics	3	0	1	4	30	70	100
5	B-ENG-DSC-805	DSC OPTION-V	Women Writings	3	0	1	4	30	70	100
6	B-ENG-DSC-806	DSC	Research Methodology	3	0	1	4	30	70	100
7	B-ENG-MIC8-807	MIC OPTIONVI	New Literature	3	0	1	4	30	70	100
8	B-ENG-RP-808	RP	Research Project		10	2	12		300	300
				9	10	5	24			600

Note: The following Courses ---*MDC1 in Sem.1, *MDC2 in Sem. 2, *MDC3 in Sem. 3, are for the students of all other Departments except Department of English.

*The students of Department of English will choose AEC, SEC and VAC from the Common Pool of Courses offered by other University.

Department of English

Dr. Phool Singh Mahila Vishwavidyalaya

Chairperson, Sonapat, Haryana

Date 2.2.24

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Programme Specific Outcomes

Knowledge Students will:

1. Demonstrate knowledge of literary terms, major periods, authors, genres, and theories.
2. Demonstrate knowledge of "best practices" regarding research, writing, teaching, and the academic profession of literary studies.

Skills Students will:

1. Develop complex reading, writing, and research skills.
2. Demonstrate argumentative skills which enable students to defend interpretations and research practices by using textual material, secondary sources, and literary theory. Develop electronic media skills.
3. Be able to participate in the profession of literary studies through conferences, publications, and memberships in learned societies.

Dispositions Students will:

1. Demonstrate an appreciation for both canonical and non-canonical works.
2. Demonstrate an appreciation for literary theory.
3. Demonstrate an understanding of and appreciation for the academic literary profession.

Programme Outcomes

The programme is designed and taught to achieve the following Outcomes:

1. Adequate exposure of the learner to the basic principles, trends and genres of English literature and language
2. Fostering critical understanding of the theories of interpreting literature written in English and translated from other languages of the world
3. Inculcating capacity to negotiate intertextuality and appreciating literature in comparativist mode
4. Improving linguistic and communicative competence of the learners
5. Facilitating learner in deciding the core areas of English Studies for undertaking further research

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana
Chairperson

Date: 02-02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Semester I

Course Nomenclature: Short Stories

Course Code: B-ENG-DSC- 101

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1. Understanding story as a literary genre.
- CO2. Enhancing grammatical competence using stories.
- CO3. Appreciation of human values as reflected in stories.
- CO4. Developing story writing as creative skill.
- CO5. Understanding story telling as an effective communicative tool.

UNIT I

1. Leo Tolstoy "How Much Land Does a Man Need?"
2. O. Henry "The Gift of the Magi"
3. Maupassant "Happiness"

UNIT II

4. Chinua Achebe "Marriage is a Private Affair"
5. Ruskin Bond "Night Train at Deoli"
6. Pearl S. Buck "The Refugees"

UNIT III

7. Alice Walker "Am I Blue?"
8. M. Premchand "Thakur's Well"
9. R.K. Narayan "Under the Banyan Tree"

UNIT IV

10. Mohan Rakesh "Lord of the Rubble"
11. Saadat Hasan Manto "Toba Tek Singh"
12. Rabindranath Tagore "The Woman's Letter"

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana
Chairperson

Date: 02-02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan**Department of English****CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH****Recommended Readings:**

1. Abrams, M.H. *A Glossary of Literary Terms*. Boston: Wadsworth Cengage Learning, 2011.
2. Canby, H.S. *The Short Story in English*. OUP, 1980.
3. Connor, Frank O'. *The Lonely Voice: A Study of the Short Story*. World Publishing: Cleveland and New York, 1963.
4. Kaushik, R.K and Bhatia S. C. *Essays, Short Stories and One act Plays*. OUP, 1998.
5. Dr. Usha Bande and Krishna Goyal (ed). *The Pointed Vision, OUP*.

Instructions to the External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one question from each unit of 10 marks each.

(7 x 10 = 70 Marks)

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat

Chairperson
Date:02-02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Drama I (One-Act Plays)

Course Code: B-ENG-DSC- 102

Total Credits: 4

L-T- P

3-1-0

External Theory Marks :70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1. Understanding one act play as a literary genre.
- CO2. Enhancing grammatical competence through dialogues.
- CO3. Learning dramatic devices and techniques.
- CO4. Promoting inter-cultural aesthetics through plays in translation.
- CO5. Plays as a potent tool for communication and enactment.

UNIT I

- 1. Thocritus *The Battle of the Bards*
- 2. Fritz Krinthy *Refund*
- 3. Synge *Riders to the Sea*

UNIT II

- 4. Rabindranath Tagore *Chandalika*
- 5. Norman Mckinnel *The Bishop's Candlesticks*
- 6. Neith Boyce & Hutchins Hapgood *Enemies*

UNIT III

- 7. J.B. Priestley *Mother's Day*
- 8. Moliere *The Pretentious Young Ladies*
- 9. Anton Chekhov *A Marriage Proposal*

UNIT IV

- 10. Josefina Niggli *Sunday Costs Five Pesos*
- 11. R.H. Wood *Post Early for Christmas*
- 12. A. Ball *The Seven Slaves*

w.e.f. Academic Session 2024-25

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Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Date:02-02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Recommended Readings:

1. *Essays, Short Stories and One Act Plays*, OUP, 1995.
2. Bolton, Marjorie. *Anatomy of Drama*. London: Routledge, 1960.
3. Shepherd, Simon & Peter Womack. *English Drama, A Cultural History*. Oxford: Blackwell, 1996.
4. White, R. Kerry. *An Annotated Dictionary of Technical, Historical, and Stylistic Terms Relating to Theatre and Drama: A Handbook of Dramaturgy*. E. Mellen Press, 1995.
5. *One Act Plays for Acting Students: an anthology of short one act plays for one, two or three actors*. Meriwether Pub, 1987.

Instructions for External Theory Paper Setter/Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one question from each unit of 10 marks each.

(7 x 10 = 70 Marks)

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana
Chairperson
Date: 02-02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Grammar and Vocabulary

Course Code: B-ENG-MIC1- 103

Total Credits: 4

L-T-P

3-1-0

External Theory Marks :70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1. Developing an understanding of appropriate word forms and vocabulary.
- CO2. Developing speaking and writing skills.
- CO3. Use a variety of accurate sentence structures meaningfully in written and oral form.
- CO4. Developing students' ability to infer meaning.
- CO5. Acquiring linguistic competence for employability.

UNIT I

1. Parts of Speech
2. Determiners, Demonstratives and Quantifiers
3. Prepositions
4. Sentence (Basic sentence patterns, Subject and predicate, Statements (affirmative and negative), questions, imperatives and exclamations, Subject –Verb Concord)

UNIT II

5. Introducing Verb Forms (Auxiliaries and Modals)
6. Non-finite Verbs (Verb + Bare infinitive, Verb + to- infinitive) Gerund, Verb + to- infinitive or –ing, Participles)
7. Phrasal verbs
8. Idioms and Phrases

UNIT III

12. Tenses
13. Active and Passive Voice
14. Direct and Indirect Speech
15. Clauses (Noun Clause, Adverb Clause, Adjective Clause)

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Khanpur Kalan, Sonapat, Haryana

w.e.f. Academic Session 2024-25

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

UNIT IV

16. Letter Writing
17. E-mail Writing
18. Précis Writing
19. Paragraph Writing

Recommended Readings:

1. Eastwood, John. *Oxford Guide to English Grammar*. OUP, 1994.
2. Hewing, Martin. *Advance English Grammar* (reprint) CUP, 2009.
3. Iver, Michelle. *Guide to Good Writing*. Random House, 1993.
4. Leech, G and M Deucar. *English Grammar for Today*. Macmillan, 2009.

Instructions for External Theory Paper Setter/Examiner

The question paper shall be of 70 marks (Unit I, II and III of 15 marks each and Unit IV carrying 25 marks) must be strictly according to the prescribed syllabus. The question shall be set on all four units covering all the topics and providing sufficient choice to the examinee. The questions could be in the form of a concept, definition, application and developing a sentence etc.

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana
Date: 02-02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Business and Communication Skills -I

Course Code: B-ENG-MDC1- 104

Total Credits: 3

L-T-P

2-1-0

Course Outcomes:

External Theory Marks :50

Internal Assessment Marks: 25

Time Allowed: 2hrs

- CO1. Shape the linguistic ability of students in a business environment.
- CO2. Train both written and spoken communication of students.
- CO3. Train students in day-to-day practical application of language.
- CO4. Hone fluency and guide speaking practices of the learners.
- CO5. Enhance skill development and build confidence in over-all personality of the learners.

UNIT I

1. What is Communication?
2. Definition of Communication, Process, Objectives, Essentials of Good Communication,
3. Barriers, Role of Active listening, Overcoming Barriers of Communication

UNIT II

4. Business Correspondence
5. Emails- Register, Style. Standard Phrasing
6. Memo and Notice

UNIT III

7. Business specific language Phrases
8. Reports----
Skim Reading Reports and News Feeds
How to Report Information and Ideas
Writing Reports: Style, Register, Conventions

Suggested Reading:

1. *Communicative skills for Engineers and Scientists*. Delhi PHI, 2009.
2. Courtland L. Bovee's *Business Communication Today*, 10th edition, Pearson, 2010
3. Sinha, K.K. *Business Communication* Galgotia Publishing Company, New Delhi, 2012
4. Sharma, R.C. and Krishna Mohan *Business correspondence and report Writing*—Tata McGraw-Hill Publishing Company Limited, New Delhi, 2014

w.e.f. Academic Session 2024-25

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Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidya
Khanpur Kalan, Sonapat, Haryana
Date: 02-02-2024
Chairperson

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions to the Paper Setter:

The question paper shall be of 50 marks (Unit I and II of 15 marks each and Unit III carrying 20 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee.

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Chairperson
Date: 02-02-2024

A. Phool Singh

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Semester II

Course Nomenclature: Essays

Course Code: B-ENG-DSC- 201

Total Credits: 4

L-T-P

3-1-0

External Theory Marks :70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1. Understanding essay as a literary genre.
- CO2. Developing critical thinking abilities.
- CO3. Developing analytical approach.
- CO4. Learning paragraph writing using cohesion and coherence.
- CO5. Promoting essays on iconic figures.

UNIT I

- 1. Joseph Addison *Lady Orators*
- 2. Francis Bacon *of Studies*
- 3. Aldous Huxley *Selected Snobberies*

UNIT II

- 4. Charles Lamb *Dream Children*
- 5. E. M Forster *Tolerance*
- 6. Jawaharlal Nehru *Letter I*

UNIT III

- 7. R K Narayan *Toasted English*
- 8. Haldane *The Scientific Point of View*
- 9. M K Gandhi *The Canker of Untruth*

UNIT IV

- 10. Shaw *Spoken English and Broken English*
- 11. Nirad C Chaudhary *Public Transport in Delhi and London*
- 12. Montaigne *On Liars*

Suggested Readings:

- 1. Kaushik, RK and Bhatia, Sc. *Essays, Short Stories and One act Plays*. OUP, 1975.
- 2. Abrams, M.H. *A Glossary of Literary Terms*. Boston: Wadsworth Cengage Learning, 2005.

w.e.f. Academic Session 2024-25

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Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidya
Khanpur Kalan, Sonapat, Haryana
Date: 02-02-2024
Chairperson

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one question from each unit of 10 marks each.

(7 x 10 = 70 Marks)

w.e.f. Academic Session 2024-25

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Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

G. Phool Singh

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Poetry I

Course Code: B-ENG-DSC- 202

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks :70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Understanding poetry as a literary genre.
- CO2. Enhancing aesthetic competence through poetry.
- CO3. Understanding use of figurative devices.
- CO4. Developing poetry writing as one of the hobbies.
- CO5. Enhancing grammatical competence through poetry.

UNIT I

- 1. G. Chaucer "Truth"
- 2. E. Spenser *Amoretti* LXXV: "One Day I Wrote Her Name"
- 3. W. Shakespeare "Let me not to the Marriage of True Minds", "My Mistress' Eyes"

UNIT II

- 4. John Donne "Go and Catch a Falling Star"
- 5. John Milton "On His Blindness"
- 6. John Dryden "Shadwell"

UNIT III

- 7. Thomas Gray "Elegy Written in a Country Churchyard"
- 8. William Blake "The Little Black Boy", "Holy Thursday"
- 9. W. Wordsworth "Daffodils", "The World is Too Much"

UNIT IV

- 10. S.T Coleridge "Kubla Khan", "Youth and Age"
- 11. P.B Shelley "Song to the Men of England", "Ode to the West Wind"
- 12. John Keats "La Bella Dame Sans Merci", "When I have Fears"

Recommended Readings:

- 1. *Scrymgeour, Daniel*. The Poetry and Poets of Britain from Chaucer to Tennyson; With Biographical Sketches of Each, and an Introductory Essay on the Origin and Progress of *British Library, Historical Print Editions, Feb 2011*.
- 2. Grierson, Herbert & J. C. Smith. *A Critical History of English Poetry*. Chatto & Windus, 1956.
- 3. *Fifteen Poets*, The Clarendon Press, 1941.
- 4. Schmidt, Michael. *Lives of the Poets*. Knopf, 1999.

w.e.f. Academic Session 2024-25

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Chairperson *Approved*
 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonapat, Haryana
 02-02-2024

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.
The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one question from each unit of 10 marks each.

(7x 10 = 70 Marks)

w.e.f. Academic Session 2024-25

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Chairperson Chairperson
Department of English 02-02-2024
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Introduction to Linguistics

Course Code: B-ENG-MIC2- 203

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks :70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Enabling the learner to understand the basic terms and concepts of linguistics.
- CO2. Learning about speech mechanism and organs of speech.
- CO3. Analyzing the problems faced by non-native speakers of English.
- CO4. Learning about words and processes of vocabulary expansion.
- CO5. Knowing the growth of English language.

Unit I

Speech Sounds of English

The Respiratory System, the Phonatory System, the Articulatory System, Air-Stream Mechanisms, Active & Passive Articulators, Classification and Description of Vowel & Consonant Sounds, Place & Manner of Articulation, Stricture, Three-Term Label, Cardinal Vowels, Vowel Diagram, IPA Symbols, Transcription of Monosyllabic, Bi-Syllabic and Tri-Syllabic Words, Consonant Clusters

Unit II

Phonological Concepts

Phoneme, Allophone, Syllable, Syllabic Structure, Minimal Pairs, Phonemic Transcription, Word Stress, Intonation, Rhythm, Pitch, Tone, Problems of Indian Speakers

Unit III

Morphology

Morphemes, Morphs, Allomorphs, Free and Bound Morphemes, Inflection and Derivation, Morphological Analysis of Words

Unit IV

History of English Language

Old English, Middle English, Modern English

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Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Suggested Readings:

1. Balasubramanian, T. *A Textbook of English Phonetics for Indian Students*. New Delhi: Macmillan, 1981.
2. Bansal, R.K. and J. B. Harrison. *Spoken English for India*. Delhi: Sangam Books Ltd; 2nd Revised Edition, 1983.
3. Gimson, A. C. *An Introduction to the Pronunciation of English*. London: Longman and Cambridge ELBS.
4. Sethi, J. and P.V. Dhamija. *A Course in Phonetics and Spoken English*. New Delhi: Prentice Hall, 1997.
5. Syal, P and D.V. Jindal. *An Introduction to Linguistics, Grammar and Semantics*. IInd ed. New Delhi: Prentice Hall, 2007.

Instructions for the External Theory Paper setter/ Examiner

The question paper of 70 marks must be set strictly according to the prescribed syllabus. The examinee shall attempt six questions in all, out of which question number 01 will be compulsory to attempt. The examinee should at least attempt one question from each unit in both the sections.

Section 1: Question number 01 will comprise short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt six questions of 5 marks each.
 (6 x 5 = 30 Marks)

Section 2: This section shall comprise long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 10 marks each.
 (4 x 10 = 40 Marks)

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18/5/24
 Chairperson
 Department of English
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 Khanpur Kalan, Sonapat, Haryana
 Date: 02-02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Business and Communication Skills –II

Course Code: B-ENG-MDC2- 204

Total Credits: 3

L-T-P

2-1-0

Course Outcomes:

External Theory Marks :50

Internal Assessment Marks: 25

Time Allowed: 2hrs

- CO1. Shape the linguistic ability of students in a business environment.
- CO2. Train both written and spoken communication of students.
- CO3. Train students in day-to-day practical application of language.
- CO4. Hone fluency and guide speaking practices of the learners.
- CO5. Train students to face interviews and participate in group discussions.

UNIT I

Negotiating and Presentations

1. Introducing a Topic Effectively
2. Framing Your Argument
3. Linking and Sequencing Ideas
4. Responding to Questions
5. Negotiating with Suppliers/Customers/Strangers
6. Concluding

UNIT II

Social English

7. The First Five minutes
8. Small talk
9. Turn Talking
10. Business conventions

UNIT III

Interviews

11. Group Discussion
12. Preparing for an Interview
13. Types of Interviews – Selection, Appraisal, Grievance, Exit
14. Meetings -Drafting of Notice, Agenda and Resolutions

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C. Phool Singh
Chairperson
Date: 02-02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan**Department of English****CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH****Recommended Readings:**

1. *Communicative Skills for Engineers and Scientists*. Delhi PHI, 2009.
2. Courtland L. Bovee's *Business Communication Today*, 10th edition, Pearson, 2010
3. Sinha, K.K. *Business Communication*, Galgotia Publishing Company, New Delhi, 2012
4. Sharma, R.C. and Krishna Mohan *Business Correspondence and Report Writing*—Tata McGraw-Hill Publishing Company limited, New Delhi, 2014

Instructions for the External Theory Paper setter/ Examiner

The question paper shall be of 50 marks (Unit I and II of 15 marks each and Unit III carrying 20 marks) must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee.

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02-2024
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Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Semester III

Course Nomenclature: Poetry II

Course Code: B-ENG-DSC- 301

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

- CO1. Understanding poetry as a literary genre.
- CO2. Enhancing aesthetic competence through poetry.
- CO3. Understanding use of figurative devices.
- CO4. Developing poetry writing as one of the hobbies.
- CO5. Understanding the terminologies and practical elements of poetry for developing creative skills in writing poetry.

UNIT I

1. Mathew Arnold "Dover Beach"
2. Robert Browning "My Last Duchess", "The Last Ride Together"
3. John Henry Newman "Lead, Kindly Light"

UNIT II

4. Alfred Tennyson "The Lady of Shalott"
5. Hopkins "The Wreck of the Deutschland"
6. Wilfred Owen "Dulce et Decorum est"

UNIT III

7. Robert Frost "The Road not Taken", "Mending Wall"
8. Rabindranath Tagore "Where the Mind is Without Fear", "Leave this Chanting"
9. Hira Bhansode "Woman", "Slave", "O Yashodhara"

UNIT IV

10. Walter de La Mare "The Listeners", "Voices"
11. W. H. Auden "Unknown Citizen", "Shield of Achilles"
12. Dylan Thomas "Do Not Go Gentle into that Good Night", "Fern Hill"

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Khanpur Kalan, Sonapat, Haryana
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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Recommended Readings:

1. Bloom, Harold. *English Romantic Poetry*. Chelsea House, 2004.
2. Wordsworth, Jonathan. *The Penguin Book of Romantic Poetry*. Penguin Books Ltd., 2005.
3. Bristow, Joseph, ed. *The Cambridge Companion to Victorian Poetry*. CUP, 2000.
4. Armstrong, Isobel. *Victorian Poetry: Poetry, Poetics and Politics*. London: Routledge, 1993.
5. Williams, Miller. *Patterns of Poetry: An Encyclopedia of Forms*. Louisiana State University Press, 1986.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7 x 10 = 70 Marks)

w.e.f. Academic Session 2024-25

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Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Prose Writings

Course Code: B-ENG-DSC- 302

Total Credits: 4

External Theory Marks: 70

L-T-P

Internal Assessment Marks: 30

3-1-0

Time Allowed: 3hrs

Course Outcomes:

- CO1. To acquaint the students with four remarkable forms of literature: Letters, Memoirs, Speeches and Diaries.
- CO2. The students think imaginatively and develop creative writing.
- CO3. The students will be able to fit themselves in the real-life situations.
- CO4. To acquaint pupils with the style of the writer.

UNIT I: Letters

1. John Keats Letters to Fanny Browne
2. Bhagat Singh Letters to Kulbir Singh, Kultar Singh and Gandhi Ji
3. Abraham Lincoln Letter to His Son's Teacher

UNIT II: Diaries

4. Anne Frank *The Diary of a Young Girl* (First Ten and Last Ten entries)

UNIT III: Speeches

5. APJ Abdul Kalam "My Vision for India"
6. Swami Vivekanand "Chicago Speech"
7. Nelson Mandela "I am the First Accused"

UNIT IV: Memoirs

8. Indu Bhushan Zutshi *She was Killed because She was an Informant; No Harm will Come to You*
9. Malala Yousafzai *I am Malala* ("Prologue", "As Free as a Bird", "Dreams", "A Day Like Any Other", "Epilogue")

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Date: 13/10/2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Suggested Readings:

1. *Journals & Diaries* by Stacia Kuceyeski.
2. Malone, Bartlett Yancey. *The Diary of Bartlett Yancey Malone*. Ed. William Whately Pierson. CreateSpace Independent Publishing Platform, 2012.
3. *The Diary of a Young Girl: Anne Frank*, Ed. Otto H. Frank and Mirjam Pressler and translated by Susan Massotty. The Definitive Edition.
4. Malala Yousafzai and Patricia McCormick. *I am Malala*. New York: YoungReader's Edition, 2014
5. Cline, Sally and Carole Angier. *The Arvon Book of Life Writing: Writing Biography, Autobiography and Memoir*. Methuen Drama: London, 2010.
6. Barrington, Judith. *Writing the Memoir*. Eighth Mountain Press, 2002.

Instructions for the External Theory Paper setter/ Examiner

**Note: The paper must be strictly according to the prescribed syllabus.
The paper shall be of 70 marks.**

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7 x 10 = 70 Marks)

w.e.f. Academic Session 2024-25

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02-02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: History of English Literature

Course Code: B-ENG-MIC3- 303

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Demonstrating a broad understanding of history of English literature and their role in the social, political and historical context.
- CO2. To make students acquaint with the literary movements that shaped the literature in the form as we see it today.
- CO3. Analyzing and understanding the evolution of various genres in English Literature.
- CO4. To acquaint the students with the representative writers and texts.

UNIT I

Age of Chaucer to Elizabethan Age (1350-1620)

UNIT II

Puritan & Restoration Age (1620-1700)

UNIT III

Neo-Classical Age to Romantic Age (1700-1850)

UNIT IV

Victorian Age & Modern Age (1850-1950)

Note: The course coordinator should focus on major writers; socio-cultural and political background, major movements and trends pertaining to each age.

Recommended Readings:

1. Alexander Michael. *History of English Literature*. Palgrave, 2000.
2. Daiches, David. *History of English Literature*. Allied Pub (21st reprint), 2005.
3. Hudson, William Henry. *A Short History of English Literature*. G. Bell and Sons, 1
4. Long, W. J. *History of English Literature*. Kalyani Pub: New Delhi, 1930.
5. Sanders, Andrew. *History of English Literature*, Reprint 2000.

w.e.f. Academic Session 2024-25

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

(Signature)
Date: 02/05/2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

The examiner will set questions from all the four units with sufficient choice. Students shall attempt seven questions of 10 marks each. The questions may have sub-parts.

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Khanpur Kalan, Sonapat, Haryana
C. Phool Singh
2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Developing Writing Skills

Course Code: B-ENG-MDC3- 304

Total Credits: 3

External Theory Marks: 50

L-T-P

Internal Assessment Marks: 25

2-1-0

Time Allowed: 2hrs

Course Outcomes:

- CO1. Prepare student with writing skills needed in academic and the professional world.
- CO2. Give them the opportunity to learn techniques, forms and traditions of various types of writing.
- CO3. Learn drafting and proof reading.
- CO 4. Learners shall develop writing skill competence enhancing their employability.

Unit 1

- 1. Introduction to writing:
- 2. Introduction and importance of writing skills;
- 3. Types of writing: Descriptive, Expository, Narrative, Argumentative and Analytic

Unit II

- 4. Writing & Discourse Analysis:
- 5. Analysis of Various Texts (literary and non-literacy)
- 6. Paragraph development: basic structure of Paragraph, Paragraph unity etc.
- 7. Use of Figurative language.

Unit III

- 8. Creative & Professional Writing:
- 9. Newsletter & Magazines Writing
- 10. Writing Articles, Features and Editorials:
- 11. Web – Content Writing

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Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana
Date: 02-02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Recommended Readings:

1. Goatly, Andrew. *An Introductory Course book; Critical Reading and Writing*, London Routledge, 2000.
2. McLoughlin, Linda. *The Language of Magazines*. London and New York Routledge, 2000. (Reprint 2006)
3. Reah, Danuta. *The Language of Newspapers*. London and New York Routledge, 2004.
4. Goddard, Angela. *The Language of Advertising*. London and New York Routledge, 2005.
5. Booher, Dianna. *E-Writing; 21st Century Tools for Effective Communication*. New Delhi McMillan 2007.
6. Boardman, Mark. *The Language of Website* London and New York: Routledge, 2005
7. Mills, Sara. *Discourse*. London and New York: Routledge 1997.
8. Salkie, Raphael. *Text and Discourse Analysis*. London and New York: Routledge, 1995.
9. Butcher, Judith. *Copy Editing Cambridge*: CUP (Third Edition).
10. Gibaldi, Joseph. *MLA Handbook for writers of research papers*. New Delhi: EWP 2000 (6th Edition).
11. Baran Stanley, J. and Dennis K. Davis. *Mass Communication Theory: Foundations, Ferment, and future*. Thomson Press, 2007 (Indian reprint).
12. Child, Peter. *Texts: Contemporary Cultural Texts and Critical Approaches*. Edinburgh: Edinburgh UP, 2006.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 50 marks.

The question paper shall be of 50 marks (Unit I and II of 15 marks each and Unit III carrying 20 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts.

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Khanpur Kalan, Sonapat, Haryana
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Chairperson
Phool Singh

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Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Semester IV

Course Nomenclature: Drama II

Course Code: B-ENG-DSC- 401

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Acquainting with the drama of Modern Age through select texts.
- CO2. Creating literary sensibility in students.
- CO3. Familiarizing with artistic and innovative use of language by writers of the Modern Europe.
- CO4. Enhancing literary and linguistic competence.

UNIT I

G.B. Shaw

Saint Joan

UNIT II

Hènik Ibsen

A Doll's House

UNIT III

Samuel Beckett

Waiting for Godot

UNIT IV

Bertolt Brecht

Mother Courage and Her Children

Recommended Readings:

1. Beckett, Samuel. *Complete Dramatic Works*. London, 1986.
2. Benjamin, Walter. *Understanding Brecht*. New Left, 1977.
3. Bentley, Eric. *What is Theatre?* Boston: Beacon Press, 1956.
4. Boyesen, Hjalmar. *A Commentary on the Works of Henrik Ibsen*. New York: Russell & Russell, 1973.
5. Cabe, MCarthy. *Joseph George Bernard Shaw: A Critical Study*. Kennerly, 1914.
6. Cohn, Ruby. Ed. *Casebook Series: Beckett: Waiting for Godot*. Macmillan, 1987.
7. Minney, R.J. *Reflections on George Bernard Shaw*. Englewood Cliff N.J.: Prentice Hall, 1969.
8. Russel, Bertrand. Ed. *Beckett and Harold Pinter: Modern British Dramatists*. OUP, 2003.
9. Unwin, Stephen. *Ibsen's A Doll's House*. London: Nick Hern Books, 1997.

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Department of English
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Date: 02-02-2024
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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Novel-I (Defoe to Goldsmith)

Course Code: B-ENG-DSC- 402

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Understanding Novel as a literary genre.
- CO2. Understanding the formal advent and development of novel writing.
- CO3. Enhancing reading skills and understanding representing ideas and experiences critically and creatively.
- CO4. Novel as a potent tool for expression.

UNIT I

Samuel Richardson

Pamela

UNIT II

Daniel Defoe

Robinson Crusoe

UNIT III

Henry Fielding

Joseph Andrews

UNIT IV

Oliver Goldsmith

The Vicar of Wakefield

Recommended Readings:

1. Backscheider, Paula R & Catherine Ingrassia, ed. *A Companion to the Eighteenth Century English Novel and Culture*. West Sussex: Blackwell Publishing Ltd, 2009.
2. Wagner, Tamara S. *Longing: Narratives of Nostalgia in the British Novel, 1740-1890*. Cranbury: Rosemont Publishing and Printing Corp., 2004.
3. Cecil, David. *Early Victorian Novelists: Essays in Revaluation*. Bobbs Merrill, 1935.
4. David, Deirdre. *The Cambridge Companion to the British Novel*. Cambridge: CUP, 2001.
5. Archibald, Diana C. *Domesticity, Imperialism and Emigration in the Victorian Novel*. Columbia: University of Missouri Press, 2002.

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Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

G. Phogat
Chairperson
Date: 02-02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7 x 10 = 70 Marks)

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C. Phool Singh
Chairperson
Chairperson
Date: 02-02-2024
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
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- 1370r

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Department of English

CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Background to English Literature

Course Code: B-ENG-DSC- 403

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Understanding the basic belief systems that the Western World that its literature rests on.
- CO2. Enhancing the knowledge of common myths and beliefs that recur in British Literature.
- CO3. Getting an insight into the literary terms and understanding nuances of literary aesthetics.
- CO4. Familiarization with artistic and innovative use of language.

UNIT I

Greeko-Roman Myths:

Heracles and the 12 Labors, Prometheus and the Theft of Fire, Narcissus and Echo, Sisyphus' Punishment, Perseus' Slaying of Medusa, Orpheus' Attempted Rescue of Eurydice, Theseus and the Labyrinth, Icarus' Flight, Oedipus and the Oracle's Prophecy, The Trojan Horse, Ulysses, Leda & Zeus, Hercules, Myth of Jupiter and the Bee, Story of Apollo and Cassandra, Legend of Lucretia

UNIT II

Stories from the Bible:

Creation and the fall (Genesis 1-3) Noah and the flood (Genesis 6.9-9.17) The Birth of Jesus (Luke 2.1-7 and Matthew 2.1-12) Noah's Ark (Genesis 6.9-9.17) The Good Samaritan (Luke 10.25-37) The Crucifixion and Resurrection of Jesus (Mark 15.20-41; Matthew 28.1-21) The Exodus (Exodus 14.1-31) The Ten Commandments (Deuteronomy 5.1-22) The Sermon on the Mount (Matthew 5.1-7.29) Isaiah's vision of God (Isaiah 6.1-8) Jeremiah and the potter's house (Jeremiah 18) Entering the Promised Land (Joshua 3)

Legends:

Faust, King Arthur, Knights of the Roundtable, Holy Grail, Fisher King

UNIT III

Literary Terms:

Allegory, Alliteration, Allusion, Anaphora, Aphorism, Archetype, Chiasmus, Colloquialism, Dramatic irony, Euphemism, Exposition, Flashback, Hyperbole, Imagery, Irony, Juxtaposition, Litotes, Malapropism, Metaphor, Metonymy, Motif, Onomatopoeia, Oxymoron, Paradox, Personification, Point of view, Repetition, Satire, Simile, Soliloquy, Symbolism, Synecdoche, Tautology.

UNIT IV

References from the Classical Texts: Oedipus, Iliad, Odyssey

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 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
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Chairperson
 Date: 02-02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Recommended Readings:

1. Alexander Michael *History of English Literature*. Palgrave, 2000.
2. Daiches, David. *History of English Literature*. Allied Pub (21- reprint), 2005.
3. Hudson, William Henry. *A Short History of English Literature*. G. Bell and sons, 1918.
4. Long, W. J. *History of English Literature*. Kalyani Pub: New Delhi, 1930.
5. Sanders, Andrew. *History of English Literature*, Reprint 2000.


Instructions for the External Theory Paper setter/ Examiner

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 4 marks each.
(5 x 4 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering from all the four units out of which the students shall attempt five questions of 10 marks each.
(5 x 10 = 50 Marks)

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: World Literature

Course Code: B-ENG-DSC- 404

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Students will have knowledge of world literary traditions and the continuing influence of those traditions on world cultures, including an awareness of emergent global literary trends.
- CO2. Students will develop a comparative understanding of national literature and literary traditions within the context of world literature.
- CO3. Gains understanding of unique aspects of diverged literature of the world.
- CO4. Students will discover the richness of the cultures reflected in their writings and appreciate the essence of knowing the works of people from other cultures and backgrounds.
- CO5. Students will comprehend the universality of human emotions, travails, joys and pain no matter what part of the world one belongs to.

Unit 1

Chinua Achebe

Arrow of God

Unit 2

Arvind Adiga

The White Tiger

Unit 3

JM Coetzee

Disgrace

Unit 4

Tolstoy

Anna Karenina

Suggested Readings:

1. Basu, Anuradha. *Postcolonial Theory of Interdependence and Reflections in the Novels of Chinua Achebe*. Avenel Press, 2018.
2. Ezenwa-Ohaeto. (ed). *Chinua Achebe: A Biography*. Indiana, 1997.
3. Gupta, Ashish. *A Critical Inquisition of the Novels of Aravind Adiga*. Dattsons, Bradley, Catherine. Causes and Consequences of the End of Apartheid. Massachusetts: Raintree Steck- Vaughn, 1996.
4. Hayward Jean. *South Africa since 1948*. New York: Bookwright Press, 1989.

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5. Rissik, Dee. Culture Shock! South Africa: A Survival Guide to Customs and Etiquette. New York: Marshall Cavendish, 2011.
6. Kellman, Steven G. "J.M. Coetzee and Samuel Beckett: The Translingual link." JSTOR: Comparative Literary studies. 33.2(1996): 161-172.
7. Rissik, Dee. Culture Shock! South Africa: A Survival Guide to Customs and Etiquette. New York: Marshall Cavendish, 2011.
8. Sharma, R.L. "J.M Coetzee's Disgrace: A Post-apartheid Perspective." Dialogue 1.2(2005): 67-68.
9. Welsh, Frank. A History of South Africa. London: HarperCollins, 2000.
10. Wright, L.S. David Lurie's Learning and the meaning of J.M. Coetzee's *Disgrace*. In: J.M. Coetzee's Austerities, Ashgate, Farnham, Surrey, England, 2010. pp.147-162.
11. Mandela, Nelson. Long Walk to Freedom. New York: Little Brown, 1994.
12. Louw, P. Eric. The Rise, Fall and Legacy of Apartheid. Praeger, 2004.
13. Hayward Jean. South Africa Since 1948. New York: Bookwright Press, 1989.
14. Guma, Alex La. Apartheid: A Collection of Writing on South African Racism. London: Laurence & Wishart, 1972.
15. Davenport, T.R.H. South Africa: A Modern History. Mac Millan, 1977.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.


The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

SEMESTER- V

Course Nomenclature: Drama III (Shaw - Brecht)

Course Code: B-ENG-DSC- 501

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1. Acquainting with the drama of Modern Age through select texts
 CO2. Creating literary sensibility in students.
 CO3. Familiarizing with artistic and innovative use of language by writers of the Modern Europe.
 CO4. Enhancing literary and linguistic competence

UNIT I

G.B. Shaw

Saint Joan

UNIT II

Henrik Ibsen

A Doll's House

UNIT III

Samuel Beckett

Waiting for Godot

UNIT IV

Bertolt Brecht

Mother Courage and Her Children

Recommended Readings:

1. Beckett, Samuel. *Complete Dramatic Works*. London, 1986.
2. Benjamin, Walter. *Understanding Brecht*. New Left, 1977.
3. Bentley, Eric. *What is Theatre?* Boston: Beacon Press, 1956.
4. Boyesen, Hjalmar. *A Commentary on the Works of Henrik Ibsen*. New York: Russell & Russell, 1973.
5. Cabe, MCarthy. *Joseph George Bernard Shaw: A Critical Study*. Kennerly, 1914.
6. Cohn, Ruby. Ed. *Casebook Series: Beckett: Waiting for Godot*. Macmillan, 1987.
7. Minney, R.J. *Reflections on George Bernard Shaw*. Englewood Cliff N.J.: Prentice Hall, 1969.
8. Russel, Bertrand. Ed. *Beckett and Harold Pinter: Modern British Dramatists*. OUP, 2003.
9. Unwin, Stephen. *Ibsen's A Doll's House*. London: Nick Hern Books, 1997.

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Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7 x 10 = 70 Marks)

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Novel II

Course Code: B-ENG-DSC- 502

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Advancing the knowledge of novel writing
- CO2. Identifying and discussing theoretical discourses concerning class, sexuality and gender as these illuminate a wide range of literature
- CO3. Enhancing reading skills and understanding representing ideas and experiences critically and creatively
- CO4. Learning to use Novel as a potent tool for expression

UNIT I

Walter Scott *Waverley*

UNIT II

Jane Austen *Pride and Prejudice*

UNIT III

Charles Dickens *Oliver Twist*

UNIT IV

Thomas Hardy *Tess of D'Urbervilles*

Recommended Readings:

1. Cox, R.G. *Thomas Hardy: The Critical Heritage*, London: Routledge, 1970.
2. Jordan, John O. Ed. *The Cambridge Companion to Charles Dickens*. Santa Cruz: University of California, 2001.
3. Scott, Walter. *Ivanhoe*. New York: New American Library, 1983.
4. Rogers, Pat (ed.) *The Cambridge Edition of the Works of Jane Austen: Pride and Prejudice*. Cambridge University Press, 2006.
5. Sage, Lorna. *Twelve Twentieth Century Women Writers*. London: Harper Collins, 2007.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each. (7x 10 = 70 Marks)

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Course Nomenclature: Indian Literature

Course Code: B-ENG-DSC- 503

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Introducing students to major movements and figures of Indian literature through the study of selected texts.
- CO2. Instilling values and human concern in students through exposure to literary texts.
- CO3. Understanding distinctive features of Indian literature through texts and contexts of prose and poetry.
- CO4. Advancing the understanding with regards to the social structure that Indian society stands upon.

UNIT I

Gurdial Singh *The Last Flicker (Marhi da Deeva)*

UNIT II

Girish Karnad *Nagamandalam*

UNIT III

Nissim Ezekiel "The Patriot" "Night of the Scorpion", "Goodbye Party for Ms. Pushpa T."
 Namdeo Dhasal "Speculations on a Shirt", "Poetry Notebook"

UNIT IV

Rahi Masoom Raza *Adha Gaon*

Recommended Readings:

1. Drewett, M.E. *The Modern Indian Novel in English: A Comparative Approach*. Brussels, 1966.
2. Iyengar, K.R. Srinivasa. *Indian Writing in English*. 4th Ed. New Delhi, 1984.
3. Mukherjee, M. *The Twice-Born Fiction: Themes and Techniques of the Indian Novel in English*. New Delhi, 2001 edition.
4. Mund, S.K. *The Indian Novel in English: Its Birth and Development*. New Delhi and Bhubaneswar, 1997.
5. Walsh, W. *Indian Literature in English*. London: Longman, 1990.

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Instructions for the External Theory Paper setter/ Examiner

**Note: The paper must be strictly according to the prescribed syllabus.
The paper shall be of 70 marks.**

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: World Classics

Course Code: B-ENG-DSC- 504

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Analyzing literary texts in English or English translation in terms of their main stylistic and thematic features.
- CO2. Discussing the literary, historical, social and cultural backgrounds of these texts.
- CO3. Identifying some of the main theoretical and methodological issues involved in reading World Literature.
- CO4. Communicating findings clearly and engagingly.

UNIT I

Homer *Iliad* (Book I)

UNIT II

Sophocles *Oedipus Rex*

UNIT III

Vyasa *Mahabharata* (Sabha Parva)

UNIT IV

Kalidasa *Meghdoot*

Recommended Readings:

- i) Beer, Josh. *Sophocles and the Tragedy of Athenian Democracy*. Greenwood Publishing, 2004
- ii) Bhasin, R.V. *Mahabharata*. National Publications: India, 2007.
- iii) Barbara, Graziosi. *Inventing Homer: The Early Reception of Epic*. Cambridge University Press, 2002.
- iv) Chaitanya, Krishna. *The Mahabharata, A Literary Study*. New Delhi: Clarion Books, 1985.
- v) Dorothy Matilda Figueira. *Translating the Orient: the Reception of Śākuntala in Nineteenth Century Europe*, Suny Press, 1991.
- vi) Gupta, S.P. and Ramachandran, K.S. (ed.). *Mahabharata: Myth and Reality*. New Delhi: Agam Prakashan, 1976.
- vii) Jyotirmayananda, Swami. *Mysticism of the Mahabharata*. Miami: Yoga Research Foundation, 1993.
- ix) Murray, Gilbert. *The Rise of the Greek Epic*. Harvard Univ. Press, 1911.
- xi) Sophocles. *Sophocles I: Oedipus the King, Oedipus at Colonus, Antigone*. 2nd ed. Grene, David and Lattimore, Richard, eds. Chicago: University of Chicago, 1991.

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Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH
SEMESTER VI

Course Nomenclature: Novel – III
Course Code: B-ENG-DSC- 601

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1. Advancement in the study of Novel.
- CO2. To acquaint the students with the major novelists of the Modern Age in English Literature through study of the fiction representative of the age and of the novelist.
- CO3. To develop in the student the ability to interpret, analyze and evaluate works of fiction in the perspective of modern literary history.
- CO4. To analyze literature as a tool of expression.

UNIT I

George Orwell *Animal Farm*

UNIT II

Ernest Hemingway *Old Man and the Sea*

UNIT III

Graham Greene *The Power and the Glory*

UNIT IV

Saul Bellow *Seize the Day*

Recommended Readings:

- 1) Valenti, Patricia Dunlavy. *Understanding The Old Man and the Sea: A Student Casebook to Issues, Sources and Historical Documents*. Westport: Greenwood Publishing Group, 2002
- 2) William Raymonds. *Orwell*. London: Fontana Press, 1991.
- 3) Bloom Harold. ed. *George Orwell's Animal Farm*. New York: Chelsea House Publishers, 1999.
- 4) O' Niell, Terry. *Readings on Animal Farm*. San Diego, CA: Greenhaven Press, 1998.

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Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Literary Theory & Criticism

Course Code: B-ENG-DSC- 602

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1. Familiarizing students with the intellectual background pertinent to the growth of Modern literary and critical theory.
- CO2. Developing in-depth knowledge of foundational critical texts from both, the orient and the occident.
- CO3. Developing understanding the major terms and concepts used in criticism of literature.
- CO4. Cultivating critical thinking through comprehensive discussion and analyses of the texts

UNIT I

Plato *The Republic* Book-X, Cratylus, Phaedrus

UNIT II

Longinus *On the Sublime*

UNIT III

Bharata *Natyashastra* (Ch. 1,6,7)

UNIT IV

Bhamaha *Kavyalankara* (Chp.1, 5)

Recommended Readings:

- i) Ambuel, David. *Image and Paradigm in Plato's Sophist*. Parmenides Publishing, 2006.
- ii) Beardsley, Monroe C. *Aesthetics from Classical Greece to the Present: A Short History*. Alabama: Univ. of Alabama Press, 1932.
- iii) Corlett, J. Angelo. *Interpreting Plato's Dialogues*. Parmenides Publishing, 2005.
- iv) De, Sushil Kumar. *Some Problems of Sanskrit Poetics*. Calcutta: Firma K.L. Mukhopadhyay, 1959.
- v) Chākyaṛ, MāniMādhava. *Nātyakalpadrumam*. New Delhi: Sangeet Natak Academi, 1975.
- vi) Ghosh, Manomohan. *Natyasastra*, 2002.
- vii) *Bharata: The Natyasastra* Kapila Vatsyayan. New Delhi: Sahitya Akademi, 1996.
- viii) Harland, Richard. *Literary Theory from Plato to Barthes: An Introductory History*. Macmillian Press, 1999.
- ix) Roberts, William Rhys. *Longinus on the Sublime*, 1899.
- x) Shastri, Gaurinath. *A Concise History of Classical Sanskrit Literature*. Delhi: Motilal Banarsidass, 1998.

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Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7 x 10 = 70 Marks)

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Literature and Films

Course Code: B-ENG-DSC- 603

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1: Learning to read films as art form, and as a visual mode of storytelling.
 CO2: Familiarizing with the similarities and differences that occur due to change in the medium.
 CO3: Understanding the concepts of representation and translation as they transcend the medium.
 CO4: Learning to analyze films as texts and to understand the potential of literature beyond spatio- temporal bounds.
 CO5: Students will be acquainted with different traditions of world cinema.
 CO6: Understand the relation between literature and films.
 CO7: Gaining knowledge on critical issues of adaptation studies.

UNIT I

Jill Nelmes

An Introduction to Film Studies

UNIT II

Franz Kafka

The Trial

Suggested Viewing:

Konstantin Seliverstov

The Trial (2014)

UNIT III

William Shakespeare

Hamlet

Suggested Viewing: Kenneth Branagh

Hamlet (1996)

UNIT IV

R.K. Narayan

The Guide

Suggested Viewing: Vijay Anand

The Guide(1965)

Suggested Readings:

1. Bluestone, George. *Novels into Films*. John Hopkins University, 1968.
2. Bordwell, David and Kristen Thompson. *Film Art: An Introduction*. McGraw- Hill Education, 1979.
3. Bordwell, David and Kristen Thompson. *Film History: An Introduction*. McGraw- Hill Education, 1994.
4. Elliott, Kamilla. *Rethinking Novel/Film Debate*. CUP, 2003.

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5. Hutcheon, Linda. *A Theory of Adaptation*. Routledge, 2006.
6. Villarejo, Amy. *Film Studies: The Basics*. Routledge, 2021.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

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- viii) Naik, M.K. *A History of Indian Literature in English*. New Delhi, 1982.
ix) Prasad, G.J.V. *Continuities in Indian English Poetry: Nation, Language, Form*. New Delhi, 1999.
x) Walsh, W. *Indian Literature in English*. London: Longman, 1990.
xi) Nayar Rana, *Tales from Tomorrow*, Sahitya Akademi

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Question number 01 will be Short-Answer type questions. The examiner will set questions from all the four units with sufficient choice. The students shall attempt four questions of 2.5 marks each.

Question number 02 to 09 will be set from all four units (two questions from each unit). The students shall attempt six questions selecting at least one from each unit of 10 marks each.

(7x 10 = 70 Marks)

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

SEMESTER VII

Course Nomenclature: British Drama

Course Code: B-ENG-DSC- 701

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1: Students will be acquainted with the major dramatist in English through a study of representative plays.
- CO2: Student will be able to interpret, analyse and evaluate plays in the perspective of history and theory as well as literary aspects of British Drama.
- CO3: Students will learn the structure of a full-length play, the dramatic devices and their effect on the audience.
- CO4: The rhetorical aspect of Drama will help students understand how to represent their experience and ideas critically, creatively, and persuasively.
- CO5: Students will learn historical contexts, psycho-social aspects and discern the various cultural and moral values associated with the texts.
- CO6: Students will learn to raise significant questions/issues, reach well-reasoned conclusions and accept alternative systems of thought.
- CO7: Students comprehend human actions and their consequences in life.

Unit I

Shakespeare

Macbeth

Unit II

Eliot

Murder in the Cathedral

Unit III

Arnold Wesker

Roots

Unit IV

Sean O'Casey

Juno and the Paycock

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Suggested Readings:

1. Harbage, Alfred. *Shakespeare. The Tragedies. A Collection of Critical Essays*, New Delhi: Pearson, 2005.
2. Bradley, A.C. *Shakespearean Tragedy: Lectures on Hamlet, Othello, King Lear, Macbeth*, New Delhi: Dodo Press, 2009.
3. Speaight, Robert. "With Becket in Murder in Cathedral", *T.S. Eliot - The Man and His Work*. Tate, Allen (ed). New York: Delta, 1966.
4. Browne, E. Martin. *The Making of T.S. Eliot Plays*. London: Cambridge University Press, 1969.
5. Rothberg, Abraham, 1967. East End, West End: Arnold Wesker. *JSTOR*. 52 (4), 368- 378.
6. Bunnell, W.S. *Sean O' Casey's Juno and the Paycock*. Trans-Atlantic Publications, 1993.

Instructions for the External Theory Paper setter/ Examiner

Instructions to the Paper Setter:

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
 (4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
 (5x 10 = 50 Marks)

w.e.f. Academic Session 2024-25

5 (391)

Chairperson
 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonapat, Haryana
 Date: 02-02-2024
(Signature)

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: British Poetry

Course Code: B-ENG-DSC- 702

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will understand major trajectories/works of British poetry.
 CO2: Students will be able to critically interrogate canonical texts within the broader spectrum of literary studies.
 CO3: Students will understand and analyse the various elements of poetry, rhythm, meter, diction, tone, form, imagery, figures of speech, symbolism, theme, etc.
 CO4: Students will understand and appreciate poetry as a literary art form and enjoy its musical aspect.
 CO5: Students will identify a variety of forms and genres of poetry from diverse cultures and historic periods.

Unit I

Milton

Paradise Lost Book 1

Unit II

Pope

The Rape of the Lock

Unit III

Coleridge

The Rhyme of Ancient Mariner

Unit IV

TS Eliot

The Waste Land

Suggested Readings:

1. Blamires, Harry. *Milton's Creations. A Guide through Paradise Lost.* London: Matheun, 1971.
Empson, William. *Milton's God.* Cambridge: Cambridge University Press, 1981.
2. Beardsley, Aubrey. *The Rape of the Lock. A Heroic Comical Poem in five Cantos.*
Courier Dover Publications, 1968.
3. Mack, Maynard. *Pope: A Life.* New Haven, 1985:
4. Barth, J. Robert. *Coleridge and Christian Doctrine.* Cambridge: Harvard, 1969.
5. Bate, Walter Jackson. *Coleridge.* The Macmillan Company, 1968.

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Chairperson
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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

6. Boulger, J.D. *Twentieth Century Interpretations of The Rime of the Ancient Mariner*. Englewood Cliffs NJ: PrenticeHall, 1969.
7. Gill, Stephen. *Selected Poems of William Wordsworth*. Penguin Classics, 2005.
8. Scofield, Dr. Martin. *T.S. Eliot: The Poems*. Cambridge University Press, 1988.

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5x 10 = 50 Marks)

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Bhagat Phool Singh Mahila Vishwavidyalaya
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12-02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: British Novel
Course Code: B-ENG-DSC- 703

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will be acquainted with major trajectories of British Novel.
- CO2: Students will understand, critically engage with and interrogate novel as a literary genre.
- CO3: Students will be able to discuss novel as a historical, cultural and ideological narrative.
- CO4: Students will be familiar with the major novelists in English Literature through study of the novels representative of the age and of the novelist.
- CO5: Students will develop the ability to interpret, analyse and evaluate works of fiction in the perspective of literary history and theory.

Unit I

Dickens

Great Expectations

Unit II

Lawrence

The Rainbow

Unit III

Orwell

Nineteen Eighty-Four

Unit IV

Muriel Spark

Drivers's Seat

Suggested Readings:

1. Douglas-Fairhurst, Robert. *Becoming Dickens: The Invention of a Novelist*. Harvard University Press, 2011
2. Arai, Hidenaga. *D.H. Lawrence's Later Novels and Critical Theory*. BRILL, 2014.
3. Bowker, Gordon. *George Orwell*. London: Little Brown, 2004.
4. Bailey, James. *Muriel Spark's Early Fiction: Literary Subversion and Experiments with Form*, Edinburgh University Press, 2021.

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.

w.e.f. Academic Session 2024-25

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 Khanpur Kalan, Sonapat, Haryana

G. Prasad
 02-02-2024

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

III. Question no. 1 is compulsory. The students shall attempt six questions in all.

IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.

(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.

(5 x 10 = 50 Marks)

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Department of English
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Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: British Prose

Course Code: B-ENG-DSC- 704

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1: Explain the prose in respective age.
 CO2: Determining the prose style of the writers which will enhance the writing skills of the students.
 CO3: Acquaint the students with the variety of prose writers.
 CO4: Analyse British prose as an expression of individual or communal values within social, political and cultural perspectives of different periods in British literature

UNIT 1

John Milton

Areopagitica

UNIT II

J.S. Mill

Utilitarianism

UNIT III

Bertrand Russell

Why Men Fight

UNIT IV

George Orwell

“Notes on Nationalism”, “The Prevention of Literature” and “Reflections on Gandhi”

Suggested Readings:

1. Lewalski, Barbara K. *The Life of John Milton*. Blackwell Publishing, 2003.
2. Empson, William. *Milton's God*. Cambridge: Cambridge University Press, 1981.
3. Lyon, David. (ed). *Mill's Utilitarianism: Critical Essays*. Rowman & Littlefield, 1998.
4. Russell, Bertrand. *Why Men Fight*. Routledge, 2010.
5. Meyers, Jeffrey. (ed). *George Orwell: The Critical Heritage*. London: Routledge, 1997

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Chairperson
 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
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 Punjab

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Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5 x 10 = 50 Marks)

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= 1397 -

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Jharkhand
A. Phool Singh
Chairperson
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Jharkhand
2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Language and Linguistics

Course Code: B-ENG-DSC- 705

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1: Understand language structures and functioning of the language.
 CO2: Classify ancient and traditional perspectives of language use in the society.
 CO3: Understand the application of linguistics on other related disciplines.
 CO4: Grasp the complexity of language as a communication system shaped by cognitive, biological, cultural, and social factors.
 CO5: Demonstrate understanding of processes of language change and variation, the role of language in reflecting and constructing social identities, and the distinctive properties of human language.

Section-A

Unit – I

Language – Its nature and functions; Influence of language philosophers; Ferdinand de Saussure's concepts: langue and parole, syntagmatic and paradigmatic relationships, synchronic and diachronic; Bloomfield's contribution.

Unit – II

Study of Language – Historical, comparative, descriptive approaches and the growth of modern linguistics. Branches of linguistics; Varieties of language.

Section-B

Unit –III

Levels of Linguistic Analysis (Sound & Lexis) – Organs of speech, description and classification of speech sounds, IPA system, phonemes, allophones, minimal pairs, transcription; Morphology and word formation.

Unit- IV

Levels of Linguistic Analysis (Syntax & Semantics) – Grammar, Development of theories of grammar – traditional, structural, phrase structure rules, transformational generative Grammar; Introduction to Semantics.

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Chairperson
 Department of English,
 Bhagat Phool Singh Mahila Vidyapeeth,
 Khanpur Kalan, Sonapat, Haryana

(Signature)
 Date: 02-09-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Suggested Readings:

1. Balasubramanian, T. A Textbook of English Phonetics for Indian Students. Macmillan, 2007.
2. Culler, Jonathan. Saussure. London: Fontana Modern Classics, 1978.
3. Crystal, D. Linguistics. Harmondsworth: Penguin, 1980.
4. Fromkin, Rodman and H yams. An Introduction to Language. Seventh Edition. Thomson/Heinele, 2002.
5. Krishnaswamy and Verma. Modern Linguistics. New Del hi: O.U.P. 1988.
6. Lyons. J. Language and linguistics. Cambridge: C.U.P., 1982.
7. Palmer, F. Grammar. Cambridge: C.U.P., 1983.
8. Syal, Pushpinder and D.V. Jindal. Introduction io Linguistics, Grammar and Semantics. Revised Edition, New Delhi: Prentice-Hall of India, 2007.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

The paper should be strictly set according to the prescribed syllabus.

- I. Question No. 1 will be compulsory. It will be designed to test the student's close knowledge of the prescribed texts/topics. Students shall have to attempt four out of eight short-notes, to be answered in 250 words each. The notes shall be made on context/terms/concepts and/or text-based. (4x5=20Marks)
- II. In case of Question No. 2 to 9, two questions from each of the four prescribed units shall be set. Questions shall be so designed as to ensure that all the prescribed topics are studied. Questions may be split into sub-parts and may involve exercises/analysis type questions. The students shall have to attempt five questions selecting at least one from each unit. (5x10=50Marks)

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Chairperson
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Khanpur Kalan, Sonapat, Haryana
202-02-2024
C. Phogat

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Contemporary Literary Theory

Course Code: B-ENG-MIC7- 706

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1: Develop students' knowledge of the terms used in the theories and criticism of literature.
 CO2: Demonstrate in-depth knowledge of foundational critical texts.
 CO3: Employ critical methodologies appropriate to the practice of critical disciplines.
 CO4: Locate the changing trends in Literary theory and criticism.

Unit- I

New Criticism and Russian Formalism

Cleanth Brooks

“Irony as a Principle of Structure”

Viktor Shklovsky

“Art as Technique”

Unit-II

Structuralism and Post-Structuralism

Roland Barthes

“The Structuralist Activity”

Jacques Derrida

“Structure, Sign and Play in the Discourse of Human Sciences”

Unit-III

Psychoanalytic Criticism

Sigmund Freud

“Creative Writing and Day Dreaming”

Jacques Lacan

“The Symbolic Order”

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Chairperson
 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonipat, Haryana
 Date: 02/02/2024
G. Phogat

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Unit-IV

Marxist Literary Criticism

Raymond Williams "Base and Superstructure" and "Dominant, Residual and Emergent"

Louis Althusser "Ideology and Ideological State Apparatuses"

Suggested Readings:

1. Barry, Peter. *Beginning Theory. An Introduction to literary and Cultural Theory.* Manchester, UP, 1995.
2. Bowie, Malcolm. *Psychoanalysis and the Future of Theory.* Cambridge, MA: B. Blackwell, 1994.
3. Derrida, Jacques. *Speech and Phenomena and Other Essays on Husserl's Theory of Signs.* Trans. David B. Allison. Evanston: Northwestern UP, 1973.
4. ——— *Positions.* Trans. Alan Bass. Chicago: U of Chicago P, 1981.
5. Frankland, Graham. *Freud's Literary Culture.* New York: Cambridge University Press, 2000.
6. Freud, Sigmund. Trans. Alix Strachey. "The 'Uncanny.'" *The Norton Anthology of Theory and Criticism.* Ed. Vincent B. Leitch. New York: W.W. Norton & Company, 2001.
7. Hertz, Neil. "Freud and the Sandman." *The End of the Line. Essays on Psychoanalysis and the Sublime.* Aurora, CO: The Davies Group, Publishers, 2009.
8. Klein, Anne Carolyn (1995). *Meeting the Great Bliss Queen. Buddhists, Feminists, and the Art of the Self.* Boston: Beacon, 1995.
9. Lemon, Lee T., and Marion J. Reis. *Russian Formalist Criticism: Four Essays* Lincoln: U of Nebraska P, 1965.
10. Surdulescu, Radu. "Form, Structure and Structurality in Critical Theory." University of Bucharest Press, 2000.

w.e.f. Academic Session 2024-25

1401

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Chairperson
Date: 02-02-2024

Prasanna

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5x 10 = 50 Marks)

w.e.f. Academic Session 2024-25

1402

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana
02-02-2024
C. Phogat

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Semester VIII (Honours)
Course Nomenclature: Folklore and Mythology
Course Code: B-ENG-DSC- 801

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will understand the importance of mythology as the background of literature.
 CO2: Recognize the essentially oral nature of myths and folklore and examine how the context of oral performance shapes the meaning of a story.
 CO3: Analyze how a diverse range of specific myths function within the cultures that produce them.
 CO4: Analyze mythology and folklore using a variety of scholarly approaches.

UNIT I

Roland Barthes *Mythologies*
 Frog *Myth*

UNIT II

A. K. Ramanujan "Who needs folklore?"
 Pandit Lakhmi Chand *Meera Bai*

UNIT III

Samhita Arni *Sita's Ramayana*
 Prem Chaudhary "An Alternative to the 'Sati' Model: Perceptions of a
 Social Reality in Folklore"

UNIT IV

Devdutt Patnaik *Indian Mythology: Tales, Symbols, and Rituals from the
 Heart of the Subcontinent (Chapter1)*

Suggested Reading:

1. Edmunds, Lowell. A Folklore Casebook. New York & London: Garland Publishing Co., 1983.
2. Phillips, Melanie Anne. Archetypes: Characters, Narrative and Mind. New York: Story mind Press, 2014. Print.
3. Jung, C. G. Gutsav. Man, and His Symbols (Arkana). London: Aldus Books Ltd, 1964.
4. Memories, Dreams, Reflections. Trans. Richard Winston. New York: Random House, Inc, 1989.
5. Four Archetypes. Trans. R.H.C. Hull. London & New York: Routledge, 1972.
6. John G. Jackson. *Pagan Origins of the Christ Myth*. Echo Point Books, 2015.

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 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonapat, Haryana

[Signature]
 Chairperson
 02-2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note:

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(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5 x 10 = 50 Marks)

w.e.f. Academic Session 2024-25

1404

Bhagat
Chairperson
Date: 02-02-2024
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: South Asian Literature

Course Code: B-ENG-DSC- 802

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will become familiar with literary works of writers from the Indian subcontinent and its surrounding areas.
CO2: Understand and interpret South Asian literary works.
CO3: Evaluate the relationship between texts and their cultural and historical contexts.
CO4: Critically evaluate translations of South Asian literature.
CO5: Critically read and formulate an interpretation of the issues and arguments presented in the literature.

Unit 1

Srilal Shukla

Raag Darbari

Unit 2

Tahmima Anam

The Good Muslim

Unit 3

Michael Ondaatje

Running in the Family

Unit 4

Mohsin Hamid

Exit West

Suggested Readings:

1. Upendra Nath Sharma (23 September 2012). "'Raag Darbari': The chronicle of power and politics retold". *The New Indian Express*
2. Anam, Tahmima (9 April 2019). "'For five years we dreaded every meal': my infant son's struggle with food". *The Guardian* 7 January 2020.
3. Barbour, Douglas. *Michael Ondaatje*. New York: Twayne, 1993.
4. *Comparative Cultural Studies and Michael Ondaatje's Writing*. Ed. Steven Tötösy de Zepetnek. West Lafayette: Purdue University Press, 2005.
5. Perlez, Jane (12 October 2007). "Mohsin Hamid: A Muslim Novelist's Eye on U.S. and Europe". *The New York Times*.

w.e.f. Academic Session 2024-25

Chairperson
 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonapat, Rajasthan
 Date: 01/10/2024
G. Phogat
 Chairperson

- 1905 -

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Department of English
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Instructions for the External Theory Paper setter/ Examiner

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- IV. However, the students should at least attempt one question from each unit in both the sections.

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(4 x 5 = 20 Marks)

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(5 x 10 = 50 Marks)

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Khanpur Kalan, Sonapat, Haryana

[Signature]
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- 1406 -

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Translation Studies

Course Code: B-ENG-DSC- 803

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1: Students will understand the agenda and purpose of translation.
 CO2: Understand the National literature and literary traditions in context of World literature.
 CO3: Appreciate the rich tradition of writings in our country in different languages.
 CO4: To discover the universality and timelessness of the selected works.
 CO5: Students will understand the importance of translation studies as a mark of historical development of widening of the field of literature.
 CO6: Students will learn the skill of translating from the source language to English.
 CO7: Students will understand the difference in translation from word to word and sense to sense.

UNIT I

Susan Bassnett

Translation Studies: Part I ("Central Issues"), Part III ("Specific Problems of Literary Translation")

UNIT II

Indra Nath Choudhuri
Mukherjee

"Towards an Indian Theory of Translation" Meenakshi
"Power and the Case of Horizontal Translation"

UNIT III

Rajender Singh Bedi

Ek Chaadar Maili Si (Hindi)

UNIT IV

(Translations of *Ek Chaadar Maili Si*)

Khushwant Singh

I Take This Woman

Avtaar Singh Judge

Ordained by Fate

w.e.f. Academic Session 2024-25

- 1407 -

Chairperson
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 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonapat, Haryana
 Date: 02-02-2024
Bhagat

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Suggested Readings:

1. Sobti, Krishna. *Mitro Marjani*. Raj Prakashan, 2018.
2. Bhaduri, Sauata ed. *Translating Power*.Katha,2019.
3. Bassnett, Susan and Andre Lefevre *Constructing Cultures: Essays on Literary Translation*. Cromwell Press,1998.
4. Bassnett, Susan and Peter Bused. *The Translator as Writer*. Continuum,2006.
5. Nayar, Rana. *Inter-sections: Essays on Indian Literatures, Translations and Popular Consciousness*. Orient Blackswan, 2012.
6. Mukherjee, Sujit. *Translation as Discovery*. Orient Blackswan, 2018.
7. Mukherjee, Sujit. *Translation as Recovery*. Pencraft International,2004.
8. Bassnett, Susan. "When is a translation not a Translation". *Constructing Cultures Essays on Literary Translation*. Susan Bassnett and Andre Lefevre. Multilingual Matters, 1998.
9. Venuthi, Lawrence. *Translator's Invisibility: A History of Trnaslation*.Routledge,2017.

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
 (4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
 (5x 10 = 50 Marks)

w.e.f. Academic Session 2024-25

1408

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Applied Linguistics

Course Code: B-ENG-DSC- 804

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will gain an understanding about applied linguistics in ESOL/EFL/ES/ environment.
CO2: Students will develop the aptitude to translate her knowledge for application in real-life situations and research.
CO3: Empower the students with linguistic tools, analytical tools, communication and thinking skills.
CO4: Students appreciate literature and practical discourse multifold.

Unit-I

Applied Linguistics

1. What is applied linguistics?
2. The interdisciplinary nature of applied linguistics

Unit-II

Research Traditions in Applied Linguistics

3. Deductive and inductive
4. Quantitative and qualitative
5. Experimental method
6. Introspective method
7. Elicitation techniques
8. Case studies
9. Use of ICT

w.e.f. Academic Session 2024-25

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11/09

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Unit-III

Stylistics

10. What is stylistics?
11. Stylistics and its relation to: Poetics, Semiotics, Pragmatics, Discourse Analysis and Linguistic and Literary Criticism
12. Six communicative functions of language
13. The principle of foregrounding and deviance
14. Schemes and tropes
15. Cohesion and coherence
16. Analysis of Short Poem/ Prose text

Unit-IV

Pragmatics

17. What is Pragmatics?
18. Sense and Force
19. Presupposition and entailment
20. Conversational Implicature
21. The Co-operative Principle of Grice
22. The Politeness Principle
23. Searle's Speech-act and categories
24. Analysis of a piece of prose

Suggested Readings:

1. Crystal, David and Derek Davy. *Investing English Style*. London: Longman, 1976.
2. Cutting, Joan. *Pragmatics and Discourse: A Resource Book for Students*. Reprint. London: Routledge, 2006
3. Davis, Steven. *Pragmatics-A Reader*: Oxford: Oxford University Press, 1991.
4. Kaplan, Robert B. *The Oxford Handbook of Applied Linguistics*. 2nd ed. Oxford: Oxford University Press, 2010
5. Nunan, David. *Research Methods in Language Learning*. S. Asian Ed. New Delhi: Cambridge University Press, 2010
6. Toolan, Michael. *Language in Literature: An Introduction to Stylistics*. London: Arnold, 1998.

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

The paper should be strictly set according to the prescribed syllabus.

- I. Question No. 1 will be compulsory. It will be designed to test the student's close knowledge of the prescribed texts/topics. Students shall have to attempt four out of eight short-notes, to be answered in 250 words each. The notes shall be made on context/terms/concepts and/or text-based. (4x5=20Marks)
- II. In case of Question No. 2 to 9, two questions from each of the four prescribed units shall be set. Questions shall be so designed as to ensure that all the prescribed topics are studied. Questions may be split into sub-parts and may involve exercises/analysis type questions. The students shall have to attempt five questions selecting at least one from each unit. (5x10=50Marks)

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- 19/11/24

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Women Writings

Course Code: B-ENG-DSC- 805

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

- CO1: Students will understand and analyse canonical texts written by women writers.
 CO2: Students will learn how and on what grounds women's writings can be considered as a separate genre.
 CO3: Students will be able to differentiate between sex and gender and how the latter is a social construction.
 CO4: Students will be aware about the issues and concerns of the women writers of the developed, developing and under-developed countries.

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Unit 1

Virginia Woolf

"A Room of One's Own"

bell hooks

Introduction to *Ain't I a Woman: Black Women and Feminism*

Mahadevi Verma

"Links in the Chain" Chandra Talpade Mohanty "Under the Western Eyes"

Unit 2

Margaret Atwood

Surfacing

Unit 3

Toni Morrison

The Bluest Eye

Unit 4

Amrita Pritam

The Skeleton

Suggested Readings:

1. Lee, Hermione (1995). *Virginia Woolf and Offence*. Oxford University Press. pp. 129– 150.
2. Bond, Alma Halbert (2000). *Who Killed Virginia Woolf? A Psychobiography*. Insight Books Human Sciences. 11 June 2020 .
3. Rosenbaum, S. P. (2013). "Virginia Woolf among the Apostles". *Le Tour Critique* (2): 131–146. 13 April 2018.
4. Howells, Coral Ann (2006). *The Cambridge Companion to Margaret Atwood* (Cambridge Companions to Literature). Cambridge University Press. p. 49.

w.e.f. Academic Session 2024-25

- 14.12 -

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Chhotat
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Department of English

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5. Waxman, Barbara Frey. "Girls Into Women: Culture, Nature, and Self-Loathing" in Fisher, Jerilyn and Silbert, Ellen S. (eds), *Women in Literature: Reading Through the Lens of Gender*, Westport: Greenwood, 2003. pp. 47-49
6. Amrita Pritam: A Great Wordsmith in Punjab's Literary History. 19 June 2006 at the Wayback Machine *Daily Times (Pakistan)*, 14 November 2005.

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5 x 10 = 50 Marks)

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: New Literatures

Course Code: B-ENG-MIC8- 806

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will gain knowledge of a variety of literary genres across the world.
 CO2: Students will become sensitive towards the issues related to marginalized communities.
 CO3: Students will be able to examine the condition of women, ethnicity, and marginalization in new literatures.
 CO4: Students will have an understanding of unique aspects of diverged literature

UNIT I

Catherine Gallagher & Stephen Greenblatt "Counter history and the Anecdote"

G. N. Devy "Tribal Verse"

Baburao Bagul "Dalit Literature is but Human Literature"

UNIT II

Bhasa

Pancharatra

UNIT III

Mamang Dai

The Legends of Pensam

UNIT IV

Jotirao Phule

Slavery

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14/4

02-02-2024

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Suggested Reading:

1. *Practicing New Historicism* by Catherine Gallagher & Stephen Greenblatt. The University of Chicago Press: Chicago (Available Online)
2. *Michael Foucault: Truth, Power, Strategy*. Ed Meaghan Morris and Paul Patton. Feral Publications: Sydney (Available Online)
3. "Why I am an Atheist" by Bhagat Singh. <https://www.marxists.org/archive/bhagat-singh/1930/10/05.htm>
4. "Is there an Indian Way of Thinking: An Informal Essay" by A.K. Ramanujan. *The Collected Essays of A.K. Ramanujan*. Ed. Vinay Dharwadkar. OUP: New Delhi
5. "Three Hundred Ramayanas" by A.K. Ramanujan. *The Collected Essays of A.K. Ramanujan*. Ed. Vinay Dharwadkar. OUP: New Delhi
6. "Hindu Social Order" by Dr B. R. Ambedkar
7. *Towards an Aesthetic of Dalit Literature* by Sharan Kumar Limbale
8. *Why I am Not a Hindu* by Kancha Ilaiah
9. *The Hindu View of Life* by S. Radhakrishnan
10. *The Question of Silence: A Para-biography* by G. N. Devy
11. *Savaging the Civilized: Verrier Elwin, His Tribals and India* by Ramachandra Guha

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5 x 10 = 50 Marks)

w.e.f. Academic Session 2024-25

- 1905

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Semester VIII (4 Year U.G. Hons. with Research)

Course Nomenclature: Folklore and Mythology (Option I)

Course Code: B-ENG-DSC- 801

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

- CO1: Students will understand the importance of mythology as the background of literature.
 CO2: Recognize the essentially oral nature of myths and folklore and examine how the context of oral performance shapes the meaning of a story.
 CO3: Analyze how a diverse range of specific myths function within the cultures that produce them.
 CO4: Analyze mythology and folklore using a variety of scholarly approaches.

UNIT I

Roland Barthes

Mythologies

Frog

Myth

UNIT II

A. K. Ramanujan

“Who needs folklore?”

Pandit Lakhmi Chand

Meera Bai

UNIT III

Samhita Arni

Sita's Ramayana

Prem Chaudhary

“An Alternative to the ‘Sati’ Model: Perceptions of a Social Reality in Folklore”

UNIT IV

Devdutt Patnaik

Indian Mythology: Tales, Symbols, and Rituals from the Heart of the Subcontinent (Chapter 1)

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— 1416 —

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G. Phogat

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Suggested Reading:

1. Edmunds, Lowell. A Folklore Casebook. New York & London: Garland Publishing Co., 1983.
2. Phillips, Melanie Anne. Archetypes: Characters, Narrative and Mind. New York: Story mind Press, 2014. Print.
3. Jung, C. G. Man, and His Symbols (Arkana). London: Aldus Books Ltd, 1964.
4., Memories, Dreams, Reflections. Trans. Richard Winston. New York: Random House, Inc, 1989.
5., Four Archetypes. Trans. R.H.C. Hull. London & New York: Routledge, 1972.
6. John G. Jackson. *Pagan Origins of the Christ Myth*. Echo Point Books, 2015.

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5 x 10 = 50 Marks)

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: South Asian Literature

Course Code: B-ENG-DSC- 802 (Option II)

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

- CO1: Students will become familiar with literary works of writers from the Indian subcontinent and its surrounding areas.
 CO2: Understand and interpret South Asian literary works.
 CO3: Evaluate the relationship between texts and their cultural and historical contexts.
 CO4: Critically evaluate translations of South Asian literature.
 CO5: Critically read and formulate an interpretation of the issues and arguments presented in the literature.

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Unit 1

Srilal Shukla

Raag Darbari

Unit 2

Tahmima Anam

The Good Muslim

Unit 3

Michael Ondaatje

Running in the Family

Unit 4

Mohsin Hamid

Exit West

Suggested Readings:

1. Upendra Nath Sharma (23 September 2012). "'Raag Darbari': The chronicle of power and politics retold". *The New Indian Express*
2. Anam, Tahmima (9 April 2019). "'For five years we dreaded every meal': my infant son's struggle with food". *The Guardian* 7 January 2020.
3. Barbour, Douglas. *Michael Ondaatje*. New York: Twayne, 1993.
4. *Comparative Cultural Studies and Michael Ondaatje's Writing*. Ed. Steven Tötösy de Zepetnek. West Lafayette: Purdue University Press, 2005.
5. Perlez, Jane (12 October 2007). "Mohsin Hamid: A Muslim Novelist's Eye on U.S. and Europe". *The New York Times*.

w.e.f. Academic Session 2024-25

- 1418 -

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 Department of English
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P. Phool Singh

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Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5x 10 = 50 Marks)

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Translation Studies (Option III)
Course Code: B-ENG-DSC- 803

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

- CO1: Students will understand the agenda and purpose of translation.
 CO2: Understand the National literature and literary traditions in context of World literature.
 CO3: Appreciate the rich tradition of writings in our country in different languages.
 CO4: To discover the universality and timelessness of the selected works.
 CO5: Students will understand the importance of translation studies as a mark of historical development of widening of the field of literature.
 CO6: Students will learn the skill of translating from the source language to English.
 CO7: Students will understand the difference in translation from word to word and sense to sense.

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

UNIT I

Susan Bassnett

Translation Studies: Part I ("Central Issues"), Part III ("Specific Problems of Literary Translation")

UNIT II

Indra Nath Choudhuri
Mukherjee

*"Towards an Indian Theory of Translation" Meenakshi
"Power and the Case of Horizontal Translation"*

UNIT III

Rajender Singh Bedi

Ek Chaadar Maili Si (Hindi)

UNIT IV

(Translations of *Ek Chaadar Maili Si*)

Khushwant Singh

I Take This Woman

Avtaar Singh Judge

Ordained by Fate

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Suggested Readings:

1. Sobti, Krishna. *Mitro Marjani*. Raj Prakashan, 2018.
2. Bhaduri, Sauata ed. *Translating Power*.Katha,2019.
3. Bassnett, Susan and Andre Lefevre *Constructing Cultures: Essays on Literary Translation*. Cromwell Press,1998.
4. Bassnett, Susan and Peter Bused. *The Translator as Writer*. Continuum, 2006.
5. Nayar, Rana. *Inter-sections: Essays on Indian Literatures, Translations and Popular Consciousness*. Orient Blackswan, 2012.
6. Mukherjee, Sujit. *Translation as Discovery*. Orient Blackswan, 2018.
7. Mukherjee, Sujit. *Translation as Recovery*. Pencraft International,2004.
8. Bassnett, Susan. "When is a translation not a Translation". *Constructing Cultures Essays on Literary Translation*. Susan Bassnett and Andre Lefevre. Multilingual Matters, 1998.
9. Venuthi, Lawrence. *Translator's Invisibility: A History of Translation*.Routledge,2017.

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

Section I: This section shall comprise of short notes from all the four units. The students shall have to attempt 4 questions out of 6. **(4x5=20 marks)**

Section II: The examiner will set eight questions covering all four units. The students shall attempt five questions selecting at least one from each unit of 10 marks each. **(5x10=50 Marks)**

w.e.f. Academic Session 2024-25 (421)

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Khanpur Kalan, Sonapat, Haryana
2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Applied Linguistics (Option IV)

Course Code: B-ENG-DSC- 804

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will gain an understanding about applied linguistics in ESOL/EFL/ES/ environment.
 CO2: Students will develop the aptitude to translate her knowledge for application in real-life situations and research.
 CO3: Empower the students with linguistic tools, analytical tools, communication and thinking skills.
 CO4: Students appreciate literature and practical discourse multifold.

Unit-I

Applied Linguistics

1. What is applied linguistics?
2. The interdisciplinary nature of applied linguistics

Unit-II

Research Traditions in Applied Linguistics

3. Deductive and inductive
4. Quantitative and qualitative
5. Experimental method
6. Introspective method
7. Elicitation techniques
8. Case studies
9. Use of ICT

w.e.f. Academic Session 2024-25

1422

Chairperson
 Department of English
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 Khanpur Kalan, Sonapat, Haryana

02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN ENGLISH

Unit-III

Stylistics

10. What is stylistics?
11. Stylistics and its relation to: Poetics, Semiotics, Pragmatics, Discourse Analysis and Linguistic and Literary Criticism
12. Six communicative functions of language
13. The principle of foregrounding and deviance
14. Schemes and tropes
15. Cohesion and coherence
16. Analysis of Short Poem/ Prose text

Unit-IV

Pragmatics

17. What is Pragmatics?
18. Sense and Force
19. Presupposition and entailment
20. Conversational Implicature
21. The Co-operative Principle of Grice
22. The Politeness Principle
23. Searle's Speech-act and categories
24. Analysis of a piece of prose

Suggested Readings:

1. Crystal, David and Derek Davy. *Investing English Style*. London: Longman, 1976.
2. Cutting, Joan. *Pragmatics and Discourse: A Resource Book for Students*. Reprint. London: Routledge, 2006
3. Davis, Steven. *Pragmatics-A Reader*. Oxford: Oxford University Press, 1991.
4. Kaplan, Robert B. *The Oxford Handbook of Applied Linguistics*. 2nd ed. Oxford: Oxford University Press, 2010
5. Nunan, David. *Research Methods in Language Learning*. S. Asian Ed. New Delhi: Cambridge University Press, 2010
6. Toolan, Michael. *Language in Literature: An Introduction to Stylistics*. London: Arnold, 1998.

w.e.f. Academic Session 2024-25 1423

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Instructions for the External Theory Paper setter/ Examiner

Note: The paper must be strictly according to the prescribed syllabus.

The paper shall be of 70 marks.

The paper should be strictly set according to the prescribed syllabus.

- I. Question No. 1 will be compulsory. It will be designed to test the student's close knowledge of the prescribed texts/topics. Students shall have to attempt four out of eight short-notes, to be answered in 250 words each. The notes shall be made on context/terms/concepts and/or text-based. (4x5=20Marks)
- II. In case of Question No. 2 to 9, two questions from each of the four prescribed units shall be set. Questions shall be so designed as to ensure that all the prescribed topics are studied. Questions may be split into sub-parts and may involve exercises/analysis type questions. The students shall have to attempt five questions selecting at least one from each unit. (5x10=50Marks)

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Women Writings (Option V)

Course Code: B-ENG-DSC- 805

Total Credits: 4

L-T-P

3-1-0

Course Outcomes:

- CO1: Students will understand and analyse canonical texts written by women writers.
- CO2: Students will learn how and on what grounds women's writings can be considered as a separate genre.
- CO3: Students will be able to differentiate between sex and gender and how the latter is a social construction.
- CO4: Students will be aware about the issues and concerns of the women writers of the developed, developing and under-developed countries.

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Unit 1

Virginia Woolf

“A Room of One’s Own”

bell hooks

Introduction to *Ain’t I a Woman: Black Women and Feminism*

Mahadevi Verma

“Links in the Chain” Chandra Talpade Mohanty “Under the Western Eyes”

Unit 2

Margaret Atwood

Surfacing

Unit 3

Toni Morrison

The Bluest Eye


Unit 4

Amrita Pritam

The Skeleton

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 Date: 02-2024


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Suggested Readings:

1. Lee, Hermione (1995). *Virginia Woolf and Offence*. Oxford University Press. pp. 129 150.
2. Bond, Alma Halbert (2000). *Who Killed Virginia Woolf? A Psychobiography*. Insight Book Human Sciences. 11 June 2020 .
3. Rosenbaum, S. P. (2013). "Virginia Woolf among the Apostles". *Le Tour Critique* (2): 146. 13 April 2018.
4. Howells, Coral Ann (2006). *The Cambridge Companion to Margaret Atwood* (Cambridge Companions to Literature). Cambridge University Press. p. 49.
5. Waxman, Barbara Frey. "Girls Into Women: Culture, Nature, and Self-Loathing" in Fish Jerilyn and Silbert, Ellen S. (eds), *Women in Literature: Reading Through the Lens of Gender*, Wesport: Greenwood, 2003. pp. 47-49
6. Amrita Pritam: A Great Wordsmith in Punjab's Literary History. 19 June 2006 at the Wayback Machine *Daily Times (Pakistan)*, 14 November 2005.

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
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 (4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
 (5x 10 = 50 Marks)

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Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: New Literatures (Option VI)

Course Code: B-ENG-MIC8- 806

Total Credits: 4
L-T-P
3-1-0

External Theory Marks: 70
Internal Assessment Marks: 30
Time Allowed: 3hrs

Course Outcomes:

- CO1: Students will gain knowledge of a variety of literary genres across the world.
CO2: Students will become sensitive towards the issues related to marginalized communities.
CO3: Students will be able to examine the condition of women, ethnicity, and marginalization in new literatures.
CO4: Students will have an understanding of unique aspects of diverged literature.

UNIT I

Catherine Gallagher & Stephen Greenblatt

“Counter history and the Anecdote”

G. N. Devy

“Tribal Verse”

Baburao Bagul

“Dalit Literature is but Human Literature”

UNIT II

Bhasa

Pancharatra

UNIT III

Mamang Dai

The Legends of Pensam

UNIT IV

Jotirao Phule

Slavery

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Suggested Reading:

1. *Practicing New Historicism* by Catherine Gallagher & Stephen Greenblatt. The University of Chicago Press: Chicago (Available Online).
2. *Michael Foucault: Truth, Power, Strategy*. Ed Meaghan Morris and Paul Patton. Feral Publications: Sydney (Available Online).
3. "Why I am an Atheist" by Bhagat Singh. <https://www.marxists.org/archive/bhagat-singh/1930/10/05.htm>.
4. "Is there an Indian Way of Thinking: An Informal Essay" by A.K. Ramanujan. *The Collected Essays of A.K. Ramanujan*. Ed. Vinay Dharwadkar. OUP: New Delhi.
5. "Three Hundred Ramayanas" by A.K. Ramanujan. *The Collected Essays of A.K. Ramanujan*. Ed. Vinay Dharwadkar. OUP: New Delhi.
6. "Hindu Social Order" by Dr B. R. Ambedkar.
7. *Towards an Aesthetic of Dalit Literature* by Sharan Kumar Limbale.
8. *Why I am Not a Hindu* by Kancha Ilaiah.
9. *The Hindu View of Life* by S. Radhakrishnan.
10. *The Question of Silence: A Para-biography* by G. N. Devy
11. *Saving the Civilized: Verrier Elwin, His Tribals and India* by Ramachandra Guha

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- II. Question no. 1 is compulsory. The students shall attempt six questions in all.
- III. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
(4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
(5 x 10 = 50 Marks)

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

Department of English

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

Course Nomenclature: Research Writing/ Methodology

Course Code: B-ENG-MIC8- 807

Total Credits: 4

L-T-P

3-1-0

External Theory Marks: 70

Internal Assessment Marks: 30

Time Allowed: 3hrs

Course Outcomes:

- CO1: Understanding fundamentals and stages of research.
- CO2: Understanding steps and methods in the process of research.
- CO3: Learning to write and document research.
- CO4: Understanding research ethics and publication protocol.
- CO5: Know the steps and procedures involved in research.
- CO6: Understand the significance of systematic planning and execution of research activity.
- CO7: Students will learn to practice the use of various tools and techniques of research.

UNIT I

Research: Nature, Scope and Types

1. Defining Research
2. Nature & Scope of Research
3. Types of Research
4. Hypothesis & Literature Review

UNIT II

Research: Methods & Methodology

5. Research Methodology
6. Research Methods
7. Research Tools (including ICT)
8. Research Techniques
9. Research Design/Proposal

UNIT III

Research: Structure, Style and Referencing

10. Styles of Writing & documentation
11. Referencing & Bibliography
12. Research format

w.e.f. Academic Session 2024-25

1428

Chairperson
Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

Chairperson
02-02-2024

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH

UNIT IV

Research: Ethics & Publication

13. Research Ethics
14. Plagiarism
15. Publication Protocol
16. Best Practices

Suggested Readings:

1. Altick, Richard D. and John J Fenstermaker. *The Art of Literary Research*. New York: Norton Press; 1992.
2. Gibaldi, Joseph. *MLA Handbook for Writers of Research Papers*. New Delhi: Affiliated East-West Press. 2000 (Eighth/Ninth Edition)
3. Griffin, Gabriele. Ed. *Research Methods in Literary Studies*. Jaipur: Rawat, 2007.
4. Guthrie, Gerard. *Basic Research Methods: An Entry to Social Science Research*. USA: SAGE Publications, 2010.
5. Mami, Fouad. *Research Methodology for Master Students of Literature: Overcoming the Lure to Plagiarize with Strategies to Avoid*. USA: Brown Walker Press, 2019.

Instructions for the External Theory Paper setter/ Examiner

Note:

- I. The paper must be strictly according to the prescribed syllabus.
- II. The paper will be of 70 marks.
- III. Question no. 1 is compulsory. The students shall attempt six questions in all.
- IV. However, the students should at least attempt one question from each unit in both the sections.

Section 1: Question no. 1 shall comprise of short-note type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt four questions of 5 marks each.
 (4 x 5 = 20 Marks)

Section 2: This section shall comprise of long-answer type questions. The examiner will set eight questions covering all the four units out of which the students shall attempt five questions of 10 marks each.
 (5x 10 = 50 Marks)

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of English
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN ENGLISH
Project Writing

Course Outcomes:

- CO1: To equip students to conceptualize and present a cogent argument in their thesis.
 CO2: To understand the fundamentals of framing research arguments.
 CO3: To train students in the rigors of research.
 CO4: Orient students to collect, analyze, and interpret data Writing of Project.

Note: The department to ensure that the tentative topic and supervisor are allotted to the students before commencement of this Semester.

Suggested Readings:

1. Carter S, Guerin C, Aitchison C. *Doctoral Writing Practices, Processes and Pleasures*. 1st ed. 2020. Springer Singapore; 2020.
2. Lester JD, Lester JD. *The Essential Guide: Research Writing Across the Disciplines*. 5th ed. Longman; 2011.
3. Murray R. *How to Write a Thesis*. 3rd ed. McGraw Hill; 2011.
4. Fabb N, Durant A. *How to Write Essays and Dissertations: a Guide for English Literature Students*. 2nd ed. Pearson Longman; 2005.
5. Luey B. *Handbook for Academic Authors*. 5th ed. Cambridge University Press; 2009.
6. Paltridge B, Starfield S. *Thesis and Dissertation Writing in a Second Language: A Handbook for Students and Their Supervisors*. 2nd ed. Routledge; 2020.

Instructions to Paper Setter:

Note: This section shall be based on evaluation of project by external examiner. The evaluation of project shall be out of 100 Marks.

w.e.f. Academic Session 2024-25

-1431-

Chairperson
 Department of English
 Bhagat Phool Singh Mahila Vishwavidyalaya
 Khanpur Kalan, Sonapat, Haryana
 22-02-2024
G. Phool Singh

Department of English
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan
Minutes of the Meeting of the UGBOS held on 21.12.2023 at 1100 am. in the conference room
of the Department of English.

Members of the UGBOS Present:

- | | |
|---|----------------|
| 1. Prof. Dinesh Kumar , Kurukshetra University, Kurukshetra | Outside Expert |
| 2. Dr. Geeta Phogat, Associate Prof., Dept. of English, BPSMV | Chairperson |
| 3. Dr. Shalini, Associate Professor, Dept. of English, BPSMV | Member |
| 4. Ms. Babita Rani, Asst. Prof. , Dept. of English, BPSMV | Member |
| 5. Dr. Jyoti Raj, Associate Professor, GCW, Murthal | Member |
| 6. Ms. Komal Verma, Associate Professor, GCW, Murthal | Member |
| 7. Mr. Ambrish Attri, Associate Professor GCW, Gohana | Member |
| 8. Dr. Rajesh Dhaka, Asst. Professor, GCW, Sonipat | Member |
| 9. Mr Sandeep Kumar, Asst. Professor, GCW, Gohana | Member |

Special Invitees Present:

1. Prof. Ashok Verma, Dept. of English, BPSMV (DFAL)
2. Prof. Ravi Bhushan, Dept. of English, BPSMV
3. Dr. Pallavi, Assistant Professor (T), Dept. of English, BPSMV

Proceedings:

The Chairperson welcomed the esteemed Members of the UGBOS and Special Invitees present in the meeting and gave a complete overview of the Schemes and Syllabus. The following agenda item was taken up for discussion.

Agenda: Discussion and Approval of

1. UG Programme Single Major (English): Scheme C and Syllabus
2. UG Programme Multidisciplinary: Scheme A and Syllabus

Suggestions and Discussions:

1. Prof. Dinesh Kumar suggested a course on translation. The chair informed that the course of translation has already been there in scheme C.
2. Prof. Sujata Rana inquired about the nomenclature and inclusion of the online courses. The courses (VAC, SEC, AEC) are already offered in the University pool according to NEP 2023.
3. The members suggested that there should be availability of texts for UG students of the affiliated colleges on the university website. It was also suggested to include non-detailed section for multidisciplinary course. It was also suggested to incorporate writings from

Shalini
Shalini
Ravi Bhushan
Ravi Bhushan
Ambrish Attri
Ambrish Attri
Komal Verma
Komal Verma
Rajesh Dhaka
Rajesh Dhaka
Sandeep Kumar
Sandeep Kumar

lesser known writers and from local and Indian authors. The suggestions were well taken and will be incorporated in the next phase of revision.

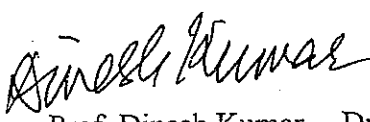
4. The suggestions received via mail from Dr. Daisy were also incorporated.

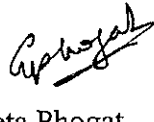
Decision: The members discussed and approved the following syllabus and schemes:

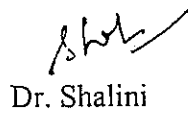
UG Programme Single Major (English): Scheme C and Syllabus

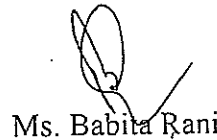
UG Programme Multidisciplinary: Scheme A and Syllabus

The meeting ended with a vote of thanks.

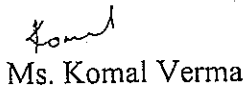

Prof. Dinesh Kumar

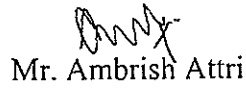

Dr. Geeta Phogat


Dr. Shalini


Ms. Babita Rani


Dr. Jyoti Raj

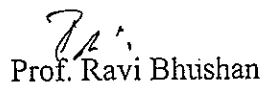

Ms. Komal Verma

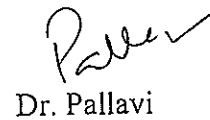

Mr. Ambrish Attri


Dr. Rajesh Dhaka


Mr. Sandeep Kumar


Prof. Ashok Verma


Prof. Ravi Bhushan


Dr. Pallavi



BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA
(A State University established under Sections 2(f) and 12 (b) of the UGC Act, 1956)
Khanpur Kalan, Sonipat, Haryana-131305

Faculty of Arts & Languages

Minutes of the Meeting

A meeting of the Faculty of Arts and Languages was convened on 09.01.2024 at 2:00 pm in the Office of the Dean, Faculty of Arts and Languages, Room no. 114, Teaching Block-I, BPS Mahila Vishwavidyalaya Khanpur Kalan, Sonipat. The following members were present:

- | | |
|---|------------------|
| 1. Prof. Ashok Verma, Dean, Faculty of Arts & Languages | Convenor |
| 2. Dr. K.J. Mathachan, HoD, Dept. of Foreign Languages. | Member |
| 3. Dr. Sudipta Sil, Asso. Prof. Dept. of Foreign Languages. | Member |
| 4. Ms. Babita, Dept. of English. | Member |
| 5. Registrar, BPSMV | Member Secretary |

Proceedings: At the outset, the convenor welcomed the members. The following agenda was discussed:

Agenda: 1. Approval for UG Programme Single Major (English) Scheme C and Syllabus.

A proposal from Chairperson, Department of English has been received to introduce UG Programme Single Major (English). The Scheme and Syllabus is duly approved by the UGBoS, Department of English. *UTD OK*

Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

Action: Office of the Dean, Faculty of Arts and Languages.

Agenda: 2. Approval for UG Programme Multidisciplinary (English) Scheme A and Syllabus.

IHL
Asst. Secy
A proposal from Chairperson, Department of English has been received to approve the Scheme and Syllabus (English) for UG Programme (Multidisciplinary) as per the guidelines of NEP 2020. The Scheme and Syllabus is duly approved by the UGBoS, Department of English.

Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

Best

[Signature]

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Action: Office of the Dean, Faculty of Arts and Languages.

Agenda 3. To consider and approve the Scheme of examinations, Syllabus and Ordinance for B A Foreign Languages (French/German/ Russian) programme under NEP 2020.

Department of Foreign Languages proposes to introduce an undergraduate programme i.e. B A Foreign Languages (French/German/ Russian) programme under NEP 2020. The UG Board of Studies at its meeting held on 20/11/2023 has approved the Scheme of examinations, syllabus and ordinance for the same.

Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

Action: Office of the Dean, Faculty of Arts and Languages.

Agenda 4. To consider and approve the discontinuation of the Post Graduate Diploma in Foreign Language Teaching (PGDFLT) programmes in French, German and Russian Languages .

The Department of Foreign Languages proposes to discontinue the PG Diploma in Foreign Language Teaching. The UG Board of Studies at its meeting held on 20/11/2023 has recommended the discontinuation of the Post graduate Diploma in Foreign Language Teaching (PGFLT) programmes considering the fact that the Department has proposed to start UG Programme B A Foreign languages under NEP 2020 w.e.f. 2024-25.

Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

Action: Office of the Dean, Faculty of Arts and Languages.


Agenda 5. To consider and approve the removal of the term "Teaching" from the nomenclature of Diploma in Foreign language teaching programmes w.e.f 2024-25.

The UG Board of Studies, at its meeting held on 20/11/2023, has reviewed and approved the Scheme of examinations, syllabus and ordinance for Diploma in Foreign Language Programmes in French, German and Russian languages and recommended the removal of the term "Teaching".

Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

Action: Office of the Dean, Faculty of Arts and Languages.

Agenda 6. To consider and approve syllabus, scheme and ordinance for the audit courses in foreign languages w.e.f 2024-25.



The UG Board of Studies, at its meeting held on 20/12/2023, has reviewed and approved the Scheme examinations, syllabus and ordinance for audit courses in French, German and Russian languages.

Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

Action: Office of the Dean, Faculty of Arts and Languages.

Agenda 7. To consider and approve syllabus, scheme for CBCS courses in foreign languages w.e.f from 2024-25.

The UG Board of Studies, at its meeting held on 20/11/2023, has reviewed and approved the Scheme of examinations, syllabus and ordinance for CBCS courses in French, German and Russian languages.

Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

Action: Office of the Dean, Faculty of Arts and Languages.


Agenda 8. To consider and approve the Scheme of examinations, Syllabus for Skill Enhancement Courses in foreign languages w.e.f from 2024-25 under NEP 2020.

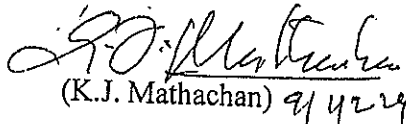
The UG Board of Studies, at its meeting held on 20/11/2023, has approved the Scheme examinations and syllabus for Skill Enhancement Courses (SEC) in French, German and Russian languages for the common pool of skill enhancement courses under NEP 2020.

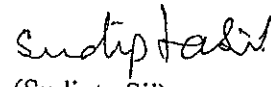
Decision: The house unanimously approved the agenda for onward consideration of the Academic Council.

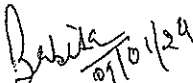
Action: Office of the Dean, Faculty of Arts and Languages.

The meeting ended with a vote of thanks from the Convenor


(Ashok Verma) 09/11/24


(K.J. Mathachan) 09/12/23


(Sudipta Sil)


(Babita) 09/10/24


(Neelam Malik) 09/10/24

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

Scheme of Examination for the 1st Semester

Sr. No.	Course Code	Course Type	Course Title /Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT -DSC-101	DSC	नीतिसाहित्य एवं संस्कृत व्याकरण I	3	0	1	4	30	70	100
2	B-SKT -DSC-102	DSC	संस्कृत महाकाव्य	3	0	1	4	30	70	100
3	B-SKT-MIC1-103	MIC	प्रयोगात्मक-संस्कृत	3	0	1	4	30	70	100
4	B-SKT-AEC1-103	AEC	संस्कृत भाषा एवं भारतीय संस्कृति बोध-1	2	0	0	2	15	35	50
5.	B-SKT-MDC1-104	MDC	वेद, यज्ञ प्रक्रिया एवं गीता	2	0	1	3	25	50	75
6.	B-SEC-101	SEC		2	0	1	3	25	50	75
7.	B-VAC-101	VAC		2	0	0	2	15	35	50
				17	0	05	22			550

*The students of Sanskrit (Hons) will choose SEC, VAC from the Common Pool of Courses offered by other University.



Chairperson
Date

CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

Scheme of Examination for the 2nd Semester

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT -DSC-201	DSC	श्रीमद्भागवद्गीता, प्राचीन भारतीय संस्कृति एवं संस्कृत व्याकरण 1	3	0	1	4	30	70	100
2	B-SKT -DSC-202	DSC	महाकाव्य एवं युक्ताकाव्य	3	0	1	4	30	70	100
3	B-SKT -MIC2-203	MIC	व्यावहारिक-संस्कृत	3	0	1	4	30	70	100
4	B-SKT-AEC2-203	AEC	संस्कृत भाषा एवं भारतीय संस्कृति बोध-2	2	0	0	2	15	35	50
5	B-SKT -MDC2-204	MDC	योग एवं भारतीय संस्कृति	2	0	1	3	25	50	75
6	B-SEC-201	SEC		2	0	1	3	25	50	75
7	B-VAC-201	VAC		2			2	15	35	50
				17	0	05	22			550

*The students of Sanskrit (Hons) will choose SEC and VAC from the Common Pool of Courses offered by other University.





Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

3

Scheme of Examination for the 3rd Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT-DSC-301	DSC	ऐतिहासिक महाकाव्य, प्राचीन भारतीय संस्कृति एवं व्याकरण	3	0	1	4	30	70	100
2	B-SKT-DSC-302	DSC	साहित्यदर्पण	3	0	1	4	30	70	100
3	B-SKT-MIC3-303	MIC	उपजीव्य महाकाव्य एवं उनके प्रमुख पात्र	3	0	1	4	30	70	100
4	B-AEC3-303 SKT	AEC	भारतीय संस्कृति, धर्म एवं दर्शन	2	0	0	2	15	35	50
5	B-SKT-MDC3-304	MDC	संस्कृत साहित्य में राष्ट्रवाद	2	0	1	3	25	50	75
6.	B-SEC-301	SEC		2	0	1	3	25	50	75
7.	B-VAC-301	VAC		2			2	15	35	50
				17	0	05	22			550

*The students of Sanskrit (Hons) will choose SEC and VAC from the Common Pool of Courses offered by other University.

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CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

Scheme of Examination for the 4th Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT - DSC-401	DSC	महाकाव्य वेदांग व्याकरण एवं शब्द प्रक्रिया	3	0	1	4	30	70	100
2	B-SKT -DSC-402	DSC	नटक (स्वप्नवासुदेवम्) एवं शंकर	3	0	1	4	30	70	100
3	B-SKT- DSC-403	DSC	काव्यदीप्तिका एवं वृत्तरत्नाकर	3	0	1	4	30	70	100
4	B-SKT-DSC- 404	DSC	लघुसिद्धान्त कौमुदी	3	0	1	4	30	70	100
5	B-SKT-MIC4(Voc) 405	MIC (Voc)	कथा साहित्य का इतिहास एवं महत्त्व पत्राचार (अपेक्षित कारक)	3	0	1	4	30	70	100
6	B-AEC4-404	AEC		2	0	0	2	15	35	50
7	B-VAC4-404	VAC		2	0	0	2	15	35	50
				16	00	04	24			600

*The students of Sanskrit (Hons) will choose AEC and VAC from the Common Pool of Courses offered by other University

[Signature]

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CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

Scheme of Examination for the 5th Semester

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-501	DSC	संस्कृत नाट्य साहित्य एवं व्याकरण (विभाजित)	3	0	1	4	30	70	100
2	B-SKT-DSC- 502	DSC	गीता एवं मनुस्मृति	3	0	1	4	30	70	100
3	B-SKT- DSC-503	DSC	वैदिक साहित्य	3	0	1	4	30	70	100
4	B-SKT-DSC- 504	DSC	दशकुमारचरित एवं शिवराजविजय	3	0	1	4	30	70	100
5	B-SKT- MIC5(Voc)-505	MIC(Voc)	महाकाव्य (भावद्गीता एवं बुद्धचरित)	3	0	1	4	30	70	100
6			Internship				4			100
				12	00	04	24			600

Rishi

Chairperson

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

6

Scheme of Examination for the 6th Semester

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-601	DSC	उपनिषद् साहित्य एवं व्याकरण (विभक्ति)	3	0	1	4	30	70	100
2	B-SKT-DSC- 602	DSC	दर्शनशास्त्र	3	0	1	4	30	70	100
3	B-SKT- DSC-603	DSC	भारतकाव्यकार, गद्यकार, नाट्यकार	3	0	1	4	30	70	100
4	B-SKT-DSC- 604	DSC	दशरूपक	3	0	1	4	30	70	100
5	B-SKT-MIG5(Voc) 605	MIG (Voc)	बौद्ध, जैन एवं यादवक दर्शन		0		4	30	70	100
6	B-SEC-603	SEC		1		1	2	15	35	50
				13	00	05	22			550

*The students of Sanskrit (Hons) will choose SEC from the Common Pool of Courses offered by other University.

Wishu

Shruti

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

7

Scheme of Examination for the 7th Semester:

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT-DSC-H1-701	DSC	वेद एवं वेदांग	3	0	1	4	30	70	100
2	B-SKT-DSC-H2-702	DSC	पद्य साहित्य	3	0	1	4	30	70	100
3	B-SKT-DSC-H3-703	DSC	भाषा विज्ञान एवं व्याकरण	3	0	1	4	30	70	100
4	B-SKT-DSC-H4-704	DSC	आधुनिक संस्कृत साहित्य-1 (कथा)	3	0	1	4	30	70	100
5	B-SKT-DSC-H5-705	DSC	संस्कृति एवं धर्मदर्शन	3	0	1	4	30	70	100
6	B-SKT-MIC7-706	MIC	भारतीय नीतिशास्त्र	3	0	1	4	30	70	100
				18	00	06	24			600

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CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

8

Scheme of Examination for the 8th Semester

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC- H6-801	DSC	नाट्य साहित्य	3	0	1	4	30	70	100
2	B-SKT-DSC- H7 802	DSC	काव्य प्रकाश एवं साहित्य दर्पण	3	0	1	4	30	70	100
3	B-SKT- DSC- H8-803	DSC	भारतीय दर्शन	3	0	1	4	30	70	100
4	B-SKT-DSC- H9- 804	DSC	आधुनिक संस्कृत साहित्य-2 (नाटक)	3	0	1	4	30	70	100
5	B-SKT-DSC- H10-805	DSC	संस्कृत साहित्य में योग, आयुर्वेद एवं विज्ञान	3	0	1	4	30	70	100
6	B-SKT-MIC8-806	MIC	संस्कृत जीवन तथा जोड्य संस्कार	3	0	1	4	30	70	100
				18	00	06	24			600

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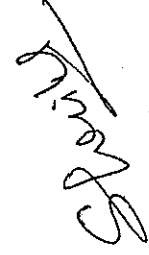
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CURRICULUM OF BACHELOR OF ARTS (HONS.) IN SANSKRIT

Scheme of Examination for the 8th Semester (Hons. With Research)

Sr. No.	Course Code	Course Type	Course Title/Nomenclature of Paper	Workload			Credits	Division of Marks		
				L	P	T		Internal	External	Total
1	B-SKT- DSC-H6-801	DSC OPTION-I	नाट्य साहित्य	3	0	1	4	30	70	100
2	B-SKT-DSC-H7-802	DSC OPTION-II	काव्य प्रकाश एवं साहित्य दर्पण	3	0	1	4	30	70	100
3.	B-SKT-MIC-803	MIC	संतुलित जीवन तथा षोडश संस्कार	3	0	1	4	30	70	100
4.	Project/ Disertation B-SKT-RP-808	Research Project					12			300
							24			600


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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN SANSKRIT

Semester- 1

Course Nomenclature: नीति साहित्य एवं संस्कृत व्याकरण

Course Code : B-SKT-DSC-101

Total Credits : 4

External Theory Marks:70

L-T-P

Internal Theory Marks:30

3-1-0

Time Allowed: 3 Hours

Course Outcomes:

छात्र हितोपदेश, पंचतन्त्र, गीता, महाभारत आदि में निहित उपदेशात्मक पद्यों और शिक्षाप्रद कहानियों से छात्रों के नैतिक गुणों का विकास करना। छात्राएँ संस्कृत व्याकरण में सर्वनाम शब्द रूपों का तीनों लिंगों के प्रयोग सीखेंगी तथा संस्कृत-अनुवाद हेतु विभक्तियों और धातुओं का यथार्थ प्रयोग सीखेंगी।

Unit -I

1. हितोपदेश(1) प्रस्तावना एवं मित्रलाभ की कथासंख्या 1-4 तक) 14अंक
प्रस्तावना के प्रथम श्लोक (सिद्धि:साध्ये.....से 45वें श्लोक 'समुद्रमासाद्य
भवन्त्यपेयाः' तक)मेंसे सूचित/श्लोक की सप्रसंग व्याख्या।

Unit -II

2. हितोपदेश(2) प्रस्तावना एवं मित्रलाभ की कथासंख्या 1-4 तक 14अंक
कथासार/रचनाकार/पाठ्य सामग्री पर आधारित आलोचनात्मक प्रश्न।

Unit -III

3. (क)शब्द रूपः-राम, कवि, भानु, लता, नदी, फल। 14अंक
(ख)धातुरूपः भू, हस्, नम्, गम् (लट्, लृट्, लोट्, लङ्, एवं विधिलिङ्ग पाँच लकारों में)

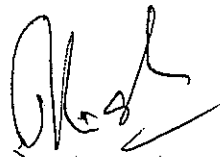
Unit -IV

4. (क)स्वर संधि (दीर्घ, गुण, वृद्धि, यण, अयादि) 14अंक
केवल संधि/विच्छेद पूछा जाएगा।
(ख) कण्ठस्थ दो श्लोकों का शुद्ध लेखन।

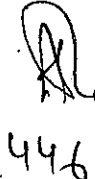
Recommended Books/e-resources/LMS:

1. हितोपदेश- कृष्णानन्द शास्त्री, भारतीय संस्कृत भवन, जालन्धर -2007।
2. संस्कृत व्याकरण प्रवेशिका- चौखम्भा संस्कृत सीरीज, वाराणसी।
3. रूपचंद्रिका-पं० रामचन्द्र झा, चौखम्भा संस्कृत सीरीज, वाराणसी।
4. संस्कृत साहित्य का इतिहास- आचार्य बलदेव उपाध्याय, शारदा निकेतन, वाराणसी।
5. बृहत् अनुवाद चन्द्रिका:-लेखक चक्रधर नौटियाल 'हंस' शास्त्री मोतीलाल बनारसी दास वाराणसी।

w.e.f. Academic Session 2024-25







Chairperson
Date

1446

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Sanskrit

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN SANSKRIT

6.संस्कृत व्याकरण प्रवेशिका-बाबू राम सक्सेना, चौखम्भा संस्कृत सीरीज,वाराणसी ।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

- 1.प्रश्न पत्र में कुल 5 प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित है। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न(14/चौदह) अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
- 2.प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएंगे।प्रत्येक लघूत्तरात्मक प्रश्न 3.5 अंको का होगा।
- 3.द्वितीय,तृतीय,चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम,द्वितीय,तृतीय,चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखना अनिवार्य होगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

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Department of Sanskrit

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN SANSKRIT

Semester- 1

Course Nomenclature: संस्कृत-महाकाव्यम्

Course Code: B-SKT – DSC- 102

Total Credits : 4

L-T-P

3-1-0

External Theory Marks:70

Internal Theory Marks:30

Time Allowed: 3 Hours

Course Outcomes: छात्र इस घटक में पुरुषोत्तम श्री राम की वंश-परम्परा एवं उनके पावन चरित्र से अवगत होकर चरित्र निर्माण की दिश में अग्रसर होंगे तथा उन्हें करुणा मूर्ति बुद्ध के चरित्र-व्यक्तित्व तथा उनकी शिक्षाओं का ज्ञान प्राप्त होगा।

Unit-I

1. रघुवंशम् , प्रथमः सर्गः 14अंक
(क) द्वयोः श्लोकयोः व्याख्या (10 अंक)
(ख) सूक्ति-व्याख्या। (4अंक)

Unit-II

2. (क)रघुवंशसम्बद्धं कविं रघुवंशं वा आश्रित्य एकः आलोचनात्मकः प्रश्नः। 14अंक

Unit-III

3. बुद्धचरितम् , प्रथमः सर्गः 14अंक
(क) द्वयोः श्लोकयोः व्याख्या (10 अंक)
(ख) सूक्ति-व्याख्या। (4अंक)

Unit-IV

4. बुद्धचरितसम्बद्धं कविं बुद्धचरितं वा आश्रित्य एकः आलोचनात्मकः प्रश्नः। 14अंक

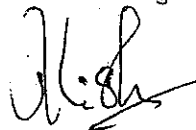
Recommended Books/e-resources/LMS:

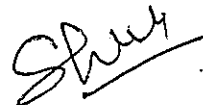
- बुद्धचरितम्- व्याख्याकार महंतरामचन्द्रदास शास्त्री चौखम्भा विद्याभवन, वाराणसी।
- रघुवंश महाकाव्य, व्याख्याकार हरगोविन्द शास्त्री चौखम्भा संस्कृत संस्थान, वाराणसी।
- संस्कृत साहित्य का इतिहास- आचार्य बलदेव उपाध्याय, शारदा निकेतन, वाराणसी।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

- प्रश्न पत्र में कुल (5) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न(14/चौदह) अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
- प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएंगे। प्रत्येक लघूत्तरात्मक प्रश्न 3.5 अंको का होगा।
- द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाए। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
- परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

w.e.f. Academic Session 2024-25





14/4/24


Chairperson
Date

Semester- 1

Course Nomenclature: प्रयोगात्मक-संस्कृतम्

Course Code : B-SKT—MIC1-103

Total Credits : 4

L-T-P

3-1-0

External Theory Marks:70

Internal Theory Marks:30

Time Allowed: 3 Hours

Course Outcomes: पशु-पक्षियों पर आधारित छोटी छोटी कथाओं के माध्यम से इस छात्रों को भारतीय ज्ञान,सभ्यता एवं संस्कृति का बोध होगा तथा व्यावहारिक शब्दों, फलों/सब्जियों आदि के संस्कृत नाम ज्ञात होने से उनका शब्दकोश समृद्ध होगा।संस्कृत अनुवाद एवं विभक्तियों का प्रयोग सीखेंगे। गीता के श्लोकों का शुद्ध लेखन एवं पठन के साथ-साथ जीवन के वास्तविक रहस्य एवं मूल्यों को समझते हुए निष्काम कर्म करने की प्रेरणा के साथ कर्मोद्योगी बनेंगे।

Unit -I

1. संस्कृत चयनिका (पद्यभाग-पाठ1से 4 तक) 14अंक
व्याख्या/सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. संस्कृत चयनिका (गद्यभाग-पाठ 1-4) 14अंक
व्याख्या/सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -III

3. संस्कृत व्याकरण: 14अंक
(क)अनुवाद (हिन्दी से संस्कृत)
(ख)कारक विभक्ति (लघुसिद्धान्त कौमुदी के आधार पर)

Unit -IV

4. (क) फलों एवं सब्जियों के नाम संस्कृत में। 14अंक
फलों के नाम:- अंजीर, आम, अमरूद,ककड़ी, तरबूज, नारियल, जामुन, बेर, सेब, शहतूत,
खीरा,खरबूजा,अनार,संतरा,कटहल,लीची, सिंघाड़ा, गन्ना, अखरोट, आड़ू, छुहारा, चिरौंजी,
मखाना,आलूबुखारा,किशमिश, खजूर, गूलर, बादाम,फालसा,बेल, मुसम्मी, मकोय, करौंदा,नीबू, मुनक्का,
अंगूर।

सब्जियों के नाम:-अदरक,आलू इमली,कटहल,कददू,करेला, कुंदरू,टिंडा, गोभी, टमाटर, तोरई, धनिया,
पालक,प्याज, बथुआ,मिर्च, भिंडी, पंरवर, बैंगन, मटर, मूली,लहसुन, लौकी, शलगम, सलाद, साग, सेम।

(ख) गीता के कण्ठस्थ किन्हीं दो श्लोकों का शुद्ध लेखन।

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CURRICULUM OF BACHELOR OF ARTS (Hons.) IN SANSKRIT

Recommended Books/e-resources/LMS:

1. संस्कृत चयनिका—परमानन्द शास्त्री
2. संस्कृत चयनिका प्रबोधिका—देवी चन्द्र शर्मा / डॉ० दिनेश कुमार सिंहल
3. वृहद् अनुवाद चन्द्रिका—चक्रधर नौटियाल, मोतीलाल बनारसी-दास, दिल्ली 2003।
4. वैदिक प्रेरण फॉर नॉलेज, पीस एंड कोएक्जिस्टेंस - प्रो० बी. बी. चौबे।

प्रश्नपत्र—निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न चौदह (14) अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार (4) प्रश्न पूछे जाएँ। प्रत्येक लघूत्तरात्मक प्रश्न साढ़े तीन अंक (3.5) का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।



1480

Chairperson
Date

Semester- 1

Course Nomenclature: संस्कृत भाषा एवं भारतीय संस्कृति बोध-1

Course Code : B-SKT—AEC1-103

Total Credits : 2

L-T-P

2-0-0

External Theory Marks:35

Internal Theory Marks:15

Time Allowed: 1.5 Hours

Course Outcomes: छात्रों को भारतीय ज्ञान-परम्परा,सभ्यता एवं संस्कृति का बोध होगा तथा विद्यालय संबन्धी व्यावहारिक शब्दों/पक्षियों/खद्यान्नों आदि के संस्कृत नाम का पता चलने से उनका शब्दकोश समृद्ध होगा। श्लोकों के शुद्ध लेखन एवं पठन के माध्यम से वे जीवन के आदर्शों/ मूल्यों को समझते हुए श्रेष्ठ कर्मों की ओर अग्रसर होंगे।

Unit -I

1. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी 7अंक
(पाठ-1, भारतीय संस्कृति का रूप)
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी 7अंक
(पाठ-2, वर्णाश्रम व्यवस्था)
सारांश/वर्ण्य विषय पर आधारित प्रश्न

Unit -III

- 3.(क) संस्कृत में विद्यालय संबन्धी वस्तुओं के नाम। 7अंक
कलासरूम, मेज, कुर्सी, बेंच(पुस्तक रखने की), बेंच(बैठने की)
बैग, किताब, कलम, टीचर, अलमारी, अध्यापिका, शूज, कमरा, खिड़की,
पंखा, इन्स्पेक्टर, डक्टर, कम्प्यूटर, कंधी, रजिस्टर, कॉपी, ड्राइंग, कॉलेज,
स्कूल, यूनिवर्सिटी, किवाड़, गेट, मेन गेट, कैची, गेट कीपर, पियन, क्लर्क,
मैदान, गेंद, फुटबाल, घण्टा, चपरासी, चॉक, चांसलर, झाड़ू, टाइमटेबल, दरी, निब
प्रिंसिपल, फाउण्टेन पेन, दरी, फीस, फाइल, यूनिफॉर्म, दीवार घड़ी, एसी, सहपाठी।

(ख) संस्कृत में पक्षियों के नाम।

कोयल, कौ विद्यालय संबन्धी वस्तुओं के नाम।

आ, चील, बगुला, मोर, मुर्गी, तोता, पतंगा, राजहंस, चमगादड़
गौरैया, कबूतर, उल्लू, बटेर, हंस, गरुण, चकवा, मैना, बतख, पक्षी।

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CURRICULUM OF BACHELAR OF ARTS (Hons.) IN SANSKRIT

Unit-IV

4. (क) संस्कृत में पाश्चात्य खाद्यान्नों के नाम। 7अंक
चिप्स, चाकलेट, स्नैक्स, पिज्जा, बर्गर, सैंडविच, फ्रूटजैम, आइसकीम,
केक, बिस्किट, कोल्डड्रिंक, च्यूइंगम, कोल्डकॉफी, कॉफी पाउडर, सोडापानी।

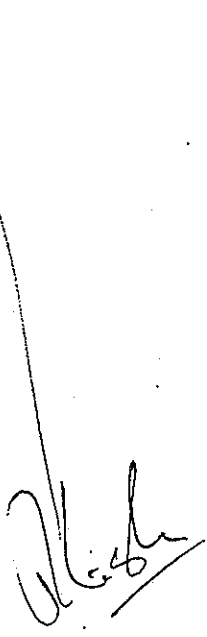
(ख) कण्ठस्थ किन्हीं दो श्लोकों का शुद्ध लेखन।

Recommended Books/e-resources/LMS:

1. भारतीय संस्कृति का वृहत्-इतिहास (भाग -1) लेखक -डॉ० एस्. एल. नागोरी।
2. वृहद् अनुवाद चन्द्रिका-चक्रधर नौटियाल, मोतीलाल बनारसी दास, दिल्ली 2003।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात (7) अंको का होगा। प्रश्न-पत्र हल करने का समय डेढ़ (1.5) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित सात (7) प्रश्न पूछे जाएँ। प्रत्येक लघूत्तरात्मक प्रश्न एक अंक (1) का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।


Chairperson
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Chairperson
Date

Semester- 1

Course Nomenclature: वेद, यज्ञ प्रक्रिया एवं गीता

Course Code : B-SKT--MDC1-104

Total Credits : 3

L-T-P

2-1-0

External Theory Marks:50

Internal Theory Marks:25

Time Allowed: 2 Hours

Course Outcomes: इस घटक से छात्रों को प्राचीन भारतीय ज्ञान, वैदिक संस्कृत भाषा एवं तत्कालीन सभ्यता एवं संस्कृति का ज्ञान होगा। वे यज्ञों के विविध स्वरूप एवं महत्त्व से अवगत होंगे। छात्रों को प्रकृति एवं पर्यावरण का महत्त्व समझने में भी सहायता होगी। श्रीमद्भगवद् गीता के 'सांख्ययोग' नामक द्वितीय अध्याय को पढ़कर छात्र जीवन के वास्तविक रहस्य एवं नैतिक मूल्यों को समझते हुए निष्काम कर्म करने की प्रेरणा प्राप्त करेंगे।

Unit-I

1. वेदों का सामान्य परिचय।
वर्णविषय / विशेषताएँ / महत्त्व आदि। 10 अंक

Unit-II

2. यज्ञ की व्युत्पत्ति, अर्थ एवं परिभाषा। यज्ञ के लाभ, यज्ञकुण्ड,
यज्ञशाला, यज्ञपात्र एवं यज्ञ की उपयोगिता। 10 अंक

Unit-III

3. यज्ञ सामग्री के वैज्ञानिक गुण तथा पर्यावरण पर प्रभाव। 10 अंक

Unit-IV

4. श्रीमद्भगवद्गीता के द्वितीय अध्याय का 1-38 श्लोक।
कण्ठस्थ दो श्लोकों का शुद्ध लेखन। 10 अंक

Recommended Books/e-resources/LMS:

1. वैदिक साहित्य का इतिहास-वाचस्पति गौरीला।
2. वैदिक साहित्य का इतिहास-डॉ० बलदेव उपाध्याय।
3. यज्ञ विमर्श-एक वैज्ञानिक अध्ययन, डॉ० रामप्रकाश।
4. श्रीमद्भगवद्गीता -गीताप्रेस गोरखपुर।
5. गीताप्रवचन-दिनोबा भावे, चौखम्भा संस्कृत सीरीज, वाराणसी 2008।

CURRICULUM OF BACHELAR OF ARTS (Hons.) IN SANSKRIT

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 50 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न दस (10) अंको का होगा। प्रश्न-पत्र हल करने का समय दो (2) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघु उत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएँ। प्रत्येक लघूत्तरात्मक प्रश्न 2.5 अंको का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के क्रमशः प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्न-पत्र की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

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Shankar
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Chairperson
Date

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Sanskrit
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN SANSKRIT

Semester- 2

Course Nomenclature: श्रीमद्भगवद्गीता, प्राचीन भारतीय संस्कृति एवं संस्कृत व्याकरण।

Course Code : B-SKT –DSC-201

Total Credits : 4

L-T-P

3-1-0

External Theory Marks:70

Internal Theory Marks:30

Time Allowed: 3 Hours

Course Outcomes:

श्रीमद्भगवद्गीता तथा प्राचीन भारतीय संस्कृति में निहित ज्ञानवर्धक तथ्यों के माध्यम से छात्र अपने व्यक्तित्व का सर्वांगीण विकास करेंगे। शब्द रूपों का यथार्थ तात्पर्य/उपयोगिता एवं ध्येय वाक्यों के प्रयोग का औचित्य सीखेंगे।

Unit –I

- 1.श्रीमद्भगवद् गीता, द्वितीय अध्याय (1-50 श्लोक) 14अंक
(क) दो श्लोकों का सरलार्थ। (8 अंक)
(ख) एक आलोचनात्मक प्रश्न। (6अंक)

Unit –II

- 2.शिवसंकल्प सूक्त (शुक्ल यजुर्वेद, अध्याय 34/1-6)।
(क) एक मंत्र की व्याख्या— (4 अंक) 14अंक
संराश/महत्व/विशेषता (5 अंक)

(ख) अधोलिखित ध्येय वाक्य :-

- 1.धर्मचक्रप्रवर्तनाय। 2.अस्माकं वीरा उत्तरे भवन्तु। 3.सत्यमेव जयते। 4. विज्ञानं ब्रह्म।
5.यतो धर्मस्ततो जयः। 6.बहुजनहिताय बहुजनसुखाय। 7.योगक्षेमं वहाम्यहम्। 8.अहर्निशसेवामहे।
9.योगःकर्मसु कौशलम्। 10.ज्ञानं विज्ञानं विमुक्तये। 11.जाननी जन्मभूमिश्च स्वर्गादपि गरीयसी।
12.कृष्वन्तो विश्वमार्यम्। 13.योगस्थः कुरु कर्माणि।14.सत्यं शिवम् सुन्दरम्।
15.सर्वे भद्राणि पश्यन्तु मा कश्चिद् दुःखभाग्भवेत्।16.श्रम एव जयते। 17.भिन्नेष्वेकस्य दर्शनम्।
18.सेवा अस्माकं धर्मः।19.नभः स्पृशं दीप्तम्। 20.शं नो वरुणः।21.विद्ययाऽमृतमश्नुते।22.तत् त्वं पूषन्नपावृणु।
23.तेजस्विनावधीतमस्तु। 24.असतो मा सद् गमय।25.निष्ठा धृतिः सत्यम्।25.धर्मो रक्षति रक्षितः।

Unit –III

- 3.(क) प्राचीन भारतीय संस्कृति की विशेषताएँ:- 14अंक
चार आश्रम/चार पुरुषार्थ/चार वर्णों/ त्रिविध कर्म (प्रारब्ध,संचित,क्रियमाण) के सिद्धान्त का संक्षिप्त परिचय (8 अंक)
(ख) श्रीमद्भगवद् गीता के दो श्लोकों का शुद्ध लेखन। (6अंक)

Unit –IV

- 4.संस्कृत व्याकरण: 14अंक
(क) शब्द रूप- अस्मद्,युष्मद्,यत् (तीनों लिंगों में)। (7अंक)
(ख) संस्कृत से हिंदी में अनुवाद। (7अंक)

w.e.f. Academic Session 2024-25

1455

Kish
Slony


Chairperson
Date

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Sanskrit

11


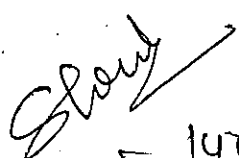
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN SANSKRIT

Recommended Books/e-resources/LMS:

1. श्रीमद्भगवद्गीता— गीताप्रेस गोरखपुर
2. रचनानुवादकौमुदी— कपिलदेव द्विवेदी, विश्वविद्यालय प्रकाशन वाराणसी।
3. वैदिक प्रेयर फॉर नॉलेज एंड पीस— प्रो० बी. बी. चौबे।
4. श्रीमद् भगवद्गीता –मधुसूदन शास्त्री, चौखम्भा संस्कृत सीरीज , वाराणसी ।
5. गीताप्रवचन—विनोबा भावे, चौखम्भा संस्कृत सीरीज , वाराणसी 2008 ।
6. भारतीय संस्कृति का वृहत् इतिहास (भाग -1)—डॉ० एस. एल. नागोरी।

प्रश्नपत्र—निर्माण के लिये निर्देश—

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न(14/चौदह) अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएँगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएँगे। प्रत्येक लघूत्तरात्मक प्रश्न 3.5 अंको का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाए। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।



1456

Semester- 2

Course Nomenclature: महाकाव्यं मुक्तककाव्यम् च।

Course Code : B-SKT –DSC- 202

Total Credits : 4

L-T-P

3-1-0

External Theory Marks:70

Internal Theory Marks:30

Time Allowed: 3 Hours

Course Outcomes: इस घटक में छात्र महाकाव्य एवं मुक्तक काव्य की परम्परा से अवगत होंगे। संस्कृत साहित्य जगत् में भारवि एवं भर्तृहरि के योगदानों को समझेंगे तथा नीतिकाव्यों के श्रवण,लेखन एवं वाचन में प्रवीणता हासिल करेंगे।

Unit-I

1. किरातार्जुनीयम्, प्रथमः सर्गः 14अंक
(क) द्वयोःश्लोकयोः व्याख्या (10 अंक)
(ख) सूक्ति-व्याख्या। (4अंक)

Unit –II

2. किरातार्जुनीयसम्बद्धं कविं किरातार्जुनीयं वा आश्रित्य एकः आलोचनात्मक प्रश्नः। 14अंक

Unit –III

3. नीतिशतकम्। (1- 50) 14अंक
(क) द्वयोः श्लोकयोः व्याख्या (10 अंक)
(ख) सूक्ति-व्याख्या। (4अंक)

Unit –IV

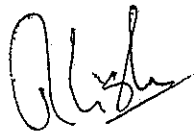
4. नीतिशतकसम्बद्धं कविं नीतिशतकं वा आश्रित्य एकः आलोचनात्मक प्रश्नः। 14अंक

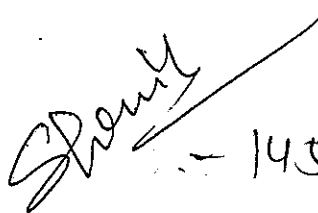
Recommended Books/e-resources/LMS:

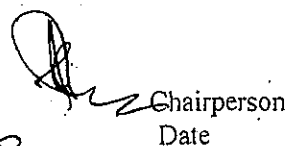
1. संस्कृत साहित्य का इतिहास-बलदेव उपाध्याय, चौखम्भा संस्कृत सीरीज, वाराणसी।
2. किरातार्जुनीयम्-भारवि विरचितम् (व्याख्याकार-डॉ० शैली अग्रवाल, आगरा, 2010)।
3. नीतिशतकम्-भर्तृहरि विरचितम्- डॉ० राजेश्वर प्रसाद मिश्र, प्रयागराज-2।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (6) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न (14/चौदह) अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघु उत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएंगे। प्रत्येक लघूत्तरात्मक प्रश्न 3.5 अंको का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाए। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखना अनिवार्य होगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।





 Chairperson
Date

- 1458 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Sanskrit
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN SANSKRIT

14

Semester- 2

Course Nomenclature: व्यावहारिक-संस्कृतम्

Course Code : B-SKT—MIC2-203

Total Credits : 4

L-T-P

3-1-0

External Theory Marks:70

Internal Theory Marks:30

Time Allowed: 3Hours

Course Outcomes: छात्रों को पशु-पक्षियों पर आधारित छोटी छोटी कथाओं से जीवन के मर्म का ज्ञान होगा एवं कर्म करने की प्रेरणा प्राप्त होगी। गिनती तथा पशु-पक्षियों, सगे-संबन्धियों आदि के नाम (संस्कृत में) जानने से छात्रों का शब्द भण्डार बढ़ेगा। ईश्वर-स्तुति/प्रार्थनापासना मन्त्रों/श्लोकों के लेखन एवं पठन से भारतीय जीवन पद्धति एवं मूल्यों में उनका विश्वास दृढ़ होगा।

Unit -I

1. संस्कृत चयनिका (पद्यभाग-पाठ 5से 8) 14अंक
व्याख्या/सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. संस्कृत चयनिका (गद्यभाग-पाठ 6सेतक9) 14अंक
व्याख्या/सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -III

- 3.संस्कृत व्याकरण: 14अंक
(क)संस्कृत में पशुओं एवं संबन्धियों के नाम।

पशुओं के नाम:- बकरा, बकरी, बैल,भेड़,हाथी,शेर, कुतिया, ऊँट,गाय,भैंस, चीता, भालू, खरगोश, घोड़ा,गधा, बन्दर,भेड़िया,भैंसा,मकड़ी,लोमड़ी,कृत्ता, गीदड़,गोह, गैंडा,चूहा, छिपकली, तेंदुआ,नेवला,बाघ, बिच्छू, बिल्ला,बिल्ली, सुअर,हिरन।

सम्बन्धियों के नाम:- पिता,माता,दादा,दादी, पति,पत्नी,नाना,नानी,चाचा,चाची,लड़का,लड़की,पोता,पोती, भाई,बड़ाभाई,छोटाभाई,भानजा,भाभी,भतीजा, मित्र,सखी,नौकर, सास,नौकरानी,दामाद,मामी, मामा,ससुर,साला,मालिक,जीजा,दुश्मन,ननद,नाती,परदादा,परदादी,समधी,समधिनि, फूआ,फूफा,सगाभाई,चचेराभाई,मौसा,बहन मौसी।

(ख) 1-100 तक गिनती संस्कृत में।

Unit -IV

4. (क)कण्ठस्थ तीन श्लोकों/मंत्रों का शुद्ध लेखन। 14अंक
(ख)शान्तिमंत्र, गायत्री मंत्र, महामृत्युंजय (अनुवाद/व्याख्या)।
(ग)संस्कृत के चार सरल वाक्यों का हिन्दी में अनुवाद।

- 1459 -

[Signature]

[Signature]
Chairperson
Date

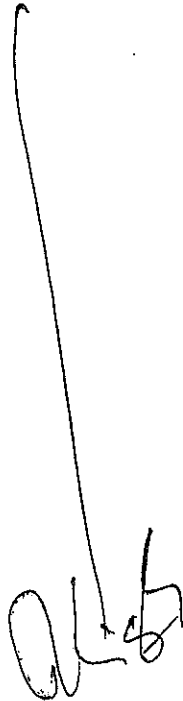
CURRICULUM OF BACHELOR OF ARTS (Hons.) IN SANSKRIT

Recommended Books/e-resources/LMS:

1. संस्कृत चयनिका—परमानन्द शास्त्री
2. संस्कृत चयनिका प्रबोधिका—देवी चन्द्र शर्मा / डॉ० दिनेश कुमार सिंहल
3. वृहद् अनुवाद चन्द्रिका—चक्रधर नौटियाल, मोतीलाल बनारसी दास, दिल्ली 2003।
4. वैदिक प्रेयर फॉर नॉलेज, पीस एंड कोएक्जिस्टेंस – प्रो० बी. बी. चौबे।
5. नीति शतक (भृगुहरि) – प्रो० राजेश्वर प्रसाद मिश्र, बलरामपुर हाउस, प्रयागराज—2।

प्रश्नपत्र—निर्माण के लिये निर्देशः—

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 70 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न चौदह (14) अंको का होगा। प्रश्न-पत्र हल करने का समय तीन (3) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार (4) प्रश्न पूछे जाएंगे। प्रत्येक लघूत्तरात्मक प्रश्न साढ़े तीन (3.5) अंक का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के क्रमशः प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाए। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।



Shankar
-1460-

Chairperson
Date

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Sanskrit
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN SANSKRIT

16

Semester- 2

Course Nomenclature: संस्कृत भाषा एवं भारतीय संस्कृति बोध-2

Course Code : B-SKT-AEC2 -203

Total Credits : 2

L-T-P

2-0-0

External Theory Marks:35

Internal Theory Marks:15

Time Allowed: 1.5Hours

Course Outcomes: छात्रों को भारतीय ज्ञान-परम्परा,सभ्यता एवं संस्कृति का बोध होगा तथा विविध खाद्य पदार्थों/विविध प्रकार के रंगों के लिए प्रयुक्त होने वाले संस्कृत शब्दों का पता चलने से छात्रों का शब्द भण्डार बढ़ेगा। ईश्वर-स्तुति / प्रार्थनापासना मन्त्रों/श्लोकों के लेखन एवं पठन से भारतीय जीवन पद्धति एवं मूल्यों में उनका विश्वास दृढ़ होगा।

Unit -I

1. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी 7अंक
(पाठ-3, पंच यज्ञ एवं संस्कार)
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -II

2. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक -डॉ० एस. एल. नागोरी 7अंक
(पाठ-4, प्राचीन भारत में नारी की स्थिति)
सारांश/वर्ण्य विषय पर आधारित प्रश्न।

Unit -III

- 3.(क) संस्कृत में भारतीय खाद्यान्नों/पकवानों के नाम। 7अंक
धान, आटा; चावल, मूँग, उड़द, गेहूँ, पूड़ी, रायता, इडली, सांभर,
अचार, अण्डा, अमचूर, आटा, आलूटिक्की, कटी, काफी, केक, खिचड़ी, पापड़,
हलवा, फ्रूट जैम, खीर, गुड़, चटनी, चाय, चीनी, डबलरोटी, दहीबड़ा, दूध, दाल, नमक,
तेल, पकवान, पनीर, पराठा, भात, मक्खन, मठरी, मुरब्बा, राजमा, लस्सी, समोसा
सैंडविच, सेवई, सुबह का नाश्ता, मूँगफली, ग्रीन टी, प्याज, प्याज डोसा, रसम।

(ख) संस्कृत में रंगों के नाम।

लाल, हरा, नीला, पीला, नारंगी, काला, सफेद, बैंगनी, नारंगी, गुलाबी
भूरा, आसमानी, गहरा लाल, गेहूँ जैसा रंग, सुनहरा, चोंदी, केसरिया
मिट्टी जैसा रंग, ग्रे, गहरा नीला, खाकी रंग, तॉबा, मैजेंटा।

Vish

Shankar

[Signature]

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Sanskrit
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN SANSKRIT

Unit -IV

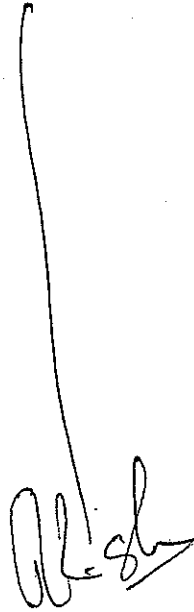
4. (क) कण्ठस्थ दो श्लोकों का शुद्ध लेखन। 7 अंक
(ख) शांतिमंत्र, गायत्री मंत्र, महामृत्युंजय मंत्र लेखन एवं अनुवाद।

Recommended Books/e-resources/LMS:

1. भारतीय संस्कृति का वृहत् इतिहास (भाग -1) लेखक --डॉ० एस्. एल्. नागोरी
2. वृहद् अनुवाद चन्द्रिका-चक्रधर नौटियाल, मोतीलाल बनारसी दास, दिल्ली 2003।
3. वैदिक प्रेयर फॉर नॉलेज, पीस एंड कोएक्जिस्टेंस - प्रो० बी. बी. चौबे।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएंगे। प्रश्न पत्र के लिए कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात (7) अंकों का होगा। प्रश्न-पत्र हल करने का समय डेढ़ (1.5) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाये जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित सात (7) प्रश्न पूछे जाएंगे। प्रत्येक लघूत्तरात्मक प्रश्न एक (1) अंक का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाए। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाए तथा प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।



Shrivats - 1462


Chairperson
Date

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Semester- 2

Course Nomenclature: योग एवं भारतीय संस्कृति

Course Code : B-SKT—MDC2-204

Total Credits : 3

L-T-P

2-1-0

External Theory Marks:50

Internal Theory Marks:25

Time Allowed: 2 Hours

Course Outcomes: इस घटक से छात्रों को प्राचीन भारतीय परम्परा एवं वर्तमान जीवन में अष्टांग योग का महत्त्व ज्ञात होगा। विभिन्न आसनों के माध्यम से छात्रों को शारीरिक-मानसिक स्वास्थ्य लाभ हेतु प्रेरणा मिलेगी। विविध भाषाओं की प्रकृति एवं तत्कालीन संस्कृति का भी बोध होने के साथ-साथ ईश्वर स्तुति/ प्रार्थनापासना परक मन्त्रों का ज्ञान होने पर उन्हें जीवन के वास्तविक सुख एवं आनन्द की प्राप्ति होगी।

Unit –I

1. अष्टांग योग का परिचय। (पातंजलयोगदर्शनम्)

10अंक

- यमनियमासनप्राणायामप्रत्याहारधारणाध्यानसमाधयोऽष्टावंगानि ।
- अहिंसासत्यास्तोयब्रह्मचर्यापरिग्रहाः यमाः ।
- शौचसन्तोषतपः स्वाध्यायेश्वरप्रणिधानानि नियमाः ।
- स्थिरसुखमासनम् ।
- श्वासप्रश्वासयोगतिविच्छेदः प्राणायामः ।
- स्वविषयासंप्रयोगे चित्तस्वरूपानुकार इयेन्द्रियाणां प्रत्याहारः ।
- देशबन्धचित्तस्य धारणा ।
- तत्र प्रत्ययैकतानता ध्यानम् ।
- तदेवार्थमात्रनिर्भासं स्वरूपशून्यमिव समाधिः ।

Unit –II

2. आसन एवं प्राणायाम ।

10अंक

- पद्मासन, वज्रासन, ताड़ासन, धनुरासन, गोमुखासन, सर्वांगासन, शवासन ।
- प्राणायाम—
कुम्भक, रेचक, पूरक ।

Unit –III

3. प्राचीन भारतीय संस्कृति की विशेषताएँ:-

10अंक

चार आश्रम/चार पुरुषार्थ/चार वर्णो/त्रिविध कर्म(प्रारब्ध,संचित,कियमाण)के सिद्धान्त का संक्षिप्त परिचय ।

w.e.f. Academic Session 2024-25

Alisha
1463
Shravya

[Signature]
Chairperson
Date

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Department of Sanskrit
CURRICULUM OF BACHELAR OF ARTS (Hons.) IN SANSKRIT

Unit -IV

4.(क)संस्कृत मन्त्र एवं श्लोक :-

10अंक

- गायत्री मंत्र
- महामृत्युंजय मंत्र
- शान्ति मंत्र (ॐ धौ शान्ति)
- संगच्छध्वम्.....
- अयं निजः परोवेति
- सर्वे भवन्तु सुखिनः.....
- कर्मण्येवा.....
- योगस्थः कुरु कर्माणि.....
- ध्यायतो विषयान्.....
- क्रोधादभवति संमोहः.....
- ॐ सहनाववतु सह नौ.....
- यत्र नार्यस्तु पूज्यन्ते.....

(ख)उपर्युक्त में से कण्ठस्थ दो श्लोकों / मंत्रों का शुद्ध लेखन
एक श्लोक/मंत्र का सरलार्थ।

Recommended Books/e-resources/LMS:

1. पातंजलयोगदर्शनम् - डॉ० देवी सहाय पाण्डेय।
2. योगासन एवं योगसाधना-डॉ० सत्यपाल, चौखम्मा संस्कृत संस्थान, वाराणसी।
3. प्राचीन भारत की संस्कृति और सभ्यता - दामोदर धर्मानन्द कोसम्बी।
4. भारतीय संस्कृति की रूपरेखा-पृथ्वी कुमार अग्रवाल।
5. वैदिक प्रेरण फॉर नॉलेज, पीस एंड कोएक्विजिस्टेंस - प्रो० बी. बी. चौबे।
6. भारतीय संस्कृति का वृहत् इतिहास (भाग -1)-डॉ० एस्. एल्. नागोरी।

प्रश्नपत्र-निर्माण के लिये निर्देश:-

1. प्रश्न पत्र में कुल (5) प्रश्न दिए जाएं। प्रश्न पत्र के लिए कुल 50 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक प्रश्न दस (10) अंको का होगा। प्रश्न-पत्र हल करने का समय दो (2) घंटे होगा।
2. प्रथम प्रश्न पाठ्यक्रम के चारों घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघूत्तर वाले विकल्परहित चार(4) प्रश्न पूछे जाएँ। प्रत्येक लघूत्तरात्मक प्रश्न 2.5 अंको का होगा।
3. द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा।
4. परीक्षार्थी को प्रश्नोत्तर की भाषा के चयन हेतु हिन्दी/संस्कृत का विकल्प दिया जाएगा।

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 1st Semester:

Total Credits- 22

Sr. No.	Course code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES-101	DSC	Foundation of Physical Education	3	0	1	4	30	70	100
2.	BPES - 102	DSC	Sports Sociology	3	0	1	4	30	70	100
3.	BPES - 103	MIC	Practical Athletic:- (Sprint and Shot Put) Practical Games:- Kabaddi & Volleyball	0	8	0	4	30	70	100
4.	BPES - 104	MDC	Yoga Science	2	0	1	3	25	50	75
5.	BPES - 105	AEC	English and Communication Skill-I	2	0	0	2	15	35	50
6.	BPES - 106	SEC	Athletic:- 100m, 200m, 400m (Sprint/Races) And Short Put	0	6	0	3	25	50	75
7.	BPES - 107	VAC	Human Values & Ethics	2	0	0	2	15	35	50
				12	14	03	22	170	380	550

Note:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester. However, separate examination for each semester will be conducted as per syllabus of each semester.
- The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
- Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/Incharge.
- For the final examination, final lesson will be prepared on a separate chart.
- Duration of practical examinations will be three hours per group followed by Vjva-voce.
- The practical syllabi shall include all the games, Athletics, other Activities events as given in semester

W.e.f Academic Session 2024-25

Amay
Chairperson

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Arushi — Singh — 1465

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 2nd Semester

Total Credits- 22

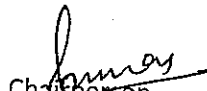
Sr. No.	Course code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES - 201	DSC	Health Education	3	0	1	4	30	70	100
2.	BPES - 202	DSC	Anatomy and Physical Fitness	3	0	1	4	30	70	100
3.	BPES - 203	MIC	Practical Athletic :- High Jump & Discuss Throw Practical Game:- Badminton & Handball	0	8	0	4	30	70	100
4.	BPES - 204	MDC	Computer Application - I	2	0	1	3	25	50	75
5.	BPES - 205	AEC	Hindi (संचारकौशल)	2	0	0	2	15	35	50
6.	BPES - 206	SEC	Athletic (Relay (4*100m, 4*400m, and High Jump)	0	6	0	3	25	50	75
7.	BPES - 207	VAC	Environmental Studies	2	0	0	2	15	35	50
				12	14	3	22	170	380	550


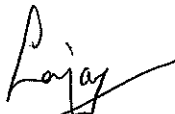

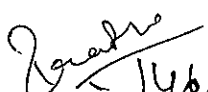

Note for Summer Internship:- Students exiting the programme after second semester and securing 48 Credits including 4 Credits of summer internship will be awarded UG Certificate in the relevant Discipline/ Subject

Note for Practical:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

1. The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.
2. The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
3. Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/Incharge.
4. For the final examination, final lesson will be prepared on a separate chart.
5. Duration of practical examinations will be three hours per group followed by Viva-voce.
6. The practical syllabi shall include all the games, Athletics, other Activities events as given in semester

W.e.f Academic Session 2024-25


Chairperson

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 3rd Semester:

Total Credits- 22

Sr. No	Course Code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES - 301	DSC	Adapted Physical Education	3	0	1	4	30	70	100
2.	BPES-302	DSC	First Aid and Safety Measure	3	0	1	4	30	70	100
3.	BPES - 303	MIC	Practical Athletic:- (Long Jump & Hammer Throw) Practical Game:- Netball & Basketball	0	8	0	4	30	70	100
4.	BPES - 304	MDC	Computer Application - II	2	0	1	3	25	50	75
5.	BPES - 305	AEC	English Communication Skills-II	2	0	0	2	15	35	50
6.	BPES - 306	SEC	Athletic:- (Javelin) Game:- Kho-Kho & Cricket	0	6	0	3	25	50	75
7.	BPES - 307	VAC	To be Selected from University Common pull of Value Added Course	0	4	0	2	15	35	50
				10	18	03	22	170	380	550

Note:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

1. The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.
2. The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
3. Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/Incharge.
4. For the final examination, final lesson will be prepared on a separate chart.
5. Duration of practical examinations will be three hours per group followed by Viva-voce.
6. The practical syllabi shall include all the games, Athletics, other Activities events as given in semester

W.e.f Academic Session 2024-25

[Signature]
Chairperson

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 4th Semester:

Total Credits- 24

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES - 401	DSC	Theory of Games & Athletics	3	0	1	4	30	70	100
2.	BPES - 402	DSC	Science of Kinesiology - I	3	0	1	4	30	70	100
3.	BPES - 403	DSC	Organization and Administration of Physical Education	3	0	1	4	30	70	100
4.	BPES - 404	DSC	Measurement and Evaluation in Physical Education	3	0	1	4	30	70	100
5.	BPES - 405	MIC (VOC)	Practical:- Athletic:- (Triple jump & Hurdles) Practical:- Games:- Football & Table Tennis	0	8	0	4	30	70	100
6.	BPES - 406	AEC	Hindi (संचारकौशल)	2	0	0	2	15	35	50
7.	BPES - 407	VAC	To be Selected from University Common pull of Value Added Course	0	4	0	2	15	35	50
				14	12	04	24	180	420	600

Note for Summer Internship:- Students exiting the programme after fourth semester and securing 94 Credits including 4 Credits of summer internship will be awarded UG Diploma in the relevant Discipline/Subject

Note for Practical:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

1. The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.
2. The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
3. Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/In-charge.
4. For the final examination, final lesson will be prepared on a separate chart.
5. Duration of practical examinations will be three hours per group followed by Viva-voce.
6. The practical syllabi shall include all the games, Athletics, other Activities events as given in semester

W.e.f Academic Session 2024-25

Chairperson

[Signature]

Rajay, 09/02/25

[Signature] 14/08/25

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 5th Semester:

Total Credits- 24

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES - 501	DSC	Sports Management	3	0	1	4	30	70	100
2.	BPES - 502	DSC	Exercise of Physiology	3	0	1	4	30	70	100
3.	BPES - 503	DSC	Sports Nutrition	3	0	1	4	30	70	100
4.	BPES - 504	DSC	Science of Sports training	3	0	1	4	30	70	100
5.	BPES - 505	MIC (VOC)	Callisthenic Exercise (Mass P.T, Dumble & Aerobic Exercise)	0	8	0	4	30	70	100
6.	BPES - 506	Internship	Internship				4			100
				12	8	4	24	150	350	600

Note:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

1. The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.
2. The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
3. Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/Incharge.
4. For the final examination, final lesson will be prepared on a separate chart.
5. Duration of practical examinations will be three hours per group followed by Viva-voce.
6. The practical syllabi shall include all the games, Athletics, other Activities events as given in semester

W.e.f Academic Session 2024-25

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Chairperson

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 6th Semester:

Total Credits- 22

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES - 601	DSC	PPCD	3	0	1	4	30	70	100
2.	BPES - 602	DSC	Sports Psychology & Sociology	3	0	1	4	30	70	100
3.	BPES - 603	DSC	Balanced Education	3	0	1	4	30	70	100
4.	BPES - 604	DSC	Olympic Movement	3	0	1	4	30	70	100
5.	BPES - 605	MIC (VOC)	Practical:- Athletics:- Javelin & Discuss Throw Event Management:- (Kabaddi, Badminton & Volleyball)	0	8	0	4	30	70	100
6.	BPES - 607	SEC	Yoga-Pranayam and Assana	0	4	0	2	15	35	50
				12	12	04	22	165	375	550

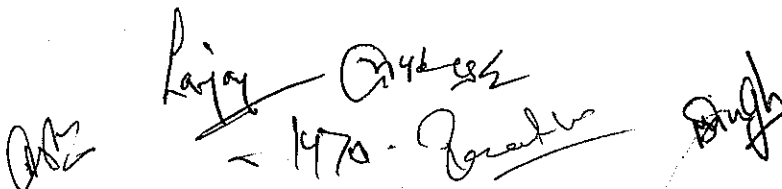
Note:- Students will be awarded 3-Year UG Degree in relevant major Discipline/ Subject upon securing 136 Credits.

Note:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

1. The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.
2. The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
3. Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/Incharge.
4. For the final examination, final lesson will be prepared on a separate chart.
5. Duration of practical examinations will be three hours per group followed by Viva-voce.
6. The practical syllabi shall include all the games, Athletics, other Activities events as given in semeste

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Chairperson


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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education ·
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 7th Semester (Honours)

Total Credits- 24


Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES-701	DSC	Officiating & Coaching	3	0	1	4	30	70	100
2.	BPES - 702	DSC	Sports Medicine, Physiotherapy and Rehabilitation	3	0	1	4	30	70	100
3.	BPES - 703	DSC	Bio-mechanic	3	0	1	4	30	70	100
4.	BPES - 704	DSC	Educational Technology and Method of Teaching in Physical Education	3	0	1	4	30	70	100
5.	BPES - 705	DSC	Research and Statistics in Physical Education - I	3	0	1	4	30	70	100
6.	BPES - 706	MIC	Practical Athletics:- Long Race & Pole vault Practical Games:- Boxing, Cricket and Judo	0	8	0	4	30	70	100
				15	08	05	24	180	420	600


Note:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

1. The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.
2. The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
3. Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/Incharge.
4. For the final examination, final lesson will be prepared on a separate chart.
5. Duration of practical examinations will be three hours per group followed by Viva-voce.
6. The practical syllabi shall include all the games, Athletics, other Activities events as given in semester

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Chairperson

 Lajay Anand
Coordinator

 - 1471 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 8th Semester (Honours)

Total Credits- 24

Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES-801	DSC	Sports Psychology	3	0	1	4	30	70	100
2.	BPES-802	DSC	Nature Studies	3	0	1	4	30	70	100
3.	BPES-803	DSC	Anatomy and Physiology	3	0	1	4	30	70	100
4.	BPES-804	DSC	Scientific Principles of Sports Training	3	0	1	4	30	70	100
5.	Optional: Anyone of the following:-									
	BPES-805	DSC	Science of Teaching & Coaching game (Wrestling)	3	0	1	4	30	70	100
	BPES-806		Science of Teaching & Coaching game (Kabaddi)							
	BPES-807		Science of Teaching & Coaching game (Basketball)							
6.	BPES-808	MIC	Practical Game:- Kho-kho Practical Athletics:- Sprint & Triple jump	0	8	0	4	30	70	100
				15	08	05	24	180	420	600

Note:- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.

- The practical classes shall be held as per the scheme of each semester. The final practical examinations shall be conducted by external & internal examiners at the end of each semester.
- The draw for final examination (Athletic, Games & other activities) will be drawn ten days before the final exams out of games and Athletics events given in each semester.
- Supervisory lesson in teaching (one each from every game, athletics events, and other activities) shall be prepared by students in their note books and got checked by the concerned teacher during each semester and countersigned by the HOD/Incharge.
- For the final examination, final lesson will be prepared on a separate chart.
- Duration of practical examinations will be three hours per group followed by Viva-voce.
- The practical syllabi shall include all the games, Athletics, other Activities events as given in semester

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scheme of Examination for the 8th Semester: (Hons. with Research)

Sr. No.	Course Type	Course Code	Course Title	Workload			Credits	Division		
				L	P	T		Internal	External	Total
1.	BPES - 809	DSC	Research and Statistics in Physical Education - II	3	0	1	4	30	70	100
2.	BPES - 810	DSC	Kinesiology - II	3	0	1	4	30	70	100
3.	BPES - 811	MIC	Sports Journalism And Mass Media	3	0	1	4	30	70	100
4.	BPES - 812	Dissertation	Dissertation				12		300	300
				9	3	3	24	90	510	600

Note:-four credits of internship earned by a student during summer internship after 2nd Semester or 4th Semester will be counted in 5th Semester of a student who pursues 3 Year UG Programmes without taking exit option.

DSC - Discipline Specific Courses
VOC - Vocational Courses
MIC - Minor Course
MDC - Multidisciplinary Courses
AEC - Ability Enhancement Courses
SEC - Skill Enhancement Courses
VAC - Value Added Courses

Internship

Research Project/Dissertation

W.e.f Academic Session 2024-25

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1473 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Foundation of Physical Education
BPES – 101

Total Credits: 4
L – P – T
3 – 0 – 1

Total Marks:- 100
External Marks: – 70
Internal assessment: -30
Time :- 3 hours

Course Outcomes

- CO1. The students can better understand the importance of physical education by studying the history.
CO2. Students would be able to know the history of Physical Education in India, Ancient Greek, Germany, Sweden, and Denmark. Students would be able to know the present status of Physical Education in Russia and Japan.
CO3. Students would be able to know about Indian sports personality and National awards: Arjuna Award, Rajive Gandhi Khel Ratna Award, Dronacharya Award
CO4. Knowledge of Olympism in organizing various sport activities.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit – I

Meaning & definition of physical education, aim and objective of physical education. Scope of physical education, need and importance of physical education in modern society. Relationship of physical education with general education. Leisure and physical education. Place of physical education in the present system of education.

Unit –II

National programme of physical education & sports. National institution of physical education & sports – NSNIS Patiala, LNIPE Gwalior, sports authority of India (SAI), SAI training center scheme, national coaching scheme, rural sports and national.

Unit – III

History of physical education in India, division of ancient period, British period till 1947. Physical Education in India after independence, physical education in Greece, Rome, Germany. Indian Olympic Association, history, constitution and role of IOA. Organization and State Associations, Asian Games, Common Wealth Games.

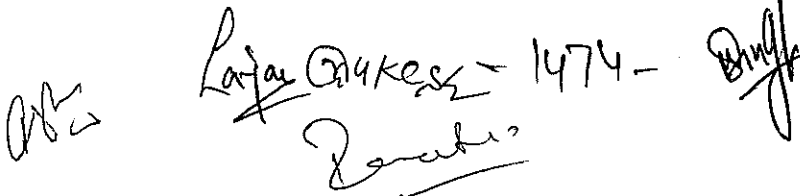
Unit – IV

Olympic movement and its impact in physical education and sports., Sports awards – Bhima, Arjun award, Rajiv Gandhi Khel Rattan award, Maulana Abul Kalam Azad Trophy, Dhyan chand life time achievement award and Dronacharya Award.

Reference: - 1. Buchor, Charles A Foundation of Physical Education St. Louis: the – C.V. Mosby company 1983.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Sports Sociology
BPES – 102

Total Credits: 4
L – P – T
3 – 0 – 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes

- CO1. Understanding social relationships between sport participants is the basis of the need to study sports from a sociological perspective.
- CO2. The amateur develops sports skills by socializing (engaging in the sports) with the professional who serves as the mentor.
- CO3. Gender issues are central to sports sociology as the discipline defines the roles of males and females in different aspects of society. The study of female engagement in a sport or certain sports is an aspect of sports sociology that cannot be overemphasized.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit-I

Meaning, Definition of Sports Sociology, Importance of Sports. Physical Education and Sports as a Social Phenomenon.

Unit – II

Social Institutions: Role of Social Institution in participation in games and sports. Socialization through sports

Unit – III

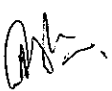
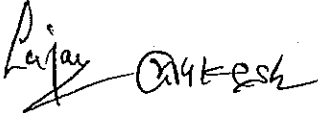
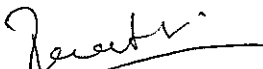
Women in Sports: Social myths related with women. Attitude of Society towards sports man and Sports women. Future of women participation in sports

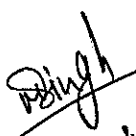
Unit – IV

Meaning, Definition and characteristics of leadership, qualities of a leader, leadership training in Physical Education, Need and Importance of leadership in Physical Education.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

YOGA SCIENCE
BPES – 104

Total Credits: 3
L – P – T
2 – 0 – 1

Total Marks:- 75
External Marks: – 50
Internal assessment:- 25
Time :- 3 hours

Course Outcome:-

- CO1. The study of foundation of yoga helps the students to understand the historical background.
- CO2. Demonstrate different types of asana and Pranayama Techniques.
- CO3. Effect of Yogic exercises on digestive system, respiratory system, circulatory system.
- CO4. Classify and exhibit various Mudras.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 10 marks. It will comprise of 5 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 10 marks each.

UNIT-I

Historical Background of Yoga Definition of Yoga and its Objectives Importance of Yoga in the Modern Society Yogic diet, Suitable place for Yoga

UNIT-II

Meaning & Importance of Astang Yoga Pranayam, its types and techniques, Benefits of Pranayam, Shitali, Sheetkari, Kumbak, KapalBhatti.

UNIT-III

Effect of Yogic Exercises: Digestive System, Respiratory System and Circulatory System. Internal Purification/Satkarms -JalNeti and its benefits & technique, SutarNeti and its technique and benefits and its technique & benefit. Asanas: Types of Asnas, their benefits (How Asana are useful) prevention of diseases through Asana.

UNIT-IV

Mudra & Bandha:- JalanderBandh, MulaBandh and UddyuanBandh, their Benefits and technique Gyan Mudra, Prana Mudra, their techniques and benefits Famous Yogis: Maharishi Patanjali, GrokhNath, Swami Daya Nand, and Arvind Ghosh Famous Institutions: Gurukul Kangri Haridwar, Viveka Nand Yog Institutions, Bihar Yog Bharti Munger.

Reference Book:

YOGA PHILOSOPHY – S.N. Dasgupta

BHARAT KA MAHAN YOGI:- Vishwnath Mukherjee

TEXT BOOK OF YOGA- Yogeshwar

ANATOMY & PHYSIOLOGY – J.P. Brothers

ANATOMY & Physiology for Nurses PATANJALI YOGA PRADEEP- Geeta Press Gorakhpur

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Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

English and Communication Skills-I
BPES – 105

Total Credits: 2
L – P – T
2 – 0 – 0

Total Marks:- 50
External Marks: – 35
Internal assessment: - 15
Time :- 1.5 hours

Course Outcomes:-

- CO1. Developing sentence structure
- CO2. Developing speaking and writing skills.
- CO3. Use a variety of accurate sentence structures meaningfully in written and oral form.
- CO4. Developing students' ability to infer meaning.
- CO5. Acquiring linguistic competence for employability.

Instruction for paper setter / Examiner

The question paper shall be of 35 marks (Unit I—20 Marks, Unit II-15 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts. Questions from the second unit may be based upon the movie.

UNIT - I

Sentence (Basic sentence patterns, Subject and predicate, Statements (affirmative and negative), questions, imperatives and exclamations, Subject –Verb Concord). Tenses, Active and Passive Voice, Direct and Indirect Speech

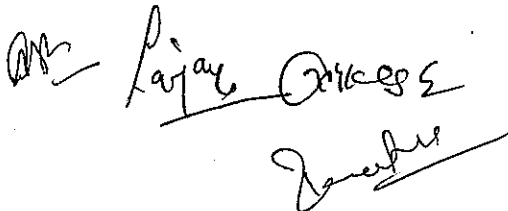
UNIT - II

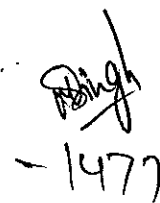
Screening & Critical Analysis in English of Hindi Sports Movie (Mary Kom)

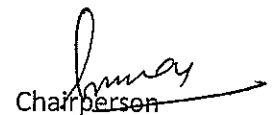
Recommended Readings:

1. Eastwood, John. *Oxford Guide to English Grammar*. OUP, 1994.
2. Hewing, Martin. *Advance English Grammar* (reprint) CUP, 2009.
3. Iver, Mitchelle. *Guide to Good Writing*. Random House, 1993.
4. Leech, G and M Deucar. *English Grammar for Today*. Macmillan, 2009.
5. Watch sports Movies

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Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Human Values and Ethics

BPES – 107

Total Credits: 2

L – P – T

2 – 0 – 0

Total Marks:- 50

External Marks: – 35

Internal assessment:- 15

Time :- 1.5 hours

Course Outcomes:

CO1. It helps students understand practically the importance of trust, mutually satisfying human behavior and enriching Instruction with nature.

CO2. Ability to develop appropriate technologies and management patterns to create harmony in professional and personal life

Instruction for paper setter / Examiner

The question paper shall be of 35 marks (Unit I—20 Marks, Unit II-15 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts. Questions from the second unit may be based upon the movie.

UNIT I:

Introduction Need, Basic Guidelines, Content and Process for Value Education. Understanding the need, basic guidelines, content and process for Value Education. Continuous Happiness and Prosperity & Ethics. Method to fulfill the above human aspirations, understanding and living in harmony at various levels.

UNIT -II:

Understanding Harmony in the Nature, Family and Society- Harmony in Human Relationship the basic unit of human Inturction . Understanding the meaning of Trust (Vishwas) and Respect (Samman) as the foundational values of relationship. Difference between intention and competence. Ethical Human Conduct.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

HEALTH EDUCATION
BPES – 201

Total Credits: 4

L – P - T

3 – 0 - 1

Total Marks:- 100

External Marks: – 70

Internal assessment: - 30

Time :- 3 hours

Course Outcome:-

CO1. Explain the meaning, Principles and Scope of health education and classify communicable disease, their transmission and prevention.

CO2. Care of personal hygiene and different aspects of school health Service.

CO3. Explain the causes, symptoms and preventions of communicable disease

CO4. Recall the concept of Communicable diseases and list out various programs for controlling diseases.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions.

Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type

questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be

set from each of four units, out of which the students will be required to attempt one question from each

unit. Long answer type questions will carry 14 marks each.

UNIT-I

Health Education:- Concept, meaning, definition, and scope of Health & Health Education. Principles and practice of health education. Planning and evaluation in health education programmes. Organization and administrative set up of health services in India.

UNIT-II

Hygiene: The concept of hygiene and personal hygiene care of skin, mouth, nails And clothing: bathing etc. importance of rest, sleep and exercise. Community Health: Brief account of housing water supply, sewerage and refuse disposal. School Health Service: History, School Health Problems. Health appraisal, healthful school environment, nutritional services, mental health, school health, school health records, Safety measures in the playfields – first aid and emergency care.

UNIT-III

Diseases: Disease: Meaning of a disease, diseases cycle, epidemiological trials, modes of disease transmission, immunity. Health Problem in India: Problems related to communicable diseases: (HIV- AIDs, Hepatitis, Malaria, Rabies and Tetanus) nutrition, environmental sanitation, medical care and population. Eating Disorders - Anaroxia Nervosa, Bullimia Nervosa and Binge Eating Disorders

UNIT-VI

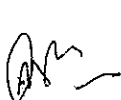
Sex Education and Family Planning:- Sex Education, Concept and meaning sex education, Need of sex education professional students. Sexually transmitted diseases **Family Planning:** Meaning and concept of family planning. Methods to control child birth, National family welfare programme & Mother and child health.

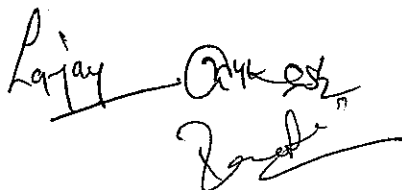
SUGGESTED READINGS


- Singh Ajmer and et al, "Essential of physical Education" (2007) 3rd edition, Kalyani
- Publisher B-1/292, Rajinder Nagar Ludhiana Punjab.
- Pandey, P.K. and Gongopadhyay, S. R. "Health Education for School Children", Friends
- Publication, 6, Mukerjee Tower, Dr. Mukerjee Nagar-Delhi.
- Park, J.E. and Park, K. "Text Book of Preventive and Social Medicine", (1985) Bnasidar 91 Bhanot, Publisher, Jabalpur-1985
- Park, J.E. and Park, K, "Text Book of Community Health for Nurses", (1982)Asrani Publisher, Jabalpur.

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1479 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Anatomy and Physical Fitness
BPES – 202

Total Credits: 4
L – P - T
3 – 0 - 1

Total Marks:- 100
External Max. Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1. Know the basics of anatomy.
- CO2. Understand the circulatory, respiratory and digestive system.
- CO3. Understand the excretory, endocrine, nervous system & sense organs
- CO4. Understand feet exercise on various system of our body.
- CO5. Understand the physical fitness components of physical fitness.

Instruction for paper setter/examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit-I

Meaning of anatomy, cell, structure, properties of living matter. The role of anatomy in physical education & sports, anatomy of bones cartilage's, Names and location and functions of bones, kinds of bones, joints and their types of body.

Unit-II

Anatomy of digestive organs (alimentary canal), meaning of endocrine glands and structure of the following glands - pituitary glands, ingroid parathyroid, adunal glands.

Unit-III

Anatomy of muscular system, structure of muscles and their kinds. Properties of muscles. Muscle work and, fatigue, anatomy of respiratory organs, tissue and palmary respiration, anatomy of heart, function of heart, heartbeat, stroke volume, cardiac output.

Unit-IV



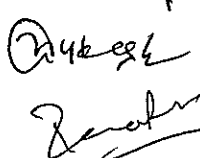

Physical — fitness:- Definition of physical fitness components of physical fitness, benefits of physical - activity, development of physical fitness. Controlling and management of your weight, determining the right weight to you, factors influencing physical fitness. Prevention of fitness related injuries, selecting a nutrial plan for fitness.

Reference:-

1. Introduction to anatomy & physiology - Dr. Shemsher Singh.
2. Bauer. WAV. (Editor). TODAY'S Health Guide, American Medical Association, Revised Edition 1968.

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   1480- 

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Computer Application – I
BPES – 204

Total Credits: 3
L – P - T
2 – 0 - 1

Max Marks: 75
External Theory: 50
Internal Assessment: 25
Time: 3 Hour

Course Outcome:-

- CO1. The students would be able to understand the basics & types of computer.
- CO2. The students would be able to understand the theoretical and practical aspects of MS Word, Excel, Power Point and Internet.
- CO3. The students would be able to aware about fundamentals of computer hardware and software.

Instruction for paper setter/examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 10 marks. It will comprise of 5 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 10 marks each.

Unit-1

Meaning and definition of computer, characteristics of computer, and basic applications of computer. Unit-II Components of a Computer System, Central Processing.

Unit-II

Visual Display Unit, Keyboard. Input and output devices, mouse, joy stick, scanner, microphone, OCR, MICR; light pen, bar code reader, digital camera, printer, speaker, plotter.

Unit-III

Concept of Memory, primary and secondary memory, RAM and ROM, units of memory - byte, kilobytes, megabytes, gigabytes.

Unit-IV

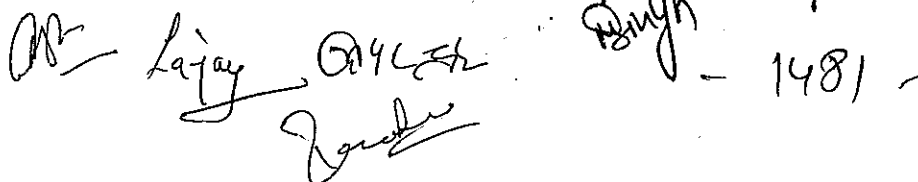
Computer languages, machine language, assembly language and high level language, role of assembler and compiler. Storage devices, floppy disc, hard disc, CD ROM and DVD.

Reference:-

1. Essential of computer and network Technology by Dr. N.S. Gill (Khanna Book Publications New Delhi).
2. Fundamental of Computers by V. Rajaramans (Printice Hall - India).
3. Computer Fundamentals by B; Ram.
4. P.C. Software (MS-Excel etc.) by R.K. Taxali (Take Maegrew Hill).

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Chairperson


Lajay - 1481 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Hindi (संचारकौशल)
BPES – 205

Total Credits: 2
L – P – T
2 – 0 – 0

Total Marks:- 50
External Marks: – 35
Internal assessment: - 15
Time :- 1.5 hours

उद्देश्य: पाठ्यक्रम छात्राओं को निम्न बिन्दुओं को समझने में सक्षम करेगा:

छात्राओं में हिन्दी भाषा-सम्बन्धी योग्यताओं का विकास करना। छात्राओं में हिन्दी अध्यापन के उपरान्त अपेक्षित कुशलताओं का विकास करना। छात्राओं में हिन्दी भाषा के उच्चारण एवं शुद्ध लेखन की योग्यता उत्पन्न करना। छात्राओं में हिन्दी सम्बन्धी विभिन्न साहित्यिक क्रियाओं के आयोजन की क्षमता विकसित करना। छात्राओं में हिन्दी वर्तनी के शुद्ध रूप का ज्ञान करवाना। छात्राओं में हिन्दी के अक्षर विन्यास का ज्ञान करवाना।

प्रश्नपत्र-निर्माण के लिये निर्देश:-प्रश्न पत्र में कुल 5 प्रश्न दिये जाएं। प्रश्न पत्र के लिये कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात अंको का होगा। प्रश्न-पत्र हल करने का समय डेढ़ घंटे होगा। प्रथम प्रश्न पाठ्यक्रम के दो घटकों में निर्धारित विषयों के आधार पर बनाया जाए। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघु उत्तर वाले विकल्परहित सात प्रश्न पूछे जाएं। प्रत्येक लघुत्तरात्मक प्रश्न एक अंक का होगा। द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के क्रमशः प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा। परीक्षार्थी को प्रश्न-पत्र की भाषा के चयन हेतु हिन्दी का विकल्प दिया जाएगा।

इकाई-1

देवनागरी लिपि की प्रकृति एवं विशेषताएं। उच्चारण प्रक्रिया के दोष, कारण एवं उपाय। हिन्दीवर्तनी के नियम एवं वर्तनी में सुधार के नियम। वाच्य,उसके भेद एवं उनके प्रयोग।

इकाई-2

खेल-कूद से सम्बन्धित हिन्दी चलचित्र चक दे इंडिया का विश्लेषण करना।

सन्दर्भग्रन्थसूची

- डॉ० प्रतिभा खरब, 2012 ई. हिन्दी शिक्षण और वर्तनी, एन०सी०ई०आर०टी० नई दिल्ली।
- डा० नीलम (2016 ई. हिन्दी शिक्षण अर्थविज्ञान प्रकाशन नई दिल्ली)
- डा० शिखा चतुर्वेदी, हिन्दी शिक्षण, लालबुकडिपो, मेरठ।
- बी० एल० वत्स, हिन्दी शिक्षण, अग्रवाल प्रकाशन, नई दिल्ली।
- बछोतिया हीरालाल (2011 ई. हिन्दी शिक्षण संकल्पना और प्रयोग, किताब घर प्रकाशन दिल्ली।
- भोलानाथ तिवारी, हिन्दी शिक्षण, लिपि प्रकाशन, नई दिल्ली।
- मंगलउमा (2009 ई. हिन्दी शिक्षण आर्य बुक डिपो, नई दिल्ली।
- पाण्डेय राम शुक्ल हिन्दी शिक्षण, अग्रवाल पब्लिकेशन, आगरा।
- पाण्डेय आर० एस० (1992 ई. विनोद पुस्तक भण्डार, आगरा।
- निरंजनकुमार सिंह, हिन्दी शिक्षण, राजस्थान ग्रन्थ अकादमी, जयपुर।

W.e.f Academic Session 2024-25

Rajay Singh
1982
Rajay Singh

Singh

Chairperson

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Environmental Studies
BPES - 207

Total Credits: 2

L - P - T

2 - 0 - 0

Total Marks:- 50

External Marks: - 35

Internal assessment: - 15

Time :- 1.5 hours

Course Outcome:-

- CO1. Understand the types of pollutions-air pollution, water pollution, and soil-pollution.
CO2. The students would be able to know the Urban/Rural problems related to energy

Instruction for paper setter/examiner

The question paper shall be of 35 marks (Unit I—20 Marks, Unit II-15 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts. Questions from the second unit may be based upon the movie.

Unit-I

Environment :- The Nature and scope and importance. Need for public awareness. Natural resources- renewable and non-renewable. Over utilization of various resources and consequences. Role of individual in conservation of natural process.

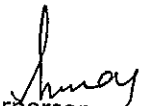
Unit - II



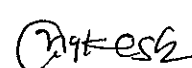
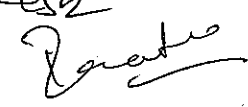
Environmental pollution-definitions, cause & Its Types. Types of pollutions-air pollution, water pollution, and soil-pollution. Concepts, structure and function of ecosystem. Types of ecosystem-forest ecosystem, grassland aquatics ecosystem.

REFERENCES:-

- 1) Aggarwal, K.C. 2001 Environmental Biology, Nidi Pub. Ltd., Bikaner.
- 2) Bharucha, Frach. The Biodiversity of India. Mapin Publishing Pvt. Ltd. Ahmedabad 380013. India. Email: mapin@icenet.net @
- 3) Brunner R.C. 1989. Hazardour Waste Incineration, MC.Graw Hill Inc. 480p.
- 4) Clark R.S. Marine Pollution, Slanderson Press Oxford (TB)
- 5) Cunningha, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Pub. House, Mumbai 1196 p.
- 6) De A.K. Environmental Chemistry, Wiley Eastern Ltd.
- 7) Down to Earth, Centre for Science and Environmental (R)
- 8) Gleick, H.P. 1993. Water in crisis, Pacific Institute for Studies in Dev. Environmental & Security. Stockholm Env. Institute Oxford Univ. Press, 473 p.
- 9) Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
- 10) Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
- 11) Mhaskar A.K. Matter Hazardous, Tekchno-Science Publications (TB)
- 12) Miller T.G. Jr. Environmental Sciences. Wadsworth Publishing Co. (TB).
- 13) Odum, .P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574 p.

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Chairperson



- 1483 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Adapted Physical Education
BPES – 301

Total Credits: 4

L – P – T

3 - 0 - 1

Total Marks:- 100

External Marks: – 70

Internal assessment: - 30

Time :- 3 hours

Course outcome

- CO1. The students would be able to know the concept meaning importance and scope of adopted physical education
- CO2. The student would be able to know the adopted program in action classification of disability
- CO3. The students would be able to know and understand the concept of rehabilitation and welfare program

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Introduction to Adapted Physical Education

UNIT-II

The Adapted Programme in Action:-Scope of adapted program. The adapted programme for elementary schools. The adapted programme for high/ secondary schools. The adapted programming for college & universities The policies for adapted physical education

UNIT-III

Classification of Disability:-Physical Disabilities:-Causes, Functional Limitations, Characteristics, Mental Retardation:- Causes, Characteristics, Functional Limitations, Visual impairment Causes, Characteristics, Functional Limitations


UNIT-VI

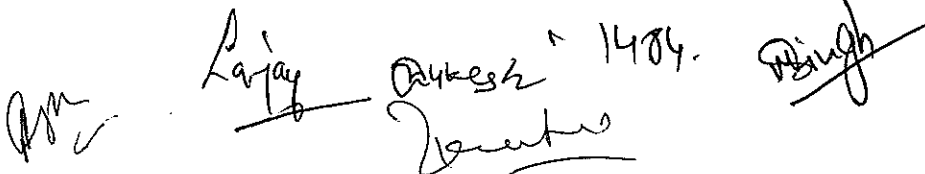
Rehabilitation and Governmental Welfare Programme:- Rehabilitation:-Aims and objectives of rehabilitation council of India, Meaning of functional and occupational rehabilitation, Importance of Adapted Programme in Rehabilitation, Psychological Rehabilitation-Adjust mental, Environmental and Personality Development.

SUGGESTED READINGS

- > H.H. Clark "Development and Adapted Physical Education" Englewood, Prentice Hall 1964.
- > D.H. Clark, A.S. Daniels "Adapted physical Education" New York Harpers & Brothers 1972.
- > G.T. Stafford, "Prevention & Corrective Physical Education"
- > J.L. Rathoone, "Corrective Physical Education" Philadelphia W.B. Saunders Co. 1968.
- > V.V. Hunt, "Recreation for the Handicapped" Prentice Hall inc., 1974
- > P.G. Rasch, "Kinesiology and applied anatomy" Lea & Febriger Philadelphia, 1978
- > B.J. Cratty, "Adapted Physical Education in the main stream" Love Publishing Company, Denver Colorado 80222. 1989.

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Chairperson


Rajay Ankeez Singh

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

First-aid and safety measures
BPES – 302

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcome:-

- CO1. The students would be able to understand the learn health, health education, personal hygiene, health problems-prevention and control, physical fitness and wellness, health and first-aid-management.
- CO2. The students would be able to know the meaning, effects and control measures of disease- Small-pox, Malaria, Influenza, Typhoid
- CO3. The students would be able to know the meaning, importance of health education and its role in physical education.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit – I

School, health programme and environment, school building, light renovation, sanitation, school canteen, school health examination, academic programme, nutrition, balance diet, caloric value of food for competitive sports. Eating for health, today's dieting guide lines medicated value of food.

Unit-II

Methods of Education in Health. Health Instruction s audio- visual methods. Health organizations – world health organizations, Red Cross, government health agencies. Communicable diseases- modes of transmission, control and prevention of following disease- (i) cholera (ii) small-pox (iii) typhoid (iv) malaria (v) influenza

Unit- III

First Aid: Definition and importance of first aid in modern life, types of first aid, first aid box. Reasons of sports injuries, principle of first aid, functions & qualities fo a good first aider.

Unit - IV

Basic steps in safety measures safety measures for the following (i) bites of animals, burns, control of bleeding, cuts and wounds. Safety for drawing artificial respiration. Safety measures environmental hazards. Heat stroke, heat syncope, wind chill and sunburn.

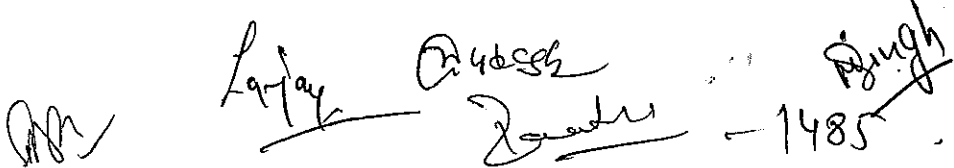
Reference –

- Safety at School – (Education Pamphlet numbers 53 Lonon: Her Majesty's Stationery office 1969.

Stack, Harbet J. Duke Elkow Education for sadeLiving :Englowood cliffs, New Jersey,

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Computer Application – II
BPES – 304

Total Credits: 3

L – P – T

2 - 0 - 1

Max Marks: 75

External Marks: 50

Internal Assessment: 25

Time: 3 Hour

- CO1. The students would be able to understand the basics & types of computer.
- CO2. The students would be able to understand the theoretical and practical aspects of MS Word, Excel, Power Point and Internet.
- CO3. The students would be able to aware about fundamentals of computer hardware and software.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 10 marks. It will comprise of 5 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 10 marks each.

Unit – I

Software & Communication Technology, MS Power Point. System, utility and application software with examples. Need of networking, LAN, MAN, and WAN. Introduction to presentation graphics, understanding the concept of slide show, basic element of slide, different types of slide layouts, creating and saving a presentation, different views of slide, editing and formatting a slide. Adding titles, sub titiss, text, background, water mark, headers and footers, numbering slides, inserting picture from files.

Unit – II

Information Technology Tools:- M.S. Windows (Basic concept of an operating system and its function). Introduction to windows using mouse and moving icons on the screen, my computer, recycle bin, task bar, start menu and menu selection, setting system date and time, windows explorer to you files, folders and directories, creating and renaming of files and folders. Basic components of windows: desktop, flame, title bar, menu bar, status bar using right button of mouse, creating short cut.

Unit- III

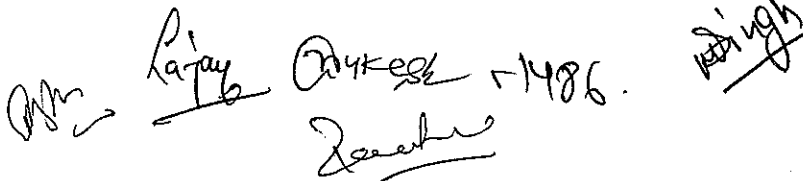
Basic Windows Accessories and MS Word:- Note pad, paint, calculator, word pad, using clip board. Introduction to word processor, creating and saving a document, editing and formatting a document, inserting symbol, printing a document, adding headers and footers, numbering pages.

Unit – IV

MS Excel:- Introduction to spread sheets, concept of work sheet and workbook, creating and saving a work sheet, working with a spread sheet, inserting numbers, date/time, inserting and deleting cells, rows and columns,

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Rajay
Ankur
1486
Singh

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

English and Communication Skill- II
BPES – 305

Total Credits: 2
L – P – T
2 - 0 - 0

Max Marks: 50
External Marks: 35
Internal Assessment: 15
Time: 1.5 Hour

Course Outcomes:

- CO1. Prepare student with writing skills needed in academic and the professional world.
CO2. Give them the opportunity to learn techniques, forms and traditions of various types of writing.
CO3. Learn drafting and proof reading.
Learners shall develop writing skill competence enhancing their employability.

Instruction for paper setter / Examiner

The question paper shall be of 35 marks (Unit I—20 Marks, Unit II-15 marks) and must be strictly according to the prescribed syllabus. The question shall be set on all units covering all the topics and providing sufficient choice to the examinee. The questions may have sub-parts. Questions from the second unit may be based upon the movie.

UNIT I

Letter Writing, E-mail Writing, Précis Writing, Paragraph Writing

UNIT II

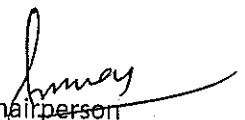
Screening & Critical Analysis in English of Hindi Sports Movie (Milkha Singh)

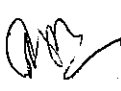
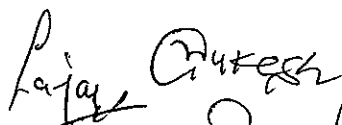
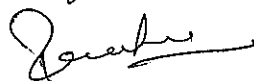
Recommended Readings:

1. Goatly, Andrew. *An Introductory Course book; Critical Reading and Writing*, London Routledge, 2000.
2. McLoughlin, Linda. *The Language of Magazines*. London and New York: Routledge, 2000. (Reprint 2006)
3. Reah, Danuta. *The Language of Newspapers*. London and New York: Routledge, 2004.
4. Goddard, Angela. *The Language of Advertising*. London and New York: Routledge, 2005.
5. Booher, Dianna. *E-Writing; 21st Century Tools for Effective Communication*. New Delhi: McMillan 2007.
6. Boardman, Mark. *The Language of Website* London and New York: Routledge, 2005
7. Mills, Sara. *Discourse*. London and New York: Routledge 1997.
8. Salkie, Raphael. *Text and Discourse Analysis*. London and New York: Routledge, 1995.
9. Butcher, Judith. *Copy Editing Cambridge*: CUP (Third Edition).
10. Gibaldi, Joseph. *MLA Handbook for writers of research papers*. New Delhi: EWP 2000 (6th Editing).
11. Baran Stanley, J. and Dennis K. Davis. *Mass Communication Theory: Foundations, Ferment, and future*. Thomson Press, 2007 (Indian reprint).
12. Child, Peter. *Texts: Contemporary Cultural Texts and Critical Approaches*. Edinburgh: Edinburgh UP, 2006.

Watch Sports Movies

W.e.f Academic Session 2024-25


Chairperson



1487 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Theory of Games and Athletics
BPES – 401

Total Credits: 4

L – P – T

3 - 0 - 1

Total Marks:- 100

External Marks: – 70

Internal assessment: - 30

Time :- 3 hours

Course Outcomes:-

CO1. To learn the technique of Sprinting, Jumping and Shot putting

CO2. To learn the fundamental skills of major games

CO3. To learn the rules of the games for efficient officiating

CO4. To know the various drills for optimum skill development.

CO5. To learn the Basics skills and their drills of Football, Handball, Swimming & Gymnastic

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

The Questions in different units given below should be based on the following games:

1. Football (2) Handball (3) Swimming (4) Gymnastic

UNIT-I

History of games

Role of Haryana's people for the development of games. Duties of officials (Pre-game, during the game & Post game). Technical officials & their duties. Protective equipment used in games

UNIT-II

Dimension & marking of the play field/area, Rules & regulations of the games mentioned above
Interpretation of rules & regulations

The Questions in different units given below should be based on the following Athletic events:

- (i) 400 meter (ii) 800 meter and 10000 meter races

UNIT-III

History of athletics in India. Organization & administration of College athletic meet. Teaching & training of athlete (Track & Events)

UNIT-IV

Dimension, rules & regulations of track & field events given below. 400, 800 meters, 10000 meters races, Duties of technical officials in athletic meet. Equipment and their specifications used in various events of track & field.

REFERENCES:-

1. Wado Allen – The F.A. Guide to training and coaching
2. Seeton, D.C. Dhyton, I.A. Leibu, H.C. And Massumith, Book of sports, Englowood Cliffs, MD. Prephilice Hall.
3. Dr. Faune Hero-The Modern Olympic games Budapost, Pennonic Press.
4. Cobarig A.L. Modern Basketball-A Fundaments Analysis of Skills and Tactics, London: Nicholes Kaya. 1966.
5. Bee, Clair and Norton, on Zone Defense and Attack, New York. The Ronld Press Company, 1959.
6. Bowland B.J Handball a complete Guide London: Faber & Faber Ltd., 24, Rosset Square, 1970.
7. Doherty J. Manneth – Modern track and Field, Englwood Cliffe, N.J. Prentice Hall, Ino.
8. Wado Allen – The F.A. Guide to training and coaching.
9. Uyenishi S.L.- The Text Book of JU- Jutsu-Athletic Publications Ltd. Link House, Store Street, London, W.C.I.

W.e.f Academic Session 2024-25

Chairperson

Rajay Anshu
Ranhi 1488. *B Singh*

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Science of Kinesiology – I
BPES – 402

Total Credits: 4
L – P – T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes

- CO1. The students are able to better understand the body movement in sports and the body mechanism for higher achievements.
- CO2. The Students would be able to know the Meaning, definition, functions and importance of biomechanics in Physical Education and Sports.
- CO3. The Students would be able to know the Meaning, Definition, and Scope & Importance of kinesiology.
- CO4. The Students would be able to know the Basic Concept of Planes and axis.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Basics of Kinesiology : Introduction, Meaning, Definitions & Importance of kinesiology for games and sports. Fundamental and Anatomical positions and movements of joints. Planes and axis. Types of Muscular contractions. Different roles of muscles in a movement. Techniques of Muscular Analysis

UNIT-II

Joint: Structure And Function of the following joints: Neck, shoulder joint, elbow, wrist joint, hip, knee, ankle and foot. The attachment and actions of muscles of following joints: Neck, shoulder, shoulder joint, elbow, hip, knee.

UNIT-III

Common sports injuries- their classification and their care and prevention. Therapeutic exercises (Active, Passive, Resistive and Stretching and their application for rehabilitation). Application of Kinesiology in Physical Education and Sports.

UNIT-IV

Muscular analysis of fundamental movements, Postural and Deformities Walking, running, jumping, throwing and catching. **Postural and Deformities:** Modern Concept of balanced posture. **Common postural deformities** i.e., flat foot, bow legs, knock knees, their causes and remedial measure. Causes of bad posture.

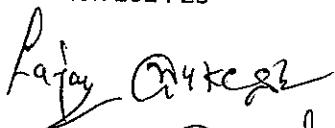
SUGGESTED READINGS

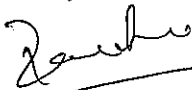
- Jenson, C.R. &Schult, G.W, *Applied Kinesiology: The Scientific Study of Human Performance* (2nd Ed.) New York: MC Grautids Book co., 1977
- Deiels, L. and Worthinghan, C., *Muscle Testing Techniques of Manual Examination*, Lousion W.B. Esundeus Com, 1956
- Bunn, John, W. "Scientific Principles of Coaching".
- James G. Hay. "The Biomechanics of Sports Technique".
- Scott, M. "Analysis of human matters". New York.
- Simonian Charles. "Fundamentals of Sports Biomechanics".
- Wells, Katharine, P. "Kinesiology", Philadelphia.

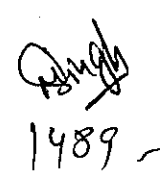
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Chairperson




Rajay Arkeez




1989

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Organization & Administration of Physical Education
BPES - 403

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks: - 70

Internal assessment: - 30

Time :- 3 hours

Course Outcomes:-

- CO1. Management, program organization, and administrative responsibility are main traits that develop by studying organization and administration of physical education.
- CO2. This also helps in providing additional information on methods of organizing competition, athletic field and court layouts, and duties of a physical education administrator.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit - I

Meaning and Definition of Planning, Organisation, Administration and Management and their nature and scope. Importance of Management in Educational Institutions. Principles of Management. Theories of Management, Scheme of Organisation in school, College and University.

Unit - II

Facilities and Equipment Lay-out of Physical Education facilities-indoor and outdoor. Need and importance of equipment for Physical Education. Procedure in purchase of equipment. Development of Improvised equipment. Care, maintenance and disposal of unserviceable equipment

Unit - III

Staff and Leadership in efficient management of Physical Education

Role of leadership in efficient management of Physical Education programme in an organization, Importance of qualified teacher/leader of Physical Education, Students leadership, its importance and limitations, Staff Co-operations, Selection and Training of students leader, Recognition of staff and student leaders

Unit - IV

Intramurals and Extramural Intramurals, Its importance and planning. Events of competitions, time and facility factor, Point system, awards, recognitions

Extramural Outcomes of participations (Educational), Limitations in participations, Selection and training of terms, Participation, finance and other aspects

References:

1. Joseph, P.M. Organization of Physical Education, The old students' Association, TipeKandivali 1963.
2. Voltmer, EE et al, The Organization and Administrations of Physical Education, New Jersey, Prentice Hall Inc, 1979.
3. Maheshwari, B.L. Management by objectives, New Delhi, Tata Mcgraw Hill Publishing Company Ltd. 1982

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Chairperson

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Rajay Anand
Joshi 1490 - Singh

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

MEASUREMENTS AND EVALUATION IN PHYSICAL EDUCATION
BPES - 404

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks: - 70

Internal assessment: - 30

Time :- 3 hours

Course Outcomes

- CO1. The Students would be able to know the meaning, Principles, Needs & Importance of Test, Measurement and Evaluation.
CO2. The Students would be able to know and understand the Construct knowledge and specific fitness test.
CO3. The Students would be able to know the Illustrate various physical fitness and motor fitness test.
CO4. The Students would be able to know and understand the different Sports Skill Tests Course Contents
CO5. The Students would be able to know the Type and classification of Test

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit- I

Introduction to Test, Measurement & Evaluation

Meaning of Test, Measurement & Evaluation in Physical Education, Need & Importance of Test, Measurement & Evaluation in Physical Education, Principles of Evaluation

Unit-II

Criteria: Classification and Administration of test

Criteria of good Test, Criteria of tests, scientific authenticity (reliability, objectivity, validity and availability of norms), Type and classification of Test, Administration of test, advance preparation-Duties during testing-Duties after testing.

Unit- III

Physical and motor Fitness Tests AAHPER youth fitness test, Sit & Reach test, JCR test


Unit- IV

Sports Skill Tests Lockhart and McPherson badminton test, Johnson basketball test, McDonald soccer test, S.A.I volleyball test, S.A.I Hockey test

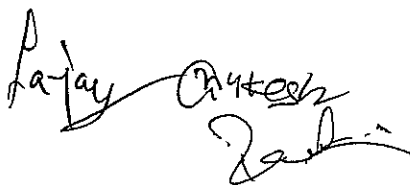
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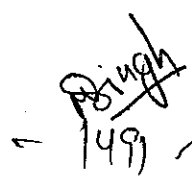
- Barrow, H. M., & McHee, R. (1997). *A practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
Kansal, D.K. (1996). *Test and measurement in sports and physical education*. New Delhi: D.V.S. Publications.
Mathews, D.K., (1973). *Measurement in physical education*, Philadelphia: W.B.Sounders Compnay.
Phillips, D. A., & Hornak, J. E. (1979). *Measurement and evaluation in physical education*. New York: John Willey and Sons.

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Chairperson




Rajay Chatterjee


Singh

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Hindi (संचारकौशल)
BPES – 406

Total Credits: 2
L – P – T
2 – 0 – 0

Total Marks:- 50
External Marks: – 35
Internal assessment: - 15
Time :- 1.5 hours

उद्देश्य: पाठ्यक्रम छात्राओं को निम्न बिन्दुओं को समझने में सक्षम करेगा: छात्राओं में हिन्दी भाषा-सम्बन्धी योग्यताओं का विकास करना। छात्राओं में हिन्दी अध्यापन के उपरान्त अपेक्षित कुशलताओं का विकास करना। छात्राओं में हिन्दी भाषा के उच्चारण एवं शुद्ध लेखन की योग्यता उत्पन्न करना। छात्राओं में हिन्दी सम्बन्धी विभिन्न साहित्यिक क्रियाओं के आयोजन की क्षमता विकसित करना।

प्रश्नपत्र-निर्माण के लिये निर्देश:- प्रश्नपत्र में कुल 5 प्रश्न दिये जाएंगे। प्रश्नपत्र के लिये कुल 35 अंक निर्धारित हैं। सभी प्रश्न समान अंक के होंगे अर्थात् प्रत्येक यूनिट से प्रश्न सात अंको का होगा। प्रश्न-पत्र हल करने का समय डेढ़ घंटे होगा। प्रथम प्रश्न पाठ्यक्रम के दो घटकों में निर्धारित विषयों के आधार पर बनाया जाएंगे। यह प्रश्न अनिवार्य होगा। इसके अन्तर्गत लघु उत्तर वाले विकल्परहित सात प्रश्न पूछे जाएंगे। प्रत्येक लघुत्तरात्मक प्रश्न एक अंक का होगा। द्वितीय, तृतीय, चतुर्थ तथा पंचम प्रश्न का निर्माण पाठ्यक्रम के क्रमशः प्रथम, द्वितीय, तृतीय, चतुर्थ घटक में निर्धारित विषय के आधार पर किया जाएगा। पाठ्यक्रम के प्रत्येक घटक से 50 प्रतिशत विकल्प के साथ ही परीक्षार्थी से प्रश्न पूछा जाएगा। प्रत्येक घटक से प्रश्न का उत्तर लिखने को कहा जाएगा। परीक्षार्थी को प्रश्न-पत्र की भाषा के चयन हेतु हिन्दी का विकल्प दिया जाएगा।

इकाई-1

पत्र लेखन, कहानी लेखन, निबंध लेखन, वाक्य, उसके भेद एवं प्रयोग।


इकाई-2


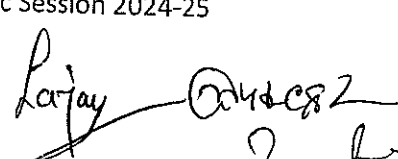
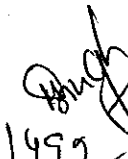
खेल-कूद से सम्बन्धित हिन्दी चलचित्र दंगल का विश्लेषण करना।

सन्दर्भग्रन्थसूची

- डॉ० प्रतिभा खरब., 2012 ई. हिन्दी शिक्षण और वर्तनी, एन० सी० ई० आर० टी० नई दिल्ली।
- डा० नीलम (2016 ई. हिन्दी शिक्षण अर्थ विज्ञान प्रकाशन नई दिल्ली)
- डा० शिखा चतुर्वेदी, हिन्दी शिक्षण, लाल बुक डिपो, मेरठ।
- बी० एल० वत्स, हिन्दी शिक्षण, अग्रवाल प्रकाशन, नई दिल्ली।
- बछोतिया हीरालाल (2011 ई. हिन्दी शिक्षण संकल्पना और प्रयोग, किताब घर प्रकाशन दिल्ली।
- भोलानाथ तिवारी, हिन्दी शिक्षण, लिपि प्रकाशन, नई दिल्ली।
- मंगल उमा (2009 ई. हिन्दी शिक्षण आर्य बुक डिपो, नई दिल्ली।
- पाण्डेय राम शुक्ल हिन्दी शिक्षण, अग्रवाल पब्लिकेशन, आगरा।
- पाण्डेय आर० एस० (1992 ई. विनोद पुस्तक भण्डार, आगरा।
- निरंजन कुमार सिंह, हिन्दी शिक्षण, राजस्थान ग्रन्थ अकादमी, जयपुर।

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Chairperson




1492

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Sports Management
BPES - 501

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks:- 70
Internal assessment: - 30
Time :- 3 hours

Course Outcome:-

- CO1. The Students would be able to know the concept, Meaning, Importance & Scope of Sports Management.
- CO2. The Students would be able to know the Meaning and Types of Class Management.
- CO3. The Students would be able to know and understand the concept of Tournaments.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Introduction to Sports Management Defining Sport Organisation, Administration and Management. Functions of Sport Management- Planning, Organising, Staffing, Directing, Coordinating, Reporting, Budgeting, Evaluating and Reforming (POSDCORB+ ER). Types of Management: Authoritarian Management, Laissez Faire Management, Democratic Management and Eclectic Management. Theories of Management: The Classical Theory, the Neo-Classical Theory and Modern Theory.

UNIT-II

Managerial Skills, Roles and Techniques, Managerial Roles: Interpersonal Roles, Informational Roles, Decision Making Roles. **Office Management:** Meaning, nature (Centralized and Decentralized) and functions of office management, aspects of office management. **Financial Management:** Introduction, objective and scope of financial management, Purpose and Principles of Financial Management in Physical Education and Sports. **Human Resource Management:** Introduction, meaning, definition, planning, recruitment and selection, induction, training and personal development, managing diversity.


UNIT-III

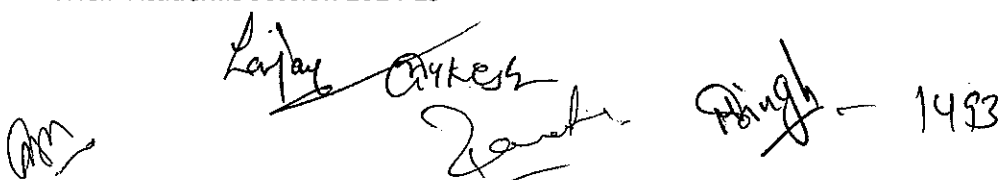
Management of Sports Facilities and Equipment's- Management of Facilities: Introduction, Administrative and General Principles of Planning, Facilities, Types of Facilities, Facility Requirements, Construction and Management of Sports Infrastructures, Outdoor (Marking of Standard Track) and Indoor, Facilities-Gymnasium and Swimming pool. **Management of Equipment and Material:** Introduction, Meanings of Equipment and Material, Need, Importance and Types of Equipment. Principles and Purchase Procedure of Sports Equipment. Important Considerations in Selecting Sports Equipment, Receiving-Stocktaking and Storing Equipment. Care and Maintenance & Conservation of Equipment, Improvisation and Modernization of Equipment, and Disposal of Equipment.

UNIT-IV

Supervision, Evaluation, Managerial and Administrative Duties of Physical Education teacher.
Supervision: Introduction, Meaning, Definitions, Aim and Objectives, Nature and Scope, Principles and Techniques, Need and Importance and Guidelines for Effective Supervision in Physical Education and Sports.
Evaluation: Introduction, Concept, Meaning, Definition, Nature, Purpose, Need and Importance of Evaluation for a Teacher and an Administrator of Physical Education and Sports. Important Points, Steps and Guidelines for an Effective Evaluation Programme. **Managerial and Administrative Duties of a Physical Education Teacher:** Instructional, Office, Finance, Facilities, Public Relations, Personnel, Professional, Purchases, Intramurals, Extramurals etc.

W.e.f Academic Session 2024-25


Chairperson



Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

EXERCISE OF PHYSIOLOGY

BPES - 502

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks: - 70

Internal assessment: - 30

Time :- 3 hours

COURSE OUTCOMES:-

CO1. The students would be able to explain concept of Exercise Physiology in sport.

CO2. The students would be able to understand the concept of Physiology of Cardiorespiratory changes, exercise & recovery.

CO3. The students would be able to understand the concept of Metabolism, Energy systems Anaerobic, Aerobic & ATP Production.

CO4. The students would be able to know about the Physiological changes in training.

Instruction for paper setter / Examiner Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Definition of exercise, types of exercise, benefit of exercise. Meaning of Physiology and Exercise Physiology, Importance & functions of Exercise Physiology in the field of Physical Education and Sports. Long term and short term effects of exercise on muscular system.

UNIT-II

Physiology of respiratory system and types of respiration, effects of exercise on respiratory system. effect of exercise on the functioning of endocrine glands

UNIT-III

Cardio-vascular system:- Adaptation of heart, Effect of exercise on heart, changes in heart, Blood, Blood pressure, effect of exercise on blood & blood pressure. Basic physiology of circulatory system effects of exercise on circulatory system

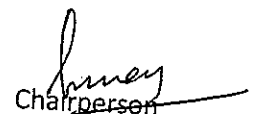
UNIT-IV

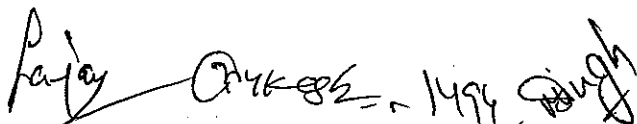
Physiology of Digestive system, stages of digestive process in mouth, stomach, small intestine, Large intestine, function of liver, effect of exercise on digestive system.

REFERENCE:-

1. Basic Anatomy of Physiology of exercise-Piyush Jain
2. Introduction to anatomy & Physiology of Exercise- Sandhya Tiwari
3. Essential of Physical Education & Sports - Dr. Ajmer Singh & others
4. Essential of Exercise Physiology - Lessy G. Shower.
5. Guyton, A.C. Text Book of Medical Physiology, W.B. Saunders Company, Philadelphia, 1981.
6. Devries, H.A. Physiology of Exercise for Physical Education and Athletics. London: Staoles Press, 1976.

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Chairperson


Rajay Anand Singh





Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Sports Nutrition
BPES - 503

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: - 70
Internal assessment: - 30 Time :-
3 hours

Course Outcomes:-

- CO1. Sports nutrition study helps in improving anyone's athletic performance.
- CO2. Sports Nutrition study is an important part of many sports training regimens, being popular in strength sports (such as weightlifting and bodybuilding) and endurance sports (e.g cycling, running, swimming, rowing).
- CO3. Sports nutrition focuses its studies on the type, as well as the quantity of fluids and food taken by an athlete. In addition, it deals with the consumption of nutrients such as vitamins, minerals, supplements and organic substances.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Nutrition concept balance diet and fitness Concept of Nutrition, Sport Nutrition and Health, Types and Sources of Nutrients, Main function of Macro and Micro nutrients in health and sports, Balanced diet, **Fitness with reference to sports and its Measurement** Flexibility, Coordination, Equilibrium, Speed, Agility, Strength, Endurance

UNIT-II

Nutrition And Sports :Energy for sports performance and The role of carbohydrate, protein, fat and their sources. A factor affecting the energy needs in different categories of sports events. Sports supplements and their effect on performance. Nutritional requirements and allowances for sports person of different categories Competition nutrition and its management glycaemic index and sports nutrition

UNIT-III

Nutrition and different body conditions Management of Hypertension atherosclerosis and dieters mellitus in sports person. Management of the female sports person: Menarche and Menstruation, Amenorrhea: Anemia and Iron Supplementation, Bone Health and Calcium Supplementation
Eating Disorders.

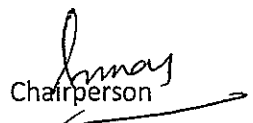
UNIT-IV

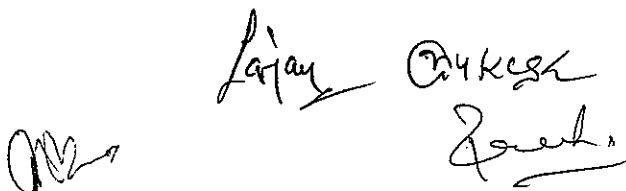
Weight Control Basic principles of weight control Calorie concept of weight control Fat reduction and role of fat loss supplements Role of diet in weight control.

SUGGESTED READINGS

- Bean, A. (2001). Sports Nutrition. Biddles Ltd, Guildford and Kings Lynn.
- Zimmermann, M. (2007). Handbook of Nutrition, Saurab Printers Pvt Ltd.
- Antoonio, J and Stout, J.R. (2001). Sports supplements. Lippincott Williams & Wilkins.

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Chairperson



 - 1495 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Science of Sports Training
BPES - 504

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks:- 70

Internal assessment: - 30

Time :- 3 hours

Course Outcomes :-

CO1. Foundation of Sport training helps in understanding how to improve activity involving physical activity and skill.

CO2. This helps in building the character and personality of a person. It certainly is an excellent tool to keep the body physically fit. Most noteworthy, the benefits of studying Foundation of Sports training are so many that books can be written. Sports training have a massive positive effect on both the mind and body.

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit - I

Meaning, definitions, Aims and objectives of sports training. Principles & Importance of sports training

Unit - II

Training load, load adaptation, overload and recovery, factors of load, Circuit training, interval training, (Fartlek training, plyometric training, Sprint training

Unit - III

Development of Motor components: Speed, Strength, endurance, flexibility, agility.

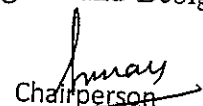
Unit - IV

Periodization: Meaning and definition of periodization, importance of periodization single, double and triple, periodization, long term and short term plan, planning for competition main and build up competitions.

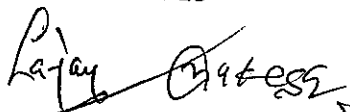
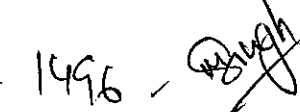

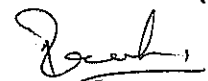
Reference:

- Batty, B: Article and Motor Development in infants and Children, Prentice Hall,
- Dick, F.W: Sports Training Principles Lepus, London 1980.
- Jenson, C.R. Bischer, A.G. Scientific Basic of Athletic Conditioning lea and Bebiger, Philedephic

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Chairperson



 
1496 - 


Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Professional Preparation and Curriculum Design in Physical Education and
Sports Sc.-I
BPES - 601

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks: - 70

Internal assessment: - 30

Time :- 3 hours

Course Outcomes:

- CO1. Students will know the foundation of profession, its criteria.
CO2. Students will understand the various perspectives of profession.
CO3. Students will understand the principles & process of professional development.

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Concept of Physical Education – Meaning and Definition .Foundations of Professional Preparation., Understanding of Foundations of Physical Education and Sports. Meaning of Profession, Preparation, Curriculum and Design. Basis of Professional Preparation in Physical Education and Sports Sciences.

UNIT-II

Forces and Factors Affecting Educational Policies and Programmes. Function of the State Govt. in implementation of the Educational and Professional Preparation of Physical Education and Sports Programme.

UNIT-III

Contribution, Aims and Purposes of General Education in the Professional. Preparation of Physical Education and Sports. Aims and Objectives of Physical Education. Historical Review of Physical Education in USA and Russia. Historical Review of Sweden & Denmark.

UNIT-IV

Professional Educational Qualification Desirable for Physical Education. Teachers for Library, Laboratory and Research. Historical Review of Professional Preparation in United Kingdom and Germany.

Suggested Readings:-

1. Gupta Rakesh, Akhilesh, Santosh, Professional Preparation and Curriculum Design in Physical Education
2. Batia, K.K. and Narang, (1991) Principles of Education (Methods and Technique) Ludhiana Prakash Brothers Educational Publisher
3. Bhatia, K.K.Kadian, K.S.Chanda, PC and Sharma (1990) Contemporary problem of Indian Education, Jalandhar Prakash Brother Educational Publishers.
4. Graily, J.Byrant, Career Potentials in Physical Activity (1990) New Jersey, Prentice Hall in Englowood cliffs USA

W.e.f Academic Session 2024-25

Chairperson

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[Signature: Rakesh] - 1497 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

SPORTS PSYCHOLOGY & SOCIOLOGY
BPES - 602

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks:- 70

Internal assessment: - 30

Time :- 3 hours

Course Outcome:-

- CO1. Understand the importance of psychology and sports psychology.
- CO2. Understand the theories and laws of learning.
- CO3. Importance of perception and motivation.
- CO4. Types of anxiety, aggression and personality.
- CO5. Role of sociology in physical education and sports

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 10 marks. It will comprise of 5 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 10 marks each.

UNIT-I

INTRODUCTION Psychology its Meaning & Definition Psychology as a Science Scope & Importance of Psychology in Physical Education Intelligence Concept of Intelligence: Meaning, Definition & Nature Types of Intelligence Theories of Intelligence

UNIT-II

DEVELOPMENTAL PSYCHOLOGY Nature of Human Growth and Development General Characteristics of Physical, Intellect; Emotional and Social Development during Infancy, Childhood & Adolescence. **PERSONALITY** Concept of Personality: Meaning & Definition Types of Personality

UNIT-III

INDIVIDUAL PSYCHOLOGY Individual Differences: Types and Nature Determinants of Individual Differences: Heredity and Environment. **LEARNING** Concept of Learning: Meaning, Definition, Nature Laws & Theories of Learning Plateau in Learning & Transfer of Learning

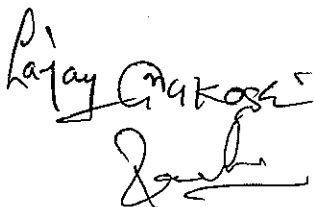
UNIT-IV

Concept of Motivation: Meaning, Definition & its Nature Factors influencing Motivation Techniques of Motivation Motivation & Sports Performance **ANXIETY** Anxiety: its Nature and Kinds Anxiety and performance Management of Anxiety. **ADJUSTMENT** Concept of Adjustment: Meaning & Definition Personal & Social Adjustment Causes of Maladjustment Role of Physical Education in Preventing Maladjustment & Promoting Mental Health.

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Chairperson




Rajay Chakraborty

1498




Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

REFERENCE BOOKS:-

1. Crow, Educational Psychology-Little field adams& Co., 1979.
2. J.Ross, Ground work of Education Psychology.
3. Mathur, S.S., Educational Psychology, VinodPustakMandir, Agra-1962.
4. Jack H., Psychology of Coaching: Theory and Application

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Chairperson

 Rajay Anurag
Ranbu

- 1499 -



Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Balanced Education
BPES - 603

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: - 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1.** Know the various Components of Balanced Education
- CO2.** Understand the Awareness to current status, Measurement & management of Health
- CO3.** Understand the Interdependence of health on sound body, mind, heart, soul, environment, genetics

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit - 1

Balanced Education: Introduction, Meaning, definition, Significance, Aims & Objectives; Components- Health; Wealth; Physical Fitness, Wellness; Longevity, Success; Happiness approach. Components of Balanced Education as Body, Mind, Intellect, Heart, Social, Spiritual, Environment and Genetics etc.

Unit - II

Health : Introduction, Meaning, Definition of Positive & Negative Health; Relation to Fitness, Illness, Wellness Continuum, Personality; Components of Health-Physical, Emotional, Mental, Spiritual, Social, Environmental, Genetic, Interdependence of health on sound body, mind, heart, soul, environment, genetics; holistic nature of health with examples of all components role on each component concept of divisions for convenience of understanding. Goal setting, Decision making for healthy behaviors; Analyzing information, Awareness to current status, Measurement & management of Health.

Unit - III

Wealth: Introduction, Meaning, Generation by work for all, Relation to MDG-2015; Right to Work, Equality, Occupational Skills; Vocational decision making, Goal Setting, Application of knowledge and enriching knowledge for progress harmony and development.

Unit - IV

Physical Fitness: Introduction, relation to health, Definition, health related physical fitness and its components, skill related physical fitness and its components exercises to improve and maintain physical fitness with physical fitness technology and principles of development of physical fitness.

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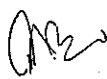
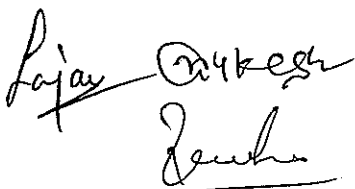
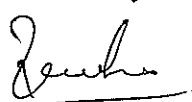
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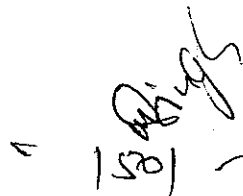
○ Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
○ Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

References:

1. Anspaugh, D.J., M.H. Hamrick & F.D. Rosato (2005). Wellness: Concepts and Application. McGraw Hill, USA.
2. Chopra, D. (1994). The Seven Spiritual Laws of Success. Amber-Allen Publishers, New World Library, New Delhi.
3. Covey, S.R. (2004). The Eighth Habit: From Effectiveness to Greatness. Franklin Covey Co., USA.
4. Kansal, D.K. (2013) Wholistic Personality Development. Sports & Spiritual Science Publications, New Delhi.
5. Kansal, D.K. (2015) Balanced Education , Sports & Spiritual Science Publications. In Press.
6. Loehr, J. And T. Schwartz (2003). The Power of Full Engagement : Managing Energy, not Time, Is the Key to High Performance and Personal Renewal. Free Press Paperbacks, New York, USA.

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1501


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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Olympic Movement
BPES - 604

Total Credits: 4
L – P – T
3 – 0 – 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1.** The Olympic Movement study is the concerted, organized, universal and permanent action, carried out under the supreme authority of the IOC, of all individuals and entities who are inspired by the values of Olympism.
- CO2.** This study talks about and informs that it covers the five continents. It reaches its peak with the bringing together of the world's athletes at the great sports festival, the Olympic Games. Its symbol is five interlaced rings.
- CO3.** The goal of the Olympic Movement is to contribute to build a peaceful and better world by educating youth through sport practiced in accordance with Olympism and its values. It talks about belonging to the Olympic Movement requires compliance with the Olympic Charter and recognition by the IOC. The three main constituents of the Olympic Movement are the International Olympic Committee ("IOC"), the International Sports Federations ("IFs") and the National Olympic Committees ("NOCs").

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit – I

Origin of Olympic Movement Philosophy of Olympic movement, The early history of the Olympic movement, The significant stages in the development of the modern Olympic movement, Educational and cultural values of Olympic movement

Unit – II

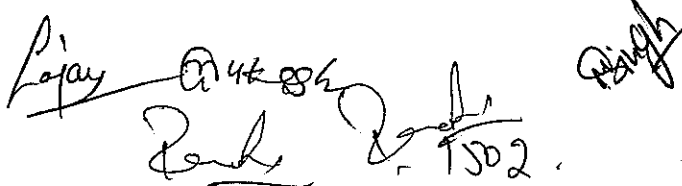
Modern Olympic Games Significance of Olympic Ideals, Olympic Rings, Olympic Flag Olympic Protocol for member countries, Olympic code of Ethics, Olympism in action, Sports for All

Unit – III

Different Olympic Games Para Olympic Games, Summer Olympics, Winter Olympics, Youth Olympic Games

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Unit – IV

Committees of Olympic Games International Olympic Committee - Structure and Functions, National Olympic committees and their role in Olympic movement, Olympic commission and their functions, Olympic medal winners of India



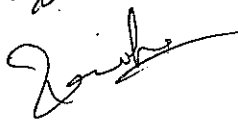
Reference:

Osborne, M. P. (2004). Magictree house fact tracker: ancient Greece and the Olympics: a non fiction companion to magic tree house: hour of the Olympics. New York: Random House Books for Young Readers.

Burbank, J. M., Heying Boulder, C. H. (2001). Olympic dreams: the impact of mega-events on local politics: Lynne Rienner

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   - 1503 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Officiating & Coaching
BPES - 701

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks: - 70

Internal assessment: - 30

Time :- 3 hours

Course Outcomes:-

- CO1. Students would be able to know the technical and tactical training and their methods.
- CO2. Able to mark Track and Field and Officiate
- CO3. Able to understand the rules of the games and sports
- CO4. The students would be able to know the measurement, marking, equipment, rule & regulations of Kabaddi, badminton, judo, kho-kho.
- CO5. The students would be able to know the criteria for selection of college/university team.

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit – I

Concept of Officiating: Meaning, Definition, Importance and Principles. Duties of Officials in General, Pre, During and Post game. Relation of Officials with Management, Players, Coaches and Spectators.

Unit – II

Measurement, Marking, Equipment, Technique and Rule & Regulations of following:
400 meters, 200 meters, Track and Field Event. Preparation of Score Sheet of Track & Field Events. Layout of Standard Track. Preparation of TA/DA bills. Qualities of good official.

Unit – III

Measurement, Marking, Equipment, Basic Fundamentals, Rule & Regulations of following Games: Kabaddi, Badminton, Judo, Kho-Kho. Preparation of Score-sheet of Kabaddi, Badminton, Judo & Kho-Kho.

Unit – IV

Methods of Conditioning:

Interval Method, Circuit Training Method, Weight Training Method, Fartlek Training Method, Principles of Training. Doping and its Effects on Sports Performance on the Health of an Athlete. Criteria for Selection of College/University Team. Warming up, Cooling down and its Physiological Effect.

Reference:

- Rules of Games and Sports by YMCA Madras.
- Athletic training by Cliffs.
- Rules of Games and Sports by Likesh Hani.

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- 1504 - 2024

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION
BPES - 702

Total Credits: 4

L - P - T

3 - 0 - 1

Total Marks:- 100

External Marks: - 70

Internal assessment: - 30

Time :- 3 hours

Course outcome:-

CO1. The students would be able to know the concept meaning importance and scope of sports medicine

CO2. The students would be able to know the demonstration of treatments

CO3. The students would be able to know and understand therapeutic exercise

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit-I

Sports Medicine: Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance. Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches. Need and Importance of the study of sports injuries in the field of Physical Education. Prevention of injuries in sports—Common sports injuries—Diagnosis— First Aid - Treatment - Laceration – Blisters – Contusion - Strain – Sprain – Fracture – Dislocation and Cramps – Bandages – Types of Bandages – trapping and supports.

Unit-II

Physiotherapy Definition – Guiding principles of physiotherapy, Importance of physiotherapy, Introduction and demonstration of treatments - Electrotherapy – infrared rays – Introduction and demonstration of treatments -Ultraviolet rays –short wave diathermy – ultrasonic rays.

Unit-III

Hydrotherapy Introduction and demonstration of treatments of Cry therapy, Thermo therapy, Contrast Bath, Whirlpool Bath – Steam Bath – Sauna Bath – Hot Water Fomentation – Massage: History of Massage – Classification of Manipulation (Swedish System) Physiological Effect of Massage.

Unit-IV

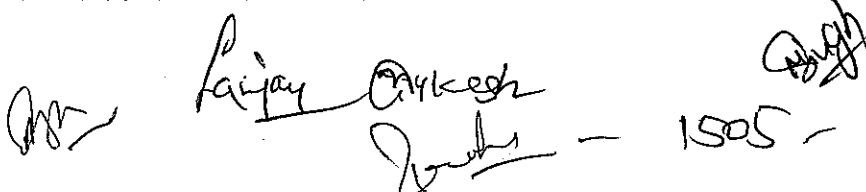
Therapeutic Exercise Definition and Scope – Principles of Therapeutic Exercise, Classification, Effects and uses of Therapeutic exercise. Passive Movements (Relaxed, Forced and passive - stretching) – active movements (concentric, Eccentric and static) application of the therapeutic exercise: Free Mobility Exercise – Shoulder, Elbow – Wrist and Finger Joints Hips, Knee, ankle and Foot joints – Trunk, head and neck exercises.

References:

- Christine, M. D., (1999). *Physiology of sports and exercise*. USA: Human Kinetics.
David, R. M. (2005). *Drugs in sports*, (4th Ed). Routledge Taylor and Francis Group.
Jayprakash, C. S., *Sports Medicine*, J.P. Brothers Pub., New Delhi, 2003.
Pandey, P.K., (1987). *Outline of sports medicine*, New Delhi: J.P. Brothers
Williams, J. G. P. (1962). *Sports medicine*. London: Edward Arnold Ltd.

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Rajay Arkeesh
1505

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

BIOMECHANICS
BPES - 703

Total Credits: 4
L – P – T
3 – 0 – 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course outcome:-

- CO1. The students would be able to know the concept meaning importance and scope of by mechanics
- CO2. The students would be able to know the meaning of motions and their applications in sports
- CO3. The students would be able to know and understand the concept of liver, balance and Equilibrium.

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Meaning, definition, functions and importance of biomechanics in Physical Education and Sports. Fundamental Mechanical Concept of: Force, Pressure, Mass, Weight, Volume and Density. Forces acting on a system: properties of a force: Types of forces: Reaction Force, Friction Force, Centripetal and Centrifugal Force and their application in Sports.

UNIT-II

Linear Movement Linear speed and velocity Linear acceleration Relationship of force, mass and linear acceleration Linear momentum Linear impulse Newton laws of motion and their application in sports

UNIT-III

Spin, Rebound and Swing and their application in Physical Education & Sports A) Spin and its types, B) Effects of spin on speed of the ball on the surface. C Effects of spin on speed and direction of the ball in flight D The Magnus effect its application in Sports Meaning and Application of Following Aerodynamic forces in Physical Education & Sports

UNIT-IV

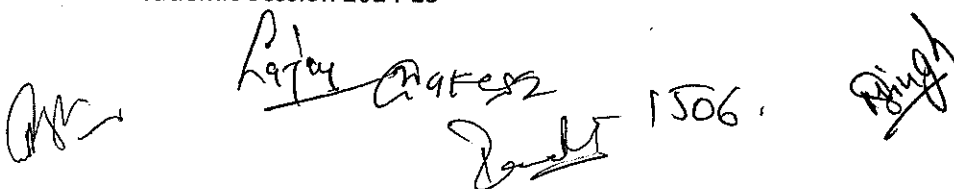
Definition description and application of levers in Physical Education and Sports Advantages of levers, Classes of levers Balance and Equilibrium a) Stable, unstable and neutral equilibrium b) Balance in static position c) Factors effecting stability

Reference Books:

1. Gowitzke, BA and Milner M. 1998, Scientific Basis of human movement (3rd Edition)
2. Hay. J (1978) The Bio-Mechanics of Sports Techniques 2nd Edition Englewood Cliffs: Prentice Hall
3. Kreighbaum&Bartheles, Biomechnis, Ny: Macmillan 1985.
4. Mood S.D. Beyond Biomechanics-New York – Taylor (1996)
5. Hall, S.J. Basic Biomechanics, London, Mosy 1991
6. Hay, J & Reid (1982) The Anatomical and Mechanical Basis of Human Motion.

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1506

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION
BPES - 704

Total Credits: 4

L – P- T

3 – 0 – 1

Total Marks:- 100

External Marks: – 70

Internal assessment: - 30

Time :- 3 hours

COURSE OUTCOMES

- CO1. The students would be able to know the meaning and types of education and educative process and importance of methods of teaching.
- CO2. The students would be able to know about teaching techniques, personal and technical preparation in presentation technique.
- CO3. The students would be able to know about command and its types & teaching aids and Lesson planning.
- CO4. The students would be able to know Micro teaching & macro teaching.
- CO5. The students would be able to know the meaning, types and steps of stimulation teaching.

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit – I

Introduction

Education and Education Technology- Meaning and Definitions, Types of Education- Formal, Informal and Non- Formal education. Educative Process, Importance of Devices and Methods of Teaching.

Unit – II

Teaching Technique

Teaching Technique – Lecture method, Command method, Demonstration method, Imitation method, project method etc. Teaching Procedure – Whole method, whole – part – whole method, part – whole method. Presentation Technique–Personal and technical preparation
Command- Meaning, Types and its uses in different situations.

Unit – III

Teaching Aids Teaching Aids–Meaning, Importance and its criteria for selecting teaching aids. Teaching aids – Audio aids, Visual aids, Audio – visual aids, Verbal, Chalk board, Charts, Model, Slide projector, Motion picture etc. Team Teaching–Meaning, Principles and advantage of team teaching. Difference between Teaching Methods and Teaching Aid.

Unit – IV

Lesson Planning and Teaching Innovations Lesson Planning–Meaning, Type and principles of lesson plan. General and specific lesson plan. Micro Teaching–Meaning, Types and steps of micro teaching. Simulation Teaching - Meaning, Types and steps of simulation teaching.

References:

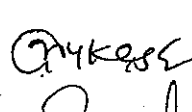
- Bhardwaj, A. (2003). *New media of educational planning*. New Delhi: Sarup of Sons. Bhatia, & Bhatia, (1959). *The principles and methods of teaching*. New Delhi: Doaba House.
- Sampath, K., Pannirselvam, A. & Santhanam, S. (1981). *Introduction to educational technology*. New Delhi: Sterling Publishers Pvt. Ltd.
- Walia, J.S. (1999). *Principles and methods of education*. Jullandhar: Paul Publishers.

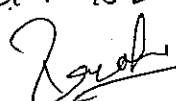
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1507 -



Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

RESEARCHES AND STATISTICS IN PHYSICAL EDUCATION – I
BPES - 705

Total Credits: 4
L – P – T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1. The students would be able to explain the Classify and formulate the different methods of research.
- CO2. The Students would be able to know and understand the importance of statistics in the field of physical education and illustrate the graphical representation of data
- CO3. The Students would be able to know and understand the Mean, Median and Mode for grouped and ungrouped data, compute parametric statistical techniques to solve various problems.

Interaction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit –I

Research literature: Location of the research material,- Index, Books, Bibliography, Note- taking, Scanning and Skimming **Hypothesis:** significance, meaning, types, importance and sources
Sampling: meaning, definition, types of sampling, techniques of sampling, Characteristics of good sampling, sampling errors.

Unit –II

Tools of data collection: Collection of data through questionnaires and observation, Collection of data through schedule. Guidelines for constructing questionnaires/Schedule. Guidelines for successful interviewing

Unit –III

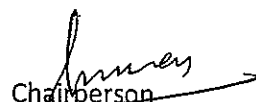
Meaning, Definition and Characteristics of a good statistics, Meaning of “Data”, Methods of Organizing Data through Frequency Distribution. Meaning of Variability, Measures of Variability and Dispersion Range, Average Deviation and Standard Deviation. Meaning of Percentile Rank, Computation of Percentile Rank.

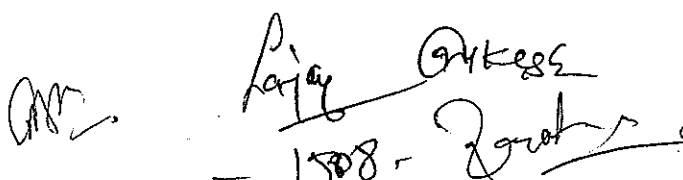
Unit – IV

Meaning of Normal Probability Curve, Characteristics and Properties of Normal Curve. Application of Normal Probability Curve, Meaning of Skewness and Kurtosis.

Suggested Readings:-

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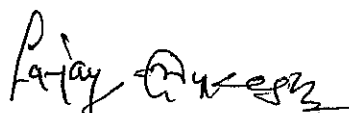
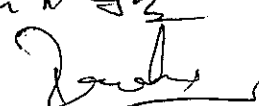
Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)


1. Best J.W. (1982) Research in Education, Prentice Hall Inc. : Delhi.
2. Clarke, H.David., (1985) Research Processes in Physical Education , Recreation & Health Prentice Hall Inc.
3. Thomas Jerry R. and Nelson Jack K., (1996) Research Methods, Physical Activity. Human Kinetics Champaign.
4. Weimer, Jon, (1994) Research Techniques in Human Engineering. Prentice Hall: New Jersey.
5. C.V.Good : (1954) Methods of Research , Appleton Century Crofts Inc., New York.
6. W.R.Mouly: (1975) Educational Research Introduction, David Making CO. Inc. Yew York,
7. J.W.Best (1980) Research in Education, Prentice Hall.
8. D.H. Clarke (1970) : Research Processes in Physical Education, Recreation and Health , Prentice Hall,
9. Clarke.HH. (1992) The Application of Measurement in Health and Physical Education.
10. Clarke,David H.and Clake H.Hares N. (1986) Research Process in Health Education Physical Education and Recreation . Englewood Cliffs, New Jersey, Prentice Hall, Inc.
11. Shaw. Dhananjay (2007) Fundamental statistics in Physical Education & Sports sciences, sports publication.
12. Margaret J. Safrit (1998) Introduction to Measurement in Physical Education and Exercise Science, Time Mirror/ Mosy, College Publishing St. Louis. Toronte Bosion (2Nd. Edition.
13. Morey E. Garrett : Statistics in Psychology and Educated, David Meka Company Inc.
. Devinder K. Kansal : Test and Measurement in Sports and Physical Education, D.V.S.Publications, Kalkaji,

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Sports Psychology
BPES - 801

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: - 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1. Sports Psychology is about improving your attitude and mental game skills to help you perform your best by identifying limiting beliefs and embracing a healthier philosophy about your sport.
- CO2. Sports psychology can be utilized as part of ongoing player management, or alongside other areas of recovery and rehabilitation such as physiotherapy, sports therapy and sports massage.
- CO3. Through the services of a sports psychologist an athlete manages to overcome these pressures and develops a stronger level of positive focus and commitment, then improved performance is more than likely to follow.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

General Concept of Sports Psychology Historical Development of Sports Psychology. Meaning and definitions of sports psychology. Need and Importance of Sports Psychology in competitive sports. Competition, sports competition, its merits and demerits. Interest: Meaning, definition, types, ways and means of arousing and sustaining student's interests in physical education and sports.

UNIT-II

Motor Skill Learning Meaning, definition and nature of motor skill learning. Principles / conditions of motor skill learning. Learning/sports performance curve, its types, characteristics; Plateau in learning/sports performance curve, its reasons and solutions. Attention: Definition, nature, characteristics, types, and role of attention in physical education and sport. Strategies for improving attention

UNIT-III

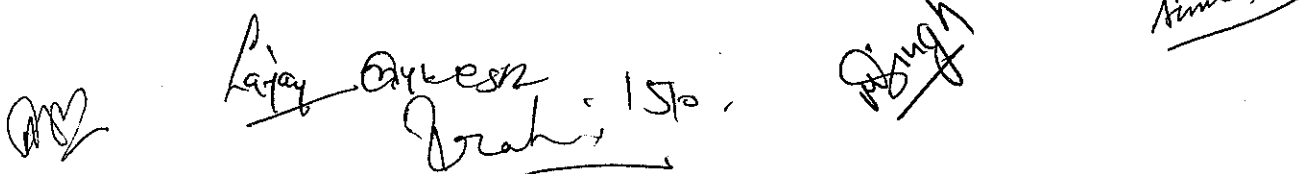
Motivation and Sport Meaning and definition of motivation, motives, drives and needs. Types of motivation. Conditions and factors for sports motivation. Methods of motivation. Need and importance of motivation in the field of physical education and sports.

UNIT-VI

Personality and Sports Concept, meaning, definition, characteristics, dimensions, traits of personality its classification. Factors affecting the development of personality. Athletic / Sports performance and personality. Meaning, concept, types and management of the following Psychological factors affecting sports performance: Stress, Anxiety, Aggression, Arousal

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Nature Study
BPES - 802

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: - 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1. Understand the Concept of environmental science.
- CO2. Know the natural resources and its issues.
- CO3. Understand the Water Resources & Air Resources
- CO4. Understand the Air born infection caused by pollution other, than micro-organism, insecticide, control & measurements of Rodents.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

NATURAL PROCESS Solar System:- Sun, major planets and their satellites. Water cycle, wind, ice, ecosystem, components of ecosystem. Ecological succession, major biotic communities, biomes of India, whether modification, noise pollution.

UNIT-II

WATER RESOURCES AND AIR RESOURCES Uses of water, water sanitation, sources of water, water supply, water quality, water purification, drinking water standard, contamination of drinking water, water pollutants, water pollution. Causes of water pollution. Control of water pollution and water management. Effects of air pollution on human health and in other organism. Effects of air pollution on weather, air pollution control, control of gaseous pollution, control of air pollution by legislation and trees.

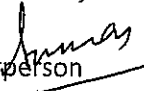
UNIT-III

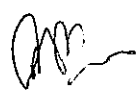
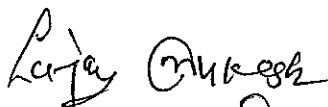
PUBLIC HEALTH Epidemiology – meaning and its types, food born and water born diseases, food related health problems other than biological agents. Air born disease. Disease from animal to man. Air born infection caused by pollution

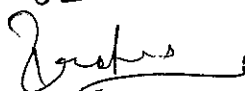
UNIT-IV

ENVIRONMENTAL MANAGEMENT AND PUBLIC PARTICIPATION: Environmental management objectives of environmental management, principle of Environmental Management, strategy of Environmental management. Natural resources management, solid waste management. Environment ethics environment conservation, bio-sphere reserve forest conversation, bio-diversity conservation, wild life conservation.

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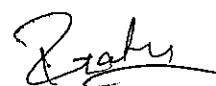
- 15/1 -

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

REFERENCES:-

- 14) Aggarwal, K.C. 2001 Environmental Biology, Nidi Pub. Ltd., Bikaner.
- 15) Bharucha, Frach. The Biodiversity of India. Mapin Publishing Pvt. Ltd. Ahmedabad 380013. India. Email: mapin@icenet.net ®
- 16) Brunner R.C. 1989. Hazardour Waste Incineration, MC.Graw Hill Inc. 480p.
- 17) Clark R.S. Marine Pollution, Slanderson Press Oxford (TB)
- 18) Cunningha, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Pub. House, Mumbai 1196 p.
- 19) De A.K. Environmental Chemistry, Wiley Eastern Ltd.
- 20) Down to Earth, Centre for Science and Environmental (R)
- 21) Gleick, H.P. 1993. Water in crisis, Pacific Institute for Studies in 'Dev. Environmental & Security. Stockholm Env. Institute Oxford Univ. Press, 473 p.
- 22) Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
- 23) Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
- 24) Mhaskar A.K. Matter Hazardous, Tekchno-Science Publications (TB)
- 25) Miller T.G. Jr. Environmental Sciences. Wadsworth Publishing Co. (TB).
- 26) Odum, .P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574 p.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Anatomy and Physiology
BPES - 803

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: - 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1.** Know the basics of anatomy and physiology.
- CO2.** Understand the circulatory, respiratory and digestive system.
- CO3.** Understand the excretory, endocrine, nervous system & sense organs
- CO4.** Know the concept of physiology and neuromuscular physiology.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Anatomy and Physiology: Introduction, Meaning & Definition, Scope, Need and Importance. **Cell & Tissues:** Introduction, Definition, Structure, Classification and Functions. **Human Skeleton:** Introduction, Axial and Appendicular Skeleton

UNIT-II

Bones: Structure, Types and their Functions. **Joints:** Introduction, Classification/Types and Functions of various Joints. **Muscular System:** Meaning, Structural Classification of Muscles (Skeletal, Smooth and Cardiac Muscles), General Characteristics of Muscles.

UNIT-III


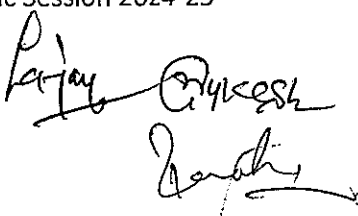
Cardio-Vascular System: Meaning, Structure & Functions of Heart and Major Blood Vessels of the Body, Circulation of blood, Pulmonary Circulation, Systemic and Portal Circulation. **Blood:** Structure & Functions of Blood, Formation of Blood Cells; Blood Groups & their Characteristics. **Respiratory System:** Introduction, Organs, Structure and Functions, Mechanism of Respiration.

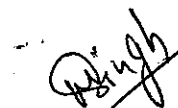
UNIT-IV

Digestive System: Introduction, Organs, Structure and Functions, Mechanism of Digestion. **Excretory System:** Introduction, Organs, Structure & Functions of Kidney and Skin. **Nervous System:** Introduction, Autonomic Nervous System, Sympathetic Nervous System and Parasympathetic Nervous System, structure of nerve cell, Sensory Nerves (Afferent or Ascending), Motor Nerve (Efferent or Descending).

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Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

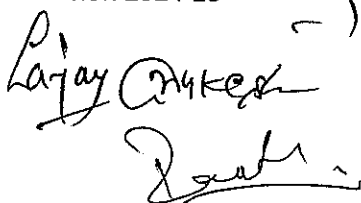
REFERNCE BOOKS:

1. Singh, Ajmer., Bains, Jagdish., Gill, Jagtar Singh. and Brar, Rashpal Singh "Essential of Physical Education" (2017) Kalyani Publisher, Ludhiana, Punjab.
2. Gerard, J. Tortora and Bryan, H. Derrickson., "Principles of Anatomy and Physiology" (2014) 14th edition – John Wiley and Sons, USA.
3. Albert Bluisdall, "Human Anatomy and Physiology" (2001) Sports Publication, Darya Ganj New Delhi.
4. Rose and Wilson, "Anatomy and Physiology in Health Illness" (2001) 9th edition Harcourt Publisher Ltd.
5. Winwood, R.S. and Smith, J. L. "Sears Anatomy and Physiology for Nurses" (1998) 6 th edition (1st Indian edition) Published by London Edward Arnold.
6. Gray A. Thibodean and Kelvin T. Patton, "Anthony's Textbooks of Anatomy and Physiology" (1994) 14th edition Mosby year book inc. St. Louis Times Mirror, Mosby College Publishing.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Scientific Principles of Sports Training
B PES - 804

Total Credits: 4

L P T
3 0 1

Total Marks:- 100

External Marks: - 70

Internal assessment: - 30

Time :- 3 hours

Course outcome:-

- CO1. The students would be able to know the concept meaning importance and scope of sports training
- CO2. The students would be able to know the meaning and types of sports training
- CO3. The students would be able to know and understand the concept of training program and planning

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit – I

Introduction to Sports Training Meaning and Definition of Sports Training Aim and Objective of Sports Training Principles of Sports Training System of Sports Training – Basic Performance, Good Performance and High Performance Training

Unit – II

Training Components Strength–Mean and Methods of Strength Development Speed–Mean and Methods of Speed Development Endurance - Mean and Methods of Endurance Development Coordination–Mean and Methods of coordination Development Flexibility–Mean and Methods of Flexibility Development

Unit – III

Training Process Training Load- Definition and Types of Training Load, Principles of Intensity and Volume of stimulus, Technical Training–Meaning and Methods of Technique Training Tactical Training–Meaning and Methods of Tactical Training

Unit – IV

Training programming and planning Periodization–Meaning and types of Periodization Aim and Content of Periods–Preparatory, Competition, Transitional etc. Planning–Training session Talent Identification and Development


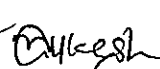
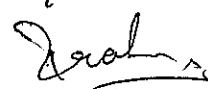
References:-

- Dick, W. F. (1980). *Sports training principles*. London: Lepus
- Harre, D. (1982). *Principles of sports training*. Berlin: Sporulated.
- Matvyew, L.P. (1981). *Fundamental of sports training*. Moscow: Progress Publishers.
- Singh, H. (1984). *Sports training, general theory and methods*. Patiala: NSNIS. Uppal, A.K., (1999). *Sports Training*. New Delhi: Friends Publication.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Science of Teaching & Coaching game (Wrestling)
BPES – 805

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course outcomes:-

- CO1. Students will be able to evaluate and analyze the Players.
- CO2. Students will be able to conduct specific Sports related tests.
- CO3. Students will manage Officiating and prepare specific programs

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Origin of Wrestling in Modern & Ancient Time, Role of FILA (International Federation of Associated Wrestling Styles) and (WFI) Wrestling Federation of India, **Define Wrestling**, Types of Wrestling Style, Scope of Wrestling in India, Achievement of India in Asian, Commonwealth, World Championship & Olympic games, Wrestling Tournaments in India.

UNIT-II

Structure of Wrestling Mat and Platform, Officials in Wrestling, Officials Dress, Competition Procedures, Drawing of lots, General Duties of Mat Chairman, Referee, Judge and Jury of Appeal Medical, Weighting, Wrestler/Competitors Dress, Duties of a Coach in Wrestling Bout, Age and Weight Categories (Male & Female)

UNIT-III

-Rules & regulations and their interpretation, Duration of wrestling bout for Junior, Sub-junior and Seniors (Free Style & Greco Roman), Famous Wrestlers of India, List of Arjun Awardee, Padam Shree, Rajiv Gandhi Khel Ratan & Bhim Awardee, Famous Dronacharya Awardee, Coach in India

UNIT-IV

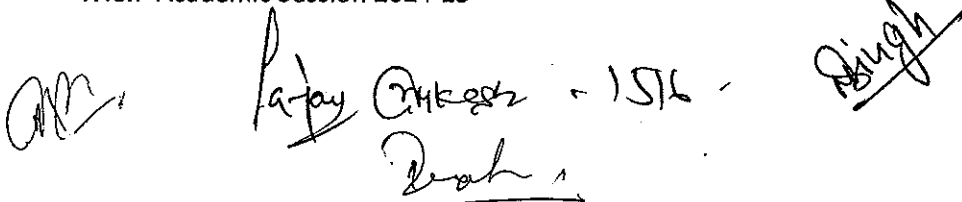
Point for Action & Holds, Evaluation of Importance of the Action & Holds, Danger position & fall, Prohibitions and illegal holds, Basic Vocabulary, Preparation of Score Sheet in Free Style & Greco-roman Styles, Diet of a Wrestler, Training & Coaching in Wrestling, Teaching Techniques, Tactics and Skill of Wrestling, Defensive & Offensive Wrestling, Importance of Warming up and Cooling down in Wrestling

REFERENCE BOOK:-

1. International Wrestling Rules- FILA
2. Training & Coaching-FILA

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Science of Teaching & Coaching game (Kabaddi)
BPES – 806

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course outcomes:-

- CO1. It will be helpful in making difference between technique, tactics, skill and style.
CO2. The Students will be able to teach Game different Evaluation of skills of the players.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

- Define Kabaddi, Types of Kabaddi, Style and Formation of Kabaddi, Origin of Kabaddi.
History of Kabaddi in India and Abroad, Origin of Kabaddi in Modern Time and Ancient Time.
Scope of Kabaddi in India, Asian Games, World Championship, Common Wealth and Olympic Games. Kabaddi Tournament in India. Selection of Kabaddi Team. Methods for Selection of Kabaddi Team.

UNIT-II

- Dimension of Kabaddi Ground/Court and its Measurement in Different Style/Types/Kinds.
- Methods and Techniques to Formation of the Kabaddi Ground/Court, Official and Formation of Kabaddi to Conduct the good Competition/Tournaments of Championship and Duties & Uses of all the Official. Responsibility & Duties of the Team Manager, Coach and Captain of the Kabaddi Team During, After and Before the Competition

UNIT-III

- Rule and Regulation of Kabaddi, Duration, Time and Period of the Kabaddi Matches in Men, Women, Junior & Sub Junior Level. Famous Kabaddi Players, Teams, Arjuna Awardee, Trophies etc. Uniform, Diet Special Training & Coaching for Outstanding Kabaddi Players/Team Daily Training Schedule/Time Table of Kabaddi Team

UNIT-IV

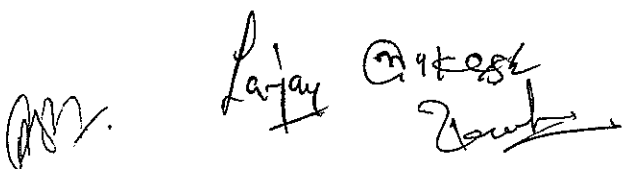
- Training & Coaching, Describe Specific Trg. And General Training & Coaching for Kabaddi Players. Technique of Training, Tactic & Skill of Training of Kabaddi, Defensive & Offensive Kabaddi Technique, Describe in Details About the Specific Training for Kabaddi Team.

Suggested Readings:-

1. John W. Dann: Scientific Principle of Coaching
2. Prentice Hall eglewood Clifs, JJ. 3. VN.Rao: Kabaddi.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

Science of Teaching & Coaching game (Basketball)
BPES – 807

Total Credits: 4
L – P - T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course outcomes:-

- CO1. Students will have technical knowledge about Sport.
- CO2. Students will demonstrate & inculcate basic skills.
- CO3. Students will inherit coaching attitude.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

- History and Development of Basketball Game, Fundamental of Basket Ball Game (Teaching and their Importance) Dribbling, Passing and Receiving, Shooting and Rebounding.

UNIT-II

Dimensions of the Basketball Court, Dimension of the Blackboard. Specification of the Basketball Ring, Upright and Ball.Equipments of the Basketball Game.

UNIT-III

- Administration of the Basketball game, Officials, Table Official, Commissioner and the Duties and Power of the Official, Playing Regulation, Violations in Basketball Game Fouls and Penalty in Basketball Game.

UNIT-IV


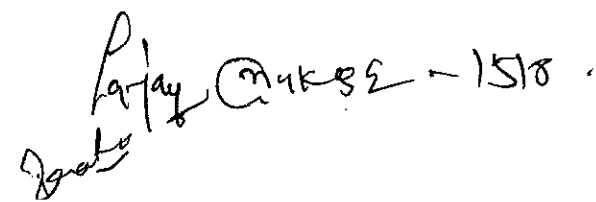
- Team Defense, Offense, Fast Break, Team Tactics Team/Talent, Signal of the Official. in Basketball Game.

REFERENCE:-

1. The complete handbook of individual skills: Robert Fox
2. Handbook of official Basketball rules-BFI
3. Complete Book of Basketball – Theory Balron berg

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

RESEARCHES AND STATISTICS IN PHYSICAL EDUCATION –II
BPES - 809

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes

- CO1. The students would be able to explain the meaning, nature and scope of research in physical education.
- CO2. The students would be able to explain the Classify and formulate the different methods of research.
- CO3. The Students would be able to know and understand the importance of statistics in the field of physical education and illustrate the graphical representation of data
- CO4. The Students would be able to know and understand the Mean, Median and Mode for grouped and ungrouped data, compute parametric statistical techniques to solve various problems.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

Unit-I

Introduction to Research:- Definition of Research, Need and importance of Research in Physical Education and Sports. Scope of Research in Physical Education & Sports. Classification of Research. Research Problem, Meaning of the term, Location and criteria of Selection of Problem, Formulation of a Research Problem, Limitations and Delimitations.

Unit-II

Survey of Related Literature:- Need for surveying related literature. Literature Sources, Library Reading. Research Proposal, Meaning and Significance of Research Proposal. Preparation of Research proposal / project. **Research Report:** A group project is to be undertaken by a small batch of students under the supervision of a teacher, wherein it is expected to survey school facilities of physical education, health assessment programme evaluation, fitness status of the students, staff and other stakeholders etc. and submit the report to the institution.

Unit-III

Basics of Statistical Analysis:- Statistics: Meaning, Definition, Nature and Importance. Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables **Graphical Presentation of Class Distribution:** Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, Ogive, Pie Diagram

Unit-IV

Statistical Models in Physical Education and Sports:- Measures of Central Tendency: Mean, Median and Mode-Meaning, Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungrouped data. **Measures of Variability:** Meaning, importance, computing from group and ungroup data **Percentiles and Quartiles:** Meaning, importance, computing from group and ungroup data

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

References:

- Best, J.W. (1963). *Research in education*. U.S.A.: Prentice Hall.
- Clark, H. H., & Clark, D. H. (1975). *Research process in physical education*. Englewood cliffs, New Jersey: Prentice Hall, Inc.
- Garrett, H.E. (1981). *Statistics in psychology and education*. New York: VakilsFeffer and Simon Ltd.
- Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011). *Research method in physical activity*. U.S.A: Champaign, IL: Human Kinetics Books.
- Uppal, A. K. (1990). *Physical fitness: how to develop*. New Delhi: Friends Publication.
- Verma, J. P. (2000). *A text book on sports statistics*. Gwalior: Venus Publications.

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Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

KINESIOLOGY – II
BPES - 810

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: – 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1. The students would be able to explain the Concept, Scope and Role of Kinesiology and biomechanics in Physical Education and Sports.
- CO2. The students would be able to explain the Attachment and Action of the Muscles of upper limbs and lower limbs Joints.
- CO3. The students would be able to illustrate the concept of -Structural Classification, Functional Classification and Methods of Studying the Action of Muscles.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT-I

Meaning of Kinesiology brief history of Kinesiology. Importance of Kinesiology for games and sports; structural & functional classification of muscles. Role of muscles in Physical activity, anatomical standing position, planes and axes of movement. Terminology of fundamental movement.

UNIT-II

Newton's laws of motion and their implication in Physical Education and Sports. Levers, Equilibrium, Center of gravity, force centripetal and centrifugal force; Application of biomechanical principles to high jump, throwing movement, like discus, shot put and javelin. Motor movement, movement coupling, movement precision and movement amplitude

UNIT-III

Location and actions of muscles at various joints: Upper extremity-shoulder girdle, shoulder joints & elbow joint. Deltoid, LatissimusDorsi, Pectoralis major, supra spinatus, peectoralis minor, Trepezius and levatorscapulas, Biceps Brachii, Brahialis and Triceps. **Lower sextremity:** Hip joint, Knew joint & Ankle joints, Gluteus Maximums, Gluteus medius, Gluteus minimum, Hamstring (Group), quadiceps (Groups), Gastrocnemicus, Sartorius.

UNIT-IV

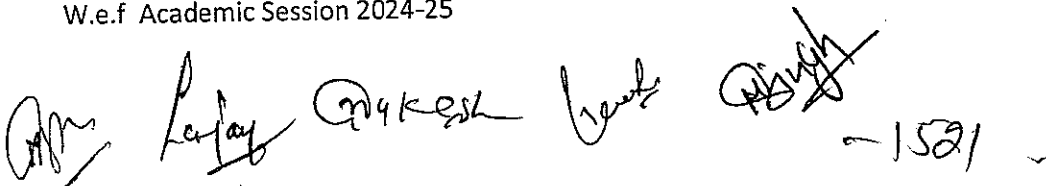
Meaning, importance, aims and objectives of biomechanics in Physical Education and Sports; kinetics, speed, velocity, acceleration, projectile, linear, kinetics, mass, weight, pressure, work energy, momentum, friction, impulse, inertia

Posture and postural deformities:

Meaning of posture type of posture, importance of posture, causes of poor posture, preventive and remedial measures of a poor posture, common postural deformities kyphosis, lordosis & Scoliosis.

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-1521

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

REFERENCE

1. Breer and Zarnicks, Efficiency of human movement W.B. Co., Philadelphis, 1970.
2. Nu. Scientific Principles of Coaching Prentice Hall 1962.
3. Per and Glassgow, C.V. Mosby Co. Saint
4. The mechanics of Athletics, Halmas and Meiar.
5. Miller, Mitohelgon, Paul and Smith, Techniques for of Human Movement Lapse Books London 1975.
6. Biomechanics of Sports technique inc. N.J. 1978.
7. Dejj, the Anatomical and Mechanical Bones of Motion, Prentice Hall Inc. N.J. 1982.
8. Mechnotach, BiomechanicsportlicherBowegungun sport-verley Berlin 1978.
9. Logan and Mckinney, Anatomic Kinesiology, M.C. Brown Co. 1977.
10. Marliyn and Hinsen, Kinesiology, Web DubugueLown 1977.

W.e.f Academic Session 2024-25

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Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

SPORTS JOURNALISM AND MASS MEDIA
BPES - 811

Total Credits: 4
L - P - T
3 - 0 - 1

Total Marks:- 100
External Marks: - 70
Internal assessment: - 30
Time :- 3 hours

Course Outcomes:-

- CO1.To know the sports journalism and mass media concepts.
CO2.To know the concept of sports bulletin.
CO3.To know the effect of mass media in journalism.
CO4.To know report writing on sports.
CO5.To understand sports organization and sports journalism.

Instruction for paper setter / Examiner

Paper setter will set 9 questions in all, out of which students will be required to attempt 5 questions. Question No. 1 will be compulsory and will carry 14 marks. It will comprise of 7 short answer type questions of 2 marks each to be selected from the entire syllabus. Two long answer type questions will be set from each of four units, out of which the students will be required to attempt one question from each unit. Long answer type questions will carry 14 marks each.

UNIT - I

Introduction:- Meaning and Definition of Journalism, Ethics of Journalism, Canons of Journalism Sports Ethics and Sportsmanship, Reporting Sports Events. National and International Sports News Agencies.

UNIT - II

-Sports Bulletin:- Concept of Sports Bulletin: Journalism and sports education, Structure of sports bulletin, Compiling a bulletin, Types of bulletin, Role of Journalism in the Field of Physical Education: Sports as an integral part of Physical Education, Sports organization and sports journalism, General news reporting and sports reporting.

UNIT - III

Mass Media:- Mass Media in Journalism: Radio and T.V. Commentary, Running commentary on the radio, Sports expert's comments. Role of Advertisement in Journalism. Sports Photography: Equipment- Editing, Publishing

UNIT - IV

Report Writing on Sports:-

Brief review of Olympic Games, Asian Games, Common Wealth Games and Indian Traditional Games.Preparing report of an Annual Sports Meet for Publication in Newspaper.Organizational Press Meet.

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Prakash

1523

Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan
Department of Physical Education
Bachelor of Physical Education & Sports (Hon. with Research)

REFERENCE:-

- Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi : Surjeet Publications
- Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication
- Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication
- Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press.
- Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication
- Mohit Chakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication,
- Padmanabhan. A & Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication
- Shiv Khera (2002), You Can Win, New Delhi: Macmillan India Limited.
- Varma A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.
- Venkataiah. N (2009) Value Education,- New Delhi: APH Publishing Corporation. 43

W.e.f Academic Session 2024-25


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ANNEXURE - 59

CURRICULUM & SCHEME OF EXAMINATIONS

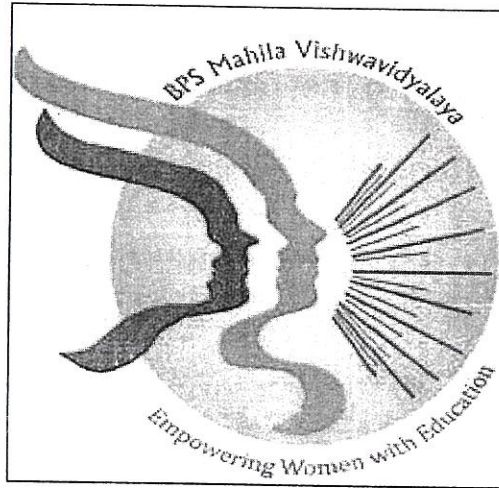
FOR

FOUR YEAR B.COM PROGRAMME

(Honours/Honours with Research)

(As Per New Education Policy-2020)

From the Academic Session 2024 - 25



Department of Commerce

Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat

Accredited with B++ grade by NAAC

2024-25

Dashrath

**Chairperson
Department of Commerce
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan Sonapat**

w.e.f 2024-25

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Program Outcomes (PO): After completion of this program, students will be able to use their knowledge for practical applications in commerce and other related domains.

PO1: Analytical reasoning and critical thinking: Students will be able to analyze the situation, think critically, and make decisions with innovative ideas and solutions based on understanding of the environment, evaluative skills, and research.

PO2: Complex problem solving: Students will be able to solve complex problems of business and society with the understanding of various laws and principles relevant to commerce.

PO3: Creativity: Students will be able to analyse the situations and think out of the box for innovations based on the evidence, examples and creative thinking.

PO4: Leadership qualities: Students will inculcate ideal leadership qualities that will encourage them to analyze the environment critically and design innovative and creative solutions for real world problems.

PO5: Digital and technological skills: Students will be able to use softwares for performing various accounting and statistical operations.

PO6: Management and strategic skills: Students will inculcate management and strategic skills to cope with the problems and competition of the business world.

PO7: Communication skills: Students will develop effective communication skills to share their views and express themselves confidently and construct logical arguments using correct technical language related to a field of learning, work/vocation, or an area of professional practice.

PO8: Value orientation: Students will inculcate values for living a fruitful life with empathy and ethics with the understanding of principles and practices for business, interpersonal skills and emotional intelligence.

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Department of Commerce

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CURRICULUM & SCHEME OF EXAMINATIONS

FOR

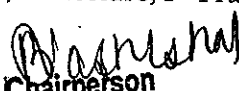
**FOUR YEAR B.COM PROGRAMME (Honours / Honours with Research)
(Interdisciplinary)**

from the Academic Session 2024 - 25

First Year: First Semester										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks Theory/ Practical)	Total Marks
1	B-BCOM-101	DSC	Financial Accounting	3	0	1	4	30	70	100
2	B-BCOM-103	DSC	Business Law	3	0	1	4	30	70	100
3	B-BCOM-105	DSC	Principles and Practices of Management	3	0	1	4	30	70	100
4	B-BCOM-107	MIC	Business Mathematics	2	0	0	2	15	35	50
5	B-BCOM-109	MDC	Banking and Insurance	2	0	1	3	25	50	75
6	B-AEC-	AEC	Choose any one course from the common pool offered by University				2	15	35	50
7	B-SEC-	SEC	Choose any one course from the common pool offered by University				3	25	50	75
8	B-VAC-	VAC	Choose any one course from the common pool offered by University				2	15	35	50
Total Credits							24	Total Marks		600

Note: DSC- Discipline Specific Courses, MIC- Minor Courses, VOC-Vocational, MDC- Multidisciplinary Courses, AEC- Ability Enhancement Courses, SEC- Skill Enhancement Courses, and VAC- Value Added Courses, L- Lecture, P- Practical, T- Tutorial.

w.e.f 2024-25


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Khanpur Kalan Sonapat

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First Year: Second Semester											
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks		Total Marks
									Theory	Practical	
1	B-BCOM-102	DSC	Computerised Accounting System	1	4	1	4	30	-	70	100
2	B-BCOM-104	DSC	Company law	3	0	1	4	30	70	-	100
3	B-BCOM-106	DSC	Principles of Marketing	3	0	1	4	30	70	-	100
4	B-BCOM-108	MIC	Business Statistics	2	0	0	2	15	35	-	50
5	B-BCOM-110	MD C	Personal Finance	2	0	1	3	25	50	-	75
6	B-AEC-	AEC	Choose any one course from the common pool offered by University				2				50
7	B-SEC-	SEC	Choose any one course from the common pool offered by University				3				75
8	B-VAC-	VAC	Choose any one course from the common pool offered by University				2				50
Total Credits							24	Total Marks			600

NOTE: Students who opt to exit after completion of the first year and have secured 52 credits including 4 credits of summer internship will be awarded a UG certificate. These students are allowed to re-enter in the degree programme within three years and complete the degree programme within the stipulated maximum period of seven years.

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Khanpur Kalan Sonapat

Second Year: Third Semester										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks (Theory/ Practical)	Total Marks
1	B-BCOM-201	DSC	Basic of Corporate Accounting	3	0	1	4	30	70	100
2	B-BCOM-203	DSC	Micro Economics	3	0	1	4	30	70	100
3	B-BCOM-205	DSC	Indian Banking Institutions	3	0	1	4	30	70	100
4	B-BCOM-207	MIC	Introduction to Taxation Law	3	0	1	4	30	70	100
5	B-BCOM-209	MDC	Investment Management	2	0	1	3	25	50	75
6	B-AEC-	AEC	Choose any one course from the common pool offered by University				2			50
7	B-SEC-	SEC	Choose any one course from the common pool offered by University				3			75
Total Credits							24	Total Marks		600

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Second Year: Fourth Semester										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks (Theory/ Practical)	Total Marks
1	B-BCOM-202	DSC	Advance Corporate Accounting	3	0	1	4	30	70	100
2	B-BCOM-204	DSC	Macro Economics	3	0	1	4	30	70	100
3	B-BCOM-206	DSC	Entrepreneurship Development	3	0	1	4	30	70	100
4	B-BCOM-208	MIC (VOC)	Tax assessment for Individuals	3	0	1	4	30	70	100
5	B-AEC-	AEC	Choose any one course from the common pool offered by University				2			50
6	B-VAC-	VAC	Choose any one course from the common pool offered by University				2			50
Total Credits							20	Total Marks		500

NOTE: Students who opt to exit after completion of the second year and have secured 96 credits including 4 credits of summer internship will be awarded a UG diploma.

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Third Year: Fifth Semester											
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks		Total Marks
									Theory	Practical	
1	B-BCOM-301	DSC	Cost Accounting	3	0	1	4	30	70	-	100
2	B-BCOM-303	DSC	GST & Custom Laws	3	0	1	4	30	70	-	100
3	B-BCOM-305	DSC	Consumer Affair and Customer Care	3	0	1	4	30	70	-	100
4	B-BCOM-307	MIC (VOC)	Corporate Secretarial Practices	3	0	1	4	30	70	-	100
5	B-BCOM-309	<i>see Internship</i>	Internship				4	30	-	70	100
Total Credits							20	Total Marks			500

Third Year: Sixth Semester											
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks (Theory)	Total Marks	
1	B-BCOM-302	DSC	Management Accounting	3	0	1	4	30	70	100	
2	B-BCOM-304	DSC	Corporate Governance & Auditing	3	0	1	4	30	70	100	
3	B-BCOM-306	DSC	Advertising & Personal Selling	3	0	1	4	30	70	100	
4	B-BCOM-308	MIC	Business Environment of Haryana	3	0	1	4	30	70	100	
5	B-BCOM-310	MIC (VOC)	E-Commerce	3	0	1	4	30	70	100	
Total Credits							20	Total Marks			500

NOTE: Students who opt to exit after completion of the third year and have secured 132 credits will be awarded a 3 year UG degree.

Basmehat
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Khanpur Kalan Sonapat

Fourth Year: Seventh Semester										
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks (Theory)	Total Marks
1	B-BCOM-401	DSC	Organizational Behaviour	3	0	1	4	30	70	100
2	B-BCOM - 403	DSC	Quantitative Techniques for Managerial Decisions	3	0	1	4	30	70	100
3	B-BCOM - 405	DSC	Indian Business Environment	3	0	1	4	30	70	100
4	B-BCOM-407	DSC (Choose any one)	Business Research Methods	3	0	1	4	30	70	100
5	B-BCOM-409		Strategic Planning	3	0	1	4	30	70	100
6	B-BCOM-411	DSC	Analysis of Financial Statements	3	0	1	4	30	70	100
7	B-BCOM-413	MIC	Retail Management	3	0	1	4	30	70	100
Total Credits							24	Total Marks		600

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Department of Commerce
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan Sonapat

Fourth Year: Eighth Semester (Honours)											
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks		Total Marks
									Theory	Practical	
1	B-BCOM-402	DSC	Financial Management	3	0	1	4	30	70	-	100
2	B-BCOM-404	DSC	Human Resource Management	3	0	1	4	30	70	-	100
3	B-BCOM-406	DSC	International Business	3	0	1	4	30	70	-	100
4	B-BCOM-408	DSC (Choose any one)	Business Ethics & CSR	3	0	1	4	30	70	-	100
5	B-BCOM-410		Strategic Management Implementation & Evaluation	3	0	1	4	30	70	-	100
6	B-BCOM-412	DSC	Corporate Tax Planning	3	0	1	4	30	70	-	100
7	B-BCOM-414	MIC	Data Analysis with Statistical Software	1	6	0	4	30	-	70	100
Total Credits							24	Total Marks			600

Fourth Year: Eighth Semester (Honours with Research)											
Sr. No.	Course Code	Course Type	Course Title	Workload			Credits	Division of Marks			
				L	P	T		Internal Marks	External Marks		Total Marks
									Theory	Practical	
1	B-BCOM-402	DSC	Financial Management	3	0	1	4	30	70	-	100
2	B-BCOM-404	DSC	Human Resource Management	3	0	1	4	30	70	-	100
3	B-BCOM-414	MIC	Data Analysis with Statistical Software	1	6	0	4	30	-	70	100
4	B-BCOM-416	Research Project/ Dissertation	Dissertation				12	90	-	210	300
Total Credits							24	Total Marks			600

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Financial Accounting
Course Code- B-BCOM-101

Total Credits: 4

L - P- T

3 - 0 - 1

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3hrs

Course outcomes: The students will be able to:

CO₁: develop the understanding of the theoretical framework of financial accounting, accounting standards and accounting cycle.

CO₂: use the knowledge of accounting procedures to prepare journal ledger trial balance and final accounts.

CO₃: explain and use the knowledge of accounting procedures to prepare the accounts for Non-profit organisation royalty accounts.

CO₄: classify the capital and revenue concept while preparing various accounts.

CO₅: understand the branch accounts and hire purchase system.

CO₆: apply the knowledge to prepare various branch accounts and hire purchase accounts by using different methods.

Unit - I

Financial accounting: Concept, objectives & scope; Accounting as an information system; Accounting principles: Concepts and conventions; Double entry system; A brief overview of accounting standards in India; Financial accounting standards: concept, benefits, procedure for issuing accounting standards in India. Journal, Ledger & trial balance.

Unit- II

Capital and revenue: Concept and classification of income; expenditure; Receipts; Provisions & reserves. Final Accounts: Trading & Profit and loss account and balance sheet with adjustments.

Unit - III

Accounting for non-profit organizations; Royalty accounts, short working, accounting treatment in case of strike and sub-lease

Unit - IV

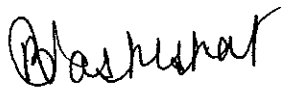
Branch accounts: dependent branch, debtors system, stock and debtor system; Wholesale branch, Final accounts. Hire purchase Concept, Features, Preparation of accounts under Higher Purchase system.

Recommended Readings:

1. Bhushan Kumar Goyal, and H.N. Tiwari. Financial Accounting. 11th edition. International Book House, Taxmann Publishing 2023.
2. R.N. Anthony, Hawkins, and Merchant, Accounting: Text and Cases. 13th edition. McGraw-Hill Education 2022.

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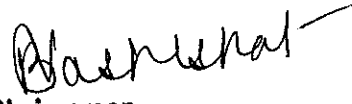

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Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan Sonapat

Page 10 of 28

3. S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. 6th edition. Vikas Publishing House, New Delhi. 2018.
 4. M.C., Shukla, T.S. Grewal and S.C. Gupta. Advanced Accounts. 19th edition. S. Chand & Co., New Delhi. 2016.
-

Instructions for External Theory Paper Setter/Examiner :

The examiner shall set nine questions in all covering the whole syllabus. Question no.1 will be compulsory covering all the units and shall carry seven small questions of two marks each. The rest of the eight questions will be set from all four units. The examiner will set two questions from each unit. All questions shall carry 14 marks. A simple calculator is allowed.


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Business Law
Course Code: B-BCOM-103

Total Credits: 4
L - P- T
3 - 0 - 1

External Theory Marks: 70
Internal Assessment Marks: 30
Time allowed: 3hrs

Course Outcomes: The students will be able to:

- CO₁: demonstrate an understanding of the legal environment of business
CO₂: analyze legal issues and evaluate the implications of the existing rules
CO₃: recognize the obligations of the buyer and seller to create business agreements and contracts.
CO₄: demonstrate skills to initiate entrepreneurial ventures as partnership and limited liability partnership.
CO₅: explain the concepts & scope of negotiable instruments and legal safeguards in Information Technology
CO₆: formulate logical arguments through a basic understanding of the legal framework and case studies
CO₇: evaluate the provisions of Factories Act
CO₈: understand code of conduct while operating a legal business
-

Unit - I

The Indian Contract Act, 1872: nature and classification of contracts; Essentials of a valid contract; An overview of Proposal and acceptance, Capacity of parties to contract, Free consent, Lawful consideration, Lawful object; Void Agreement; Performance of contract; Discharge of contract; Remedies for breach of contract

Unit - II

Sale of Goods Act, 1930: Formation of contract of sale; Goods and their classification; Price; Conditions and warranties; Transfer of ownership in goods; Performance of the contract of sale; Remedies: unpaid seller and his rights, buyer's remedies; Auction sale, online auction.

Unit - III

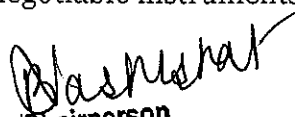
Indian Partnership Act 1932: Nature of firm; Duties and rights of partners; Liabilities of firm and partner; Limited Liability Partnership Act, 2008: concepts, characteristics of LLP; Incorporation of LLP; LLP agreement, Extent & limitations of liabilities of LLP and partners.

Unit - IV

Negotiable Instruments Act, 1881: scope, features and types; Negotiation; Crossing; Dishonour and discharge of negotiable instruments.

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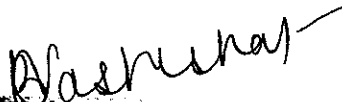
The Factories Act-1948: Approval, Licensing & Registration of Firms, Notice regarding occupier, Inspecting Staff, Certifying Surgeons, Health, Safety and Welfare of Workers. Working hours of Adult.

Recommended Readings:

1. V.K Jain and Shashank Sharma. Business Laws. 6th Edition. Taxmann 2023
 2. Bhushan Kumar Goyal and Jain Kinneri. Business Laws NEP 2020. 12th Edition. Singhal Publication. 2023.
 3. Avtar Singh. Business Law. 11th Edition. Eastern Book Company, Lucknow. 2021.
 4. S.N. Maheshwari and S.K. Maheshwari. Business Law. 1st Edition. Himalaya Publishing House, New Delhi. 2018.
 5. M.C. Kuchhal and Vivek Kuchhal. Business Law. 7th Edition. Vikas Publishing House, New Delhi. 2018.
-

Instructions for External Theory Paper Setter/Examiner :

The examiner shall set nine questions in all covering the whole syllabus. Question no.1 will be compulsory covering all the units and shall carry seven small questions of two marks each. The rest of the eight questions will be set from all four units. The examiner will set two questions from each unit. All questions shall carry 14 marks. The students will be required to attempt four questions (at least one question from each unit).


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Principles and Practices of Management

Course Code: B-BCOM-105

Total Credits: 4

L - P - T

3 - 0 - 1

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3hrs

Course Outcomes: The students will be able to:

CO₁: understand the nature and scope of management.

CO₂: understand the decision-making process and organizing structures for business

CO₃: understand the concept and characteristics of staffing & recruitment and application of controlling techniques in organizations.

CO₄: apply the principles of management to overcome the challenges of business and life and find solutions to problems in real life situations.

Unit - I

Definition, Nature, Features, Management Functions, Management as a Process, Importance of Management, Management and Administration, Functional Areas of Management, Managerial Skills, Roles of a Manager, Levels of Management, Management as a Science an Art and as a Profession. Schools of Management Thought, Classical Approaches: Systematic Management, Scientific Management, Administrative Management

Unit - II

Planning – Meaning and Definition, Features, Steps in Planning Process, Approaches, Principles, Importance, Advantages and Disadvantages of Planning, Types of Plans, Types of Planning, Management by Objectives. Decision making- Meaning, Characteristics, Decision-Making Process, Guidelines for Making Effective Decision, Types of Decisions.

Unit - III

Organization and Organization structure: Meaning and Definition, Characteristics, Process, Need and Importance, Principles, Span of Management. Organization Chart – Types, Contents, Uses, Limitations, Factors Affecting Organizational Chart, Organizational Structure- Line Organization, Line and Staff, Functional, Project, Matrix and Virtual. Informal Organization- Meaning, Characteristics, Importance, Limitations, Difference between Formal and Informal organization.

Unit - IV

Leading: Introduction, Characteristics of a Leader, Functions of a Leader; Leadership and Management; Principles of Leadership, Styles of Leader, Controlling: Introduction, Concept of Controlling, Purpose of Controlling; Types of Control; Steps in Controlling; Techniques in Controlling.

w.e.f 2024-25

Dashrath
Chairperson
Department of Commerce
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan Sonapat

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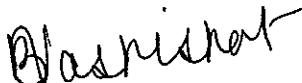
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Recommended Readings:

1. Dr. Pardeep Kumar. Management Principles and Applications. Based on National Education Policy-2020. 2nd Edition. Sultan Chand & Sons. 2022.
 2. P.C. Tripathi, P.N. Reddy and Ashish Bajpai. Principles of Management. 7th Edition. Mc Graw Hill Publisin House. 2021.
 3. Prabhu TL. Principles of Management. 1st Edition. Nestfame Creations Pvt. Ltd. 2020.
 4. Robert L.Dansby and Karel Sovak. Principles of Management. Goodheart-Willcox Company, Incorporated. 2019.
 5. Charles W.L. Hill and Steven L.M. Mc Shane, Principles of Management. 1st Edition. Tata Mc Graw Hill Education. 2017.
 6. Ricky W. Griffin, Management. 12th Edition. South- Western College Publishing. 2016.
-

Instructions for External Theory Paper Setter/Examiner:

The examiner shall set nine questions in all covering the whole syllabus. Question no.1 will be compulsory covering all the units and shall carry seven small questions of two marks each. The rest of the eight questions will be set from all four units. The examiner will set two questions from each unit. All questions shall carry 14 marks. The students will be required to attempt four questions (at least one question from each unit).


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Business Mathematics
Course Code: B-BCOM-107

Total Credits: 2

L - P - T

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15

Time allowed: 1.5 hrs

Course outcomes: Students will be able to:

CO₁: develop understanding of evaluating interest and annuity

CO₂: understand the concept and application of Permutations & Combinations in business

CO₃: evaluate logarithmic and antilogarithmic values

CO₄: demonstrate the applicability of linear programming to business

CO₅: express the use of set theory and Venn diagrams

CO₆: use mathematical properties to solve various mathematical calculations

CO₇: predict and represent mathematical information and use it in business applications to make better and stronger decisions

Unit – I

Time Value of Money, Annuity, Interest- Simple and Compound, Permutation and Combinations, Use of Logarithms and Antilogarithms.

Unit – II

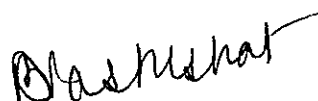
Linear programming: Formulation of linear programming problems (LPP) and their solution by graphical and simplex methods, Set Theory: Representation of sets, equivalent sets, power set, complement of a set. Venn Diagrams

Recommended Readings:

1. Dr. Amarnath Dikshit and Dr. Jitendra Kumar Jain. Business mathematics. 1st Edition. Himalaya Publishing House Pvt. Ltd. 2023.
2. J.K.Sharma. Business mathematics. 3rd Edition. Wiley Publishing House. 2019.
3. Dr. V.K.Kapoor. Business mathematics. Theory and Applications. 1st Edition. Sultan Chand & Sons. 2012.

Instructions for External Theory Paper Setter/Examiner:

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Banking and Insurance
Course Code: B-BCOM-109

Total Credits: 3
L - P- T
2 - 0- 1

External Theory Marks: 50
Internal Assessment Marks: 25
Time allowed: 2hrs

Course Outcomes: Students will be able to:

- CO₁: understand the basic concept of Indian banking system and assess Banking environment
CO₂: understand the nationalisation of banks in India and provisions of banking regulation act 1949
CO₃: demonstrate the present status and development of life and general insurance in India
CO₄: analyze the risks and value associated with different types of insurance policies
CO₅: understand the recent innovations in banking sector
CO₆: discuss and compare different types of insurance plans along with their importance
CO₇: discuss and explain the claim settlement process adopted by life and general insurance companies

Unit – I

Banking: Concept, features, functions, importance and principles of banking; Evolution of banking in India; Classifications of banks; Credit creation, Banking Regulation Act 1949: Major provisions. Indian Banking System: Features, nationalization of commercial banks and its effects;

Unit – II

Reserve Bank of India –Functions, control of credit by RBI, power of RBI. Insurance: Concept, need and principles of insurance; Insurance and economic development; Life and general insurance: principles, present status & growth of life and general insurance in India, claims settlement procedure; Regulatory Framework of Insurance

Unit – III

Fire insurance: Concept, principles; Fire insurance policy, claims settlement procedure; Marine insurance: Marine insurance policy and claims settlement procedures; Accident and motor insurance: Policy and claims settlement procedures.

Recommended Readings:

1. E.Gordon and K Natarajan. Banking Theory , Law and Practices. 3rd Edition. Himalya Publishing House. 2023.
2. Principles and Practices of Banking (CA-IIBF). 1st Edition. Macmillan, New Delhi 2023.

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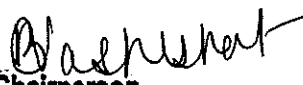
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3. M.N. Gopinath: Banking Principles and Operations. 7th Edition. Snow White Publisher, Mumbai. 2021.
 4. Dr. P.K. Gupta, Insurance & Risk Management. 1st Edition. Himalaya Publishing House, Delhi. 2016.
 5. M.N. Mishra, Principles and Practices of Insurance. 22nd Edition. Sultan Chand and Sons. 2016.
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Instructions for External Theory Paper Setter/Examiner:

The examiner shall set seven questions in all covering the whole syllabus. Question no.1 will be compulsory covering all the units and shall carry seven small questions of two marks each. The rest of the six questions will be set from all three units and questions shall carry 12 marks each. The students will be required to attempt three questions (at least one question from each unit).


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Computerized Accounting System

Course Code: B-BCOM-102

Total Credits: 4

L - P- T

1 - 4- 1

External Practical Marks: 70

Internal Assessment Marks: 30

Course outcomes: Students will develop the skills to:

CO₁: understand the concept of computerized accounting and be familiar with accounting software.

CO₂: apply the knowledge to create company ledger, vouchers in accounts software.

CO₃: use the knowledge to prepare financial statements in Tally.

CO₄: understand the inventory accounting system.

CO₅: understand tax regulations – GST, Income Tax.

CO₆: apply the knowledge to prepare various service related accounts.

Unit - I

Computerized Accounting System: Concept, Tally Prime, installations of Tally Prime, licensing configurations; Tally vault password: Security control in Tally Prime, data backup and restore, export and import data, edit log feature in tally; Gateway of Tally.

Unit - II

Company creation: Setup features, accounting features, configuration, shutting and deleting a company; Ledger creation: Creating single and multiple ledgers, altering, deleting and displaying ledger; Invoicing; Budgets; Cost centres; Interest calculations; Inventory: Stock items, purchase and sales orders processing

Unit - III

Financial Statements: Profit & loss account, balance sheet; Bank reconciliation; Debit and credit note; Tally audit features; Printing features; Management Information System & different reports in tally

Unit - IV

Income tax and GST in Tally Prime; TDS; TCS; Payroll in Tally: Introduction, salary accounting, payroll masters, and payroll vouchers, gratuity, provident fund, ESI, payroll reports.

Recommended Readings:

1. A.K. Nadhavi. Tally.ERP 9 Training Guide. 4th Revised and Updated Edition. BPB Publications, New Delhi. 2023
2. Manoj Bansal and Ajay Sharma. 1st Edition. Computerized Accounting System, Sahitya Bhawan Publications. 2019

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Dr. Ashish
Chairperson

Department of Commerce

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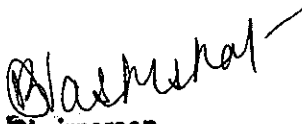
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3. Kavitha et. al., Computerized Accounting, Himalaya Publishing House. 2023.
 4. Raman B.S. and Singh Ravi. Computerized Accounting System. 1st Edition. EPBP Publication. 2018.
 5. Ashok K. Nadavi. Tally Training Guide (Financial Accounting, Invoicing & Inventory). 4th Edition. BPB Publications, New Delhi. 2018.
 6. Ashok, K. Nadhavi, Kishor K. Nadhavi, Implementary Tally ERP 9. Latest and Updated Edition. BPB Publications, NewDelhi. 2017.
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Instructions for External Practical Paper/Examiner:

The students shall be evaluated on the basis of external practical / viva voce.


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Company Law
Course Code: B-BCOM-104

Total Credits: 4

L - P- T

3 - 0 - 1

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3hrs

Course outcomes: Students will develop the skills to:

CO₁: understand the concept of a company as a form of business organization.

CO₂: classify and explain various documents required for registration of a company in detail.

CO₃: understand the procedure of raising capital as per the companies act.

CO₄: understand the legal provisions of Directors as per the companies act.

CO₅: understand the various provisions of alteration in various documents of the company.

CO₆: understand provisions and procedure relating to dividend decisions and winding up of the company.

Unit - I

Concept of corporate body; Advantages of company, features of company, types of company; Privileges of private company; Conversion of private company into public company and vice versa; Formation of company.

Unit -II

Memorandum of Association- meaning, clauses of memorandum of association and their alteration; Doctrine of ultra - virus. Articles of Association-meaning, contents, alteration of articles of association; Constructive notice and doctrine of indoor management. Prospectus- Definition, contents of prospectus, Misstatement in prospectus and its consequences.

Unit -III

Share Capital- Types of Share Capital, Alteration of share capital, Reduction of Share Capital; Directors: meaning, numbers of directors, Position, appointment, qualification, disqualification, restrictions on the number of directorship, vacation of office of director, removal of directors, powers and duties, liabilities of directors.

Unit - IV

Dividend: Types, factors affecting dividend decisions, Legal provisions, dividend practices prevalent in India. Winding Up: meaning, compulsory winding up; voluntary winding up, winding up under the supervision of Court, consequences of winding up.


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Department of Commerce

Bhagat Phool Singh Mahila Vishwavidyalaya

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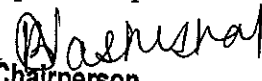
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Recommended Readings:

1. M.C. Kuchal. Modern Indian Company Law. 12th Edition. Shri Mahavir Books, Noida. 2023.
 2. G.K. Kapoor and Sanjay Dhamija. Company Law. A Comprehensive Text Book on companies Act 2013. 25th Edition. Taxmann Publications. 2023.
 3. Avtar Singh. Company Law. 17th Edition. Eastern Book Company, Lucknow. 2023.
 4. A. K. Majumdar and G. K .Kapoor. Company Law. 17th Edition. Taxmann Publications. 2023.
 5. Dr. Rajni Jgota. A Comprehensive Text Book on Corporate Law. 2021 Edition. Taxmann Publications. 2021.
 6. Ashok Sharma. Corporate Law with the amendments of companies Act 2015, 2017, 2019. V.K.Publications. 2022.
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Instructions for External Theory Paper Setter/Examiner:

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Principles of Marketing

Course Code: B-BCOM-106

Total Credits: 4
L - P - T
3 - 0 - 1

External Theory Marks: 70
Internal Assessment Marks: 30
Time allowed: 3hrs

Course outcomes: Students will develop the skills to:

- CO₁: understand the basic concepts of marketing and assess the marketing environment.
- CO₂: understand the consumer behaviour in the present scenario and marketing segmentation
- CO₃: discover the new product development and factors affecting the price of a product in the present context
- CO₄: understand the promotional and distribution strategies along with the recent developments in the field of marketing.
- CO₅: apply their knowledge on marketing in communicating and selling their ideas and products and attain satisfaction of recipients and customers.
- CO₆: apply their knowledge for innovations using the understanding of marketing and creative thinking.

Unit - I

Marketing: Concept, nature, scope and importance; Evolution of Marketing; Understanding marketing in new perspectives; Marketing environment: Concept, importance; Micro environmental factors: Suppliers, marketing intermediaries, customers, competitors, public; Macro environmental factors: Demographic, economic, natural, technological, politico-legal and socio-cultural.

Unit - II

Consumer behaviour: Concept, nature and importance, consumer buying decision process, factors Influencing consumer buying behaviour; Market segmentation: Concept, importance and bases; Target market selection; Positioning: Concept, importance and bases

Unit - III

Product: Concept, importance and classification; Branding, Packaging and Labelling; Product life cycle; New product development; Pricing: Concept, significance, price determination, pricing methods, pricing policies and strategies

Unit - IV

Promotion: Nature and importance; Advertising, personal selling, sales promotion and publicity/public relations; Factors affecting promotion mix decisions; Distribution: Concept, importance and types of distribution channels; Factors affecting choice of distribution channel; Retailing; Wholesaling. Overview of recent

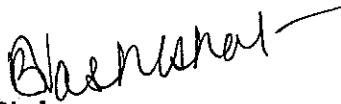
developments in marketing: Social marketing; Online marketing; Direct marketing; Green marketing; Relationship marketing.

Recommended Readings:

1. Philip Kotler. And Kevin Lane Keller. Marketing Management. 15th Edition. Pearson Education. 2022.
 2. Michael, J. Etzel, Bruce J. Walker, William J Staton and Ajay Pandit. Marketing Concepts and Cases. (Special Indian Edition). 14th Edition. 2017.
 3. Lamb, Charles W., Joseph F. Hair, Dheeraj Sharma and Carl McDaniel. Marketing: A South Asian Perspective. Cengage Learning. 2016.
 4. T.N. Chhabra, and S. K. Grover. Marketing Management. 1st Edition. Dhanpat Rai & Company. 2016.
 5. Dawn Iacobucci. Marketing Management. 1st Edition. Cengage Learning. 2016.
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Instructions for External Theory Paper Setter/Examiner:

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Business Statistics
Course Code: B-BCOM-108

Total Credits: 2

L - P- T
2 - 0 - 0

External Theory Marks: 35

Internal Assessment Marks: 15
Time allowed: 1.5hrs

Course outcomes: Students will develop the skills to:

CO₁: understand the meaning of the statistics and data in everyday life and its implication for business decision making

CO₂: remember and understand numerical and quantitative issues in business and acquire a fair degree of proficiency in comprehending statistical data, processing and analysing it using descriptive statistical tools

CO₃: identify and assess different shapes of frequency distribution

CO₄: use statistical tools and software to perform statistical operations.

CO₅: understand the use of correlation and regression analysis to estimate the relationship between two variables and its applications

CO₆: discuss and compare various uses and properties of Correlation and Regression

Unit - I

Statistics: concept, need, importance, Applications; Collection of data: types, methods, classification and tabulation of data, Frequency, Stem and Leaf Display, Frequency Distributions, Data Grouping: Discrete and Continuous, Introduction to Graphs, Graph for Qualitative variables, Graph for Quantitative variables, Various types of graphs and diagrams: pictographs, bar diagram, scatter diagram, histogram, pie chart, frequency curve and frequency polygon

Unit - II

The measure of central tendency: mean, median, mode, harmonic mean, and geometric Mean, measures of dispersion: range, inter-quartile range, quartile deviation, mean deviation, standard deviation, coefficient of variation.

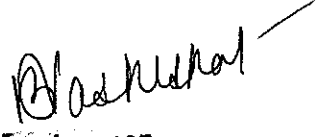
Bivariate Linear Correlation and Regression: Concept, types, comparison, application and calculation of Karl Pearson Coefficient of Correlation and regression.

Recommended Readings:

1. S.P.Gupta. Statistical methods. 46th Edition. S.Chand & sons Co. 2021.
2. D. N. Elhance, Veena Elhance and B.M.Aggarwal. Fundamentals of Statistics. New Revised Edition. Kitab Mahal. 2018
3. R.P.Hooda, Statistics for Business and Economics, 5th Edition. Mcmillan India Ltd., New Delhi. 2013.
4. N.D. Vohra. Quantitative Techniques in Management. 5th Edition. Tata Mc Graw Hill Publishing House. 2000.

Instructions for External Theory Paper Setter/Examiner:

The examiner shall set three questions in all covering the whole syllabus. Question no.1 will be compulsory covering all the units and shall carry five small questions of three marks each. The rest of the two questions will be set from all two units and questions shall carry 10 marks each. The students will be required to attempt two questions (at least one question from each unit). A simple calculator is allowed.


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Personal Finance
Course Code: B-BCOM-110

Total Credits: 3

L - P- T

2 - 0 -1

External Theory Marks: 50

Internal Assessment Marks: 25

Time allowed: 2hrs

Course outcomes: Students will develop the skills to:

CO₁: understand the basics of personal finance and personal financial planning

CO₂: understand the relationship between investment risk and return and the role of regulatory environment in managing personal finance

CO₃: explain important investment principles and understand their implications for investment

CO₄: analyze the concept of evaluating time value of money

CO₅: use digital technologies to manage and allocate finances

CO₆: demonstrate knowledge of insurance planning, tax and estate planning, and retirement planning

CO₇: discuss and analyze various forms of institutional framework for investment

Unit - I

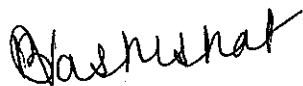
Personal finance: Concept, need, principles, scope; Personal finance services and strategies; Personal financial planning: Process, factors affecting; Financial planner: Role and functions; Financial objectives; Time Value of Money: Compounding and discounting.

Unit - II

Basics of investment; Investment avenues and strategies; Mutual Funds: Concept, types, asset management companies, identifying mutual fund for investment; Investing in stock markets: Identifying stocks, holding, day trading, hedging instruments, etc.; Investing in real estate: Identifying properties, likely legal issues in purchase of property, documents in purchase of property; Other avenues for investment: Gold bonds, sovereign bonds, tax saving instruments, PPF, Provident Fund, etc.; loans: Sources and types; Identifying risky avenues for investment.

Unit - III

Calculating risk and return of various investment avenues; Calculating costs in investment and loans; Identifying hidden costs; Likely causes of cheating and fraud in investment; Institutional framework for investing: SEBI, IRDA, RERA, AMFI, bank ombudsman, etc. Retirement planning: Pension plans, NPS.



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Khanpur Kalan Sonapat

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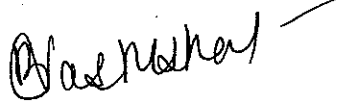
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Recommended Readings:

1. Jack R. Kapoor, Les R. Dlabay, Robert J. Hughes, Melissa Hart. Personal Finance. 12th edition. Tata McGraw Hill India. 2020.
 2. Madura Jeff. Personal Finance. 7th edition. Pearson India. 2020.
 3. Arthur J. Keown. Personal Finance. 8th edition. Pearson India. 2018.
 4. Madhu Sinha. Financial Planning: A Ready Reckoner. 2nd edition. McGraw Hill. 2017.
 5. Lewis Altfest. Personal Financial Planning. Tata McGraw Hill. 2016.
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Khanpur Kalan Sonapat

ANNEXURE-59

Scheme & Syllabus
of
4 Year Bachelor of Business Administration (BBA)
(Honours/Honours with Research) Programme
(As per NEP-2020)
(Interdisciplinary)



Department of Management Studies
BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA
KHANPUR KALAN
(2024)

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BPS Mahila Vishwavidyalaya

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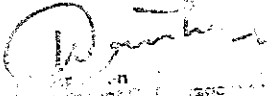
**Scheme of 4 Year Bachelor of Business Administration (BBA)
(Honours/Honours with Research) Programme
(Interdisciplinary)**

S. No.	Course Code	First Semester								
		Course Type	Course Title	Workload			No. of Credit	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-BBA - 101	DSC	Principles of Management	3	0	1	4	30	70	100
2	B-BBA - 103	DSC	Fundamentals of Accounting	3	0	1	4	30	70	100
3	B-BBA - 105	DSC	Business Organisation	3	0	1	4	30	70	100
4	B-BBA - 107	MIC	Corporate Office Management	2	0	0	2	15	35	50
5	B-BBA-109	MDC	Micro Economics-I	2	0	1	3	25	50	75
6	AEC-1	AEC	Choose any one from the common pool of courses offered by the University				2			50
7	SEC-1	SEC	Choose any one from the common pool of courses offered by the University				3			75
8	VAC -1	VAC	Choose any one from the common pool of courses offered by the University				2			50
		Total Hours/Credit					24			600

Second Semester										
S r · N o	Course Code	Cou rse Typ e	Course Title	Worklo ad			No. of Credi t	Division of Marks		
				L	P	T		Inter nal Mark s	Extern al Marks	Total Marks
1	B-BBA -102	DSC	Understanding Human Behaviour	3	0	1	4	30	70	100
2	B-BBA -104	DSC	Entrepreneurial Development	3	0	1	4	30	70	100
3	B-BBA -106	DSC	Business Statistics-I	3	0	1	4	30	70	100
4	B-BBA -108	MIC	Management Lessons from Indian leaders	2	0	0	2	15	35	50
5	B-BBA-110	MDC	Micro Economics-II	2	0	1	3	25	50	75
6	AEC-2	AEC	Choose any one from the common pool of courses offered by the University				2			50
7	SEC-2	SEC	Choose any one from the common pool of courses offered by the University				3			75
8	VAC -2	VAC	Choose any one from the common pool of courses offered by the University				2			50
		Total Hours/Credit					24			600

Students who opt to exit after completion of first year and have secured 52 credits including 4 credits of summer internship will be awarded a UG Certificate in the relevant Discipline/Subject.

S r · N o	Course Code	Cou rse Typ e	Course Title	Third Semester						
				Worklo ad			No. of Credi t	Division of Marks		
				L	P	T		Inter nal Mark s	Extern al Marks	Total Marks
1	B-BBA -201	DSC	Business Environment	3	0	1	4	30	70	100
2	B-BBA -203	DSC	Financial Accounting & Auditing	3	0	1	4	30	70	100
3	B-BBA -205	DSC	Business law	3	0	1	4	30	70	100
4	B-BBA -207	MIC	Human Resource Management	3	0	1	4	30	70	100
5	B-BBA-209	MDC	MSME Management	2	0	1	3	25	50	75
6	AEC-3	AEC	Choose any one from the common pool of courses offered by the University				2			50
7	SEC-3	SEC	Choose any one from the common pool of courses offered by the University				3			75
			Total Hours/Credit				24			600


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 University of Jammu
 Jammu - 180 006

S r · N o	Course Code	Course Type	Course Title	Fourth Semester						
				Workload			No. of Credit	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1	B-BBA -202	DSC	Marketing Management	3	0	1	4	30	70	100
2	B-BBA -204	DSC	Statistical Methods for Managerial Decisions	3	0	1	4	30	70	100
3	B-BBA -206	DSC	Company Law	3	0	1	4	30	70	100
4	B-BBA -208	MIC (VOC)	Personality & Soft Skills Development	3	2	0	4	30	35(P) 35(T)	100
6	AEC-4	AEC	Choose any one from the common pool of courses offered by the University				2			50
8	VAC-3	VAC	Choose any one from the common pool of courses offered by the University				2			50
		Total Hours/Credit						20		500

Students who opt to exit after completion of second and have secured 96 credits including 4 credits of summer internship will be awarded a UG Certificate in the relevant Discipline/Subject.

w.e.f. academic session 2024-25

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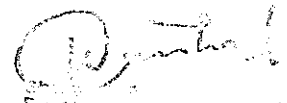
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Fifth Semester										
S r · N o	Course Code	Cour se Type	Course Title	Worklo ad			No. of Credi t	Division of Marks		
				L	P	T		Inter nal Mark s	Extern al Marks	Total Marks
1	B-BBA -301	DSC	International Business	3	0	1	4	30	70	100
2	B-BBA -303	DSC	Basics of Cost Accounting	3	0	1	4	30	70	100
3	B-BBA -305	DSC	Indian Management	3	0	1	4	30	70	100
4	B-BBA -307	MIC (VOC)	Business Research Methods	3	2	0	4	30	35(P) 35(T)	100
5	B-BBA -309		Internship				4			100
Total Hours/Credit							20			500

Sixth Semester										
S r · N o	Course Code	Cour se Type	Course Title	Workloa d			No. of Credi t	Division of Marks		
				L	P	T		Intern al Marks	Extern al Marks	Total Marks
1	B-BBA -302	DSC	Business Ethics	3	0	1	4	30	70	100
2	B-BBA -304	DSC	Financial Management	3	0	1	4	30	70	100
3	B-BBA -306	DSC	Taxation Laws	3	0	1	4	30	70	100
4	B-BBA -308	MIC	Indian Economy	3	0	1	4	30	70	100
5	B-BBA -310	MIC (VOC)	Quantitative Techniques through Computers	3	2	0	4	30	35(P) 35(T)	100
Total Hours/Credit				15		5	20	150	350	500

Students who wish to undergo a 3 years UG Programme will be awarded UG Degree in the Major Discipline after successful completion of three years, securing 132 credits


 Head of Institution
 K. J. Somaiya Institute of Management Studies
 K. J. Somaiya Institute of Management Studies

Seventh Semester										
Sr. No	Course Code	Course Type	Course Title	Workload			No. of Credit	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective-International Business*	3	0	1	4	30	70	100
2		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective-International Business *	3	0	1	4	30	70	100
3		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective-International Business *	3	0	1	4	30	70	100
		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective-International Business *	3	0	1	4	30	70	100
4	B-BBA-401	MIC	Tourism and Hospitality	3	0	1	4	30	70	100

7

w.e.f. academic session 2024-25

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D. J. Singh
 Head of Department
 Department of Management Studies
 Indian Institute of Technology
 Kharagpur, India

		Management						
		Total Hours/Credit	15	5	20	150	350	500

*Students need to choose any one elective as major elective. List of all electives are given below-

Elective - Finance

B-BBA -403	Principles of Banking	7 th Semester
B-BBA -405	Financial Market	7 th Semester
B-BBA -407	Financial Statement Analysis	7 th Semester
B-BBA -409	Working Capital Management	7 th Semester

Elective - Marketing

B-BBA -411	Product and Brand Management	7 th Semester
B-BBA -413	Marketing Research	7 th Semester
B-BBA -415	Retail Marketing	7 th Semester
B-BBA -417	Supply Chain Management	7 th Semester

Elective - Human Resources

B-BBA -419	Training and Development	7 th Semester
B-BBA -421	Employee Legislation	7 th Semester
B-BBA -423	Group Dynamics	7 th Semester
B-BBA -425	Compensation management	7 th Semester

Elective - International Business

B-BBA -425	International Aspects Of Business Operations	7 th Semester
B-BBA -427	Foreign Exchange Management	7 th Semester
B-BBA -429	WTO & International Trade Policy	7 th Semester
B-BBA -431	International Marketing	7 th Semester


 Head of Department
 Department of Management Studies
 Anna University
 Chennai

1560

Eighth Semester without Research										
Sr No	Course Code	Course Type	Course Title	Workload			No. of Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective- International Business	3	0	1	4	30	70	100
2		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective- International Business *	3	0	1	4	30	70	100
3		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective- International Business*	3	0	1	4	30	70	100
		DSC	Elective – Finance* Or Elective –Marketing* Or Elective -Human Resources* Or Elective- International Business *	3	0	1	4	30	70	100
4	B-BBA	MIC	Healthcare	3	0	1	4	30	70	100

-402	Management							
	Total Hours/Credit	15	5	20	150	350	500	

*Students need to choose any one elective as major elective. List of all electives are given below

Elective - Finance

B-BBA -404	Financial Derivatives	8 th Semester
B-BBA -406	Risk and Insurance	8 th Semester
B-BBA -408	Investment Management	8 th Semester
B-BBA -410	Behavioural Finance	8 th Semester

Elective - Marketing

B-BBA -412	Digital Marketing	8 th Semester
B-BBA -414	Customer Relationship Management	8 th Semester
B-BBA -416	Consumer Behaviour	8 th Semester
B-BBA -418	Advertising and Public Relations	8 th Semester

Elective - Human Resources

B-BBA -420	Organisational Development	8 th Semester
B-BBA -422	Knowledge Management	8 th Semester
B-BBA -424	Performance Management	8 th Semester
B-BBA -426	Global HR Practices	8 th Semester

Elective - International Business

B-BBA -428	Management of Cross Cultural Issues	8 th Semester
B-BBA -430	International Regulatory Framework	8 th Semester
B-BBA -432	International Strategic Management	8 th Semester
B-BBA -434	Global Supply Chain Management	8 th Semester

Eighth Semester with Research										
Sr No	Course Code	Course Type	Course Title	Workload			No. of Credits	Division of Marks		
				L	P	T		Internal Marks	External Marks	Total Marks
1		DSC	Elective – Finance Or Elective - Marketing Or Elective -Human Resources Or Elective- International Business	3	0	1	4	30	70	100
2	B-BBA - 402	MIC	Data Analytics	3	0	1	4	30	70	100
3	B-BBA - 436		Dissertation				12			300
		Total Hours/Credit					20			500

A four year UG Honours degree in the major discipline will be awarded to those who complete a four year degree programme with 172 credits

Elective - Finance

B-BBA -404	Financial Derivatives	8 th Semester
B-BBA -406	Risk and Insurance	8 th Semester
B-BBA -408	Investment Management	8 th Semester
B-BBA -410	Behavioural Finance	8 th Semester

Elective - Marketing

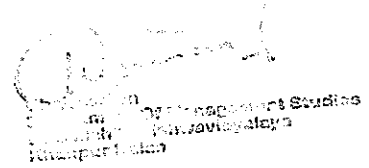
B-BBA -412	Digital Marketing	8 th Semester
B-BBA -414	Customer Relationship Management	8 th Semester
B-BBA -416	Consumer Behaviour	8 th Semester
B-BBA -418	Advertising and Public Relations	8 th Semester

Elective - Human Resources

B-BBA -420	Organisational Development	8 th Semester
B-BBA -422	Knowledge Management	8 th Semester
B-BBA -424	Performance Management	8 th Semester
B-BBA -426	Global HR Practices	8 th Semester

Elective - International Business

B-BBA -428	Management of Cross Cultural Issues	8 th Semester
B-BBA -430	International Regulatory Framework	8 th Semester
B-BBA -432	International Strategic Management	8 th Semester
B-BBA -434	Global Supply Chain Management	8 th Semester



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PRINCIPLES OF MANAGEMENT

Course Code: B-BBA -101

Total Credits: 4

L - T - P

3 - 1 - 0

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3 hrs

Course Outcomes:

CO1: Students will be able to have clear understanding of managerial functions like planning, and have same basic knowledge on international aspect of management

Students will able to

CO2: Students will be able to understand the concept of organization

CO3: Students will be able to demonstrate the ability to directing, leadership and communicate effectively

CO4: Students will be able to demonstrate the ability to understand the requirement of good control system and control techniques.

Unit-I

Nature, Scope and Significance of Management; Process of Management; Management as an Art, Science and Profession; Management and Administration; Role of Managers; Principles of Management; Levels of Management

Unit-II

Planning : Meaning and Importance of Planning; Planning Process; Making Planning Effective; Types of Plans; Decision Making : Concept, Nature, Types of Decision, Process and Techniques, Creativity in Decision Making . Management by Objectives

Unit-III

Organizing- Nature, Importance, Process and Principles of Organizing Departmentation, Decentralization, Centralization, Delegation, Authority and Responsibility Relationship - Line, Staff and Functional; Formal vs. Informal Organizations, Directing: Concept, Nature and Importance

Unit-IV

Leadership: Meaning, Importance and Characteristics of a Good Leader, Trait Theories, Managerial Grid, Robert House theory, Path Goal theory, Blake & Mouton theory. Control: Nature, Process and Significance, Control Methods: Pre-action Control, Steering Control and Post-action Control, Control Techniques


Recommended Readings:

1. Koontz, Harold and Weihrich, Heinz. Essentials of Management. 10th ed. Tata McGraw Hill Education, 2015. Print
2. Robbins, Stephen P. Management, 5th ed. Englewood Cliffs, Prentice Hall Inc. New Jersey.

3. Stoner, James A. F., Freeman, R. Edward, Gilbert, Daniel R. Management, 6e (Revised). Prentice Hall of India, New Delhi. 2018. Print
4. Luthans, Fred. Organizational Behaviour. 12th ed. Mc Graw Hill , New York, 2011. Print
5. Rao, V. S. P. Management. Excel Books, New Delhi, 2012.
6. Prasad, L.M. Principles and Practice of Management. 20th ed. Sultan Chand & Sons. Print

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 2 marks each, all are compulsory. Section 'B' will contain 8 questions (2 questions from each unit) of 15 marks each. The students will be required to attempt four questions (one question from each unit).


Professor
Department of Management Studies
K. J. Somaiya Institute of Management Studies
Kirti Road, Mumbai

FUNDAMENTALS OF ACCOUNTING

Course Code: B-BBA -103

Total Credits: 4

L - T - P

3 - 1 - 0

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3 hrs

Course Outcomes:

CO1: Students will able to understand about various basic aspects of Accounting

CO2: Students will able to understand about various accounting concepts used in preparing financial statements

CO3: Students will able to understand the steps used in passing journal enteries and ledger accounts

CO4: By the end of the course, students will able to prepare trial balance and final accounts of proprietary concern.

Unit-I

Accounting: Nature, Scope, Functions and Limitations, Types of Accounting and Accounting System, Accounting Concepts and Conventions, Accounting Equation

Unit-II

Accounting Process: Journal and Ledger, Trial Balance including Rectification of Errors, Subsidiary Books

Unit-III

Capital and Revenue, Classification of Income, Expenditure and Receipts. Preparation of Final Accounts: Trading Account, Profit and Loss Account, Balance Sheet

Unit-IV

Depreciation: Concept, Causes, Features, Objectives and Methods. Computer and Accounting: Role of Computer in Accounting

Recommended Readings:

1. Goyal, V. K. Financial Accounting. 3rd ed. Excel Books, 2009. Print
2. Hingorani, N. L. and Ramanathan, A. R. Management Accounting. 5th ed. New Delhi: Sultan Chand & Sons, 2012. Print.
3. Gupta, R. L. and Ramaswamy: Advanced Accounting, Vol.1 & 2, Sultan Chand & Sons, New Delhi.


w.e.f. academic session 2024-25

4. Maheshwari, S.N. and. Maheshwari, S. K. Financial Accounting. Vikas Publishing House, New Delhi.

5. Ghosh, T. P. Financial Accounting for Managers. 4th ed. Taxman Allied Service.

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 2 marks each, all are compulsory. Section 'B' will contain 8 questions (2 questions from each unit) of 15 marks each. The students will be required to attempt four questions (one question from each unit).


Chairperson
Department of Management Studies
GGS Indraprastha Vishwavidyalaya
New Delhi

BUSINESS ORGANISATION

Course Code: B-BBA -105

Total Credits: 4

L - T - P

3 - 1 - 0

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3 hrs

Course Outcomes:

CO1: Students will be able to understand the different types of business organisation

CO2: Students will come to know that how they can set up their own enterprise

CO3: Students will come to know the procedure of preparing business plan

CO4: Students will be able to know the interface between government and business

Unit- I

Business-Concept, nature and scope, business as a system, business objectives, business and environment interface, distinction between business, commerce and trade

Unit- II

Forms of business organization - Sole proprietorship, partnership, joint stock company, types of company co-operative societies; multinational corporations

Unit- III

Entrepreneurship –Concept and nature; entrepreneurial opportunities in contemporary business environment; process of setting up a business enterprise; choice of a suitable form of business organization, feasibility and preparation business plan

Unit- IV

Government and business interface; stock exchange in India; business combination- concept and causes; chambers of commerce and industries in India. FICCI, CII Association

Recommended Readings:

1. Vasishth, Neeru. Business Organisation, , New Delhi : Taxmann
2. Talloo, Thelman J. Business Organisational and Management, New Delhi: TMH.
3. Tulsian, P.C., Business Organisation, New Delhi: Pearson Education.
4. Prakash, J., Business Organisation and Management, Kitab Mahal Distributors.
5. Singh, B.P. and Chhabra, T.N. Business Organisation and Management, Delhi : Dhanpat Rai & Co. (P) Ltd., 2002.

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 2 marks each, all are compulsory. Section 'B' will contain 8 questions (2 questions from each unit) of 15 marks each. The students will be required to attempt four questions (one question from each unit).

9

Corporate Office Management
Course Code: B-BBA -107

Total Credits: 2
L - T - P
2 - 0 - 0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1.5 hrs

Course Outcomes:

CO1: Students will be able to understand the different types of office functions and how they relate with other departments'

CO2: Students will be able to understand the skills and competencies of an office manager.

CO3: Students will come to know about the concept of filing and indexing

CO4: Students will be able to know about the types of office forms

Unit- I

Office and Office Management: Meaning of office, functions of office-primary and administrative functions, importance of office, Relation of office with other departments of Organization, Concept of paperless office, virtual office, back and front office, Definition and elements of office management, duties of an OfficeManager.

Unit- II

Filing and Indexing: Meaning and importance of filing, essential of good filing system. Centralized and decentralized filing system. Meaning, need and types of indexing used in the business organization. **Office Forms:** Meaning and types of forms used in business organization, advantages, forms controls, objectives, form designing, principles of forms designing and specimens used in office.

Recommended Readings:

1. Chhabra, T.N. Modern Business Organization. New Delhi: Dhanpat Rai & Sons.
2. Duggal, Balraj. Office Management and Commercial Correspondence. New Delhi: Kitab Mahal.

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 3 marks each, all are compulsory. Section 'B' will contain 6 questions (3 questions from each unit) of 5 marks each. The students will be required to attempt any four questions (two questions from each unit).

MICRO ECONOMICS-I
Course Code: B-BBA-109

Total Credits: 3
L - T - P
2 - 1 - 0

External Theory Marks: 50
Internal Assessment Marks: 25
Time allowed: 2 hrs

Course Outcomes:

CO10: Students will be able to understand the fundamentals of microeconomics

CO2: Students will be able to get an introduction about supply and demand and the basic forces that determine equilibrium in a market

CO3: Students will be able to get an introduction about consumer behaviour and analysing consumer decisions

CO4: Students will be able to understand about firms and their decisions about optimal production

Unit-I

The concept of demand and the elasticity of demand and supply: Demand curves: individual's curve, market demand curve. Movements along versus shifts in the demand curve. Elasticity of demand: price, income and cross

Unit-II

Concept of revenue; Marginal and Average; Revenue and elasticity of demand. Consumer Equilibrium: Utility Analysis, Indifference curve analysis: Consumer's equilibrium (necessary and sufficient conditions). Price change and income and substitution effects. Revealed Preference

Unit-III

Production: Fixed and variable inputs, production function, total, average and marginal products, law of variable proportions. Production isoquants, marginal rate of technical substitution, economic region of production, optimal combination of resources, the expansion path, isoclines, return to scale


Recommended Readings:

1. Kumar, Raj., Gupta, Kuldeep. Business Economics, New Delhi: Publishing & Distributors P. Ltd.
2. Roy, Uddipto. Managerial Economics. New Delhi: Asian Book Private Ltd.
3. Varshney, R.L, Maheshwari, K.L. Managerial Economics. Sultan Chand & Sons.
4. Trivedi, M.L. Managerial Economics. Tata McGraw Hill.
5. Salvatore, D. Microeconomic Theory. New Delhi : Tata McGraw Hill.
6. Hirschey, Mark. Managerial Economics. New Delhi: Thomson, South Western.
7. Mehta, P.L. Managerial Economics. New Delhi: Sultan Chand.

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Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 questions of 4 marks each, all are compulsory. Section 'B' will contain 6 questions (2 questions from each unit) of 10 marks each. The students will be required to attempt any three questions (one question from each unit).


Principal
Department of Management Studies
University of Hyderabad

Understanding Human Behaviour
Course Code: B-BBA -102

Total Credits: 4

L - T - P

3 - 1 - 0

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3 hrs

Course Outcomes:

CO1: Students will be able to relate the different aspects of the human behaviour with organisation

CO2: Students will be able to modify their own beliefs, assumptions, and behaviors with respect to how individuals act in order to expand the options of approaches and increase the own effectiveness

CO3: Students will be able to learn about nature and theories of Emotion.

CO4: Students will be able to know about nature and theories of learning and personality.

Unit I

Understanding Human Behaviour: Nature, Meaning, Need to understand human behaviour. Approaches for studying Human Behaviour: Behavioural Approach, Cognitive Approach, Psychoanalytic Approach

Unit II

Individual & Interpersonal Behaviour: Biographical Characteristics; Values; Attitudes Formation, Theories, Organisation related attitude, Relationship between attitude and behaviour; Transactional Analysis – ego states, types of transactions, life positions, applications of T.A

Unit III

Emotions-Nature and Meaning, Physiological responses in emotions, Theories of emotions

Unit IV

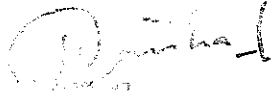
Learning-Nature and Meaning, Theories of learning, Personality-Nature and Meaning, Theories of personality

Recommended Readings:

1. Davis, K. Human Behaviour at Work, Organizational Behaviour. New Delhi: Tata McGraw Hill Publishing Co.
2. Luthans, F. Organizational Behaviour. McGraw-Hill Book Company.
3. Robbins, S.P. Organizational Behaviour. New Delhi: Prentice Hall of India.
4. Dwivedi, R.S. Human Relations and Organizational Behaviour.
5. Richard S. and Black, J. Organizational Behaviour. New York: Hrper Collins College Publishers,.
6. Sukla, M. Understanding Organizations: Organization Theory and Practice in India. New Delhi: Prentice Hall.

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 2 marks each, all are compulsory. Section 'B' will contain 8 questions (2 questions from each unit) of 15 marks each. The students will be required to attempt four questions (one question from each unit).


Professor
Department of Management Studies
VIT Vellore
Vellore, Tamil Nadu

Entrepreneurship Development
Course Code: B-BBA -104

Total Credits: 4

L - T - P

3 - 1 - 0

External Theory Marks: 70

Internal Assessment Marks: 30

Time allowed: 3 hrs

Course Outcomes:

CO1: Student will be able to understand the concept of Entrepreneurship

CO2: Student will be able to know about the role of entrepreneurship in economic development

CO3: Student will be able to know about the qualities, characteristics and role of an Entrepreneur

CO4: Students will be able to prepare a business plan

Unit-I

Entrepreneurship: Concept, knowledge and skills requirement; characteristics of successful entrepreneurs; role of entrepreneurship in economic development; Need and significance of Entrepreneurship Development in Global contexts

UNIT-II

Entrepreneurship Quality/Motivation: The Entrepreneurship – myths and misconception, qualities, characteristics and role demanded of an Entrepreneur, entrepreneur v/s Professional Managers.

Unit-III

New Venture Development: Meaning and Stages, Sources of Financing Entrepreneurship, Evaluation of Role of Government and Non Government Agencies in Promoting Entrepreneurship in India, Start Up India Schemes, Stand Up India Schemes.

Unit-IV

Business Plan Preparation: Procedure & steps, Market Survey & Demand Analysis, Growth, Modernization & Expansion of Enterprise

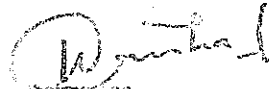
Recommended Readings:

1. Hisrich, Robert D., Peters, Michael and Shepherd, Dean. Entrepreneurship. New Delhi: Tata McGraw Hill.
2. Barringer, Brace R., and Ireland, R. Duane. Entrepreneurship. New Jersey: Pearson Prentice Hall.
3. Lall, Madhurima, and Sahai, Shikha. Entrepreneurship. New Delhi: Excel Books.
4. Poornima, Charantimath. Entrepreneurship Development and Small Business Enterprises. New Delhi: Pearson Education.

- 5 Khanka, S.S. Entrepreneurial Development. New Delhi: S. Chand.
- 6 Desai, Vasant. Dynamics of Entrepreneurial Development and Management. Himalaya Publishing House.

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 2 marks each, all are compulsory. Section 'B' will contain 8 questions (2 questions from each unit) of 15 marks each. The students will be required to attempt four questions (one question from each unit).


Vasant Desai
Department of Management Studies
Himalaya Institute of Management Studies
New Delhi, India

BUSINESS STATISTICS -I
Course Code: B-BBA -106

Total Credits: 4
L - T - P
3 - 1 - 0

External Theory Marks: 70
Internal Assessment Marks: 30
Time allowed: 3 hrs

Course Outcomes:

CO1: Students will be able to organize, manage and present data.

CO2: Students will be able to learn about various tools and techniques used in business statistical analysis such as Central Tendency, Measures of Dispersion, Skewness and Kurtosis

CO3: Students will be able to know about the degree and nature of relationship between two variables by using techniques like Correlation and Regression

CO4: Students will be able to learn about components of Time Series Analysis

Unit-I

Statistics: Meaning, Scope, Significance, Functions, and Limitations; Collection of Data: Types of Data, Methods of Collecting Primary Data; Sources of Secondary Data; classification and Tabulation of Data; Organizing Numerical Data: Ordered Array, and Frequency Distribution; Cumulative and, Percentage Frequency Distributions; Bi-variate Frequency Distributions; Diagrammatic and Graphic Presentation of Data.

Unit-II

Measures of Central Tendency: Mean Median, Mode, Geometric Mean, and Harmonic Mean; Partition Values - Quartiles, Deciles, and Percentiles. Measures of Dispersion: Range, Mean Deviation, Standard Deviation and Variance, Coefficient of Variation; Measures of Skewness and Kurtosis.

Unit-III

Correlation Analysis: Concept, Types and Significance; Karl Pearson's and Spearman's Coefficients of Correlation. Regression Analysis: Concept, and Significance, Two Lines of Regression

Unit-IV

Multiple Correlation and Regression Analysis: Estimation of Multiple Regression Equation; Calculation of Multiple Correlation Coefficient; Time Series Analysis: Meaning, Components and Trend Analysis; Seasonal Variations.


9

Recommended Readings:

1. Gupta, B. N. Statistics (Theory & Practice). Agra: Sahitya Bhawan Publishers and Distributors (P) Ltd.
2. Beri, G. C. Statistics for Management. New Delhi: Tata McGraw Hills Publishing Company Ltd.
3. Hooda, R. P. Statistics for Business and Economics. New Delhi: MacMillan India Ltd.
4. Gupta, S. P. and Gupta M. P. Business Statistics. New Delhi: Sultan Chand and Sons,
5. Gupta, S. P. Statistical Methods. New Delhi: Sultan Chand and Sons.
6. Sharma, J. K. Business Statistics. New Delhi : Prentice Hall of India, 2012

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 2 marks each, all are compulsory. Section 'B' will contain 8 questions (2 questions from each unit) of 15 marks each. The students will be required to attempt four questions (one question from each unit).


Dr. P. K. Sharma
Department of Management Studies
K. J. Somaiya Institute of Management Studies
Kharvela, Mumbai - 400 015

Management Lessons from Indian leaders
Course Code: B-BBA -108

Total Credits: 2
L - T - P
2 - 0 - 0

External Theory Marks: 35
Internal Assessment Marks: 15
Time allowed: 1.5 hrs

Course Outcomes:

CO1: Students will be able to understand management lessons from different eras of Indian leaders

CO2: Students will be able to develop skills learnt from these leaders and apply them in different situations for solving different problems

Unit-I

Ancient –Shri Ram, Shri Krishna , Chandra Gupt Maurya, Chanakya , Samrat Ashok

Medieval- Maharana Pratap , Chatrapati Shivaji, Jhansi Ki Rani, Ahilya Bai, Jyotiba Phule

Unit-II

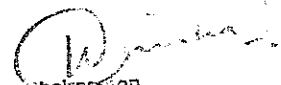
Modern- Swami Vivekanand , Mahatma Gandhi, Vallabh bhai Patel, Atal Bihari Vajpayee, APJ Abdul Kalam

Recommended Readings:

The instructor will provide the reading material and share online sources with the students.

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 small questions of 3 marks each, all are compulsory. Section 'B' will contain 6 questions (3 questions from each unit) of 5 marks each. The students will be required to attempt any four questions (two questions from each unit).


Chairperson
Department Of Management Studies
BPS Mulla Vishwavidyalaya
Khanpur Kolar

9

MICRO ECONOMICS-II
Course Code: B-BBA-110

Total Credits: 3
L - T - P
2 - 1 - 0

External Theory Marks: 50
Internal Assessment Marks: 25
Time allowed: 2 hrs

Course Outcomes:

CO1: Students will be able to understand the concepts of cost, nature of production and its relationship to Business operations

CO2: Students will be able to apply marginal analysis to the "firm" under different market conditions

CO3: Students will be able to know about the concept of supply and demand and the basic forces that determine equilibrium in a market economy

CO4: Students will be able to know about the concept of price and output decisions of firms under various market structure

Unit-I

Cost of Production: traditional and modern theory of production (long run and short run costs of production). Economies and diseconomies of scale and the shape of the long run average cost, Learning curve

Unit-II

Perfect Competition: Assumptions, price and output decisions. Equilibrium of the firm and the industry in the short and the long runs, including industry's long run supply, producer surplus

Unit-III

Monopoly competition: Assumptions, price determination, Equilibrium of the firm in the short and the long runs. Monopolistic Competition: Assumptions, price determination, Equilibrium of the firm and the group in the short and the long runs, Stability analysis – Walrasian and Marshallian Demand – supply analysis

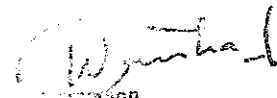
Recommended Readings

1. Kumar, Raj. Gupta, Kuldip. Business Economics, New Delhi: Publishing & Distributors P. Ltd.
2. Roy, Uddipto. Managerial Economics. New Delhi: Asian Book Private Ltd.
3. Varshney, R.L, Maheshwari, K.L. Managerial Economics. Sultan Chand & Sons.
4. Trivedi, M.L. Managerial Economics. Tata Mcgraw Hill.
5. Salvatore, D. Microeconomic Theory. New Delhi: Tata McGraw Hill.

6. Hirschey, Mark. Managerial Economics. New Delhi: Thomson, South Western.
7. Mehta, P.L. Managerial Economics. New Delhi: Sultan Chand.

Instruction for External Theory Paper Setter/Examiner:

The question paper will have two sections. Section 'A' shall comprise of 5 questions of 4 marks each, all are compulsory. Section 'B' will contain 6 questions (2 questions from each unit) of 10 marks each. The students will be required to attempt any three questions (one question from each unit).


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Department Of Management Studies
EPWU, The Vaidwani, Jayalaya
Khanpur Kalat

ANNEXURE - 6A

SCHEME AND CURRICULUM
of
Four Year

BACHELOR IN HOTEL MANAGEMENT
(Hons./Hons. with Research)

(Programme Code-43)

(As Per New Education Policy-2020)

From the Academic Session 2024-25



DEPARTMENT OF HOTEL MANAGEMENT

Bhagat Phool Singh Mahila Vishwavidyalaya, Sonapat

Accredited with B++ Grade by NAAC

2024-25

Pankaj

Incharge
Department of Hotel Management
BPSMV, Khanpur Kalan (Sonapat)

Program Outcome (PO)

The Program Outcomes of the programme will be as follows :-

PO (1) Students will be able to gain knowledge, skills and ability which make them competent to work in the hospitality industry.

PO (2) Students will be able to apply their acquired skills to make careers in various sectors of the hospitality industries.

PO (3) The Programme empowers students to compete and perform well in the hospitality industry.

PO (4) The Programme make students able to work in the field of Hospitality and also make them able to become an entrepreneur.

Program Specific Outcomes (PSO):

The Program Specific Outcomes of the programme will be as follows:-

PSO (1) Understand the nature and basic concept of the Hotel and Hospitality Industry.

PSO (2) Analyze the relationship among operational departments of the Hotel Industry.

PSO (3) Hands on training of students in all core departments to develop basic skills needed for the industry.

PSO (4) Understand the applications of skill acquired in different operational areas of the Hotel Industry.

CURRICULUM & SCHEME OF EXAMINATIONS
For
Four Year BHM (Hons./Hons. with Research)
from the Academic Session 2024 - 25

First Year: First Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-101	DSC	Foundation Course in Food Production -I	3	-	2	4	30	35	35	100
2	B-BHM-103	DSC	Foundation Course in Food and Beverage Service-I	3	-	2	4	30	35	35	100
3	B-BHM-105	DSC	Foundation Course in Front Office-I	3	-	2	4	30	35	35	100
4	B-BHM-107	MIC	Foundation Course in Housekeeping -I	2	-	-	2	15	35	-	50
5	B-BHM-109	MDC	Understanding Indian Tourism	3	-	-	3	25	50	-	75
6	B-AEC	AEC	Choose any one course offered by common pool of the university						Theory/ Practical		
							2	15	35	50	
7	B-SEC	SEC	Choose any one course offered by common pool of the university				3	25	50		75
8	B-VAC	VAC	Choose any one course offered by common pool of the university				2	15	35		50
Total credits							24	Total Marks			600

First Year: Second Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-102	DSC	Foundation Course in Food Production -II	3	-	2	4	30	35	35	100
2	B-BHM-104	DSC	Foundation Course in Food and Beverage Service -II	3	-	2	4	30	35	35	100
3	B-BHM-106	DSC	Foundation Course in Front Office-II	3	-	2	4	30	35	35	100
4	B-BHM-108	MIC	Foundation Course in Housekeeping - II	2	-	-	2	15	35	-	50
5	B-BHM-110	MDC	Management in Hotel Industry	3	-	-	3	25	50	-	75
6	B-AEC	AEC	Choose any one course offered by common pool of the university				2	15	Theory/ Practical		50
									35		
7	B-SEC	SEC	Choose any one course offered by common pool of the university				3	25	50		75
8	B-VAC	VAC	Choose any one course offered by common pool of the university				2	15	35		50
Total credits							24	Total Marks			600

Note: Students who opt to exit after completion of the first year and have secure 48 credits will be awarded a UG Certificate if, in addition they complete ~~one~~ optional course of 04 credits during the summer vacation of the first year.

Second Year: Third Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-201	DSC	Indian Regional Cuisine	3	-	2	4	30	35	35	100
2	B-BHM-203	DSC	Food and Beverage Service operation-I	3	-	2	4	30	35	35	100
3	B-BHM-205	DSC	Front Office operation -I	3	-	2	4	30	35	35	100
4	B-BHM-207	MIC	Housekeeping operation-I	3	-	2	4	30	35	35	100
5	B-BHM-209	MDC	Understanding of Airline operation	3	-	-	3	25	50	-	75
6	B-AEC	AEC	Hotel French				2	15	35	-	50
7	B-SEC	SEC	Personality Development-I				3	25	50		75
Total credits							24	Total Marks			600

Second Year: Fourth Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-202	DSC	North Indian Cuisine	3	-	2	4	30	35	35	100
2	B-BHM-204	DSC	Food and Beverage Service operation-II	3	-	2	4	30	35	35	100
3	B-BHM-206	DSC	Front Office operation -II	3	-	2	4	30	35	35	100
4	B-BHM-208	MIC (VOC)	Housekeeping operation-II	-	-	8	4	30	-	70	100
5	B-AEC	AEC	Soft skills in Hospitality Industry	-	-	4	2	15	-	35	50
6	B-VAC	VAC	Food Safety & Quality	2	-	-	2	15	35	-	50
Total credits							20	Total Marks			500

Note: Students who opt to exit after completion of the second year and have secure 96 credits including 04 credits of summer internship will be awarded a UG Diploma.

Third Year: Fifth Semester										
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Viva-Voce Division of Mark		
				L	T	P		Internal Marks	External Marks	Total Marks
1	B-BHM-301	DSC	Food Production Operation	-	-	-	4	30	70	100
2	B-BHM-303	DSC	Food and Beverage Service operation	-	-	-	4	30	70	100
3	B-BHM-305	DSC	Front Office Operation	-	-	-	4	30	70	100
4	B-BHM-307	MIC VOC	Housekeeping Operation	-	-	-	4	30	70	100
5	B-BHM-309	Internship*	Report Writing	-	-	-	4	30	70	100
Total Credits							20	Total Marks		500

* Note: Students who has already complete their 04-credit internship in the end of their first year of the programme, they do not need to undergo for internship in this semester again.

Third Year: Sixth Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-302	DSC	Bakery and Confectionery	3	-	2	4	30	35	35	100
2	B-BHM-304	DSC	Food and Beverage Management	3	-	2	4	30	35	35	100
3	B-BHM-306	DSC	Front Office Management	3	-	2	4	30	35	35	100
4	B-BHM-308	MIC (VOC)	Housekeeping Management	3	-	2	4	30	35	35	100
5	B-BHM-310	MIC	Entrepreneurship in Hospitality Industry	4	-	-	4	30	70	-	100
Total credits							20	Total Marks		500	

Note: Students who opt to exit after completion of third year and have secure 132 credits will be awarded a 3-year BHM.

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Department of Hotel Management
BPSMV, Khanpur Kalan (Sonipat)

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4-year BHM with Honours

Fourth Year: Seventh Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-401	DSC	Indian Curries & Sweets	3	-	2	4	30	35	35	100
2	B-BHM-403	DSC	Catering Management	3	-	2	4	30	35	35	100
3	B-BHM-405	DSC	Property Management System	3	-	2	4	30	35	35	100
4	B-BHM-407	DSC	Room Division	3	-	2	4	30	35	35	100
5	B-BHM-409	DSC	Interior Decoration	3	-	2	4	30	35	35	100
6	B-BHM-411	MIC	Guest Relationship Management	4	-	-	4	30	70	-	100
Total credits							24	Total Marks			600

Fourth Year: Eighth Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-402	DSC	Mexican Cuisine	3	-	2	4	30	35	35	100
2	B-BHM-404	DSC	Food & Beverage Cost Control	3	-	2	4	30	35	35	100
3	B-BHM-406	DSC	Yield Management	3	-	2	4	30	35	35	100
4	B-BHM-408	DSC	Hotel Textile	3	-	2	4	30	35	35	100
5	B-BHM-410	DSC	Hotel Marketing	4	-	-	4	30	70	-	100
6	B-BHM-412	MIC	HRM in Hotel Industry	4	-	-	4	30	70	-	100
Total Credits							24	Total Marks			600

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4-year BHM Honours with Research

Fourth Year: Eighth Semester											
Sr. No	Course Code	Course Type	Course Title	Workload			Credit	Division of Marks			
				L	T	P		Internal Marks	External Marks		Total Marks
									T	P	
1	B-BHM-402	DSC	Mexican Cuisine	3	-	2	4	30	35	35	100
2	B-BHM-404	DSC	Food & Beverage Cost Control	3	-	2	4	30	35	35	100
3	B-BHM-412	MIC	HRM In Hotel Industry	4	-	-	4	30	70	-	100
4	B-BHM-414	Dissertation	Dissertation/ Research Project	-	-	-	12	Viva-voce	200	-	300
								100			
Total Credits							24	Total Marks			600

Note: A four-year BHM (Honours) Degree in the major discipline will be awarded to those who complete a four-year degree programme with 180 credits.

The students who secured 180 credits including 12 credits from a research project /dissertation, are awarded BHM (Honours with research)

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Incharge
Department of Hotel Management
BPSMV, Khanpur Kalan (Sonipat)

Foundation Course in Food Production -I
B-BHM-101

Total Credits: 4
L - T - P
3 - 0 - 2

External Theory Marks: 35
External Practical Marks :35
Internal Assessment Marks: 30
Time allowed: 3hrs

Course Outcomes: After completion of this course the students will be able to:

CO1 Understand of concept and nature the Professional Cookery.

CO2 Students will acquire knowledge about different kind of Cooking Methods used in Professional Kitchens.

CO3 Students will be familiar with different Kitchen Organization & kitchen Management.

CO4 students will acquire knowledge about basic food commodities.

Unit – 1

Professional Kitchen & Cooking:

Definition, importance, Personal & Kitchen Hygiene, Uniform, Protective clothing, Kitchen Layouts (Basic, Bulk and Show kitchens), of Kitchen Hierarchy, Classical Kitchen Brigade, Modern Staffing in various hotels, Duties & Responsibilities of various chefs in kitchen, their attributes; coordination of kitchen with other departments.

Unit – 2

Kitchen Equipments, Fuels & Safety:

Kitchen Equipments, Classification, Description, Storage, Kitchen Tools, Knives, Their Usage, Care & Maintenance, Work stations, Safety Procedures, Types of fuel, Usage and Precautions. Types of fire, handling and usage of fire fighting extinguishers.

Unit – 3

Condiments, Herbs and Spices Used in India Cuisine:

Introduction, Condiments, Herbs and Spices used in Indian Cuisine (All spice, Ajwain, Aniseed, Asafoetida, Bay leaf, Cardamom, Cinnamon, Cloves, Coriander seeds, Cumin, Chilli, Fenugreek, Mace, Nutmeg, Mustard, Pepper, Poppy Seeds, Saffron, Tamarind, Turmeric, Celery, Curry Leaf, Marjoram, Pomegranate Seeds, Stone Flowers, Basil, Betel Root, Black Salt, Red Chilli, Rock Salt) Various ways of using spices, their storage and usage tips.

Unit – 4

Stocks, Sauces, Soups and Salads:

Stocks: Introduction, Classification, Usage, Preparation; Sauces: Introduction, Classification, Usage, Thickening Agents, Preparation of Mother Sauces, Understanding their derivatives, propriety sauces, making of good sauce, emerging trends, Soups: Introduction, Classification, Preparation, Salient Features, Care and precautions, trends in soup presentation. Salads: Introduction, compositions, types, dressings, emerging trends.

Practical Component:

- Familiarization, identification of commonly used ingredients in kitchen.
- Preparation of Stocks, Mother Sauces and at least two derivatives each mother Sauce.

- Preparation of Soups (Minestrone, Consommés, Cream Soups, Puree Soups, Clear Soups, Bisques, Cold Soups, Chowders and others).

Recommended Readings:

1. Chef Parvinder S. Bali. Food Production Operations, 3rd ed, Oxford Higher Education, 2021, Print.
2. Chef Parvinder S. Bali. Theory of cookery, 1st ed. Oxford Higher Education, 2017. Print.
3. David Foskett, Ceserani & Kinton's The Theory of Catering, 11th ed, Hodder Education 2007 print.
4. Wayne Gisslen, Professional Cooking, 5th Edition, Wiley 2002. Print

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus excluding practical component. Question no-1 will compulsory covering all the units and shall carry seven small questions of one mark each. The rest of eight questions will be set from all the four units. The examiner will set two questions from each unit. All questions shall carry 7 marks.

Practical component shall be evaluated on the basis of practical cum viva voce examination.

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Incharge
Department of Hotel Management
BPSMV, Khanpur Kalan (Sonipat)

Foundation Course in Food and Beverage Service-I
B-BHM-103

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 35

External Practical Marks: 35

Internal Assessment Marks: 30

Time allowed: 3hrs

Course Outcomes: After completion of this course the students will be able to:

CO1: Knowledge of the history and evolution of food and beverage service

CO2: Understanding of the various types of food and beverage service styles, including formal, casual, and quick-service

CO3: Familiarity with different types of food and beverage establishments, such as restaurants, hotels, cafes, and bars

CO4: Knowledge of the role of the server in the food and beverage industry and the importance of good customer service.

Unit-1

Food and Beverage Service Sector

Introduction to Food Service Industry in India Sectors of Food Service Industry Types of Restaurants and their Characteristics. Environmental Factors Influencing Food Service Operations, External Factors, Internal Factors, Employment Opportunities in Food and Beverage service Sector.

Unit-2

Trends and Challenges in the Food & Beverage Service Sector

Healthy and Organic Products, Slow product innovation cycles, Product traceability, Data Consolidation, Waste generation and management, GST Input Tax Credit, Enforcement of Plastic Ban, An Optimized Supply Chain, Stringent Regulatory Landscape, Use of Modern Technologies, The Pervasive Presence of e-Commerce Transparency, Sustainability, and Waste Reduction, Rise of Veganism, Increase in Demand for Plant-Based Foods.

Unit-3

Food Service Equipments

Introduction, Furniture, Linen, Crockery, Glassware, Tableware, Special and Miscellaneous Equipment and their Uses, Disposables, Purchase Considerations for Food Service Equipment: Capital Available, Type of Clientele, Style of Service, Location, Efficiency and Durability, Cost of Maintenance, Replacement, Menu Items. Type of Meal, Storage, Suitability for Multiple Applications Design and Pattern to Suit the Décor, Operation Cost.

Unit-4

Ancillary Sections & Food Service Techniques

Introduction to ancillary areas, Still Room, Silver Room or Plate Room, cleaning of silverware, Wash-up, Hotplate, Pantry, Linen Store, Introduction to food service, Waiter Service, Self-service, Assisted Service, Factors Influencing Style of Service.

Practical:

- Familiarization with F&B Equipment
- Pantry preparations and service
- Care, cleaning and polishing of F&B equipment
- Service using trays and salvers, Water service

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BPSMV, Khanpur Kalan (Sonipat)

Parker

- Mise-en-place and mise-en-scene for different meal periods

Recommended Readings:

1. John Cousins & Suzanne Weckes Food and Beverage Service, 10th ed, U.K. Hodder Education, 2020, Print
2. R. Singaravelavan, Food and Beverage Service, 2nd ed, oxford University Press India, Publication, 2016, print.
3. S N Bagchi and Anita Sharma, Textbook of Food and Beverage Service. 3rd ed. India: Aman Publications, 2015, Print.
4. Gajanan Shirke. Food and Beverage Management. 1st ed. India: Shroff Publishers, 2013, Print

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus excluding practical component. Question no-1 will compulsory covering all the units and shall carry seven small questions of one mark each. The rest of eight questions will be set from all the four units. The examiner will set two questions from each unit. All questions shall carry 7 marks.

Practical component shall be evaluated on the basis of practical cum viva voce examination.

Foundation Course in Front Office-I
B-BHM-105

Total Credits: 4
L - T - P
3 - 0 - 2

External Theory Marks: 35
External Practical Marks :35
Internal Assessment Marks: 30
Time allowed: 3hrs

Course Outcomes: After completion of this paper students will be able to:

- CO1:** Know the history and structure of hospitality industry.
CO2: Understand the positive and negative impacts of tourism.
CO3: Explore the development and distribution of hospitality products.
CO4: Understand different departments in a hotel and their functioning.
-

Unit 1

Hospitality Industry:

Introduction, origin and Growth, Evolution and growth of hotel industry in India- Ancient and medieval Era, Colonial Era, Modern Era. Tourism Industry: Introduction, industries related to tourism, 5A's of tourism, Importance of tourism, Types of Tourism: International tourism and domestic tourism.

Unit 2

Accommodation Industry:

Classification of Hotels on different basis; Star Categorization, Heritage, On the basis of Location, Clientele, Level of services, on the basis of size. types of rooms in a large hotels.

Unit 3

Organization structure of various hotels:

Organization structure of various hotels; Large Hotel, Medium hotel, Small Hotel. Core areas of the hotels. Introduction and hierarchy of Front Office Department, Layout of front Office department, Qualities of front office staff.

Unit 4

Front office Departments:

Functions of various sub-sections: Reservation, Reception, information, cash and Bills, Travel desk, Communication Section, Bell desk, Concierge, Inter and Intra-department coordination. Duties and responsibilities of Front office personnel: Front office Manager, receptionist, Bell Boys.

Practical Components;

- Personal grooming
- Knowledge of Equipments
- Inter department and intra department co-ordination
- Handling situations
- Front office Activities

Recommended Readings:

1. Chakravarti B. K., Front Office Management in Hotel, 1st ed. CBS, 2018. Print
2. Sudhir Andrews. Front Office Training manual. 3rd ed. India: Tata Mac Graw Hill, 2017. Print.

3. Jatashankar Tewari. Hotel Front Office: Operations and Management, 2nd ed. India: Oxford University Press, 2016. Print
4. Woods, Front Office Management, 1st ed, Pearson India, 2008. Print

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus excluding practical component. Question no-1 will compulsory covering all the units and shall carry seven small questions of one mark each. The rest of eight questions will be set from all the four units. The examiner will set two questions from each unit. All questions shall carry 7 marks.

Practical component shall be evaluated on the basis of practical cum viva voce examination.

Foundation Course in Housekeeping -I

B-BHM-107

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Theory Marks: 15

Time allowed: 1.30hrs

Course outcomes: After completion of this course the students will be able to:

CO1: Students will be able to identify and classify different types of hotels based on their locations.

CO2: Students will be able to understand the responsibilities of the housekeeping department.

CO3: Students will be able to understand the importance of coordination between different departments for efficient and effective hotel operations

CO4: Students will be able to understand the role of housekeeping in non-hotel industries such as hospitals, hostels, universities, etc.

Unit - 1

The Hotel Industry Overview:

Classification of Hotel, Based on Location, Based on Target Market, Based on size of Property, Based on level of Services, Based on Length of Stay, Based on Theme, Star Rating Hotels and Hotel Departments.

Unit - 2

Housekeeping Department:

Responsibilities of Housekeeping Department, Organizational Structure of Housekeeping Department in Small, Medium and Large Hotel, Housekeeping Personnel, Personal Attributes of Housekeeping Staff. Layout of Housekeeping Department, Coordination with Other Departments i.e. Front Office, Maintenance, Security Department, Food & Beverage, Stores, Human Resource, Purchase, Sales and Marketing.

Recommended Readings:

1. Jayanti Jayanti, Hotel Housekeeping Management: Changing trends and developments, 1st ed. Goodfellow Publishers, 2023, print.
2. G. Raghubalan & Samritee Raghubalan Press Hotel Housekeeping – Operations & Management, 3rd ed., Oxford University Press, 2015, Print.
3. Sudhir Andrews, Hotel Housekeeping Publisher: Tata McGraw Hill, 2017, Print.
4. Joan C Branson & Margaret Lennox (ELBS), Hotel Hostel and Hospital Housekeeping, 5th ed.1988, Print.

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus. Question no-1 will compulsory covering all the units and shall carry three small questions of five marks each. The rest of two questions will be set from both the two units. The examiner will set two questions from each unit. All questions shall carry 10 marks.

Understanding Indian Tourism
B-BHM-109

Total Credits: 3

L - T - P

3 - 0 - 0

External Theory Marks: 50

Internal Assessment Theory Marks: 25

Time allowed: 3hrs

Course Outcomes: After completion of this paper students will be able to:

CO1: Understand the concepts of travel and tourism

CO2: Appraise the positive and negative impacts of tourism.

CO3: Discuss the framework, types and form of tourism

CO4: Describe the different types tourism resources of India, their importance in tourism.

Unit- 1

Introduction of tourism

Meaning and definition of tourism. Characteristics and types of Tourism, components of Tourism, tourism as an industry. Reasons of travelling. History of Tourism through ages, linkages of tourism with other subjects like History, sociology, geography, management and economics, Economic impacts of tourism

Unit -2

Tourism Organizations

Tourism Organizations: Origin, Organization and Function of WTO, IATA as International Organizations while TAAI, IATO and ITDC as Domestic Organizations. Explaining of the terms- Tours, Tourist, and Visitor, traveller, Excursionist, Resource, Attraction, W.T.O. classification of Tourists and its significance. Problem and Prospects of Tourism.

Unit -3

Travel Agency & Tour Operators.

Travel Agency; Introduction and definition, types of Travel agency, Organizational structure and working of travel agency. Tour Operator; Introduction, definition, functions and Organizational structure. Differentiation between travel agency and tour operation business, Purpose of travel of tourists or people.

Recommended Readings:

1. Dallen J. Timothy, Cultural Heritage and Tourism: An Introduction, 2nd ed. Channel view publication, 2020 ebook & Print.
2. Bhatia, A. K., International Tourism, 3rd ed., Sterling Publishers New Delhi, 2006, print.
3. McIntosh, Robert, W. Goldner, Charles, Tourism: Principles, Practices and Cliffs, N.J., Prentice Hall, 1985, print.
4. Anand, M.M., Tourism and hotel Industry in India, Prentice Hall, New Delhi, 1976. print.

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus. Question no-1 will compulsory covering all the units and shall carry four small questions of four marks each. The rest of three questions will be set from all the three units. The examiner will set two questions from each unit. All questions shall carry 10 marks.

2nd Semester
Foundation Course in Food Production -II
B-BHM-102

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 35

External Practical Marks :35

Internal Assessment Marks: 30

Time allowed: 3hrs

Course Outcomes: After completion of this course students will be able to:

CO1: Understand of various cooking methods.

CO2: Acquire knowledge about different food commodities used in professional kitchens.

CO3: Familiar with different types of fishes and its preparations.

CO4: Gain the basic vegetable preparations and different commodities used in hotels.

Unit – 1

Cooking Methods:

Definition, aims and importance of Cooking. Cooking Types, Baking, Broiling, Grilling, Frying, Steaming, Stewing, Poaching, Roasting, Frying, Braising. Microwave cooking, Cooking equipment's such as Ovens, Cooking Ranges, Induction Plates.

Unit – 2

Eggs & Meat Cookery:

Structure of Egg, Classification, Grading of Eggs, Types, Selection, Storage and preparation of breakfast dishes with eggs and its usage in Modern cookery. Classification and selection Criterion of Poultry & Game, Cuts of Poultry, Yield and simple Indian preparations. Characteristics, selection & grading of Meat, Meat cuts, Storage and handling.

Unit – 3

Fish Cookery:

Introduction, Types, Purchasing, Storing Considerations, Fish & Shellfish, Their Classification, Cuts of Fish, Popular Species of Fish, Classical Preparations of Fish, Common cooking methods used for sea food.

Unit – 4

Vegetable, Cuts & Cookery:

Introduction, Vegetables, Pigment and Colour Changes, Effect of Heat on vegetables, Cuts of Vegetables, nutritional and hygiene aspects. Some Indian Cuts on vegetables: Broccoli, Cabbage, Potatoes, Onions, Spinach, Cucumber, Tomatoes, avocado. Beetroot, French Beans, Gourd, Bottle Gourd, Pumpkin, Okra, Colocasia, Spinach, Carrot, Turnips

Practical Components

- Understanding Methods of Cooking
- Mise-en- Place and Basic Vegetable Cuts
- Identification of types of rice varieties & pulses.
- Cooking of Indian Breakfasts, Continental breakfasts, Rice, Dals, Indian Breads.

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Recommended Readings:

1. Chef Parvinder S. Bali. Food Production Operations, 3rd ed, Oxford Higher Education, 2021, Print.
2. Chef Parvinder S. Bali. Theory of cookery, 1st ed. Oxford Higher Education, 2017. Print.
3. David Foskett & Victor Ceserani Ceserani & Kinton's The Theory of Catering, 11th ed, Hodder Education 2007.
4. Wayne Gisslen, Professional Cooking, 5th Edition, Wiley 2002. Print

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus excluding practical component. Question no-1 will compulsory covering all the units and shall carry seven small questions of one mark each. The rest of eight questions will be set from all the four units. The examiner will set two questions from each unit. All questions shall carry 7 marks.

Practical component shall be evaluated on the basis of practical cum viva voce examination.

Foundation Course in Food and Beverage Service-II

B-BHM-104

Total Credits: 4

L - T - P

3 - 0 - 2

External Theory Marks: 35

External Practical Marks :35

Internal Assessment Marks: 30

Time allowed: 3hrs

Course Outcomes: After completion of this course the students will be able to: **CO1:** Proficiency in basic table setting, napkin folding, and serving techniques
CO2: Understanding of menu planning and design, including the use of seasonal ingredients and menu engineering
CO3: Familiarity with basic menu service, including accompaniments and the proper use of glassware
CO4: Knowledge of food safety and sanitation practices, including proper handling and storage of food, hygiene, and sanitation regulations.

Unit-1

Food and Beverage Organization Structure

Function of Food and Beverage Department, Support Services, Organization of Food and Beverage Department, Functions of Food and Beverage Manager, Organization of Kitchen Stewarding, Purchase and Stores Department, Support Department, Restaurant Organization, Banquet Organization, Room Service Organization, Bar Organization, Intra-and Inter-department Relationships, Inter-department Relationship with Food Production, Front office and Housekeeping departments, Qualities of food and beverage staff

Unit-2

Menu Knowledge

History of Menu, Functions of Menu, Types of Menu, Other Types of Menus, Menu of Institutional Catering, Cyclic Menu, French Classical Menu Courses: Appetizer (Hors d'oeuvre) Soup (Potage) Eggs/Pastas (Oeufs/Farineux) Fish (Poisson) Entrée, Joint (Relevé) Sorbet, Roast (Rôti) Vegetables (Légumes) Sweets (Entremets) Cheese/Savoury (Fromage/Savoureux) Fruits (Dessert) Coffee (Café) À La Carte Sequence, Order of Category of Continental Dishes in À la Carte Menu, Order of Category of Indian Dishes in À la Carte Menu.

Unit-3

Menu Planning

Introduction to Menu Planning, Points Considered while Planning the Menu, Competition Policy of the Establishment, Customer, Operational Aspects, Gastronomic Standpoint, Nutritional Aspect, Government Regulations, Compiling À La Carte Menu, Extensive Choice, Pricing, Waiting Time, Compound Butter, Sauces, Foundation Sauces, Proprietary Sauces, Miscellaneous Sauces,

Unit-4

Cover Set up and Accompaniments

Different types of Garnishes, Importance of garnishes, condiments and their roles in food, different types of seasonings, different types of dressings French Culinary Terms & Examples of Dishes and their Descriptions for French Classical Courses

Practical Components:

- Laying and relaying of table cloth
- Napkin folding

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Incharge

Department of Hotel Management
BPSMV, Khanpur Kalan (Sonipat)

- Handling of service spoon and service fork
- Laying and service of special Table d'hôte menu
- Laying and service of breakfast set up on trays
- Service Sequence- Greeting, seating, order taking, serving and bill presenting.

Recommended Readings:

1. John Cousins & Suzanne Weekes Food and Beverage Service, 10th ed, U.K. Hodder Education, 2020, Print
2. R. Singaravelavan, Food and Beverage Service, 2nd ed, oxford University Press India, Publication, 2016, print.
3. S N Bagchi and Anita Sharma. Textbook of Food and Beverage Service. 3rd ed. India: Aman Publications, 2015, Print.
4. Gajanan Shirke. Food and Beverage Management. 1st ed. India: Shroff Publishers, 2013, Print

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus excluding practical component. Question no-1 will compulsory covering all the units and shall carry seven small questions of one mark each. The rest of eight questions will be set from all the four units. The examiner will set two questions from each unit. All questions shall carry 7 marks.

Practical component shall be evaluated on the basis of practical cum viva voce examination.

Foundation Course in Front Office-II
B-BHM-106

Total Credits: 4
L - T - P
3 - 0 - 2

External Theory Marks: 35
External Practical Marks :35
Internal Assessment Marks: 30
Time allowed: 3hrs

Course Outcomes: After the completion of the course the students will be able to;
CO1: Gain the knowledge of receiving and departure activities of guest along with room reservation process.
CO2: Acquire the skills in relation to guest registration procedure and process of bill settlements.
CO3: Gain deep understanding of equipments used in front office department.
CO4: Develop situation handling while working with varied kind of guests and their complaints.

Unit -1

Reservation and Guest cycle:

Guest cycle; all phases and activities; pre-arrival, Arrival, Stay, Departure and Post Departure. Reservation: Types of reservation; Tentative, Waitlisted, Confirmed, Guaranteed and non-guaranteed reservation. Modes of Reservation; Written & Verbal. Various source of reservation. System of reservation; Manual system of reservation and automatic system.

Unit- 2

Registration:

Registration Procedure, Identification of guest, Formation of registration records, Room and rate assignment, Establishment of mode of settlement of bills, completion of check-in procedure, room keys are issued. Check-in Procedure in manual, semi-automated and fully automated system.

Unit- 3

Automatic, semi- automatic and manual Equipments

Equipments used at front office; Room Rack, Mail Message, and Key Rack, Reservation Racks, Information Rack, Folio Trays, Account Posting Machine, Voucher Rack, Cash Register Support Devices, Telecommunications Equipments, Meal plans, Basis of Room charging, Tariff fixation. All types of Manual and automated Equipments used at front office.

Unit -4

Complaint Handling and Job Description

Complaint Handling procedure and Types of complaints; Attitudinal complaints, Service related complaint, Mechanical Complaint and Unusual complaints. Job description and specification of front office Manager, Supervisor, Bell boy, Lobby Manager.

Practical Components:

- Skill to handle guest arrival
- Skills to handle to telephones at the reception- receive/ record messages.
- Skills to handle guest departure (fits and groups)
- Preparation and study of countries, capitals, currencies
- Identification of F.O. equipments

- Telephone handling at Reservations and

Recommended Readings:

1. Chakravarti B. K., Front Office Management in Hotel, 1st ed. CBS, 2018. Print
2. Sudhir Andrews. Front Office Training manual. 3rd ed. India: Tata Mac Graw Hill, 2017. Print.
3. Jatashankar Tewari. Hotel Front Office: Operations and Management, 2nd ed. India: Oxford University Press, 2016. Print
4. Woods, Front Office Management, 1st ed, Pearson India, 2008. Print

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus excluding practical component. Question no-1 will compulsory covering all the units and shall carry seven small questions of one mark each. The rest of eight questions will be set from all the four units. The examiner will set two questions from each unit. All questions shall carry 7 marks.

Practical component shall be evaluated on the basis of practical cum viva voce examination.

Foundation Course in Housekeeping -II

B-BHM-108

Total Credits: 2

L - T - P

2 - 0 - 0

External Theory Marks: 35

Internal Assessment Theory Marks: 15

Time allowed: 1.30 hrs

Course Outcomes: After the completion of the course the students will be able to:

CO1: Understand the role of human resource management in housekeeping.

CO2: Understand the role of outsourcing in housekeeping and its impact on managing housekeeping operations

CO3: Learn how to effectively plan and manage housekeeping operations, and provide high-quality housekeeping services.

CO4: Learn the cleaning equipment and cleaning agent inventories and provide high-quality housekeeping services.

Unit – 1

Managing Housekeeping Personnel

Introduction, Job Description, Job Specification, Functions of Human Resource Management, Recruiting, Selecting, Hiring, Orienting and Training, Interviewing, Orienting Employees, Scheduling, Motivating Employees, Performance Appraisal.

Unit – 2

Planning Housekeeping Operations

Introduction, The Planning Process, Division of Work Document, Area Inventory List, Frequency Schedule, Performance Standard, Productivity Standard, Equipment and Operating supply Inventory Level, Determining the Par Levels, Work Schedule

Suggested Readings:

1. Jayanti Jayanti, Hotel Housekeeping Management: Changing trends and developments, 1st ed. Goodfellow Publishers, 2023, print.
2. G. Raghubalan & Samritee Raghubalan Press Hotel Housekeeping – Operations & Management, 3rd ed., Oxford University Press, 2015, Print.
3. Sudhir Andrews, Hotel Housekeeping Publisher: Tata McGraw Hill, 2017, Print.
4. Joan C Branson & Margaret Lennox (ELBS), Hotel Hostel and Hospital Housekeeping, 5th ed.1988, Print.

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus. Question no-1 will compulsory covering all the units and shall carry three small questions of five marks each. The rest of two questions will be set from both the two units. The examiner will set two questions from each unit. All questions shall carry 10 marks.

W.e.f. 2024-25

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Department of Hotel Management
BPSMV, Khanpur Kalan (Sompat) Page 23 of 24

Management in Hotel Industry

B-BHM-110

Total Credits: 3

L - T - P

2 - 1 - 0

External Theory Marks: 50

Internal Assessment Theory Marks: 25

Time allowed: 2hrs

Course Outcomes: After completion of this course students will be able:

CO1: To help the students gain understanding of the functions and responsibilities of managers.

CO2: To provide them tools and techniques to be used in the performance of the managerial job.

CO3: To enable them to analyze and understand the environment of the organization.

CO4: To help the students to develop cognizance of the importance of management principles.

Unit-1

Introduction to Management

Definitions, managerial roles and functions; Science or Art perspectives, External environment global, innovative and entrepreneurial perspectives of Management Early Contributions and Ethics in Management: Contributions of Taylor and Contribution of Henry Fayol.

Unit-2

Planning and Organising

Planning, Nature and importance of planning, types of plans Steps in planning, Levels of planning, The Planning Process. Organization Structure, Organization chart, Principles of organisation, Scalar Principle, Unity and Command, Span of Control, Centralization and Decentralization, Authority and Responsibility, Delegation of Authority.

Unit-3

Leading and Controlling:

Leading Vs Managing, Trait approach and Contingency approaches to leadership, Dimensions of Leadership. Leadership Behavior and styles, Transactional and Transformational Leadership. Basic control process, control as a feedback system. Feed Forward Control, Global controlling, Requirements for effective control, control techniques and preventive controls.

Recommended Readings:

1. Griffin, Management Principles and Applications, 10th Edition, Cengage publication, 2012. Print.
2. Richard Pettinger, Introduction to Management, Red Globe Press, 4th Edition. 2006. Print.
3. Colin Combe, Introduction to Management, Oxford University Press, 1st edition, 2014. Print.
4. Dr Sarah Birrell Ivory and Professor Emma Macdonald, Introduction to Management, Oxford University Press, 1st edition, 2024. Print.

Instructions for paper setter/examiner:

The examiner shall set nine questions in all covering the whole syllabus. Question no-1 will compulsory covering all the units and shall carry four small questions of four marks each. The rest of three questions will be set from all the three units. The examiner will set two questions, from each unit. All questions shall carry 12 marks.

OPEN ELECTIVE
(For the students of 3rd Semester of Other Departments)

Paper : Introduction to History of Haryana (Earliest time to Sultanate)

Paper Code: CBOE1129(A)

Course Outcomes:

- CO1: The students know their regional History from Stone Age to Independence of India.
CO2 : The student learnt about the formation and administrative structure of rise of State and new power in Haryana region.
CO3 : Explain and analyse the Turkish Invasion and it's impact on Haryana.

Max Marks : 100
External Marks : 80
Internal Marks : 20
Time : 3 Hours

Note: The paper must be strictly according to the prescribed syllabus.
The paper shall be of 80 marks. Question No. 1 is compulsory.
The students shall attempt five questions in all.

Section 1: Question no. 1 shall comprise of eight short note type questions of two marks each.

(2x8 = 16 marks)

Section 2: This section shall comprise of eight questions set on all the four units. The student shall attempt one question from each unit of 16 marks each.

(4x16 = 64 marks)

Unit-I

Early Phase:

- Sources of Ancient History of Haryana
- The Stone Age
- Harappan Civilization : General Features
- Vedic Civilization : Origin and Development,
Traditional History of the Kurus.

Unit-II

Towards State Formation:

- Origin and Development of Monarchy
- Historicity of the Battle of Mahabharata
- Yaudheyas
- Agras and Kunindas
- Pushpabhutis

Unit-III

Rise of New Powers:

- Gurjara- Pratiharas
- Tomaras
- Chalmanas
- The Battles of Tarain and their impact

Unit-IV

Sultanate Period:

- Sources of Medieval History of Haryana
- Haryana on the eve of Turkish Invasion
- Revolts of Meos and Rajputs
- Provincial Administration.

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7.6. The schedule for conducting internal examinations will be finalized by the faculty member(s) concerned in consultation with the Chairperson of the Department.

7.7. The Medium for instruction and examination shall be English & Hindi both.

7.8. Every student has to appear in the minor test/surprise test. If a student does not take a minor test, she shall be awarded zero marks in the test. The marks obtained in Sessional /practical/theory/drawing/general proficiency are to be submitted to the examination branch duly signed by the Chairperson of the department before the close of semester examination. The examination branch/paper coordinator shall convert the marks in to equivalent grades as per the grading procedure.

7.9. A candidate who has completed her degree from this University and is desirous of improving her performance/result/ division/grade will be allowed to improve by depositing the requisite fee as per the University rules. She is allowed to appear in one or more theory papers of a semester along with the regular candidates of that semester and the sessional (Internal assessment) part will be retained. Such opportunity of improvement shall be given only during the extended duration of academic programme as per the ordinance of concerned course/programme. The result of such a candidate shall be declared only if she improves her result in aggregate of the whole examination, and the candidate shall be awarded a new detailed marks card clearly mentioning "Improvement case". If the improved CGPA/Marks are less than the original, then the original will be retained."

8. Evaluation and Grading:

8.1. The assessment will be 20 marks Internal and 80 marks External.

8.2. There will be no internal marks awarded in semester 4th only in paper entitled 'Principles and Methods of Archaeology' (Archaeology Group only) as it consist of 40 marks for practical and 60 marks theory examinations.

8.3. The weightage for internal evaluation is as follows:

8.2.1. Surprise test	10%
8.2.2. Presentations/ Seminars/ Assignments/ Group Discussions	5%
8.2.3. Attendance	5%

Marks for Attendance:-

- 75% = 1
- 80% = 2
- 85% = 3
- 90% = 4
- 95% = 5

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M.A History - 3rd semester

Group -A: Indian Archaeology

Paper : Historiography: Concepts, Methods and Tools-I(Common for all Groups)

Paper Code: HIS-2201

Course Types : Core Course

Course Outcomes:

- CO1: Students are able to understand the method of writing history.
- CO2: Student are understand the evolution of various Historiographical traditions.
- CO3 : Student are able to practice the historical writing and develop critical thinking.
- CO4: students will have had the opportunity to think reflexively about the nature of the historical enterprise within society

Max. Marks: 100
External Marks: 80
Internal Mark: 20
Time: 3 Hrs

Note: The paper must be strictly according to the prescribed syllabus.
The paper shall be of 80 marks.

Section 1: Question No. 1 is compulsory. The students shall attempt five questions in all.
Question no. 1 shall comprise of eight short note type questions of two marks each. (2x8 = 16 marks)

Section 2: This section shall comprise of eight questions set on all the four units. The student shall attempt one question from each unit of 16 marks each. (4x16 = 64 marks)

- Unit-I**
- History: Definition and Scope
- The Major Trends in History
- a From the Earliest times to Positivism and Documented History
 - b. From Political/ Military to Social History
 - c. The New Trends : Postmodernism and Gender
- Some Major Thinkers on History
- a. The Khaldun (1332-1406)
 - b. G.W.F. Hegal (1770-1831)
 - c. Karl Marx (1818-1883)
 - d. Fernand Braudel (1902-1985)

- Unit-II**
- Sources and their evaluation
- a. Collection and Selection of Data
 - b. Kinds of evidence
 - c. External Criticism of sources
 - d. Internal Criticism of sources
- Methodology:
- a. Generalization
 - b. Causation
 - c. Objectivity

- Unit-III**
- The Pre-modern Traditions of Historical Writing:
- A. Early Tradition:
 - a Greeco-Roman Traditions;
 - b. Chinese Traditions
 - c. Ancient Traditions
 - B. Medieval Traditions:
 - a Western
 - b. Arabic & Persian
 - c Indo-Persian

- Unit-IV**
- History and other Disciplines:
- a. History and the Social Sciences in General
 - b. History and Geography
 - c. History and Economics
 - d. History and Sociology
 - e. History and Anthropology
 - f. History and Psychology
 - g. History and political Science

Semi

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20/11/2018

1608

Faculty of Social Sciences
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat,
Haryana

The minutes of the meeting of the Faculty of Social Sciences (FSS) held on 20.11.2023 at 12:00 PM in the office of the Dean, FSS

Members Present

1. Prof. Ravi Bhushan, Dean, FSS
2. Dr. Manju Panwar, Chairperson, Department of Social Work
3. Dr. Archana, Chairperson, Department of History & Archaeology
4. Dr. Rampal, Chairperson, Department of Political Science & Officiating Chairperson, Department of Geography
5. Dr. Deepali Mathur, Assistant Professor, Department of Social Work
6. Dr. Anju, Assistant Professor, Department of Economics

Proceedings

Agenda 1: To change the nomenclature of M.A. Social Work programme to Master of Social Work (MSW) w.e.f. 2023-24

Statement: Consequent upon UGC's notification and recommendation of the PGBOS, the Chairperson, Department of Social Work presented the proposal to change the nomenclature of M. A. Social Work programme to Master of Social Work (MSW).

Decision: Considering the wider acceptability of the proposed nomenclature the faculty discussed and approved the proposed change of the nomenclature.


Agenda 2: To introduce Bachelors of Social Work (Hons.) with Research programme (B.S.W.) in the Department of Social Work

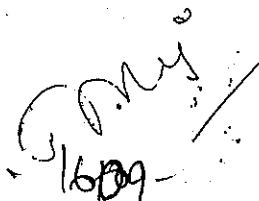
Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of Social Work presented the proposal to Bachelors of Social Work (Hons.) with Research programme (B.S.W.) in the department in accordance with the recommendation of NEP-2020.

Decision: Discussed and approved

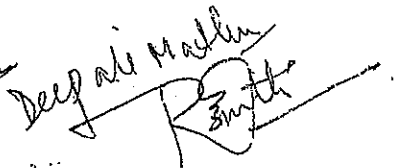
Agenda 3: Approval of the Scheme, Syllabus, Ordinance and Panel of Examiner & Paper Setters for Pre-Ph.D Course Work in the Department of Political Science

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of Political Science presented the Scheme, Syllabus, Ordinance and Panel of Examiner & Paper Setters for Pre-Ph.D Course Work.









Decision: The faculty discussed and recommended that the stated documents/ items be revised in line with the University's common ordinance for Ph.D and be resubmitted.

Agenda 4: To approve the revised Scheme, Syllabus, Ordinance of M.A. History & Archaeology programme, CBCS Papers and proposal of Krishna Nagar (Regional center) for starting MA History course offered by the Department of History and Archaeology.

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of History & Archeology presented the Scheme, Syllabus, Ordinance of M.A. History & Archaeology programme, CBCS Papers and proposal of Krishna Nagar (Regional center) for starting MA History course for discussion and approval.

Decision: Discussed and approved

Agenda 5: To introduce Ph.D. programme in the Department of History & Archeology

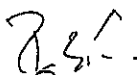
Statement: The Chairperson, Department of History & Archaeology presented the proposal to introduce Ph.D. program in the department from the next academic session i.e. 2024-2025.

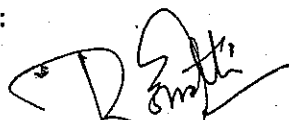
Decision: The faculty discussed and approved the proposal in principle and asked the department to prepare accordingly:

The Dean, Faculty of Social Sciences asked the concerned Departments of Faculty of Social Sciences to submit the 1st draft of scheme and tentative structure of 04 Years U.G. Honours programme (with research in the UTDs already running PhD programme) as early as possible but not later on 30.11.2023.

The meeting concluded with the vote of thanks proposed by the Dean, FSS.


Signatures of the Members:

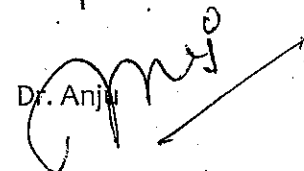

Prof. Ravi Bhushan


Dr. Rampal


Dr. Manju Panwar


Dr. Archana


Dr. Deepali Mathur


Dr. Anju

DEPARTMENT OF HISTORY AND ARCHAEOLOGY

MINUTES OF THE MEETING OF PGBOS ON 30.09.2023

A meeting of the Post-Graduate Board of Studies (PGBOS) in History and Archaeology was held on 30.09.2023 at 11.00 AM in the office of the Chairperson, BPS Mahila Vishwavidyalaya Khanpur Kalan.

The following members were present:

- | | |
|--|-------------------------------|
| 1. Prof. Ravi Bhushan
Dean of Social Science, BPSMV | Chairman |
| 2. Prof. J.S. Dhankhar
Head Department of History, MDU Rohtak | Outside Expert |
| 3. Prof. Renu Takhur
Department of Ancient Indian History,
Culture & Archaeology,
Punjab University, Chandigarh | Outside Expert (Online) |
| 4. Dr. Archana Malik (In-Charge)
Department of History & Archaeology
BPSMV | Member |
| 5. Dr. Seema Takran
Associate Professor, GCW Murthal | Member (Online) |
| 6. Dr. Pawan Latwal
Associate Professor, GCW Gohana | Member |
| 7. Mr. Arihant Jain | Person from industry (Online) |
| 8. Ms. Neelam | Alumni Representative |

The following agenda items were discussed and decided after due deliberations:

Agenda item no.1: Syllabus Reviewed and approved of 2 new CBCS Paper for MA History & Archaeology in 3rd Semester & 2 new CBCS papers in 4th Semester as enclosed.

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Agenda item no. 2: Ordinance, Scheme & Syllabus of M.A History & Archaeology Course for 1st, 2nd, 3rd & 4th semester reviewed and approved as enclosed.

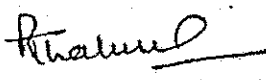
Agenda item no.3: Approved the Agenda of the proposal of Krishna Nagar Regional Centre for starting M.A History course from the session 2024-25.

Agenda item no 4: Approved the list of Examiner as enclosed.

The meeting ended with the vote of thanks to the chair.


(Prof. Ravi Bhushan)


(Prof. J.S. Dhankhar) 30/9/23


(Prof. Renu Takhur)


(Dr. Archana Malik) 30/9/23


(Dr. Seema Takran)


(Dr. Pawah Latwal)


(Mr. Arihant Jain)


(Ms. Neelam)

ANNEXURE - 63

Subject : Proposal to Establish University Media and eContent Development Center

It is submitted that to cater the growing needs and essential qualitative expansion of Indian higher education in accordance with the mandate of National Education Policy 2020, there is requirement to develop high quality eCourses, eProgrammes along with eContent and making it available anytime anywhere in a seamless manner to students, teachers and other global viewers through web and other eservices.

With the objective to develop in-house high quality eProgrammes, eCourses and eContent in a variety of disciplines and subjects, it is proposed that a University Media and eContent Development Center (UMEDC) may be set up in the university with the prime objective to create facility for developing in-house eContent Preparation Facility and also to strengthen Learning Management System (LMS) of the University. The goal of the proposed center will be to encourage individual teachers, groups of teachers and other experts to develop educational content in electronic format, suitable for use in various teaching, learning and capacity-building programmes.

This proposed center shall provide the opportunity, training, and support to all the faculty members to develop high quality eContent and Lectures. The eContent once developed, shall be available in the web-based Learning Management System of the university accessible to all stakeholders. The lectures may also be uploaded on the official Youtube Channel of the University for dissemination of the knowledge among all.

The educational videos and eContent related to diverse subjects developed through (UMEDC) will help in training, skill development and overall human resource development of the students, non-teaching staff and faculty members also.

The proposed UMEDC shall provide technical support to teachers and other experts for the development of eContent. The UMEDC shall provide several multi-functional objectives, capabilities, and services such as:

- To set up proper facility for producing educational programmes and generating eContent material.
- Virtual classroom with multi location students – suitable for Distance education contact sessions.
- Animation and effects for recorded digital content production.

CFMS - 1904

DAA/D/24/1028
04/03/2024

✓ 04/03/24

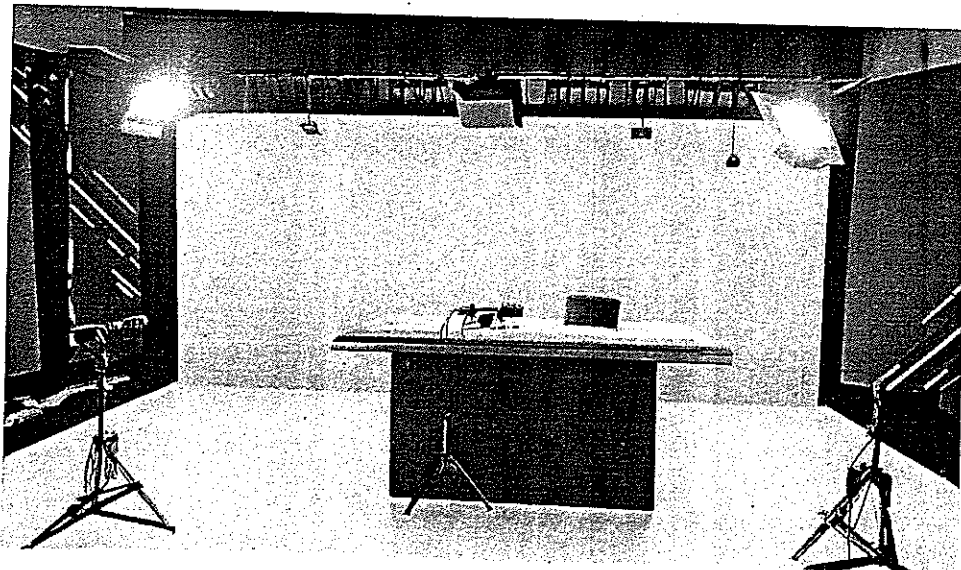
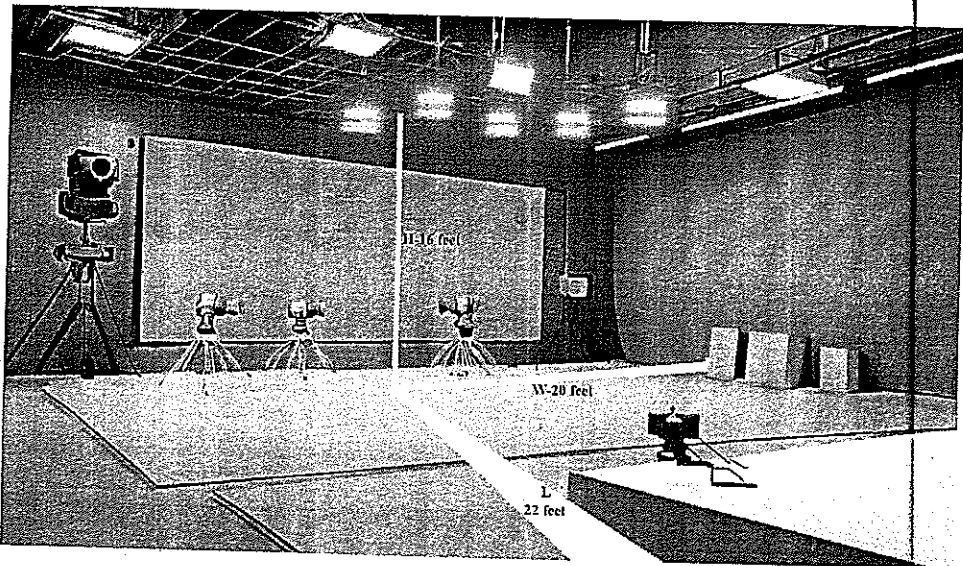
- Develop eContent suitable for Institutional Learning Management System (for regular, distance education, skill building etc.) and Massive Open Online Courses (MOOCs).
- Networking and collaboration with other educational agencies in India and abroad in the field of educational communication.
- Training and overall human resource development in the field of educational communication.
- To provide platform and opportunity to the students to enhance communication and life skills.
- To provide economical, easy and convenient way to broadcast (online/offline) lectures, panel discussions, debates, interviews, etc. which will enhance the reach of the teachers, professors, educators and experts to establish connect with students and other stakeholders inside and outside the campus.
- Studying, promoting and experimenting with new techniques / technologies that will increase the reach and / or effectiveness of educational communication.

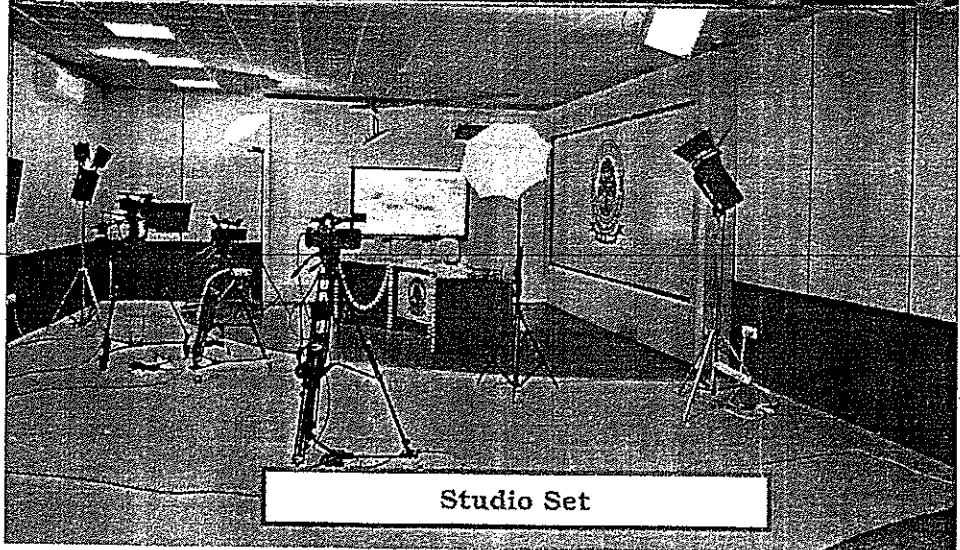
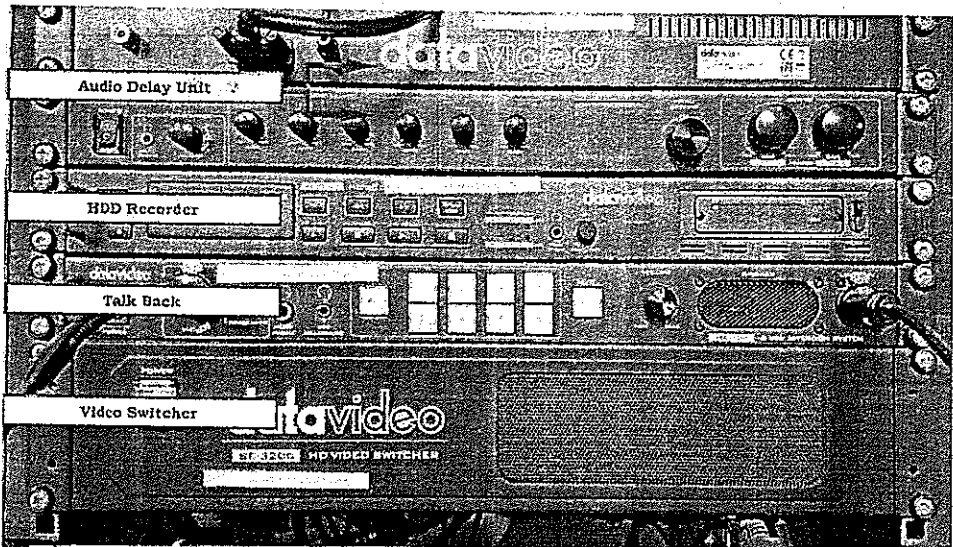
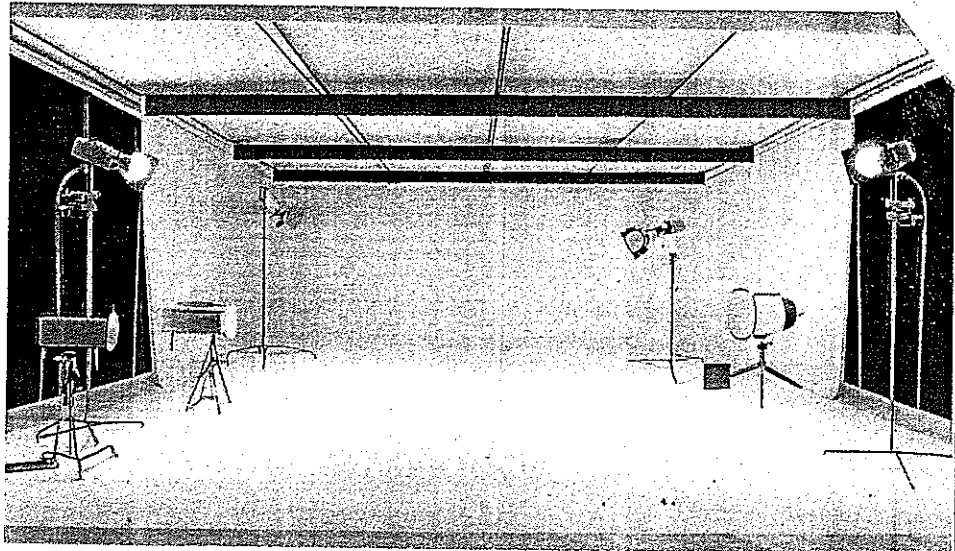
The equipment's details and estimated cost of the proposed UMEDC is given below :

Production Stage		
Item	Quantity	Budget (in Lakhs)
Soundproof Studio- Acoustic walls with soundproof doors and Lights Grills	01	30
ENG Camera with lens (4K) (For Both Indoor and Outdoor Shoot) For Multi-camera Setup Minimum 03 required	03	45
Tripods, Cables, Talk back System and etc.	01	10
LED Studio lights with Potera Lights	01 Set	50
Microphones : > Wireless Lapel Mics (4 minimum) > Dynamic Microphones (3 minimum)		6
Audio Mixer	01	5
Green Chroma Set	01	10
Virtual Reality Machine (For Online Recording including Video Switcher)	01	15
Teleprompter	02	5
Preview Monitor	02	5
Lighting Controller	01	3
Total (A)		179 lakh

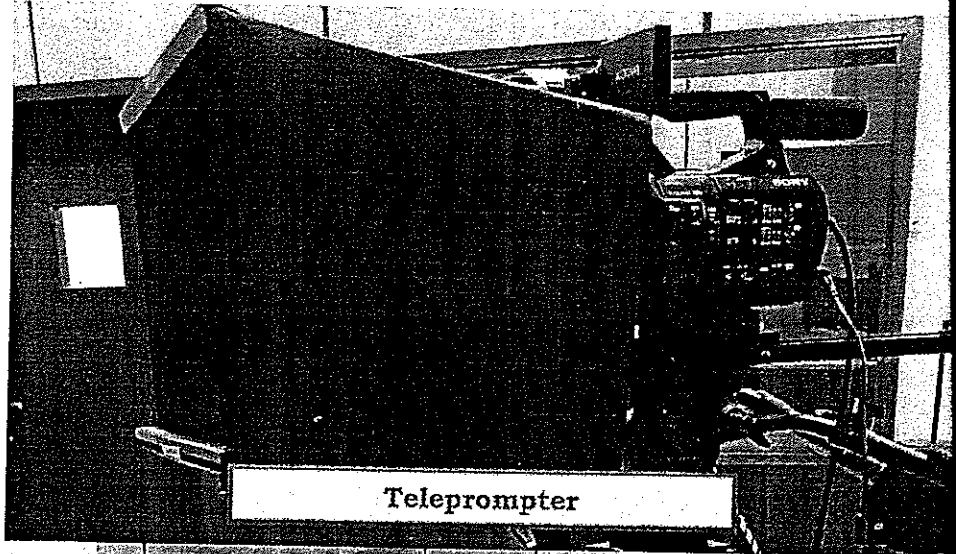
Post- Production Stage : Editing System		
Apple Mac Pro with Software (Minimum 02)	01	10
Graphics Machine (Apple Mac Pro 01)	01	8
Adobe Creative cloud (Graphic and Animation Software)	01	0.80
Apple Mac Book Pro (laptop - Minimum 01)	01	3
Archive System- Storage (200TB (as per production requirement) NAF/SAN with RED System)	01	60
	Total B	91.80
	Grand Total (A+B)	270.80 lakhs

Studio Dimensions :

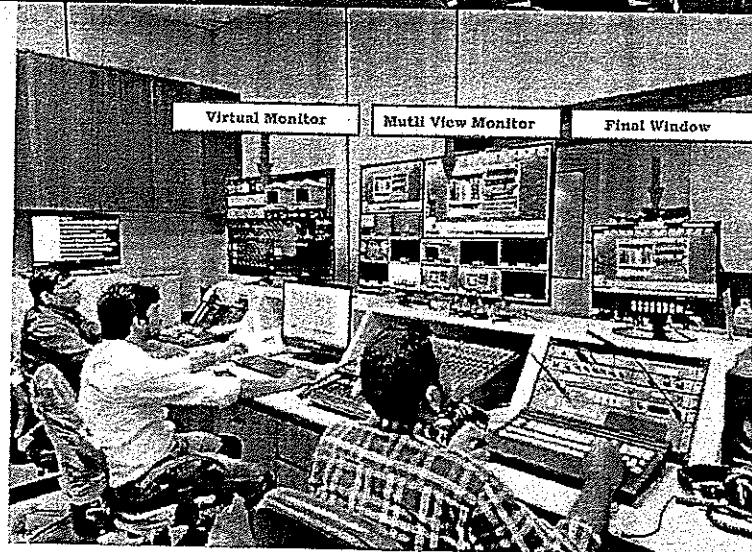




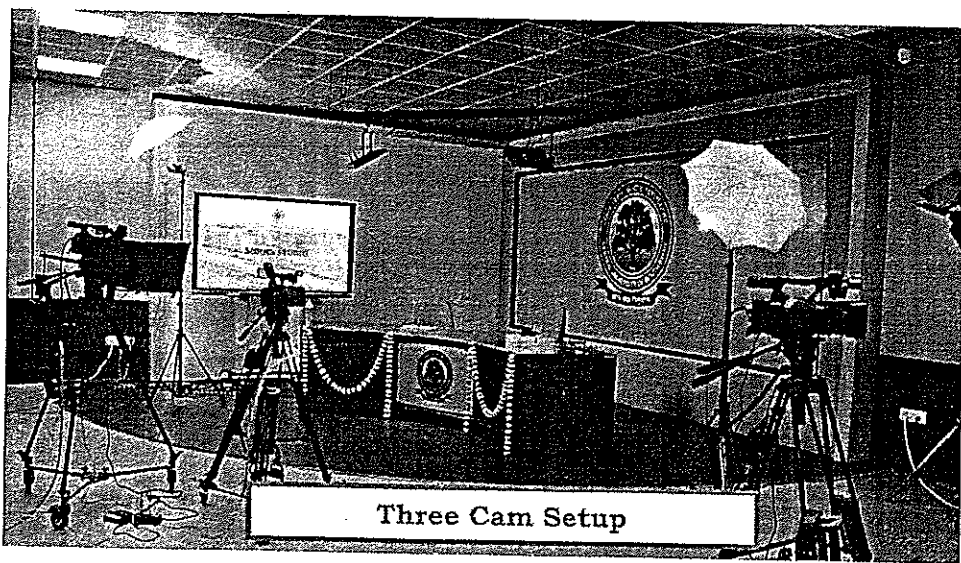
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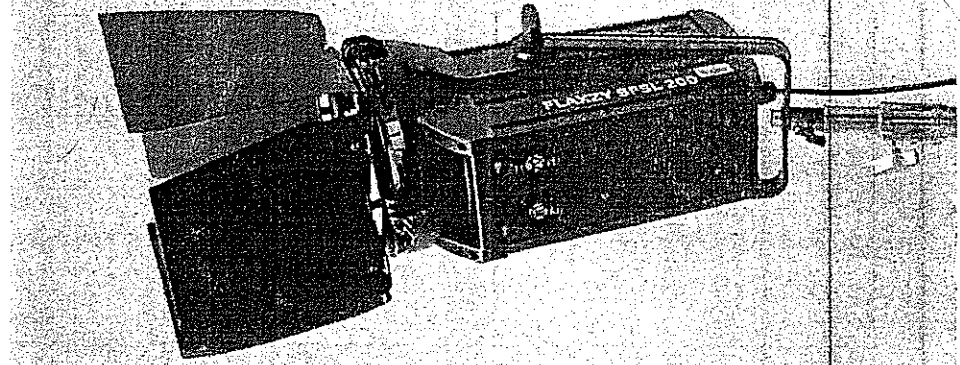
Teleprompter



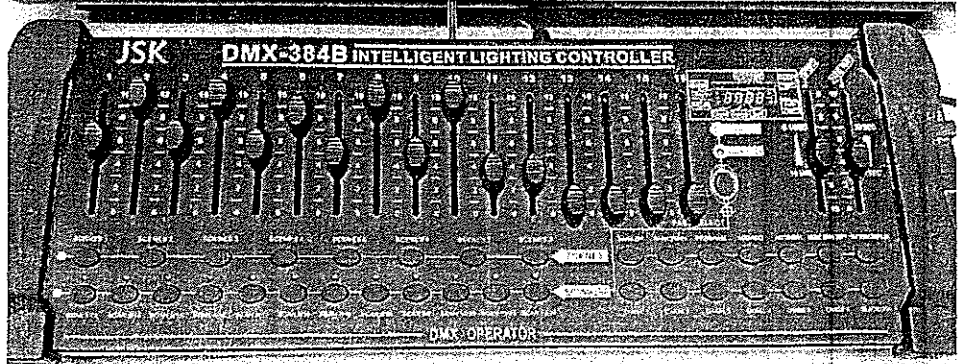
Virtual Monitor Multi View Monitor Final Window



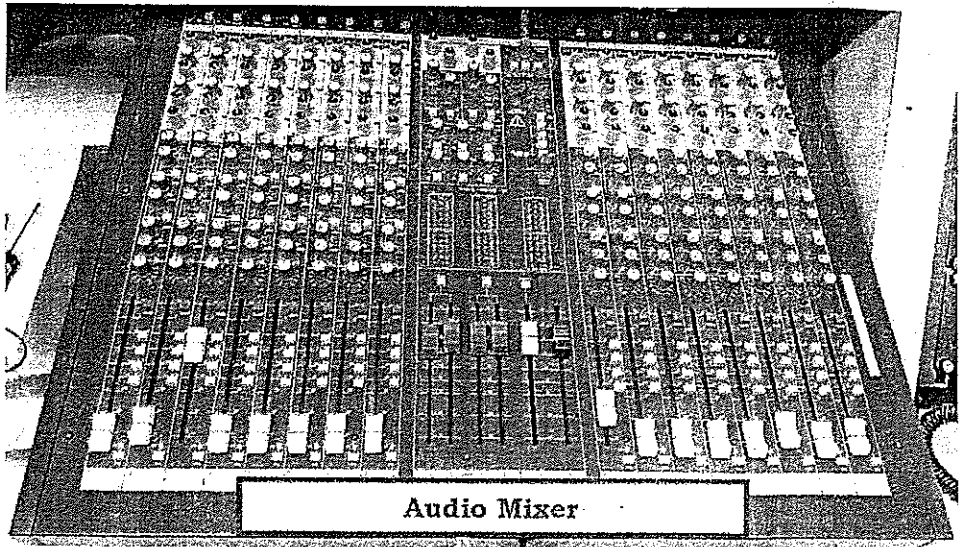
Three Cam Setup



Spot Light



Lighting Controller



Audio Mixer

Further, the details of the technical budgeted posts required for the smooth functioning of the proposed UMECD is mentioned below :

Sr. No.	Post	Pay Scale	Number
1.	Producer	8000 - 13500	01
2.	Script Writer		01
3.	Camera Man	6500 - 10500	02
4.	Production Assistant	5500 - 9000	02
5.	Graphic Designer	5500 - 9000	01
6.	Video Editor	5500 - 9000	01
7.	Sound Engineer (For Sound Recording and Editing)	6500 - 10500	01

It is pertinent to mention here that the list of the equipment's and posts have been proposed with the vision to cater the upcoming 10 years requirement of the proposed center.

The University Media and eContent Development Center (UMECD) shall fulfill the mandatory condition required to establish the proposed Department of Mass Communication and Journalism in the University. Furthermore, the UMECD shall operate as a central facility for all the departments of the University.

In view of above, the proposal is submitted for the kind consideration and necessary directions of the Vice Chancellor, please.

The Vice Chancellor

[Signature]
04/03/24

Prof. Sanket Vij
DAA - BPSMV

Approved

[Signature]

4/3/24

DR (Est)

ET-2

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DRET-644
06/03/24

CFMS-1904

Proceedings of the meeting of Faculty of Commerce and Management (FCM) was held on 21/08/2023 at 11.05 a.m. in the room no. 315, Department of Commerce, B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan.

The following members attended the meeting:-

- | | | | |
|----|----------------------|---|------------------|
| 1) | Prof. Ipshita Bansal | : | Dean FCM |
| 2) | Dr. Krishan Boora | : | Chairperson, DMS |
| 3) | Dr. Bhavna Sharma | : | Chairperson, DOC |
| 4) | Dr. Pankaj Misra | : | Incharge, DHM |
| 5) | Dr. Anshu Bhardwaj | : | Member |
| 6) | Dr. Seema Malik | : | Member |

The following decisions were taken:-

Agenda No. 1:- The Committee members discussed and approved the title and synopsis for registration in Ph.D. (Commerce) Programme in respect of Ms. Tanu that was duly approved by the DRC committee meeting (dated 29/05/2023) and PGBoS committee meeting (dated 20/07/2023). In this regard, all the committee members of Faculty of Commerce and Management approved the same and it may be forwarded to Academic Branch for further necessary action for the registration of the above-mentioned research scholar.

Agenda No 2:- The Committee members discussed the matter of cancellation of the admission of Ms. Priya, Ph.D. Scholar in Department of Commerce. All the committee members of Faculty of Commerce and Management discussed and approved the same as duly approved earlier during the meeting of DRC held on 29/05/2023 and the meeting of PGBoS held on 20/07/2023. The same may be sent to Academic Branch further necessary action.

Agenda No. 03:- The Committee members discussed the matter of change in the pattern of Scheme of CBCS paper offered by Department of Hotel Management. In this regard, All the committee members of Faculty of Commerce and Management discussed and approved the same as duly approved by the Departmental Staff Committee.

Agenda No. 4:- The Committee members discussed the matter of space allocation issue between Department of Commerce and Department of Management. All the committee members of Faculty of Commerce and Management discussed and it was resolved that, this agenda items has to be reverted to all the Department of Commerce and Management to propose concrete points with respect to sharing of resources as well as transfer of resources/rooms between departments.

The meeting ended with vote of thanks to the chair.

Dr. Seema Malik

Dr. Anshu Bhardwaj

Dr. Pankaj Misra

Dr. Bhavna Sharma

Dr. Krishan Boora

Prof. Ipshita Bansal

Bhavna Sharma

(Dr. Bhavna Sharma)

Chairperson, Department of Commerce

DEPARTMENT OF COMMERCE

Minutes of the Meeting of Post Graduate Board of Studies (PGBoS) held on 20/07, 2023

A meeting of Post Graduate Board of Studies (PGBoS - Commerce) was held on 20/07/2023 in the office of Chairperson, Department of Commerce, Bharati Prashasthi Mahila Vastuvidyalaya, Khanpur Kalan, Sonapat.

The following members were present:

- Dr. Bhavna Sharma Chairperson
- Prof. Laxmi Malodia Outside Expert
- Dr. Seema Mahli Assistant Professor. (Member)
- Dr. Isham Patharia Assistant Professor. (Member)

Following items were discussed and resolved by the Post Graduate Board of Studies (PGBoS-Commerce).

It was informed to the house that one of the Ph.D student, ~~Dr. Laxmi Malodia~~ had put up the request for the cancellation of her Ph.D admission via an email on 18/07/2023. The recommendations of Dean, FCM were presented in the meeting for consideration. The members discussed the matter in details and advised the faculty to counsel the candidates in future considering her personal problems, her dissatisfactory progress reports, and Dean's ~~request for cancellation of her admission and the agenda is approved.~~

The meeting ended with a vote of thanks

Prof. Laxmi Malodia

Seema
20/7/2023
Dr. Seema Mahli

Bhavna
20/7/2023
Dr. Bhavna Sharma

Isham
Dr. Isham Patharia

DEPARTMENT OF COMMERCE

Minutes of the Meeting of Departmental Research Committee (DRC) held on 29/05/2023

Meeting of the Departmental Research Committee (DRC) was held on 29/05/2023 at 11.00 a.m. in online mode from the office of Chairperson, Department of Commerce, Bhagat Phool Singh Mahila Vishwavidyalaya, Khatipur Kalan, Sonapat.

The following members were present:

- Dr. Bhayna Sharma : Chairperson, Commerce and Convener
- Prof. Usha Arora : Outside Expert
- Prof. Raju Lehel : Outside Expert
- Dr. Isham Pathana : Assistant Professor, Commerce

Following items were discussed and resolved by the Departmental Research Committee (DRC):

1. It was informed to the house that one of the Ph.D. Student Ms. Priya (Roll No. 16101004) had put in the request for the cancellation of her Ph.D. admission on 28/03/2023. The experts recommended that the student must be counselled by the internal members and some time must be given to her for reconsidering her request/decision to quit from Ph.D. In case of any response of candidate, the same will be considered and decided after completing this process.

2. The case of Ms. Anshu research paper submitted on 28/03/2023. During the meeting, Chairperson informed to the members that following research paper submitted by Ms. Anshu have been submitted by the supervisor for cancellation of her Ph.D. admission. The same has been submitted to the concerned authorities for their consideration.

The case was discussed and the members of the committee have been informed about the same and the same will be considered and decided after completion of the process.

The meeting ended with a vote of thanks.

Dr. Bhayna Sharma

Prof. Raju Lehel

Dr. Isham Pathana

Dr. Usha Arora

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SCHEME OF EXAMINATION & COURSE CURRICULAM

Ph. D (Political Science) Course Work

Session (2023-2024)

Paper Code	Paper name	L-T-P	Marks Theory External	Marks Internal	Total	Total Credit
CPEAPE -2203	Research and Publication Ethics	2-0-0 ^c	40	10	50	2
DPS-3312	Research Methodology	4-1-0	80	20	100	5
DPS-3313	Recent Advance in Political Science	4-1--0	80	20	100	5
Total			200	50	250	12

Rules and Regulation will be implemented Ph.D. Ordinance BPSMV, KK-2023

Program Objectives:

1. To acquire deep knowledge of literature and a comprehensive understanding of techniques and methods adapted to their own research.
2. Discover, interpret, and communicate new knowledge through original research. Publishable quality, which satisfies a review.
3. Apply significant ranges of advanced and specialized skills and enable them to act autonomously in the planning and implementation of research.
4. Practice a proactive, critical, and reflective approach based on research and develops professional relationships with others where appropriate.
5. Present an original research outcome that extends to the forefront of a discipline or relevant area of professional practice.
6. Critically and creatively evaluate current issues. Research and advanced scholarships in the discipline
7. Manage complex ethical and professional issues and make informed judgments based on ethical code and practices.
8. Work collaboratively with all stakeholders to create, develop, and exchange research knowledge to influence society and the economy.

Ph.D: Program-Specific Outcomes

Ph.D: Program-Specific Outcomes

PSO1 (Knowledge Outcomes):

The graduates of the Ph.D. in Political Science program should be able to demonstrate the acquisition of knowledge in the following areas: reviewing the theories of science, political and economic knowledge, and social research and their linkage with political science. Research; develop highly specialized knowledge, linking political science ideologies, theory, research, policy, and practice on the chosen political science topic. Master the established research methods and techniques applicable to political science.

PSO2 (Attitudes and Ethical Outcomes):

The graduates of the Ph.D. program should be able to demonstrate ethical practices, which are to consider research as an integral part of practice. Study social policies and practices so that they positively improve the social realities of socially excluded groups; make a comparative analysis of different practice approaches; use participatory research approaches and a plurality of methods for understanding social issues; follow ethical practices in all aspects of research; and development, including avoiding practices such as fabrication, falsification, or misrepresentation of data, committing plagiarism, and not adhering to intellectual property rights.

PSO3 (Skill Outcomes):

The graduates of the Ph.D. in Political Science program should be able to demonstrate the acquisition of highly specialized cognitive and technical skills required for performing and accomplishing complex tasks related to research and development that make original contributions to knowledge, professional practice, and innovations. Further cognitive and technical skills required for conceptualizing, designing, and implementing fundamental and/or applied research at the forefront of political science to generate original knowledge. Skills of situational assessment, monitoring, and evaluation of policies, programs, and interventions, according to the stage of practice.

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Research and Publication Ethics

Course Code: CPERPE-2203
Total Credits : 2 (L- 2 T -0 P-0)
Duration : 1:30 hrs

External Theory Marks: 40
Internal Marks : 10
Total Marks : 50

Instructions for External Theory Paper Setter/ Examiner :

The question paper will contain 8 questions of 10 marks each and student will be required to attempt 4 questions (1 question from each unit).

Course Objectives: The course aims to sensitize researchers regarding publication ethics and publication misconducts.

Course Input :

Unit – I

Philosophy and Ethics : Introduction to philosophy: definition, nature and scope, concept, branches; Ethics: definition, moral philosophy, nature of moral judgements and reactions.

Scientific Conduct : Ethics with respect to science and research; Intellectual honesty and research integrity; Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP); Redundant publications: duplicate and overlapping publications, salami slicing; Selective reporting and misrepresentation of data

Unit - II

Publication Ethics : Publication ethics: definition, introduction and importance; Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.; Conflicts of interest;

Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types; Violation of publication ethics, authorship and contributorship; Identification of publication misconduct, complaints and appeals; Predatory publishers and journals Practice

Unit - III

Open Access Publishing : Open access publications and initiatives; SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies; Software tool to identify predatory publications developed by SPPU; Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

Publication Misconduct : Subject specific ethical issues, FFP, authorship; Conflicts of interest; Complaints and appeals: examples and fraud from India and abroad; Use of plagiarism software like Turnitin, Urkund and other open source software tools.

Unit - IV

Databases And Research Metrics : Databases - Indexing databases; Citation databases –Web of Science, Scopus, SCI, etc.; Research Metrics - Impact Factor of journal as per Journal Citation Report, SNIP, SIR, IPP, Cite Score; Metrics : h-index, g-index, i-index, Altmetrics journal database.

Suggested Readings:

- Bird, A. (2006). Philosophy of Science. Routledge.
- MacIntyre, Alasdair (1967) A Short History of Ethics. London.
- P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
- National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press.
- Resnik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10. Retrieved from <https://www.niehs.nih.gov/research/resouices/bioethics/whatis/index.cfm>
- Bcall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179. <https://doi.org/10.1038/489179a>
- Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance (2019), ISBN:978-81-939482-1-7. <http://www.insaindia.res.in/pdf/Ethics Book.pdf>



Research Methodology (Paper Code: DPS-3312)

Time: 3 hours.

Max. Marks: 60

Theory: 80

Internal: 20

Note:

There will be nine questions in all from theory section. The first question is compulsory, consisting of eight short Answer type questions (30–35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e., 2 questions from each of the four units of 10 marks each unit. The examinees have to attempt one question from each unit besides the compulsory question.

Course Objective:

The aim of this course is to give thorough knowledge about research methods and Techniques that could be applied to conducting the research. The course would also enable the students to handle the time series and panel data sets with the use of software and statistical packages to analyze the Data.

Course Outcome:

After doing this course, students will learn various research methods that they can apply to writing dissertations and other academic writings.

Unit-I: Meaning, Nature, Scope, Objective and types of Research.

Unit-II. Qualitative Research Methods - Interview, Ethnographic Research, Content Analysis, Phenomenological Research,

Unit-III. Quantitative Research Methods- Experimental Research, Survey Research, Questionnere, Schedule

Unit-IV. Mixed Methods of Research and steps of to write a research proposal.

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S. Bhandari

Suggested Readings

1. H.N. Blalock, An Introduction to Social Research, Englewood Cliffs NJ, Prentice Hall, 1970
2. J. Blondel, Thinking Politically, London, Wildwood House, 1976.
3. A. Bryman, Quantity and Quality in Social Research, London, Unwin Hyman, 1988.
4. A.F. Chalmers, Science and Its Fabrication, Milton Keynes, Open University Press, 1990.
5. J. Galtung, Theory and Methods of Social Research, New York, Columbia University Press, 1987.
6. A.Giddens, Profiles and Critiques in Social Theory, London Macmillan, 1982.
7. W.J. Goode and P.K. Hatt, Methods of Social Research, New York, McGraw Hill, 1952.
8. A.C. Isaak, Scope and Methods of Political Science, Homewood Illinois, Dorsey Press, 1985.
9. J.B. Johnson and R.A. Joslyn, Political Science Research Methods, Washington DC, C.Q. Press, 1986.
10. F.N. Kerlinger, Behavioural Research, New York, Holt, Rinehart and Winston, 1979.
11. T.Kuhn, The Structure of Scientific Revolution, Chicago, University of Chicago Press, 1970.
12. R. K. Merton (ed.), Social Theory and Social Structure, New York, The Free Press, 1957.
13. D. Miller (ed.), Pocket Popper, London, Fontana, 1997.
14. Sir, K.R. Popper, the Logic of Scientific Discovery, London, Hutchinson, 1959.
15. Sir, K. R. Popper, Conjectures and Refutations: The Growth of Scientific Knowledge, London, Routledge and Kegan Paul, 1963.
16. Sir, K.R. Popper, the Poverty of Historicism, London, Reoutledge, 1991.
17. P.V. Young, Scientific Social Surveys and Research.
18. Robert A. Dahl, Modern Political Analysis, Englewood Cliffs, NJ Prentice Hall, 1963.

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Recent Advances in Political Science (Paper code: DPS-3313)

Time: 3 Hrs.

Max. Marks: 100

External: 80

Internal: 20

Note: There will be 9 questions in all. The first question is compulsory consisting of 8 short Answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The Remaining 8 questions shall be from the four units, i.e., 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question

Course Objective: Course Objective:

The paper aims at acquainting the students with the core issues in international politics as well as Indian politics and thoughts of thinkers. It critically explores issues, challenges and themes surrounding global environment, Human Rights, Gender, Nationalism and Ethnicity, International Terrorism, Regionalism. The paper aims at introducing the students to the major political processes that are integral to politics in India. It explores themes like Historical Dimensions, Values and Legacies of Political Culture in India and Problems of Nation Building and Integration, among others. Also aims to acquaint the students with the core elements of Political Theory.

Course Outcome:

The Department is dedicated to promote teaching and research in diverse fields of political science including Indian politics, comparative politics, international relations and human rights while maintaining the scholarship in some of the conventional fields like political theory and political philosophy. Presently, the department is offering Master's and PhD programmes in Political Science. The learning outcomes of the programmes are as follows:

- To develop comprehensive understanding of the subject by teaching both conventional and new areas of relevance in the domain of political theory and philosophy, Indian politics, comparative politics, public administration and international politics.
- To develop comprehensive and interdisciplinary knowledge by emphasizing inter-linkages between various political, economic and social issues and challenges.
- To generate socially-informed knowledge and cater to the educational upliftment of marginalized communities through papers like Human Rights, Political Ideas in Modern India and Women and Politics in India.

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Unit-1 Political Traditions and Concepts:

Justice, Fraternity, Citizenship, Feminism, Ecologism

Unit-2 Political Thinkers:

John Rawls , Amartya Sen , Partha Chatterjee, Vandana Shiva

Unit-3. Indian Politics.

Major Constitutional issues: Revival of Constitutional Debates, Language Politics, Communalism, Criminalization of Politics, Reservation Politics in India with special reference to Haryana.

Unit-4.

New Concepts, Issues and Challenges: Comprehensive, National Power (CNP), Responsibility to Protect (R2P), Developmental Partnership, U.N. Reforms :(Security Council and General Assembly) Contemporary Challenges: Dispora Issues, Forced Migration, Sovereignty challenges

References:

1

1. D. Held, Political Theory Today, Cambridge, Polity Press, 1991
2. A. Heywood, Political Theory: An Introduction, London, Macmillan, 1999.
3. G. H. Sabine, What is Political Theory?, Journal of Politics, 1939, 1(1).
4. N. P. Barry, Hayek's Social and Economic Philosophy, London, Macmillan, 1979.
5. E Butler, Hayek : His Contribution to the Political and Economic Thought of Our Time, Hounslow, Temple Smith, 1983.
6. C. Kukathas, Hayek and Modern Liberalism, Oxford, the Clarendon Press, 1989.
7. J. Wolff (ed.), Robert Nozick : Property, Justice and the Minimal State, Oxford Polity with Basil Blackwell, 1991
8. Sen, Amartya, 1980, "Equality of What?" in Tanner Lectures on Human Values, Volume 1, ed. S. McMurrin, Cambridge: Cambridge University Press.
9. Cohen, G. A., 2008, Rescuing Justice and Equality, Harvard University Press: 1-14; 229-371.
10. Okin, Susan M, 1987, "Justice and Gender", Philosophy & Public Affairs 16/1: 42-72.
11. Pogge, Thomas, 2008, "Introduction to the Two-Volume Collection" Global Justice: Seminal Essays (co- edited with Darrel Moellendorf) and Global Ethics: Seminal Essays (co-edited with Keith Horton), St. Paul, MN: Paragon House: xiii-xxiv
12. Rawls, John, 2001, Justice as Fairness: a restatement. Cambridge, MA: Harvard University Press. (Excerpts)

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13. Walzer, M, 1983, Spheres of Justice, New York: Basic Books.
14. Dworkin, Ronald, 1984, "Rights as Trumps", in Waldron, J., (ed.) Theories of Rights, Oxford: Oxford University Press:
15. Raz, Joseph, 1986, The Morality of Freedom, Oxford: Clarendon Press. (Ch. 7) Steiner, Hillel, 1994, An Essay on Rights, Oxford: Blackwell. (Ch. 3)
16. Kymlicka, Will, 2002, Contemporary Political Philosophy: An Introduction (Oxford University Press)
17. B. Shiva Rao (1968) The Framing of India's Constitution, A Study and Select Documents, Bombay: Tripathi.
18. Rajeev Bhargava (ed.) (2008), Politics and Ethics of the Indian Constitution, New Delhi: Oxford University Press.
19. S.K. Chaube (1973), Constituent Assembly of India: Springboard of Revolution, New Delhi: PPH, (reprinted 2000 Delhi: Manohar).
20. Dr. B.R. Ambedkar's speech in the Constituent Assembly, CAD, 25 November 1949, Vol.X-XII, Book 5, Delhi: Lok Sabha Secretariat, Delhi, 2003.
21. Upendra Baxi (2007) 'The Rule of Law in India,' Sao Paulo: SUR – International Journal On Human Rights, Vol.3 no.
22. Akeel Bilgrami (1994), 'Two Concepts of Secularism: Reason, Modernity and the Archimedean Ideal', Economic and Political Weekly, July 9, pp.1749-61.
23. Ashis Nandy (1999), 'A Critique of Modernist Secularism' in Sudipta Kaviraj (ed) Politics in India, Delhi: Oxford University Press, pp.329-341.
24. Sudipta Kaviraj (2011), 'Religion, Politics and Modernity' in Sudipta Kaviraj, The Enchantment of Democracy and India: Politics and Ideas, Ranikhet: Permanent Black, pp.183-208.
25. Paul Brass (2003), 'Riots and Election' (Chapter 8) and 'The Practice of Communal Politics' (Chapter 9) in Paul Brass, the Production of Hindu-Muslim Violence in Contemporary India, Delhi: Oxford University Press, pp. 219-239, 240-261.
26. Rajeev Bhargava (1998, 2006), Secularism and its Critics, New Delhi: Oxford University Press
27. M.P. Sullivan, Theories of International Politics: Enduring Paradigm in a Changing World, Hampshire, Macmillan, 2001.
28. S.P. Verma, International System and the Third World, New Delhi, Vikas, 1988.
29. Ajay Kumar, Antarrashtriya Sambandhon Ke Siddhant, Pearson, New Delhi, 2012.
30. Chimni et al, International Relations, Pearson, New Delhi, 2012.
31. Sanju Gupta, an Introduction to International Relations, Pearson, New Delhi, 2012.

Yash Chandra
23/10/2023

Rajeev Bhargava
23/10/23
Blawden
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MINUTES OF THE MEETING HELD ON 23rd October, 2023

A meeting of the Postgraduate Board of Studies was held in the Office of the Chairperson, Department of Political Science on 23rd October, 2023 at 11:30 A.M.

MEMBERS PRESENT:

- | | |
|--------------------------------|-----------------|
| 1. Dr Rampal | Chairperson |
| 2. Prof. Upendra Choudhury | Outside Expert |
| 3. Prof. Rajender Sharma | Outside Expert |
| 4. Dr. Ram Niwas | Internal Expert |
| 5. Dr. Shamsher Singh Bhanderi | Internal Expert |
| 6. Ms. Komal Sharma | Alumni |

PROCEEDINGS:

The following agenda was discussed:

1. Pre Ph. D Course Work Syllabus
2. Panel of Examiners, Paper Setter
3. Ph. D Ordinance

DECISIONS TAKEN:

1. Syllabi of Pre Ph. D Course work.
Considered and approved.
2. Panel of Examiners and Paper Setters
Considered and approved.
3. Ph. D Ordinance
Considered and approved.
4. Thrust Area: State Politics, International Relations and Political thought
Considered and approved.
5. Since preparation and discussion on M.A. Political Science Syllabus need more time hence the same shall be taken up in the next meeting.

The meeting ended with a vote of thanks from the Chair.

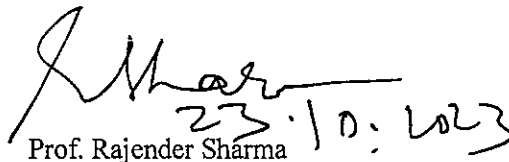


Dr Rampal

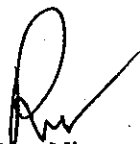
Prof. Ravi Bhusan



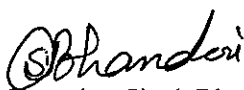
Prof. Upendra Choudhury



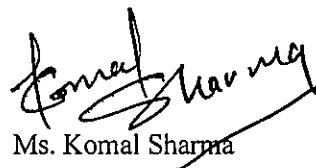
Prof. Rajender Sharma



Dr. Ram Niwas



Dr. Shamsher Singh Bhanderi



Ms. Komal Sharma

Faculty of Social Sciences
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat,
Haryana

The minutes of the meeting of the Faculty of Social Sciences (FSS) held on 20.11.2023 at 12:00 PM in the office of the Dean, FSS

Members Present

1. Prof. Ravi Bhushan, Dean, FSS
2. Dr. Manju Panwar, Chairperson, Department of Social Work
3. Dr. Archana, Chairperson, Department of History & Archaeology
4. Dr. Rampal, Chairperson, Department of Political Science & Officiating Chairperson, Department of Geography
5. Dr. Deepali Mathur, Assistant Professor, Department of Social Work
6. Dr. Anju, Assistant Professor, Department of Economics

Proceedings

Agenda 1: To change the nomenclature of M.A. Social Work programme to Master of Social Work (MSW) w.e.f. 2023-24

Statement: Consequent upon UGC's notification and recommendation of the PGBOS, the Chairperson, Department of Social Work presented the proposal to change the nomenclature of M. A. Social Work programme to Master of Social Work (MSW).

Decision: Considering the wider acceptability of the proposed nomenclature the faculty discussed and approved the proposed change of the nomenclature.

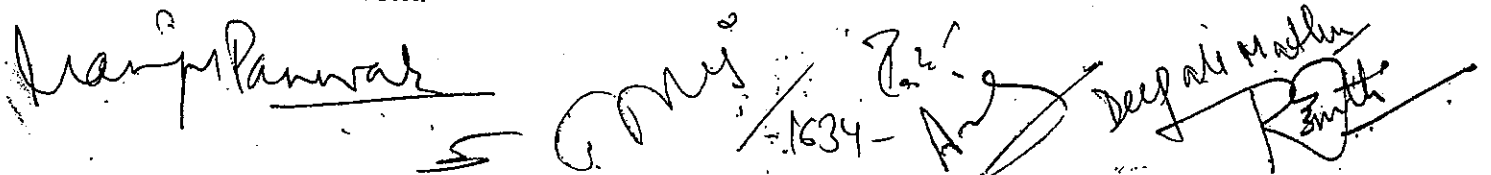
Agenda 2: To introduce Bachelors of Social Work (Hons.) with Research programme (B.S.W.) in the Department of Social Work

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of Social Work presented the proposal to Bachelors of Social Work (Hons.) with Research programme (B.S.W.) in the department in accordance with the recommendation of NEP-2020.

Decision: Discussed and approved

Agenda 3: Approval of the Scheme, Syllabus, Ordinance and Panel of Examiner & Paper Setters for Pre-Ph.D Course Work in the Department of Political Science

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of Political Science presented the Scheme, Syllabus, Ordinance and Panel of Examiner & Paper Setters for Pre-Ph.D Course Work.


Manju Panwar
Rampal
Deepali Mathur
Anju
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Decision: The faculty discussed and recommended that the stated documents/ items be revised in line with the University's common ordinance for Ph.D and be resubmitted.

Agenda 4: To approve the revised Scheme, Syllabus, Ordinance of M.A. History & Archaeology programme offered by the Department of History and Archaeology

Statement: Consequent upon recommendation of the PGBOS, the Chairperson, Department of History & Archeology presented the Scheme, Syllabus, Ordinance of M.A. History & Archaeology programme for discussion and approval.

Decision: Discussed and approved

Agenda 5: To introduce Ph.D. programme in the Department of History & Archeology


Statement: The Chairperson, Department of History & Archaeology presented the proposal to introduce Ph.D. program in the department, from the next academic session i.e. 2024-2025.

Decision: The faculty discussed and approved the proposal in principle and asked the department to prepare accordingly.

The Dean, Faculty of Social Sciences asked the concerned Departments of Faculty of Social Sciences to submit the 1st draft of scheme and tentative structure of 04 Years U.G. Honours programme (with research in the UTDs already running PhD programme) as early as possible but not later on 30.11.2023.

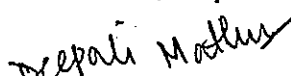
The meeting concluded with the vote of thanks proposed by the Dean, FSS:


Signatures of the Members:



Prof. Ravi Bhushan


Dr. Archana


Dr. Rampal


Dr. Deepali Mathur


Dr. Manju Panwar


Dr. Anju

BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA

DEPARTMENT OF ECONOMICS

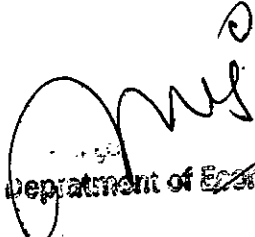
(A State Women University, B++ Accredited by NAAC)

Khanpur Kalan, Sonapat, Haryana, India



Ph.D. COURSE WORK AND CURRICULUM

W.e.f. session (2023-24)


Department of Economics

ABOUT THE DEPARTMENT

Established in 2009, the Department endeavours to impart specialised knowledge in economics to create a class of skilled professionals and intellectuals to cope with the globalisation era's challenges. Department enables students to become agents of change in the social and economic development of the country. The Department foresees and creates a platform for the empowerment of girls to become agents of change in the social and economic development of the country. The Department of Economics aims to provide students with opportunities to understand the discipline of economics and develop analytical skills and scientific aptitude. Further, it will train young minds ready to undertake teaching and research in economic science and create an intensive understanding of economic theory with excellent rapport development with the students to fulfil society's aspirations. It strives to enable students to evolve as efficient and intelligent academicians and administrators and to train students as professional economists with a multidisciplinary approach so that they can cope with uncertain and ever-changing markets.

The Department revised a course curriculum to develop and enable students to become skilled professionals in economics who have immense job opportunities teaching at universities, colleges, and various research institutes. There are various research institutes in economics where students can work as research associates. There are various services like Indian Economic Services, Indian Administrative Services, State PSCs, RBI, and NITI Aayog where the students can impart their services. The curriculum includes field surveys, project reports, and research dissertations, and primary research work is conducted regularly to understand rural areas' social and economic problems. The teaching and training are provided through expert lectures, seminars, documentaries, language laboratories, and study tours/industrial visits—experienced and highly dedicated teaching faculty. Focus on student participation, rapport development, and value-based education.

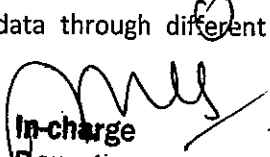
Research on social and economic problems in rural areas is one of the thrust areas of the Department. The Department has evolved a holistic environment for research activities, which is reflected in research work undertaken by students at UG, PG, and PhD levels. The Department has a modern state-of-the-art library, a computer lab with an internet facility, a smart classroom, a conference and seminar hall with all advanced teaching aids, and a common room.

PROGRAMME OUTCOMES (POs)

- PO₁: Candidates will have a strong foundation in economic theory, research methods, and quantitative analysis;
- PO₂: Candidates will get expertise in understanding complex economic problems and will be able to analyse socio-economic scenario and policy decisions;
- PO₃: Candidates will be acquainted with the latest development in economics and will be equipped with the methodology of social science research in general and of economics in particular; and
- PO₄: Candidates with research in Economics can make a career in academia, research institutes, financial organizations and international organizations as economic advisor, economic consultant, financial manager, policy analyst, litigation consultant, mutual funds manager etc.

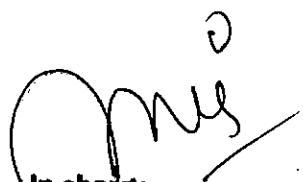
PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO₁: The program enriches the candidates with the skills to undertake various government and non-government research projects;
- PSO₂: Candidates will better understand the real world economic and social problems and suggest the solutions in more realistic way;
- PSO₃: Candidates will be acquainted with the development of advanced analytical skills, and will be able to conduct original research and contribute through publications and policy papers; and
- PSO₄: Candidates will acquire adequate training in the analysis of quantitative data through different computer software.


 In-charge
 Department of Economics

**SCHEME OF EXAMINATION & COURSE CURRICULUM
Ph.D. (Economics) Course Work**

Paper Code	Nomenclature	Workload			Total Credit	Marks division			
		L	T	P		Internal	External	Total	
ECP-3101	Research Methodology	4	0	0	4	20	80	100	
ECP-3102	Methodology of Economics	4	0	0	4	20	80	100	
ECP-3103	Seminar and Review of Literature	2	0	0	2	10	40	50	
CPERPE-2203	Research and Publication Ethics	2	0	0	2	10	40	50	
Students are required to choose one paper from the followings as per their thrust area opted At the time of PhD admission.									
ECP-3104A	Dynamics Macroeconomics	4	0	0	4	20	80	100	
ECP-3104B	Development Economics	4	0	0	4	20	80	100	
ECP-3104C	International Trade and Development	4	0	0	4	20	80	100	
ECP-3104D	Environment and Sustainable Development	4	0	0	4	20	80	100	
ECP-3104E	Contemporary Issues in Indian Economy	4	0	0	4	20	80	100	
ECP-3104F	Contemporary Issues in Indian Agriculture	4	0	0	4	20	80	100	
ECP-3104G	Advanced Economic Theory	4	0	0	4	20	80	100	
ECP-3104H	Gender and Development	4	0	0	4	20	80	100	
ECP-3104I	Economics of Innovation	4	0	0	4	20	80	100	
ECP-3104J	Economics of Entrepreneurship	4	0	0	4	20	80	100	
ECP-3104K	Database for Research in Economics	4	0	0	4	20	80	100	
ECP-3104L	Artificial Intelligence in Economic Analysis	4	0	0	4	20	80	100	
ECP-3104M	Applied Econometrics	4	0	0	4	20	80	100	
Total Marks and Credit					400 Marks and 16 Credit	16	80	320	400


 In-charge
 Department of Economics

RESEARCH METHODOLOGY

Course code: ECP-3101
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objective: The aim of this course is to give the thorough knowledge about the research methods and techniques which could be applied for conducting the research. The course would also enable the students to handle the time series and panel data sets with the use of software and statistical packages to analyse the data.

Course Outcomes: At the end of the course the students will be able to:
CO₁: understand the role of research in economics, types and design of research;
CO₂: acquire knowledge of collecting the required data, construct a questionnaire/schedule;
CO₃: know various tools for the processing and interpretation of data; and
CO₄: present the research report in an effective manner.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Research: Nature and Scope; Formulation of a research problem; Research design (Exploratory, descriptive and Experimental). Basics of Qualitative Methods- Case studies FGD, Ethnographic studies, content analysis, Sampling design; Sampling techniques.

Unit-II

Scaling techniques; Reliability and Validation; Attitude Scaling; Thurston's scale, Likert's scale, Cumulative scaling; Multivariate analysis techniques; Discriminant Analysis, Canonical Analysis, Factor Analysis, Cluster Analysis.

Unit-III

Regression Analysis: Simple and Multiple regression model, OLS and its properties, Significance of test of estimates. The problems of Multicollinearity, Heteroscedasticity and Autocorrelation; Dummy Variables, Qualitative regression models: Logit, Probit and Tobit Model.

Unit-IV

Time Series Analysis: Stationary and Random walk model, Unit Root tests- ADF, PP, KPSS, Co-integration, Engle Granger Test, Johansen Test- Error Correction Model; Determinant of Trend and Seasonal indices; Forecasting technique ARIMA; Overview of Regression with Panel data- Fixed Effect and Random Effect Models.

Suggested Readings:

1. Malhotra, Naresh K. 2016. *Marketing Research an Applied Orientation*. 5th edition, Pearson.
2. Cooper and Schindler. 2011. *Business Research Methods*. 8th edition. Tata McGraw Hill.
3. Joseph F. H., William C. B., Barry J. B. and Rolph. E. A. 2013. *Multivariate Data Analysis*. Pearson Education.
4. Fred N.Karlinger. 1986. *Foundations of Behavioural Research*. 3rd Edition. New York, Rinehart and Winston.
5. Gream, W. 2000. *Econometrics Analysis*. 5th Edition, Prentice Hall.
6. Goldberder, A.S. 1998. *Introductory Econometrics*. Harvard University Press, Cambridge.
7. Gujarati, D. 2002. *Basic Econometrics*. 4th Edition, McGraw Hill.
8. Gujarati, D. 2012. *Econometrics by Example*. Palgrave Macmillan.
9. Amemiya, T. 1985. *Advanced Econometrics*, Harvard University Press, Cambridge, Mass.
10. Intrilligator, M.D. 1978. *Econometric Methods, Techniques and Applications*. Prentice Hall Englewood Cliffs, New Jersey.
11. Johnson, J. 1991. *Econometric Methods*. McGraw Hill.
12. Kmenta, J. 1998. *Elements of Econometrics*. University of Michigan Press, New York.
13. Koutsoyiannis, A. 1977. *Theory of Econometrics*. The Macmillan Press.
14. Maddala, G.S. 1993. *Econometric Methods and Application*, Aldershot U.K.
15. Theil, H. 1981. *Introduction to Econometrics*. Prentice Hall of India, New Delhi.
16. Wooldridge, J.E. 2014. *Introductory Econometrics: A Modern Approach*. 5th Edition, Cengage Publication.
17. Cameron, A.C. and Trivedi P. K. 2010. *Microeconometrics Using STATA: Revised Edition*, Stata Press.


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Department of Economics

METHODOLOGY OF ECONOMICS

Course code: ECP-3102
L-T-P
4-0-0
Time: 3 Hrs

Max.Marks:100
External: 80
Internal: 20

Course Objective: The aim of this course is to enable students learn method of economics as well as academic writing with research ethics and various styles of references and citation methods.

Course Outcomes: At the end of the course the students will be able to:

- CO₁: explore the Scientific knowledge and evolution economics as science;
- CO₂: understand the subject of economics as a theoretical system;
- CO₃: know the mechanism of thesis writing;
- CO₄: gain understanding on the structure of thesis and from to research paper.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Evolution of Scientific Knowledge: Propositions, Syllogism; Scientific Method; Deductive and Inductive analysis; Mills's method of Experimental Enquiry, Evolution of Economics in terms of Paradigm Shift and MSRP (Karl Popper, Thomas Kuhn and Imre Lakatos).

Unit-II

Theoretical system of Economics and its Methodology; Economic theory and Economic laws; Role of assumptions in Economics, Economic Models- Various Concepts: Function, Variable, Equilibrium-Partial and General, Static; Nominal and Real Value.

Unit-III

Basic Concepts in Thesis writing: Literature Review, Methodology, Argumentation Analysis, Synthesis, Comprehension, Knowledge, Analogy, Homology, Criticism.

Unit-IV

Structure and content of the thesis and research paper; Indicators of good research/thesis; Referencing and citation: Styles of citing sources/ references the in text (APA, Chicago, and IEEE).

Suggested Readings:

1. Lerary, Z.O. 2005. *The Essential Guide to Doing Research*. Vistaar Publications, New Delhi.
2. Cohen, Morris R. and Nagel E. 1934. *An Introduction to Logic and Scientific Method*. Simon Publications.
3. Blaug, M. 1985. "Economic Theory in Retrospect", CIP, Cambridge.
4. Diana, R. 2008. "The Literature Review: A Step-by-Step guide for students" Sage Publication.
5. Goode W. J. and Pual K. Hatt, 1952. *Methods in Social Research*. McGraw Hill.
6. Kuhn, T.S. 1962 (2012 Edition). *The structure of scientific revolution*. University of Chicago Press
7. Kate, T. 2007. *A Manual for writers of Research Papers, Theses and Dissertation*. University of Chicago.
8. Mishra, V. 1980. *From the autobiography of Economic theory and Other Reflections*. Kalyani Publications, New Delhi
9. Mishra V. 1984. *The study of Product Behaviour- the Nature of the Theoretical System of Economics*. Vishal Publications
10. Nicholas, W. 2011. *Research Methods: The Basics* Routledge.
11. Scale, C. 2008. *Social Research Methods*. Routledge.
12. Hart, C. 1998. *Doing a Literature Review*. Sage Publications, New Delhi.
13. Walliman, N. 2003. *Your Research Project*. Sage Publications, New Delhi.
14. Thomas R. M. 2003. *Blending Quantitative & Quantitative Research Methods in Theses and Dissertations*. Corwin Press.
15. Punch, K. F. 2000. *Developing Effective Research Proposals*, Sage Publications, New Delhi.
16. Glatthorn, A. 1998. *Writing the Winning Dissertation - A Step-by-Step Guide*, Corwin Press.
17. Rudestam Kjell E. & Newton Rae R. 2001. *Surviving Your Dissertation*. 2nd Edition. Sage Publications, New Delhi.
18. Phillips Estelle M. & Pugh D. S. 1987. *A Handbook for students and their supervisors*. In-charge Distributors Ltd., New Delhi.

6

SEMINAR AND REVIEW OF LITERATURE

Course code: ECP-3103

L-T-P

2-0-0

Time: 1.5 Hrs.

Max.Marks:50

External: 40

Internal: 10

Course Objectives: The purpose of this course is to gain and understanding the existing research and debates relevant to a particular topic and area of study. Further, it enables students to conduct the review of literature and learn the research gap after Review of Literature. Further, to prepare and present seminar papers on contemporary issues

Course Outcomes: At the end of the course the students will be able to:

CO₁: help the students learn the way to present that knowledge in the form of a report;

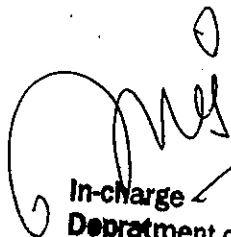
CO₂: conduct of a literature review and help build knowledge in their respective field of work;

CO₃: help in prevent duplication of work and engages the learners in a formal discussion and debates; and

CO₄: promotes involvement of students in group and team work and to address socio-economic issues.

Instruction for examiners/examinees:

- The candidate will get necessary guidance from their supervisor/coordinator for the paper 'Review of Literature and Seminar'.
- The Candidate shall review minimum 30 research papers on given topic. The research papers should be from Scopus Indexed/ Web of Science journals.
- She shall submit a copy of Review of Literature on the relevant research topic.
- A report of about 50 pages will be submitted by the candidate consisting of a comparative analysis of research methodology, data analysis techniques and findings from different papers.
- The candidate shall present seminar before the committee/experts.
- The report and seminar would be assessed by a committee consisting of chairperson, one faculty member and one external examiner from the approved panel of the experts.
- The marks for report and seminar are 20 marks each.


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Department of Economics

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RESEARCH AND PUBLICATION ETHICS

Course code: CPERPE-2203

L-T-P

2-0-0

Time: 1.5 Hrs.

Max.Marks:50

External: 40

Internal: 10

Course Objectives: The course aims to sensitize researchers regarding publication ethics and publication misconducts.

Course Outcomes: At the end of the course, the student will be able to:

CO₁: acquire awareness about publication ethics and publication misconducts;

CO₂: identify research misconduct and predatory publications;

CO₃: understand indexing and citation databases, open access publications, research metrics; and

CO₄: understand the usage of various plagiarism tools.

Instructions for examiner/examinees: The question paper will contain 8 questions of 10 marks each and student will be required to attempt 4 questions (1 question from each unit).

Unit I

Philosophy and Ethics: Introduction to philosophy: definition, nature and scope, concept, branches; Ethics: definition, moral philosophy, nature of moral judgements and reactions. Scientific Conduct: Ethics with respect to science and research; Intellectual honesty and research integrity; Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP); Redundant publications: duplicate and overlapping publications, salami slicing; Selective reporting and misrepresentation of data.

Unit II

Publication Ethics: Publication ethics: definition, introduction and importance; Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.; Conflicts of interest; Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types; Violation of publication ethics, authorship and contributorship; Identification of publication misconduct, complaints and appeals; Predatory publishers and journals Practice.

Unit III

Open Access Publishing: Open access publications and initiatives; SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies; Software tool to identify predatory publications developed by SPPU; Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc. Publication Misconduct: Subject specific ethical issues, FFP, authorship; Conflicts of interest; Complaints and appeals: examples and fraud from India and abroad; Use of plagiarism software like Turnitin, Urkund and other open-source software tools.

Unit IV

Databases And Research Metrics: Databases - Indexing databases; Citation databases - Web of Science, Scopus, SCI, etc.; Research Metrics - Impact Factor of journal as per Journal Citation Report, SNIP, SIR, IPP, Cite-Score; Metrics: h-index, g-index, i-index, Altmetric, journal database.

Suggested Readings:

1. Anderson B.H. 1997. *Thesis and assignment writing*. Wiley Eastern.

2. Beall, J. 2012. *Predatory publishers are corrupting open access*. *Nature*, 489(7415), 179-179. <https://doi.org/10.1038/489179a>

3. Bird, A. 2006. *Philosophy of Science*. Routledge.

4. Bordens K.S. and Abbott, B.B. 2008. *Research Design and Methods*, Me Graw Hill.

5. Brooks, R., Kitty teRiele & Maguire, M. 2014. *Ethics and Education Research*, Sage Publications.

6. Carroll, J. 2015. *A handbook for Detering Plagiarism in Higher Education*. Oxford Centre for Staff and Learning Development.

7. Chaddah, P. 2018. *Ethics in Competitive Research: Do not get scooped; do not get plagiarized*, National Academy of Sciences,

8. Francisco M. Salzano, A. & Magdalena Hurtado. 2004. *Lost Paradises and the Ethics of Research and Publication*. Oxford University Press. New York.

9. Graziano, A. M., and Raulin, M.L. 2007. *Research Methods - A process of Inquiry*. Sixth Edition, Pearson.

10. Hammersley, M. & Traianou, A. 2012. *Ethics in Qualitative Research Controversies and Contexts*. SAGE Publications Ltd.

11. Love, S. 2000. *Textbook*. SAGE Publications Ltd.

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12. MacIntyre, A. 1967. *A Short History of Ethics*. London.

13. Miller, T., Birch, M., Mauthner, M. & Jessop, J. 2012. *Ethics in Qualitative Research*. Oxford Brookes University, UK.

14. Nicolas H. Steneck. 2007, *Introduction to the Responsible Conduct of Research Office of*

15. Oliver, P. 2003. *The student's guide to research ethics*. Open University Press, Maidenhead, Philadelphia.

16. Resnik, D. B. 2011. *What is ethics in research & why is it important*. National Institute of Environmental Health Sciences, 1-10. Retrieved from <https://wwwv.niehs.nih.gov/research/resouices/bioethics/whatis/index.cfm>

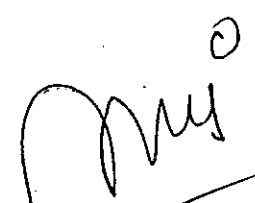
17. Sales, Bruce, D. & Folkman, S. 2002. *Ethics in Research with Human participants*. American Psychological Association, Washington D.C.

18. Shamoo, Adil E. & Resnik, David B. 2003. *Responsible conduct of research*. Oxford university press.

19. Stewart, Neal C. 2011. *Research Ethics for Scientists: A Companion for Students*. Wiley.

20. Todorovich, M., Paul K. & Hook, S. 1977. *The Ethics of Teaching and Scientific Research*. Prometheus Books. Buffalo, NY.

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 In-charge
 Department of Economics

(9)

DYNAMIC MACROECONOMICS

Course code: ECP-3104A

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course objectives: The course gives a step-by-step introduction to the key theoretical concepts relating to static and dynamic analysis and to the corresponding model types. In the analysis we are also able to integrate the market for foreign exchange and the choice of monetary policy regime (instruments and targets) and to show that the dynamic response of the macro economy is regime-dependent.

Course Outcomes: At the end of the course the students will be able to:

CO₁: understand the issues of contemporary relevance in macroeconomic theory.

CO₂: explore researchable areas from New and Keynesian economics;

CO₃: analyse the monetary policy and its implications on economy; and

CO₄: gain knowledge on role of state in solving economics issues.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Economic growth and the neoclassical model; Growth accounting and growth empirics: Solow model, AK model, Romer model; Neo-classical growth model in discrete time and dynamic programming; Consumption theories.

Unit -II

Linear Rational Expectations Models; Three Ways of Solving Linear Rational Expectations Models; The Real Business Cycle model; The New Keynesian model

Unit -III

The monetary economy; Monetary non-neutrality, the Phillips curve, nominal rigidities; Advanced Macroeconomics Monetary policy; monetary policy: goals, strategies, implementation

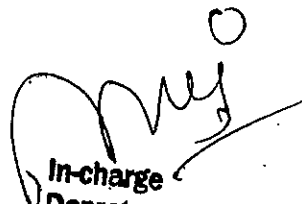
Unit-IV

Government expenditures and fiscal multipliers; Budget deficits and debt sustainability; the yield curve and the zero lower bound; Unemployment: Search-and-matching model.

Suggested Readings:

1. David Romer. 2018. *Advanced Macroeconomics*. McGraw-Hill Economics, 5th edition.
2. Dirk Niepelt. 2019. *Macroeconomic Analysis*. MIT Press.
3. Daron Acemoglu. 2009. *Introduction to Modern Economic Growth*. Princeton University Press.
4. Olivier J. Blanchard and Stanley Fischer. 1989. *Lectures on Macroeconomics*. MIT press.
5. Thomas J. Sargent. 1987. *Dynamic Macroeconomic Theory*. Harvard University Press.
6. Thomas J. Sargent and Lars Ljungqvist. 2018. *Recursive Macroeconomic Theory*. MIT Press, 4th edition.
7. Angus Deaton. 1992. *Understanding Consumption*. Oxford University Press.
8. George McCandless. 2008. *The ABCs of RBSS: An Introduction to Dynamic Macroeconomic Models*. Harvard University Press.
9. Jordi Galí. 2015. *Monetary policy, inflation, and the business cycle: an introduction to the new Keynesian framework and its applications*. Princeton University Press, 2nd edition.

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DEVELOPMENT ECONOMICS

Course code: ECP-3104B
L-T-P
4-0-0
Time: 3 Hrs.

Max. Marks: 100
External: 80
Internal: 20

Course Objectives: The main objectives of this course on development economics are to enable students with knowledge of various approaches to underdevelopment. The course also covers various dimensions of development policy like role of state and trade theory for economic development.

Course Outcomes: At the end of the course the students will be able to:
CO₁: understand the issues of developed and low-income economies and international trade;
CO₂: gain knowledge on the rural and development issues;
CO₃: know the issues related to labour and migration in the economy; and
CO₄: analyse the implications of environmental changes on economy.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

The current problem of least developed and low-income economies; trade and economic development; foreign assistance in general and various specific alternatives of foreign development cooperation; the application of distinctive measurement concepts of inequality and poverty.

Unit II

Urbanisation and development; Rural development; Community and development; the main theories of capital market imperfections in developing countries

Unit-III

Labour and migration; Health and education; Gender and development; Governance and the political economy of development; the role of the state in advancing economic development

Unit-IV

Environment and development; Natural resource and Dutch disease – technological progress, human capital and increasing return; an overview of endogenous growth models and its evaluation.

Suggested Readings:

1. Bardhan, P.K. and C. Udry. (1999). *Development Microeconomics*, Oxford University Press.
2. Banerjee, A. and E. Dufflo. 2012. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, Public Affairs.
3. Ravallion, Martin. 2016. *The Economics of Poverty: History, Measurement & Policy*, Oxford University Press.
4. Morduch, J. and B. A. de Aghion. 2005. *The Economics of Microfinance*, The MIT Press.
5. Baland, J-M & J-P Platteau. 1996. *Halting Degradation of Natural Resources*, Oxford University Press.
6. Constant, Amelie F. and Klaus F. Zimmermann. 2013. *International Handbook on the Economics of Migration*, Edward Elgar
7. Johnes, Geraint and Jill Johnes. 2004. *International Handbook on the Economics of Education*, Edward Elgar.
8. Weingast, Barry R. and Donald Wittman. 2011. *The Oxford Handbook of Political Economy*, Oxford University Press.
9. Oliver Morissey. 2017. *Handbook of Trade and Development*, Edward Elgar.
10. Christopher Bliss. 1989. *Trade and Development*. In *Chenery and Srinivasan (ed) Handbook of Development Economics, Vol 2*, Edward Elgar: 1187-1240.
11. Ronald Findlay. 1973. *International Trade and Development Theory*. Columbia University Press, New York.
12. Paul Krugman. 1991. *Increasing returns and economic geography*. *Journal of Political Economy*, 99(3): 483-499

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INTERNATIONAL TRADE AND DEVELOPMENT

Course code: ECP-3104C

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: To strengthen and deepen the understanding of the scholars on modern trade theories and the problem of managing the balance of payments. This paper also deals with the institutional factors constraining the development process and difficulty in utilisation of the natural resources. The environmental economics also forms a unit of this paper.

Course Outcomes: At the end of the course the students will be able to:

CO₁: understand the various theories of international trade;

CO₂: explore researchable in various economic blocks worldwide;

CO₃: know the issue of market failures and role of state; and

CO₄: analyse the implications of regionalism and multilateralism.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit: I

Theories of International Trade, Trade under increasing Return – Imperfect competition, Intra-industry trade – Product Life Cycle Theory.

Unit II

Balance of Payments Convertibility – current and capital Accounts, Theories of Regional trade Block, Evolution of European Union, BREXIT, Optimum Currency area, SAPTA, SAFTA and BRICS.

Unit III

Basic issues and Factors in Development Problems of market: its immaturity, imperfect information, lack of credibility, property rights, and externality; Problems in the development of market: adverse selection and moral hazards; Role of State: Peter B Evans' State as the problem and solution: Predation embedded autonomy and structural change.


Unit IV

Trade Policy as input to Transition, Development and Integration Regionalism and multilateralism, extent of regionalism: coexistence and conflicts, developing countries: growth crisis and need for reform, trade as input to development, transition and liberalization, theory of economic integration, effects of economic integration.

Suggested Readings:

1. Meier, G. M. and Rauch, J. E. 2005. *Leading Issues in Economic Development*, Oxford University Press, 7th edition.
2. Macho-Stadler, I and Perez-Castillo, J D. 2001. *An Introduction to the Economics of Information*. Oxford University Press.
3. Mikic, Mia. 1998. *International Trade*, Macmillan Education, St. Martin's Press, Scholarly and Reference Division, New York.
4. Soderston, B. 1997. *International Economics*, Prentice Hall, Upper Saddle River, NJ New York
5. Salvador, D. 1997. *International Economics*, Prentice Hall, Upper Saddle River, NJ New York.
6. Markandya A and Harou Patrice. 2002. *Environmental Economics for Sustainable Growth*, Edward Elger, USA,
7. Pearce, D. W. 1992. *Environmental Economics*, Longman, London.

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ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

Course code: ECP-3104D

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: It will acquaint students with the socio-economic benefits of a project often outweighed the environmental costs. Guided by objectivity, the syllabus prepared for environmental economics addresses the major environmental issues emanating from different kinds of activities.

Course Outcomes: At the end of the course the students will be able to:

CO₁: To understand the various techniques of environmental valuation;

CO₂: To learn about sustainable development goals and policies;

CO₃: To gain understanding about major environmental agreements; and

CO₄: To analyse the functions of pollution boards India.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question

Unit-I

Environmental Valuation Methods and its Application Values of environmental goods, need for environmental valuation, Valuation methods: Revealed preference (Direct proxy method) - Productivity change method, Substitute cost method - Revealed preference (non-proxy method)- travel cost and Hedonic price method (conceptual Framework and case studies); Stated preference - Contingent valuation method.

Unit-II

Sustainable Development and Environmental Policies Issues of sustainable development, green accounting of national income, rules to sustainability, sustainable development goals.

Unit-III

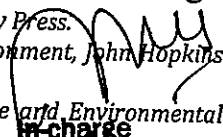
United Nations Environmental Programmes, NEP; Conference of parties-Agenda for developed and developing Countries; Major international environmental agreements,

Unit-IV

Environmental policies in India and its evaluation, National Green Tribunal: Function and Initiative; Central Pollution Control Boards-Power and function; State Pollution Control Boards-Power and Functions.

Suggested Readings:

1. Rangarajan, Mahesh. 2006. *Environmental Issues in India: A Reader*. Pearson.
2. Gadgil, Madhab and Ramachandra, Guha. 1992. *This Fissured land: An Ecological History of India*. Oxford University Press, New Delhi.
3. Hanley N, J.F. Shogern and Ben White. 1997. *Environmental Economics in Theory and Practice*, Macmillan.
4. Chary S.N. and Vyasulu V. 2000. *Environmental Management - An Indian Perspective*, Macmillan, New Delhi.
5. Cropper, Maureen. 1999. *Valuing Environmental Benefits*, Edward Elgar.
6. Hussen A.M. 1999. *Principals of Environmental Economics*, Routledge London.
7. James, A.J., M. N. Murty and Smita Misra. 1999. *Economics of Water Pollution-The Indian Experience*, Oxford University Press, New Delhi.
8. Jeroen. C.J.M. van den Berg. 1999. *Handbook of Environmental and Resource Economics*, Edward Elgar Publishing Ltd., U.K.
9. Kolstad, C. 2010. *Intermediate Environmental Economics*, 2nd Ed. Oxford University Press.
10. Pearce D.W. and Turner R. 1991. *Economics of Natural Resource Use and Environment*, John Hopkins University Press, Baltimore
11. Perman R, Ma Y, McGilvray J. and Common M. 2011. 3rd Ed, *Natural Resource and Environmental Economics*, Pearson Education
12. Shankar, U. 2001. *Environmental Economics*, Oxford University press, New Delhi.


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CONTEMPORARY ISSUES IN INDIAN ECONOMY

Course code: ECP-3104E

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: To acquaint the students with the conditions of the Indian economy and its institutional structure – in many instances the students find economic dealing with the problems of the developed countries in depth and only touching tangentially the 'real' problems of the developing countries, including India.

Course Outcomes: At the end of the course the students will be able to:

CO₁: understand the issues of contemporary relevance in microeconomics and macroeconomics;

CO₂: explore researchable areas for their relevant contribution in research;

CO₃: forecast the future course of changes and developmental policies of the government; and

CO₄: analyse the implications of changes in economic policies.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit I

Poverty alleviation programmes; Recent Employment Generation Programmes and Social Safety framework in India, Issues in Health and Education. Inclusive growth – Evaluation of Five-year plans with special emphasis on the 11th and 12th five-year plans.

Unit II

Contemporary economic issues in India- Infrastructural Development- Environmental Issues; Global Warming in the Indian Context- Pigovian taxes –taxable permits and tradable permits in the Indian context, Externalities and its measurement.

Unit III

Contemporary Issues in Social Sector Rural Livelihood Mission, MGNREGA, NRHM, SSA, Social Security; Impact of the Covid19 pandemic on the Indian Economy. Impact on Employment and Labour Market, Labour migration.

Unit IV

Contemporary Issues in Banking, Finance and Corporate Restructuring Banking reform: Nationalization, Non-performing assets and privatization of banks; Recent Tax reforms (GST) and Expenditure reforms and Deficit, Inflation Targeting and monetary policy in India. Interfaces of Monetary and Fiscal policy in India.

Suggested Readings:

1. Ahluwalia, I J and IMD Little. 1999. *India's Economic Reforms and development (Essays in honour of Manmohan Singh)*, Oxford University Press, New Delhi.
2. Bardhan, P. 1991. *The Political Economy of development in India*, Oxford University Press, New Delhi.
3. Government of India, *Economic Survey (annual)*, Ministry of Finance, New Delhi.
4. Mishra K Deepak. 2016. *Internal Migration in Contemporary India*, Sage Publications, New Delhi.
5. Mishra K Deepak and Vandana Upadhyay. 2017. *Rethinking Economic Development in North East India: The Emerging Dynamics*, Rutledge, London/New Delhi.
6. Mishra K Deepak and Pradeep Nayak. 2020. *Land and Livelihoods in Neoliberal India*, Springer, Palgrave Macmillan, Singapore.
7. Jalan, B. 1992. *The Indian Economy – Problems and Prospects*, Vikash, New Delhi.
8. Kapila, Uma. 2021. *India's Economic Reforms*, Academic Foundation, New Delhi.
9. Kapoor, R. 2021. *COVID-19 and the State of India's Labour Market*. ICRIER Policy Series'
10. Khera, Reetika. 2011. *The Battle for Employment Guarantee*, Delhi: Oxford University Press
11. 12. Sahoo, P., & Ashwani. 2020. *COVID-19 and Indian economy: Impact on growth, manufacturing, trade and MSME sector*. *Global Business Review*, Vol. 21(5), 1159- 1183

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CONTEMPORARY ISSUES IN INDIAN AGRICULTURE

Course code: ECP-3104F

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: Agriculture is still considered to be the backbone of the Indian economy. However, the sector is subject to many challenges. Hence, this paper aims to give an insight about the state of Indian agriculture in recent times, its functioning and the significance of the agricultural factor markets and the basic issues concerning the sector.

Course Outcomes: At the end of the course the students will be able to:

CO₁: understand the functions of agricultural markets;

CO₂: learn about the factors required agricultural operations;

CO₃: analyse the causes of farmers misery; and

CO₄: examine the implications of climate change on agriculture operations.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Agriculture and Factor Markets State of Agriculture in India- share in GDP and employment, cropping pattern, crop diversification towards HYV seeds, cropping intensity, irrigation, and mechanization.

Unit-II

Small and fragmentation of holdings and markets of primary inputs of agriculture – land, labour, capital and water; Market for support services-credit, extension service and insurance

Unit-III

Farmers' distress; Green Revolution and environment; Recent agricultural reforms- The Farmer's Produce Trade and Commerce (Promotion and Facilitation) Act, 2020, The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020, The Essential Commodities (Amendment) Act, 2020.

Unit-IV

Climate change and its impact on agriculture; Farm income and the Goal of doubling of farmer's income; CACP and MSP; Artificial Intelligence in agriculture

Recommended Readings:

1. Chand, R. 2016. *Doubling Farmers' Income: Strategy and Prospects*, Presidential address, Seventy sixth annual conference, The Indian Society of Agricultural Economics.
2. Goswami, Binoy, M P Bezbaruah and Raju Mandal. 2018. *Indian Agriculture after the Green Revolution: Changes and Challenges*, Routledge: Abingdon, Oxfordshire, UK and New York, USA.
3. Kapila, Uma. 2021. *India's Economic Reforms*, Academic Foundation, New Delhi.
4. Ministry of Agriculture & Farmers' Welfare. 2017. *Report of the Committee on Doubling Farmers' Income, Volume II, Department of Agriculture, Cooperation and Farmers' Welfare.*
5. Ray, Debraj. 2011. *Development Economics*, Oxford University Press, New Delhi.


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ADVANCED ECONOMIC THEORY

Course code: ECP-3104G

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: This is the paper covering a wide range of topics: advanced demand theory, oligopoly and asymmetric information from economics, business cycles, rational expectation and policy ineffectiveness from macroeconomics and also deals with financial economics.

Course Outcomes: At the end of the course the students will be able to:

CO₁: understand the utility and demand functions;

CO₂: explore the asymmetric information in the oligopolistic markets;

CO₃: know the impact of various macroeconomics policies on economy; and

CO₄: analyse the implications of changes in economic policies.

Instruction for examiners/Examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Demand Theory Shape of the utility function and risk: von Neumann-Morgenstern Utility Theorem, Envelop Theory; Duality in demand theory: Properties of Marshallian and Hicksian demand functions; Empirical estimation of demand (Rotterdam Model): Kaldor's theory of distribution.

Unit II

Market Oligopoly: application of both cooperative and non-cooperative games to the solution of oligopoly problems, Asymmetric information and market: Adverse selection and moral hazard, Akerlof's theory of market for lemons, elements of auction theory

Unit III

Macro Economics in Closed and Open Economy New Classical Macro Model: Adaptive expectation, Rationale expectation and Policy ineffectiveness; Real business cycle model; New Keynesian Model and their critique. Open Economy Macro Model: Mundell-Fleming Model, flexible exchange rate and problems of Monetary and Fiscal Policy in the open Economy model.

Unit IV

Financial Economics Debt and equity financing of a business; Cost of Capital: Net Income Approach, Net Operating Income Approach, Traditional Theory of Gearing, Modigliani-Miller Theory; Derivatives: Types, Binominal pricing model and Black-Scholes model of derivative pricing.

Recommended Readings:

1. Birman H Scot & L Fernandez. 2003. *Game Theory with Economic Application*, Pearson Education.
2. Froyen, R. T. 1999. *Macroeconomics*, Delhi: Pearson.
3. Hoover, K. D. 1988. *The New Classical Macro-Economics*, Oxford: Blackwell.
4. Elton, E. J. and Grucer, M. J. 2001. *Modern Portfolio Theory and Investment Analysis*, Singapore, John Wiley.
5. Mclaney, E. J. 2000. *Business Finance: Theory and Practice*, Delhi: Pearson.
6. Paul, Davidson. 2011. *Post Keynesian Macroeconomic Theory*. Second edition.
7. Sharpe, W. F., Alexander, G. J. and Bailey, J. V. 1995. *Investments*, New Delhi: Prentice Hall.
8. Sheffrin, M Steven. 1996. *Rational Expectations'*, Cambridge University Press, 1996.

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GENDER AND DEVELOPMENT**Course code: ECP-3104H****L-T-P****4-0-0****Time: 3 Hrs.****Max.Marks:100****External:80****Internal: 20**

Course Objectives: The paper will provide an analysis of the location of women in processes of development and to understand the centrality of gender in each case. Further, to examine the theoretical and conceptual frameworks for the analysis including an understanding of gender divisions and their interaction with other forms of inequality such as caste, class, race, and ethnicity and their spatiality.

Course Outcomes: At the end of the course the students will be able to:

CO₁: understand the role of gender in developmental process;

CO₂: know the researchable areas for gender empowerment;

CO₃: learn about the regional dimensions of gender and development; and

CO₄: analyse the implications of gender budgeting;

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Gender in Development Process-Theoretical framework – Classical and neo-classical theories of human capital formation, institutions and their feminist critique; gender theories-contextualizing patriarchy and its importance for understanding gender relations and their implication for development processes.

Unit-II

Locating Gender in Development Process- Conceptual shift in the women and development discourse from 'Women in Development' (WID) to 'Gender in Development' (GID) and 'Gender and Development' (GAD). Feminist critique of gender perspective in the Indian Planning: from welfare to 'empowerment and women's agency approach. Gender and structural adjustment

Unit-III

Regional Dimension of Gender and Development Access and control over resources and assets; the cross-cutting issues of caste and class and space; Gendered livelihoods and poverty; workforce trends and implications for emerging regional patterns; caste/class/region overlap; Health: Gender biases in access and utilization of health including reproductive health and its consequences;

Unit-IV

Gender budgeting; Institutionalizing gender concerns and gender empowerment in policies and interventions. Gender and political participation: national, state and local, Indigenous knowledge and gender development. Role of educational institutions in removing gender disparities in Haryana; Gender Issues in Haryana.

Recommended Readings:

1. Agarwal, Bina. 1994. *A field of one's own: gender and land rights in South Asia*. Cambridge University Press. Cambridge.
2. Boserup, Ester. 1989. *Woman's Role in Economic Development*. Earthscan, London. 283 pp.
3. Unwin Hyman Coltrane, S. 1994. 'Theorizing Masculinities in Contemporary Social Science', in *Theorizing Masculinities*. H. Brod and M. Kaufman (eds.), pp. 39-60. Thousand Oaks: Sage
4. Drèze Jean and A. Sen. 2002. *India: Development and participation*, Delhi: Oxford University Press. Human Development in South Asia 2000: The Gender Question,
5. The Mahbub ul Haq. 2000. Human Development Centre. Delhi, Oxford University Press,
6. Kabeer Naila. 2002. *Reversed Realities*. Oxford University Press
7. Kapadia Karin. 2002. *The Violence of Development: The Politics of Identity, Gender and Social* India, New Delhi
7. Moser, Caroline O.N. 1989. *Gender planning in the Third World: Meeting practical and strategic needs*. World Development, 17(11).

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ECONOMICS OF INNOVATION

Course code: ECP-3104I
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: This course presents students with a solid understanding of the economic fundamentals of innovation, emphasizing two complementary approaches to innovation: micro and macroeconomic. It will provide training of the student in a broader framework of interpretation of phenomena of economic dynamics, at the level of companies, technologies, sectors and the economy. Innovation is one of the most important economic and business phenomena of our time.

Course Outcomes: At the end of the course the students will be able to:
CO₁: know the fundamentals of innovation economics;
CO₂: understand the techniques for measurement of innovation;
CO₃: learn about various innovation systems in economy; and
CO₄: analyse the implications of innovation drivers in the digital era.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Innovation in the history of economic thought; Introduction to the Economics of Innovation, Innovation and Economic Growth; Neoclassical theory, evolutionary theories, (neo) Schumpeterian approaches; Demand pull vs. technology push debate; Adoption and diffusion of technologies; Innovation and Inequality

Unit-II

Measurement of Innovation, The Supply of Inventors; Invention, innovation and diffusion, Technologic innovation, Taxonomies of innovation, Indicators of Science Technology & Innovation; Immigration and Innovation; Intellectual Property Rights

Unit-III

Innovation, economic growth and structural change; Long waves and techno-economic paradigms, National innovation systems; Innovation and international competitiveness - technological gap model; Research and Innovation.

Unit-IV

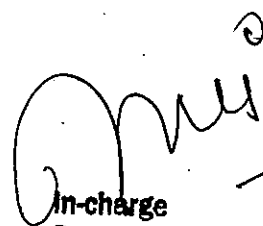
Drivers: network externalities; the consumer as innovator, co-creation and mass customization in the era of Industry 5.0; the democratization of innovation and the relevance of other stakeholders; Open innovation: an introduction; Innovation in the digital era: new business models; digital platforms

Suggested Readings:

1. Angrist, Joshua and Jörn-Steffen Pischke. 2008. *Mostly Harmless Econometrics*, Princeton University Press.
2. Scotchmer, Suzanne. 2004. *Innovation and Incentives*, MIT Press.
3. Arrow, Ken. 1962. *Economic Welfare and the Allocation of Resources for Invention*, in *The Rate and Direction of Inventive Activity*: 609-619, National Bureau of Economic Research.
4. Boldrin, M. and D. K. Levine. 2008. *Against Intellectual Monopoly*, Cambridge University Press. Available at <http://www.dklevine.com/general/intellectual/againstnew.htm>
5. Hall, B. and N. Rosenberg. 2010. *Handbook of the economics of innovation*, Elsevier.
6. Leveque and Meniere. 2004. *The Economics of Patents and Copyright*, Berkeley Electronic Press. Available at <http://www.bepress.com/leveque>
7. Kogan, Leonid, Papanikolaou, Dimitries, Seru, Amit, and Stoffman, Noah. 2017. *Technological Innovation, Resource Allocation, and Growth*, *The Quarterly Journal of Economics*, 132(2), 665-712.
8. Agarwal, Ruchir and Patrick Gaule. 2018. *Invisible Geniuses: Could the Knowledge Frontier Advance Faster?*

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9. Moser, Petra, Alessandra Voena, and Fabian Waldinger. 2014. German Jewish Émigrés and US Invention, *American Economic Review* 104(10): 3222–3255.
10. Hvide, Hans K., and Benjamin F. Jones. 2018. University Innovation and the Professor's Privilege, *American Economic Review* 108.7: 1860-98.
11. Sampat, Bhaven and Heidi L. Williams. 2019. How Do Patents Affect Follow-On Innovation? Evidence from the Human Genome, *American Economic Review* 109(1): 203–36.
12. Moretti, Enrico and Daniel J. Wilson. 2017. The Effect of State Taxes on the Geographical Location of Top Earners: Evidence from Star Scientist", *American Economic Review* 107(7): 1858–1903.
13. Azoulay, Pierre, Joshua S. Graff Zivin, Danielle Li, and Bhaven N. Sampat. 2019. Public R&D Investments and Private-sector Patenting: Evidence from NIH Funding Rules, *Review of Economic Studies* 86(1): 117–152.
14. Jaravel, Xavier. 2019. The Unequal Gains from Product Innovations: Evidence from the U.S. Retail Sector, *Quarterly Journal of Economics* 134(2): 715–783
15. Church, J. and R. Ware. 2000. *Industrial Organization: A Strategic Approach*, Irwin McGraw-Hill. Available at: http://works.bepress.com/jeffrey_church/23
16. Besen, S. and L. Raskind. 1991. An Introduction to the Law and Economics of Intellectual Property, *The Journal of Economic Perspectives* 5 (1), pp. 3-27
17. David, P., 1985, Clio and the Economics of QWERTY, *The American Economic Review papers and proceedings* 75 (2), pp.332-337
18. Liebowitz, S.J. and S.E. Margolis. 1994. Network externality: an uncommon tragedy, *Journal of Economic Perspectives* 8 (2), pp.133-150.


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ECONOMICS OF ENTREPRENEURSHIP

Course code: ECP-3104J

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course objectives: The paper aims to acquaint students with the most influential theoretical and empirical contributions on entrepreneurship in the economics literature, with an emphasis on recent work. The course will enable scholars to understand the importance of small business to the national economy besides identifying firm factors viz. technological knowledge, adaptive capability, network, institutional support, cost etc.

Course Outcomes: At the end of the course the students will be able to:

CO₁: understand the connect between entrepreneurship and development;

CO₂: explore the motivation for entrepreneurship;

CO₃: gain knowledge about entrepreneurial policies; and

CO₄: analyse the implications entrepreneurship on industry dynamics.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

The Economics of Entrepreneurship; Entrepreneurship and Organization Design; The returns to entrepreneurship - Who becomes an entrepreneur? Entrepreneurial entry: benchmark model for the transition between paid work and entrepreneurship; The Relation between Entrepreneurship and Economic Development; Entrepreneurship: Productive, Unproductive and Destructive.

Unit-II

Does Entrepreneurship Pay? An Empirical Analysis of the Returns to Self-employment; the Returns to Entrepreneurial Investment: A Private Equity Premium Puzzle? Non-pecuniary motivations for entrepreneurship and empirical strategies to identify such motivations; Notion of entrepreneurship as a luxury good, Entrepreneurship and happiness

Unit-III

Entrepreneurs and personal traits; Public policy; entrepreneurs are fundamentally different from non-entrepreneurs. Why Do Entrepreneurial Parents Have Entrepreneurial Children; Entrepreneurship and Network Externalities? Innovation and Diffusion in Small Firms: Theory and Evidence; Macro-economic relevance of entrepreneurship.

Unit-IV

Are entrepreneurs substitutable? Entrepreneurs are crucial in starting up new firms, but are they crucial once the firm has been founded? And for how long? What is a firm anyway? Entry, Exit, Growth, and Innovation over the Product Life Cycle, Entrepreneurship and industry dynamics;; Entry and Competition in Concentrated Markets Entrepreneurship and the Business Cycle.

Suggested Readings:

1. Shane, S. 2003. *A General Theory of Entrepreneurship*. Edward Elgar.
2. Shane, S. 2003. *New Horizons in Entrepreneurship*. Edward Elgar
3. Parker, S. 2009. *The Economics of Self-employment and Entrepreneurship*. Cambridge University Press.
4. Bhidé, Amar. 2000. *The Origins and Evolution of New Businesses*. Oxford University Press.
5. Aldrich, H. 1999. *Organizations Evolving*. Sage Publications Ltd.
6. Angrist, J. D. & J.S. Pischke. 2009. *Mostly Harmless Econometrics*. Princeton University Press.

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DATABASE FOR RESEARCH IN ECONOMICS

Course code: ECP-3104K
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: This course is introduced to enrich the students with the knowledge of various data sources of national and international importance.

Course Outcomes: At the end of the course the students will be able to:

- CO₁: understand the architecture of Indian data system;
- CO₂: know the National Accounts Statistics (NAS) and National Sample Survey (NSS) data;
- CO₃: learn about National Family Health Survey (NFHS) and Periodic Labour Force Survey (PLFS) data; and
- CO₄: analyse the data on environmental economy form reputed internal sources.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Secondary Data Sources of India: Architecture of Indian Data System – NSO, Ministries and its allied organizations and DES of States; Independent and International Data Systems or Sources – reliability, comparability and validity; Issue of National versus International Data Sources.

Data Sources on: National Income, Population, Poverty, Employment, Inequality, Wages, Agriculture, Industry, Health, Education, FDI, Foreign Trade, Environment, Government Finance, Monetary and Banking System.

Unit-II

NAS: Structure, Designing, Concepts, Recent debate on Issues in Methodology; limitations NSSO: Types of surveys – Household, Enterprise and Individuals; Concepts, sampling and definitions in different rounds; Detailed discussion on quinquennial rounds and PLFS; Issue of congruence between NAS and NSS. Population Census: Structure of different tables; Changes in definition over time; Issues covered over time; Available data till now.

Unit-III

NFHS: Themes covered; Sampling, Concept, Definitions – changes over time; Limitations. ASI: Survey design; Concepts used; Limitations Labour Bureau: Types of surveys, sampling; limitations; Types of available data; Sources and method of collection of available data; Cautions to be used in using DES data.

Unit-IV

Data on Environmental Economics- World Bank, Ministry of Statistics & Plan Implementation, and Ministry of Environment, Forest and Climate Change, UN Commodity Statistics Trade Database (UNSTD), Directorate General of Commercial Intelligence & Statistics (DGCIS), International Financial Statistics (IFS), International Trade Centre (ITC), World Economic Outlook (WEO); Extraction of Unit Level Data of different sources such as NSS, NFHS, Population Census.

Suggested Readings:

1. Nagaraj, R. 1999. *How Good Are India's Industrial Statistics? An Exploratory Note, Economic and Political Weekly*, 34 (6).
2. Nagaraj, R. (2002. *How to Improve India's Industrial Statistics', Economic and Political Weekly*, 37 (10).
3. Rao, C. R. 1972. *Data Base of Indian Economy, Vols. I and II, Statistical Publishing Society, Calcutta.*
4. Raza, M., S. Naqvi and J. Dhar. 1978. *Sources of Economic and Social Statistics of India, Eureka Publications, New Delhi.*

Miy
In-charge
Department of Economics

ARTIFICIAL INTELLIGENCE IN ECONOMIC ANALYSIS

Course code: ECP-3104L
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: The course introduces learners with the operations of Artificial Intelligence. The paper will be a mixed bag of tools (imported from the Computer Science literature), theoretical results (from the Economics literature) and empirical evidence (from the marketing literature). The course integrates the study of key algorithms used in digital marketplaces as well as the study of theoretical models that employing a stylized approach.

Course Outcomes: At the end of the course the students will be able to:
CO₁: understand the history and fundamentals of Artificial intelligence (AI);
CO₂: explore the applications of AI in regression;
CO₃: know the AI techniques along with machine learning (ML) algorithms; and
CO₄: analyse the implications of AI in frauds.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

History of AI – key events and timelines; Current state of AI- capabilities & applications, AI as a GPT: productivity boost; Machine Learning and Economics; Use cases of AI methods in Economics; Introduction to basic concepts and notations; Ethics in AI, Concerns of model explain ability and Data privacy

Unit-II

Data pre-processing- Outlier detection, Scaling, Missing value imputation, Curse of dimensionality & dimensionality reduction methods; Linear & Logistic Regression; Elements of Reinforcement Learning;

Unit-III

Regularization & Model Selection; Tree-based methods; ML algorithms – SVM, KNN; Bagging & Boosting concepts; ANN – Basics of GD, Activation functions, Optimizers, Regularization – focus on MLP, CNN, RNN models, back propagation; Clustering methods

Unit-III

Uses of AI: Demand estimation/estimation of elasticity's; Credit Scoring (Finance and Banking); Load Forecasting; Operational Risks for Banks

Unit-IV

Applications of AI in Fraud Detection (Insurance, Finance), Claims Prediction (Insurance); Quitting behaviour and change of service provider of customers (Insurance, Banking)

Suggested readings:

1. Acemoglu, D., & Restrepo, P. 2019. Automation and New Tasks: How Technology Displaces and Reinstates Labor. *The Journal of Economic Perspectives: A Journal of the American Economic Association*, 33(2), 3–30. <https://doi.org/10.1257/jep.33.2.3>
2. Aggarwal, C. C. 2016. *Recommender Systems: The Textbook*. Springer, Cham. <https://doi.org/10.1007/978-3-319-29659-3>
3. Agrawal, A., Gans, J., & Goldfarb, A. 2018. *Prediction Machines: The Simple Economics of Artificial Intelligence*. Harvard Business Press.
4. Agrawal, A., Gans, J., & Goldfarb, A. 2019. Economic Policy for Artificial Intelligence. *Innovation Policy and the Economy*, 19, 139–159. <https://doi.org/10.1086/69995>
5. Agrawal, A., Gans, J., & Goldfarb, A. 2019. *The Economics of Artificial Intelligence: An Agenda*. University of Chicago Press.

In-charge
Department of Economics

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8. B. Edelman, M. Ostrovsky and M. Schwarz. 2007. Internet Advertising and the Generalized Second-Price Auction: Selling Billions of Dollars' Worth of Keywords, *American Economic Review*, 97 (1), 242-259. <https://doi.org/10.3386/w11765>
9. Brynjolfsson, E., Mitchell, T., & Rock, D. 2018. What Can Machines Learn, and What Does It Mean for Occupations and the Economy? *AEA Papers and Proceedings*, 108, 43-47. <https://doi.org/10.1257/pandp.20181019>
10. Brynjolfsson, E., Rock, D., & Syverson, C. 2017. Artificial intelligence and the modern productivity paradox: A clash of expectations and statistics. *National Bureau of Economic Research*. <https://doi.org/10.3386/w24001>
11. Calvano, E., Calzolari, G., Denicolò, V., & Pastorello, S. 2020. Artificial Intelligence, Algorithmic Pricing, and Collusion. *The American Economic Review*, 110(10), 3267-3297. <https://doi.org/10.1257/aer.20190623>
12. Calvano, E., Calzolari, G., Denicolò, V., & Pastorello, S. 2021. Algorithmic collusion with imperfect monitoring. *International Journal of Industrial Organization*, 102712. <https://doi.org/10.1016/j.ijindorg.2021.102712>
13. Claussen, J., Peukert, C., & Sen, A. 2021. The Editor and the Algorithm: Returns to Data and Externalities in Online News. <https://doi.org/10.2139/ssrn.3479854>
14. Cowgill, B., & Tucker, C. E. 2020. Algorithmic Fairness and Economics. In preparation for the *Journal of Economic Perspectives*. <https://doi.org/10.2139/ssrn.3361280> Policy
15. Daniel Zhang, Saurabh Mishra, Erik Brynjolfsson, John Etchemendy, Deep Ganguli, Barbara Grosz, Terah Lyons, James Manyika, Juan Carlos Niebles, Michael Sellitto, Yoav Shoham, Jack Clark, and Raymond Perrault. *The AI Index 2021 Annual Report*, AI Index Steering Committee, HumanCentered AI Institute, Stanford University, Stanford.
16. F. Decarolis and G. Rovigatti. 2019. From Mad Men to Maths Men: Concentration and Buyer Power in Online Advertising, *CEPR Discussion Paper 13897*, *American Economic Review*, forthcoming.
17. F. Decarolis, M. Goldmanis and A. Penta. 2020. Marketing Agencies and Collusive Bidding in Online Ad Auctions, *Management Science*, 66(10), pp. 4359-4919.
18. Fleder, D., & Hosanagar, K. 2009. Blockbuster culture's next rise or fall: The impact of recommender systems on sales diversity. *Management Science*. <https://pubsonline.informs.org/doi/abs/10.1287/mnsc.1080.0974>
19. Goldfarb, A., & Tucker, C. 2019. Digital Economics. *Journal of Economic Literature*, 57(1), 3-43. <https://doi.org/10.1257/jel.20171452>
20. Johnson, J., Rhodes, A., & Wildenbeest, M. R. 2020. Platform Design When Sellers Use Pricing Algorithms. In Available at SSRN. <https://doi.org/10.2139/ssrn.3691621> Recommender Systems
21. Kleinberg, J., Ludwig, J., Mullainathan, S., & Obermeyer, Z. 2015. Prediction Policy Problems. *The American Economic Review*, 105(5), 491-495. <https://doi.org/10.1257/aer.p20151023>
22. Lambrecht, A., & Tucker, C. 2019. Algorithmic Bias? An Empirical Study of Apparent GenderBased Discrimination in the Display of STEM Career Ads. *Management Science*, 65(7), 2966- 2981. <https://doi.org/10.1287/mnsc.2018.3093>
23. Lee, D., & Hosanagar, K. 2019. How do recommender systems affect sales diversity? A crosscategory investigation via randomized field experiment. *Information Systems Research*. <https://pubsonline.informs.org/doi/abs/10.1287/isre.2018.0800>
24. Mullainathan, S., & Spiess, J. 2017. Machine Learning: An Applied Econometric Approach. *The Journal of Economic Perspectives: A Journal of the American Economic Association*, 31(2), 87- 106. <https://doi.org/10.1257/jep.31.2.87> Reinforcement Learning
25. O'Connor, J., & Wilson, N. E. 2021. Reduced demand uncertainty and the sustainability of collusion: How AI could affect competition. *Information Economics and Policy*, 54, 100882. <https://doi.org/10.1016/j.infoecopol.2020.100882>
26. Rambachan, A., Kleinberg, J., Mullainathan, S., & Ludwig, J. 2020. An Economic Approach to Regulating Algorithms. <https://papers.ssrn.com/abstract=3597843>
27. Sutton, R. S., & Barto, A. G. 2018. Reinforcement learning: An introduction. MIT press.
28. Wan, X. (shawn), Kumar, A., & Li, X. 2020. How Beneficial are Recommendations to Consumers? Estimates of Relative Benefits of Product Recommendations to Consumers and Retailers. <https://doi.org/10.2139/ssrn.3702762> Auctions and algorithmic bidding
29. Yeomans, M., Shah, A., Mullainathan, S., & Kleinberg, J. 2019. Making sense of recommendations. *Journal of Behavioral Decision Making*, 32(4), 403-414. <https://doi.org/10.1002/bdm.2118>


 In-charge
 Department of Economics

APPLIED ECONOMETRICS

Course code: ECP-3104M

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objective: The aim of this course is to enable students learn the methodology of econometric along with estimation process. The students shall be able to use the statistical and econometric criteria of model evaluation. It enables the students to know the estimation process of qualitative repressors in their research work. The course would also enable the students to handle the time series, cross section and panel data sets with the use of software and statistical packages to analyse the data.

Course Outcomes: At the end of the course the students will be able to:

- CO₁: understand the Econometrics modelling;
 CO₂: learn about sampling distributions and their applications;
 CO₃: gain input on use of qualitative regression models; and
 CO₄: analyse the implications of time series analysis.

Instruction for examiners/Examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Econometrics- Nature, Meaning, Scope and Methodology; Types of Econometrics Models: - OLS with Assumptions, Estimation and Properties; Statistical Tests of Significance of the Estimates- Tests of Goodness of Fit with R^2 Adjusted R^2 .

Unit-II

Sampling Distribution of the Least Square Estimates, Standard Error Test of Least Square Estimates, Confidence Interval of Least Square Estimates, Z test, T test Econometric Problems- Nature, Causes, Consequences, Detection and Remedial Measures of the Problems of Multicollinearity and Heteroscedasticity.

Unit-III

Nature, Causes; Consequences, Detection and Remedial Measures of the Problems of Autocorrelation; Test Procedures and Model Selection- Tests of Specification and Mis-specification, Measurement, Criteria for Model Selection; Dummy Variables, Qualitative regression models: Logit, Probit and Tobit Model.

Unit-IV

Time Series Analysis: Stationary and Random walk model, Unit Root tests- ADF, PP, KPSS, Co-integration, Engle Granger Test, Johansen Test- Error Correction Model;

Suggested Readings:

1. Gream, W. 2000. *Econometrics Analysis. 5th Edition, Prentice Hall.*
2. Goldberder, A.S. 1998. *Introductory Econometrics. Harvard University Press, Cambridge.*
3. Gujarati, D. 2002. *Basic Econometrics. 4th Edition, McGraw Hill.*
4. Gujarati, D. 2012. *Econometrics by Example. Palgrave Macmillan.*
5. Amemiya, T. 1985. *Advanced Econometrics, Harvard university Press, Cambridge, Mass.*
6. Intrilligator, M.D. 1978. *Econometric Methods, Techniques and Applications. Prentice Hall Englewood Cliffs, New Jersey.*
7. Johnson, J. 1991. *Econometric Methods. McGraw Hill.*
8. Kmenta, J. 1998). *Elements of Econometrics. University of Michigan Press, New York.*
9. Koutsoyiannis, A. 1977. *Theory of Econometrics. The Macmillan Press.*
10. Maddala, G.S. 1993. *Econometric Methods and Application, Aldershot U.K.*
11. Theil, H. 1981. *Introduction to Econometrics. Prentice Hall of India, New Delhi.*
12. Wooldridge, J.E. 2014. *Introductory Econometrics: A Modern Approach. 5th Edition, Cengage Publication.*
13. Cameron, A.C. and Trivedi P. K. 2010. *Microeconometrics Using STATA: Revised Edition, Stata Press.*


 in-charge
 Department of Economic

B.P.S. Mahila Vishwavidyalaya Khanpur Kalan, SonapatDEPARTMENT OF ECONOMICSMinutes of the Meeting of post Graduate Board of Studies in Economics

A meeting of post Graduate Board of Studies in Economics held on 20th January 2024, at 11.00 am in the Department of Economics to discuss the following agenda item:

Agenda Items:

1. To Consider and approve scheme and syllabus of Pre Ph.D. Economics w.e.f. session 2023-24.
2. To approve the minutes of DRC for registration of Ms Hema in economics
3. Any other time with the permission of the chair.

The Following were present in the meeting:

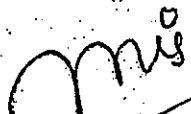
Dr. Anju Rani	In-charge
Prof. Manoj Siwach	External Member
Prof. Surender Mor	Member
Dr. Priyanka	Member (Alumni)

The board discussed the aforesaid agenda at length and approved the following:

Item 1: The Board approved the scheme and syllabus of Pre PhD Economics with minor modification for the session 2023-24.


Item 2: The Post Graduate Board approved the synopsis for the registration of Ms Hema in Ph.D. economics approved by the DRC in its meeting held on 17 January 2024.

Meeting ended with vote of thanks to chair.


(Dr. Anju Rani) 20/01/2024


(Prof. Manoj Siwach) 20/01/24


(Dr. Priyanka) 20/01/2024


(Prof. Surender Mor) 20/01/24

o/c

Faculty of Social Sciences
Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat, Haryana

The minutes of the meeting of the Faculty of Social Sciences (FSS) held on 15.02.2024 at 11:00 a.m. in the office of the Dean, FSS, BPSMV

Members Present:

1. Prof. Ravi Bhushan, Dean, FSS
2. Dr. Sangita Sapra, Principal, GCW Murthal, Sonapat
3. Dr. Sandeep Kandhwal, Principal, GCW Madlaudha, Panipat
4. Dr. Kokila Malik, Chairperson, department of Geography
5. Dr. Rampal, Chairperson, Department of Political Science
6. Dr. Archana Malik, in-charge, Department of History & Archaeology
7. Dr. Anju, in-charge, Department of Economics
8. Dr. Deepali Mathur, Assistant Professor, Department of Social Work
9. Assistant Registrar (Academic) (Nominee of the Registrar)

Proceedings:

Agenda 1: To discuss and approve the scheme & syllabus of History subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The in-charge, Department of History & Archaeology presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of History subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, History.

Decision: Discussed & Approved

Agenda 2: To discuss and approve the scheme & syllabus of History subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the Department of History & Archaeology, BPSMV

Statement: The in-charge, Department of History & Archaeology presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of History subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the Department of History & Archaeology, BPSMV. The same has been approved by the UGBOS, History & Archaeology.

Decision: The FSS discussed the proposal and approved it in-principle with the recommendation that the said programme be launched once the required faculty with prescribed qualifications and infrastructure are in place.

Pradeep
15/2/24

Sangita Sapra
15/2/24

Wahid

Deepali Mathur

Amos

AS

Dr.

16/2/24

Agenda 3: To discuss and approve the scheme & syllabus of Economics subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The in-charge, Department of Economics presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of Economics subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, Economics.

Decision: Discussed & Approved

Agenda 4: To discuss and approve the scheme & syllabus of Economics subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the Department of Economics, BPSMV

Statement: The in-charge, Department of Economics presented the scheme (for 08 semesters) and syllabus (for the first 02 semesters) of Economics subject for '04 Years Undergraduate Honours with Research (Single Major) Programme' to be offered by the department of Economics, BPSMV. The same has been approved by the UGBOS, Economics.

Decision: Discussed and Approved

Agenda 5: To discuss and approve the scheme & syllabus of Political Science subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The Chairperson, Department of Political Science presented the scheme (for 02 semesters) and syllabus (for the first 02 semesters) of Political Science subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, Political Science.

Decision: Discussed & Approved

Agenda 6: To discuss and approve the scheme & syllabus of Social Work subject for '04 Years B.A. Honours with Research (Single Major) Programme' to be offered by the Department of Social Work, BPSMV

Statement: The Chairperson, Department of Social Work presented the scheme (for the first 02 semesters) and syllabus (for the first 02 semesters) of Social Work subject for '04 Years B.A. Honours with Research (Single Major) Programme' to be offered by the department of Social Work, BPSMV. The same has been approved by the UGBOS, Social Work.

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Decision: Discussed & Approved

Agenda 7: To discuss and approve the scheme & syllabus of Geography subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV

Statement: The Chairperson, Department of Geography presented the scheme (for 06 semesters) and syllabus (for the first 04 semesters) of Geography subject for '04 Years Undergraduate Honours (Multidisciplinary) Programme' to be offered by BPSIHL and affiliated colleges of BPSMV. The same has been approved by the UGBOS, Geography.

Decision: Discussed & Approved

Agenda 8: To discuss and approve the scheme & syllabus of value added course B-VAC-405 'Gurukul Tradition & the Philosophy of Bhagat Phool Singh'

Statement: The Dean, FSS presented the scheme and syllabus of value added course B-VAC-405 'Gurukul Tradition & the Philosophy of Bhagat Phool Singh' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved *and recommended to be taught compulsorily to all the students of the university. RC*

Agenda 9: To discuss and approve the scheme & syllabus of value added course B-VAC-204 'Cultural History of Haryana'

Statement: The in-charge, Department of History & Archaeology presented the scheme and syllabus of value added course B-VAC-204 'Cultural History of Haryana' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 10: To discuss and approve the scheme & syllabus of value added course B-VAC-207 'Indian Heritage & Civilization'

Statement: The in-charge, Department of History & Archaeology presented the scheme and syllabus of value added course B-VAC-207 'Indian Heritage & Civilization' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 11: To discuss and approve the scheme & syllabus of value added course 'Community Engagement & Sustainable Development Goals'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of value added course 'Community Engagement & Sustainable

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Development Goals' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 12: To discuss and approve the scheme & syllabus of value added course 'Social Work Response to Substance Abuse'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of value added course 'Social Work Response to Substance Abuse' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 13: To discuss and approve the scheme & syllabus of skill enhancement course (SEC) 'Life Skill Education.'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of SEC 'Life Skill Education' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 14: To discuss and approve the scheme & syllabus of skill enhancement course (SEC) 'Field Work Skill: Working with People'

Statement: The Chairperson, Department of Social Work presented the scheme and syllabus of SEC 'Field Work Skill: Working with People' as part of the common pool of courses prescribed the University.

Decision: Discussed & Approved

Agenda 15: To discuss and approve the revised scheme, ordinance & syllabus of M.Sc. Geography

Statement: The Chairperson, Department of Geography presented the scheme and syllabus of M.Sc. Geography programme. The same has been approved by the PGBOS, Geography.

Decision: Discussed & Approved


Agenda 16: To discuss and approve the revised scheme & syllabus of PhD Course Work (Economics) offered by the Department of Economics, BPSMV

Statement: The in-charge, Department of Economics presented the scheme and syllabus of PhD Course Work (Economics) offered by the department of Economics, BPSMV. The same has been approved by the PGBOS, Economics.

Rachna
15/11/24

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Zeevani Mathan



Decision: Discussed and Approved

Agenda 17: To discuss and approve the scheme & syllabus of PhD Course Work (Political Science) offered by the Department of Political Science, BPSMV

Statement: The Chairperson, Department of Political Science presented the scheme and syllabus of PhD Course Work (Political Science) offered by the department of Political Science, BPSMV. The same has been approved by the PGBOS, Political Science.

Decision: Discussed and Approved

The meeting concluded with the vote of thanks proposed by the Dean, FSS.

Signatures of the Members:

Prof. Ravi Bhushan 25/11/2024

Dr. Sandeep Kandhwal 15/11/24

Dr. Sangita Sapra 15/10/24

Dr. Kokila Malik

Dr. Rampal

Dr. Archana Malik 15/12/24

Dr. Anju

Dr. Deepali Mathur Deepali Mathur

Assistant Registrar (Academic) MP

ANNEXURE-69

**BPS Mahila Vishwavidyalaya, Khanpur kalan, Sonipat
MSM Institute of Ayurveda**

**ORDINANCE FOR
AYURVEDA VACHASPATI**

i.e. M.D. (AYURVEDA)

ORDNINANCE NO. BPSMV/MSM/P.G (.....)

*(Adapted from Govt. of India Gazette Notification No.4-9072016- P.G.
Regulation, dated Nov 2016 - Indian Medicine Central Council (Post
Graduate Ayurveda Education Regulations, 2016)*

(Ordinance shall come into force with effect fromonwards.)

1. Short title, Commencement and Definitions:

1.1. Short title and commencement: This ordinance is based on NCISM (National Commission for Indian System of Medicine) for minimum standards and procedure for award of PG Degree regulations. No. 4-90/2016-P.G. Regulation dated 7.11.2016 The ordinance shall be applicable from academic session 2024-25.

1.2. Definitions:

1.2.1. Programme stands for Ayurveda Vachaspati, Kyachikitsa, i.e. M.D(Ayurveda)-Kayachikitsa. Nearest terminology of modern subject: Doctor of Medicine.

1.2.2. Programme stands for Ayurveda Vachaspati, Dravyaguna, i.e. M.D(Ayurveda)-Dravyaguna. Nearest terminology of modern subject: Doctor of Indian Materia Medica & Pharmacology.

(Handwritten signatures and stamps)

PG Ordinance, M.S.M Institute of Ayurveda, BPSMV

Sr.no	Name of Speciality	Nomenclature of Degree	Nomenclature of Department	Nearest Terminology of Modern Subject
1	Kayachikitsa	Ayurveda Vachaspati (MD- Ayurveda) Kayachikitsa	Kayachikitsa	Internal Medicine
2	Dravyaguna	Ayurveda Vachaspati (MD- Ayurveda) Dravyaguna	Dravyaguna	Indian Materia Medica & Pharmacology.

1.2.3. BPSMV stands for Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

1.2.4. NCISM stands for National Commission for Indian System of Medicine.

1.2.5. MSMIOA stands for Madu Singh Memorial Institute of Ayurveda.

1.2.6. Course Work (CW) means courses of study prescribed by the University/Department/Institution to be undertaken by a student registered for the P.G Degree.

1.2.7. Plagiarism means the practice of taking someone else's work or idea and passing them as one's own.

1.2.8 Eligibility Criteria for Admission-

A citizen of India possessing the degree of Ayurvedacharya (Bachelor of Ayurveda Medicine and Surgery) after completion of compulsory rotatory internship from a recognised University or Board or Medical Institution specified in the Second Schedule to the Indian Medicine Central Council Act 1970 and enrolled in Central or State register of Indian System of Medicine shall be eligible for admission in the post graduate degree courses.

1.2.9 Only female candidates are eligible for admission in MD ayurveda , M.S.M Institute of

PG Ordinance, M.S.M Institute of Ayurveda, BPSMV

Principal
M.S.M. Institute of Ayurveda
B.P.S. Mahila Vishwavidyalaya
Khanpur Kalan, Distt. Sonapat (U.P.)

Ayurveda, BPSMV.

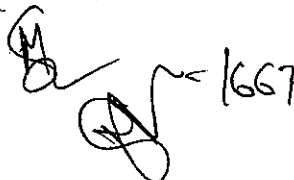
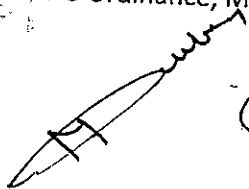
2. Procedure of Admission:

- 2.1. A person possessing the degree in Ayurveda of a University or Board or medical institution specified in the Second Schedule to the Act Shall be eligible for admission in the post-graduate degree course.
- 2.2. The admission shall be made on the basis of merit list of AIAPGET (All India Ayurveda Post Graduate Entrance Test) and centralized/state counselling as per the case may be or as per the directions of the statutory body revised from time to time.
- 2.3. Reservation for all categories shall be applicable as per State Government /Central Government Policy. Final number and distribution of seats in each categories shall be filled by SKAU, Kurukshetra.
- 2.4. Out of total seats, 25% seats will be reserved for the candidates passing or qualifying BAMS from M.S.M Institute of Ayurveda.


3. Period of Study and Attendance:

- 3.1. The student shall have to undergo a study for a period of three years after the admission.
- 3.2. The student shall have to attend at least seventy five percent of total lectures, Practicals and Clinical tutorials or classes to become eligible for appearing in the examination.
- 3.3. The students shall have to attend the hospital and other duties as may be assigned to them during the course of study.
- 3.4. The students shall have to do Resident duties in their respective departments like Pharmacy, Hospital, Herbal Garden, and Laboratory during entire period.
- 3.5. The students shall have to attend special lectures, demonstrations, seminars, study tours and such other activities as may be arranged by the teaching departments.
- 3.6. The maximum duration for completion of the course shall not exceed beyond the period of six years from the date of admission to the course. Stipend in lien of the training period will only be payable for the regular duration i.e. 36 months only.
- 3.7. Web based centralized biometric attendance system shall be required for the attendance of post-graduate students and manual attendance at department level in which student is pursuing the post-graduate course.
- 3.8. If the PG scholar get selected for a permanent appointment in any government body during the tenure of course he/she may join the service and may continue the study after getting due

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permission from the employer within 3 months from joining of the service. If the scholar fails to resume his or her study after three months of joining, his/her admission will be deemed cancelled and he/she will be liable to refund the whole amount of stipend/ emoluments paid to him/her since his/her joining of the course along with bond amount. However, the Vice Chancellor may extend this period if deemed fit. In case of rejoining the study the scholar must fulfil the criteria of 75% attendance in each year and thesis completion before appearing for the final examination. If the candidate fails to fulfill these criteria he/she will not be eligible to appear for the final examination.

3.9. The students undergoing M.D./M.S. (Ayurveda) courses are not permitted to undertake any paid or unpaid appointments/work/service or engage himself/herself in self-employment. The candidate is directed to obtain N.O.C from the university while submitting an application for any new job/appointments. The defaulters are liable for disciplinary action such as recovery of stipend and termination of admission.

4. Teaching Methodology:

4.1. Intensive training shall be provided in classical knowledge along with comparative and critical study in the respective specialty.

4.2. The emphasis shall be given on intensive applied and hand on training.

4.3. The students shall have to acquire the knowledge about the methods and techniques of research in the respective fields making use of Information Technology.

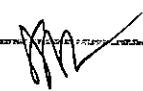
4.4. The students shall have to undertake training in teaching methodology and research methods and shall have to participate in the teaching and training programs of Under-Graduate students or interns in the respective subjects during the course of studies.

4.5. In the first year of the course, the students have to acquire knowledge in the subject of Research Methodology and Bio Statistics applied aspects of the fundamentals of Ayurveda.



4.6. In the clinical training, the student shall have to acquire knowledge of independent work as a specialist.

4.7. The M.D./M.S. (Ayurveda) students will have to work as residents. They will have to complete all the clinical records pertaining to the patients. They will have to assist the concerned physician/teacher in conducting hospital rounds and OPD. They will have to attend hospital emergency and night duties. All the students will have to attend hospital duties on Sunday and Holiday also. They shall be required to take prior permission and approval for station leave from Chairman/HOD.

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4.8. The students shall have to undergo training in the department concerned and shall maintain month-wise record (log book) of the work done during course of study in the speciality opted by him/her as under.

- a) study of literature related to speciality.
- b) Regular clinical training in the hospital in respective department.
- c) Details of surgical operations and other different procedures assisted or done independently by M.D./M.S. (Ayurveda) candidates.
- d) Practical training of research work carried out in the department, for student of pre-clinical and para-clinical subject.
- e) Active participation in various seminars, symposia and discussions.
- f) Progress of the work done on the topic of dissertation.

The record (log) books shall be checked and assessed periodically by the faculty members imparting the training.

5. Medium of Instructions: Hindi, Sanskrit or English.

6. Research advisory committee (RAC):

Research advisory committee comprising the following shall be constituted for each PG Scholar to guide her in pursuing the research smoothly and effectively:

- Research supervisor of the candidate Convener
- One faculty member from the concerned department preferably in related research area Member
- One faculty member from related / allied department / institute, preferably from same faculty Member

RAC shall have the following responsibilities:

6.1 To review the research proposal and finalise the topic of research.

6.2 To guide the research scholar in developing the research design and methodology of research and identify the course she may have to do.

6.3 To periodically guide the research scholar.

7. Constitution of Department Research Committee (DRC):

Department Research Committee shall consist of the following:

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7.1 Chairperson of the concerned department Chairperson

7.2 All professors and associate professors of the concerned departments

7.3 One assistant professor by rotation for two years from those eligible for appointment as research supervisor

7.4 Dean of the concerned faculty

7.5 The research supervisor (in case he/she is not a member of DRC) shall be invited to the DRC's meeting as a special invitee for his/her candidate(s).

7.6 Two/fifths of the total members with at least one out of two outside experts shall constitute a quorum for the Departmental Research Committee.

7.7 Chairperson of the concerned Department, on behalf of the Department Staff Committee (DSC), shall place the application(s) for registration along with the recommendations of the DSC before the Departmental Research Committee (DRC). DRC shall invite the candidate(s) to defend their synopsis.

7.8 The DRC shall assign research supervisor to each admitted candidate. For subject of interdisciplinary/inter speciality nature, the DRC may recommend the appointment of a Joint Supervisor from other Universities/UTDs/institutes of BPSMV/Research Laboratories of recognized Indian or foreign Universities and R&D institutions.

7.9 All professors and associate professors serving in the concerned department will be eligible for appointment as research supervisor. Assistant professors with minimum five years of teaching experience shall also be eligible for appointment as research supervisor.

7.10 The ratio of guide student will be maintained as 1:3 per year in case of Professor and 1:2 per year in case of Reader or Associate Professor. The teacher student ratio shall be 1:1 in case of Lecturer or Assistant Professor having minimum of five years teaching experience.

7.11 The DRC may either reject the synopsis or may suggest suitable changes in it for reasons to be recorded. In the latter case, the candidate shall be given 02 months to resubmit the synopsis to the Department.

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7.12 The Institutional Ethical committee is a independent body whose responsibility is to ensure the protection of the rights , safety & wellbeing of human subject involved in the trial by among other things reviewing, approving and providing continuing review of trial protocol and amendments.

7.13 The Institutional Animal Ethics committee is responsible for approving & monitoring research within animal research establishments including carrying out inspection of animals & facilities.

7.14 A registered student, in consultation with her supervisor, may modify the topic of her research duly recommended by the PGBoS.

7.15 Change of supervisor :

The change of research supervisor may be allowed in following circumstances:

- a) the research supervisor has expired or has left the services of bpsmv or proceed on leave/deputation of more than one year, then in this condition, head/incharge of the department will act as supervisor of the research scholar.
- b) by mutual consent of both supervisor and research scholar.
- c) in case of extreme hardship where it becomes almost impossible for candidate to work/continue her research work with allotted supervisor or in case the supervisor or the candidate request for the change of supervisor on valid/genuine grounds. The candidate/supervisor will represent to chairperson of the department who will put the matter before the departmental research committee. However the change in such cases will be allowed only after the approval of academic council.
- d) the co-supervisor can be added within two years of registration of candidate to PG program on recommendation of RAC and ratified by DRC.

8. Duration of Programme:

8.1. The duration of the programme of instruction for Postgraduate degree of Ayurveda Vachaspati. M.D. (Ayurveda) Dravyaguna Vigyan, shall be of 03 years.

8.2. The period of three years will be divided as follows:

First year – 12 months

Second year – 12 months

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9.

(A) **Dissertation /Thesis-**

- (1) Applicability Every student shall carry out work on an assigned research project, under guidance of recognised postgraduate teacher(s) , the result of which shall be written up and submitted in the form of a thesis.
- (2) Work for writing Thesis is aimed at contributing to the development of a spirit of enquiry, besides exposing the candidate to the techniques of research ,critical analysis, acquaintance with the latest advances in medical sciences and manner of identifying and consulting available literature
- (3) Central Scientific Advisory Post Graduate Committee appointed by Central Council of Indian Medicine shall suggest the area of Research and topics to be focused every academic year to make campaigning of evidence based Ayurveda to the need of global standards and achieve publications and the same shall be followed by University Committee while approving the Dissertation Title.
- (4) The Title of the Dissertation along with the synopsis ,along with the approval of the Ethics Committee constituted as per regulations of university ,shall be submitted to the university with in a period of six months from the date of admission to the postgraduate course.
- (5) If the student fails to submit the title of dissertation and synopsis within the period specified under the sub-regulation (4) of (A), his /her admission can be cancelled or terms for final postgraduate course shall be extended for six months or in accordance with the time of submission of the synopsis to the university .
- (6) The application for the registration of the dissertation shall clearly mention full title of the dissertation with a synopsis of the proposed scheme of work indicating the familiarity of student with the proposed theme of work , name of department and the name and designation of the guide or supervisor and co-guide , if any.

(B) **Synopsis/Protocol-**

- (1) A University Research Committee(URC) shall be constituted by the university for approving the title. The university shall approve the synopsis not later than three months after submission of the synopsis .
- (2) While selecting a topic for research and designing the research project , among other things , the following aspect should be taken care of:-
 1. The feasibility of conducting the study within available resources and time frame .
 2. In case of interventional studies involving animal or human subjects, the projects and concerned departments should fulfil the ethical and other requirements necessary for human/animal experiments and necessary approval should be obtained as required under the rules and regulations in force .
 3. The project designed should satisfy statistical requirements in respect of sample size, and proposed analysis of data .

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4. It must be ensured that the same thesis topics are not repeated year after year. The synopsis protocol must accompany a disclosure/explanation if a similar study has been undertaken already under university during last five years.
5. The subject of every dissertation shall be research oriented, practical oriented, innovative and helpful in the development of Ayurveda system and the subject of the dissertation shall have relation with subject matter of the speciality.
6. Synopsis/Protocol should be submitted in following format :

Title	Page 1
Certificate from Institution	Page 2
Introduction/Background including lacunae in existing knowledge	Page 3
Review of literature	Page 4-6
Objectives of research project	Page 7
Content/Subject/Materials and Methods including plan of statistical evaluation	Page 8-10
List of references (Vancouver system of references)	Page 11-12
Appendix, if any (consent form, data sheet, etc.)	

- (3) The thesis protocol must be presented and discussed in the meeting of department concern to ensure that the design the protocol fulfils the statistical requirements, before it is finalised. The need for consideration of the protocol by Institutional Ethics Committee must be considered.
- (4) The Head of the institution, while forwarding the protocol of the university shall certify that the protocol (synopsis) fulfils all the requirements stipulated by the faculty of Ayurveda of the university.
- (5) The university shall put the protocol before the Institutional Ethics Committee (IEC) to obtain clearance from it before the consideration of University Research Committee for giving approval.
- (6) In case there is any objection(s) of University Research Committee. The protocol should be referred back to the supervisor with the observations of University Research Committee, through Head of Institution, for suggested clarifications/modifications within specified time frame. The thesis-protocols, revise thesis-protocol and related matters would be submitted to BRS for consideration and approval.
- (7) Once the title for dissertation is approved by the University Research Committee of the University, the student shall not be allowed to change the title of the proposed theme of work without permission of university.
- (8) Ten copies of the title of the dissertation along with the synopsis be submitted to the university.

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- (9) After approval of the University Research Committee the same will be sent to the Controller of Examination for approval of the Vice-Chancellor.
- (10) The University shall display the approved synopsis of dissertation on their website .


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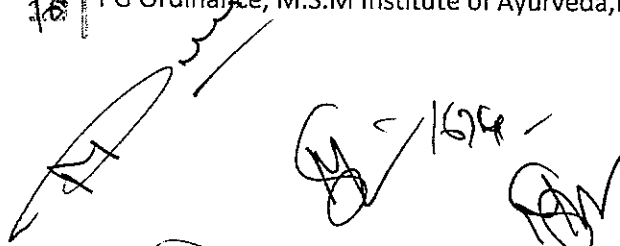
Thesis:

- (1) Five hard copies of the thesis with two copies of summary and one electronic/soft copy of the thesis should be submitted in the following general format-
- (a) Title Page : title page should mention the topic of the thesis, Degree(with discipline) for which the thesis is being submitted, name and educational qualifications of the candidate, supervisor and co-supervisor(s), name of institution where the thesis has been undertaken along with the name of the University and session. The title cover should be in standard format as specified in the ANNEXURE-1 .The colour of the title cover of the thesis shall be Neel(Shri Krishna) Varna(Torquoise Blue).
- (b) Declaration by candidate: The candidate must submit a declaration that the contents of the thesis have not been submitted earlier in candidature for any degree.
- (c) Certificate from Institution: The thesis should be accompanied by a certificate issued by the supervisor and co-supervisor, head of the department, and counter signed by the Head of institution certifying that the candidate has undertaken the thesis work in the department under the direct guidance of the supervisors and that the thesis fulfil all the requirements stipulated by the faculty of the university .
- (d) Standard structural format of the thesis –
- 1)Required certificates
 - 2)Acknowledgements
 - 3) Table of contents
 - 4) Glossary of Abbreviations
 - (e) Text of thesis-
- 1) Introduction/ Background
 - 2) Review of literature
 - 3) Objectives of research
 - 4) Patients/Subjects/Materials and Methods
 - 5) Results/Observation
 - 6) Discussion
 - 7) Conclusions and recommendations
 - 8) Presentation of thesis results to scientific forums and publications in scientific journals , if any
 - 9) Index of references: Vancouver system of references
 - 10) Appendix

(2)Thesis must show a good academic standard, satisfactory literary presentations and format in all respects.

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(3) No student shall be allowed to submit the dissertation before six months of completion of course and the student shall continue his regular study in the institution after submission of dissertation to complete three years.

(4) The dissertation shall contain the methods and data of the research carried out by the student selected by him and completed under the guidance of the guide or supervisor approved by the university .

(5) The thesis must be typed on both sides of A4 size paper with a margin of one inch on either side .The typing should be done in font size of 12 with the fonts of Times New Romans with 1.5 line spacing . For devanagiri scripts kritidev 10 fonts in the font size of 14 with 1.5 lines spacing should be used

(6) The dissertation shall consist of note less than 100 pages and forty thousand words .

(7) The dissertation shall contain, at the end ,a summary of not more than 1500 words and the conclusion not exceeding 1000 words.

(8) To facilitate appointment of examiners each institute shall send a list of the thesis in the following format : Serial number, Institution, Department, Candidate, Supervisor , and title, one month before the last date of submission of the thesis of the faculty .


(9) Five copies of the bound dissertation along with certificate from the supervisor or guide shall reach the office of the C.O.E of the University four months before the final examination .

(10) The student shall be permitted to appear in the final examination of post graduate degree college only after approval of the dissertation by the examiners.

(11) Interdisciplinary research may be done by co-opting the guide or the supervisor from the concerned speciality .

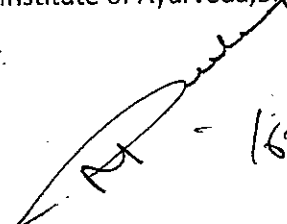

(12) if a para-clinical or pre-clinical subject student takes a thesis topic involving clinical trials then he/she may opt clinical teacher of speciality concerned as co-guide for preparing the thesis.

(13) If the student fails in theory or practical in the final examination ,he/she can appear in the subsequent examination without requiring to submit a fresh dissertation.


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10. Plagiarism Check

The following guidelines must be adhered to while submitting the plagiarism report at the time of submission of P.G. thesis:

10.1 The Plagiarism Report generated through the software authorized by the University and issued by the central library of BPSMV shall be appended to the thesis.

10.2 The central library shall submit soft copy of the thesis to INFLIBNET within a month of the award of degree for hosting in Shodh Ganga e-repository.

10.3 The awarded thesis shall be added to the institutional repository and uploaded on the University website by the central library. The related information after uploading shall be provided to the Director, IQAC of the BPSMV.

10.4 The similarity check for plagiarism shall exclude the following:

10.4.1 All quoted work reproduced with all necessary permission and/or attribution.

10.4.2 All references, bibliography, table of content, preface and acknowledgements.

10.4.3 All generic terms, laws, standard symbols, Mathematical Formula, Supervisor name, Institutional, Departments, Quotes, and standards equations

10.5 The research work carried out by the researcher shall be based on original ideas, which shall include abstract, summary, hypothesis, observations, results, conclusions and recommendations only and shall not have any similarities. It shall exclude a common knowledge or coincidental terms, up to fourteen (14) consecutive words.

10.6 Plagiarism would be quantified into following levels in ascending order of severity for the purpose of its definition:

Level 0: Similarities up to 10% - Minor similarities, no penalty

Level 1: Similarities above 10% to 40% - Such student shall be asked to submit a revised script within a stipulated time period not exceeding 6 months.

Level 2: Similarities above 40% to 60% - Such student shall be debarred from submitting a revised script for a period of one year.

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Level 3: Similarities above 60% - registration to Ph.D. programme shall be cancelled.

10.7 Regarding Self-Plagiarism or cases where published work of the student is shown as similarity in the check, a certificate (Plagiarism Self Exclusion Certificate) has to be issued by the Supervisor specifying and attaching the articles that have been published by the student from thesis work. Only these articles should be excluded from the check. No other article of the Supervisor or the student should be excluded from the check.

10.8 The final Plagiarism check from the library is essential so that the correct report is submitted at the time of thesis submission.

10.9 The Central Library will issue the Plagiarism Verification Certificate duly countersigned by the University librarian/Professor In-charge that the similarity index is acceptable as per UGC guidelines applicable from time to time and adopted by the University. The original certificate has to be included in the thesis.

11. Evaluation of dissertation:

11.1 The dissertation shall be assessed by two external examiners and two internal examiners appointed by the University.

11.2 The dissertation shall be accepted only after the approval of examiners appointed under sub-regulation (14.2) and in case of disapproval by one external examiner, the dissertation shall be referred to third external examiner approved by the University concerned.

11.3. If the dissertation is not accepted by two external examiners, the same shall be returned to the student with the remarks of the examiners and the student shall resubmit the dissertation after making necessary improvement in the light of examiners' report to the University within a further period of six months.

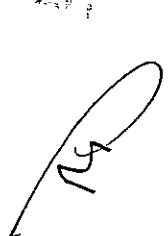


11.4. The student shall be permitted to appear in the final examination of post-graduate degree course only after approval of the dissertation by the examiners.

12. Examination and Assessment-

12.1. The post-graduate degree course shall have two examinations in the following manner, namely:-

12.1.1. The preliminary examination shall be conducted at the end of one academic year after admission;

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12.1.2. The final examination shall be conducted on completion of three academic years after the admission to postgraduate course;

12.1.3. Examination shall ordinarily be held in the month of June or July and November or December every year or as decided by the University.

12.1.3. Examination shall ordinarily be held in the month of June or July and November or December every year or as decided by the University.

12.1.4. The examination shall be held in written , practical or clinical & oral examination.

12.2. Eligibility to appear in the examinations-

- A student who possesses the qualification laid down in Clause-6 and produces the following certificates signed by the Chairman/Head of Department concerned and countersigned by the Head of the College/ Institution recognized by the University for M.D./M.S. (Ayurveda) Course where he/she received the training shall be eligible to appear in the examination.

In case of MD/MS (Ayurveda) preliminary examination-

- Of good character
- Of fulfillment of the condition of attendance
- Certification of Log-Book maintenance by the HOD.
- Of assessment of the work done by the student in first year

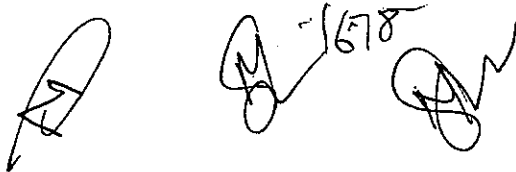
In case of MD/MS (Ayurveda) Final examination-

- Of good character
- Of fulfillment of the condition of attendance
- Certification of Log-Book maintenance by the HOD.
- Of assessment of the work done by the student in second & third year.
- Of having completed training for a period of not less than 36 months in a Department/ College/Institute.
- Of submission of thesis four months before the final examinations.

12.3. For being declared successful in the examination, student shall have to pass all the subjects separately in preliminary examination;

12.4. A candidate shall be declared successful in MD/MS (Ayurveda) final examination only when the thesis has been accepted and student has required to obtain minimum fifty per cent. Marks in practical and theory subjects separately to be announced as pass;

12.5. If a student fails in preliminary examination, he shall have to pass before appearing in the final examination;



12.6. If the student fails in theory or practical in the final examination, he can appear the subsequent examination without requiring to submit a fresh dissertation:

12.7. The subsequent examination for failed candidates shall be conducted at every six months interval;

12.8. The post-graduate degree shall be conferred after the dissertation is accepted and the student passes the final examination with minimum 50% marks in theory as well as clinical/Practical & oral examinations separately. There shall be no grace marks.

12.9. The examination shall be aimed to test the clinical acumen, ability and working knowledge of the student in the practical aspect of the speciality and his fitness to work independently as a specialist.

12.10. The clinical examination shall be judge the competence of the student in Ayurveda and scientific literature of the speciality.

12.11. The viva-voce part of the practical examination shall involve extensive discussion on any aspect of subject or speciality.

12.12. Provision of three attempts has to be availed by the student within two years from the date of her admission to MD/MS Ayurveda Course.

13. Subjects of examination:

13.1. The preliminary examination at the end of one academic year after admission shall be conducted in the following subjects, namely:-

13.1.1. Paper I - Paper A - Research Methodology

Paper B – Bio or Medical Statitics

13.1.2. Paper II – Paper A – Applied aspects regarding concerned subjects.

Paper B - Concerned subject

13.1.3. Theory-

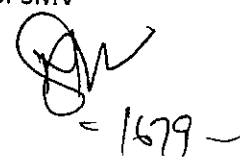
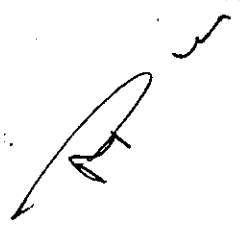
➤ The Preliminary Examination shall be conducted at the end of one academic year after admission, in the following subjects, namely-

Paper 1- Research Methodology and Medical Statistics

Paper 2- Applied aspects regarding concerned subjects as fundamentals of subject concerned of Ayurveda with an emphasis on applied aspects along with relevant studies of basic sciences of modern medicine.

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- The Practical Examination of each subject shall be conducted by a team of two examiners out of which one examiner shall be external from any other University and one internal examiner from the department concerned. The internal examiner will be appointed from among the teachers on basis of seniority by rotation by the chairman/Head of the Department concerned.

The roster of internal examination shall be maintained.

13.2. The student shall have to undergo training in the department concerned and shall maintain month-wise record of the work done during the last two years of study in the speciality opted by him/her as under:-

13.2.1. Study of literature related to specialty;

13.2.2. Regular clinical training in the hospital for student of clinical subject;

13.2.3. Practical training of research work carried out in the department, for student of pre-clinical and para-clinical subject;

13.2.4. Participation in various seminars, symposia and discussions; and

13.2.5. Progress of the work done on the topic of dissertation.

13.3. The assessment of the work done by the students of first year post-graduate course during the first year as specified shall be done before the preliminary examination.

13.4. The final examination will include dissertation, written papers and clinical or practical and oral examination.

13.5. There shall be four theory papers in each specialty and one practical or clinical and viva-voce examination in the concerned specialty or group of sub-specialties selected by the student for the special study.

13.6. The student shall publish or get accepted minimum one research paper on his/her research work in one journal and one paper presentation in regional level seminar.

14. Mode of examination and appointment of examiner(s)-

14.1 Assessment-

MD/M.S. (Ayurveda) First year

- (i) The Assessment of the work done during first year of students shall be carried out by all the teachers concerned collectively in the chairmanship of the chairmanship/HOD before the commencement of preliminary examination.
- (ii) The assessment of the first year students shall be carried out on the basis of applicable items specified in clause -(12) of T2.

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- (iii) The assessment shall be marked 'Satisfactory' and 'Non satisfactory'.
- (iv) Chairman / HOD shall send the assessment report of all the students to the Controller of Examination through Head of Institution before commencement Of the preliminary examination.

MD/MS (Ayurveda) Final Year

- (i) The assessment of the work done during the second and third year of the final year student shall be carried out by all the teachers concerned collectively in the Chairmanship of the Chairman/HOD before the commencement of the final examination.
- (ii) The assessment of the final year students shall be carried out on the basis of its specified in clause -(12) of 12 . .
- (iii) The assessment shall be marked as Satisfactory and Non satisfactory.
- (iv) Chairman/HOD shall be sent the assessment report of all the students to the Controller of Examination before the commencement of the final examination.

14.2 Evaluation of Theory Papers -

- (i) M.D./M.S. (Ayurveda) Preliminary Examination- There shall be two section (Part -A & Part -B) of each paper .Two separate answer sheets will be provided to the candidate. The answer books of each subject shall be evaluated by two examiner ,out which one examiner shall be external from any other university and other examiner shall be internal examiner of the examination from concerned department. Part -'A' will be evaluated by internal examiner and Part -'B' by the external examiner. The answer book of Part -"B" of Research Methodo5and Biostatistics i. e. Medical Statistics will be evaluated by eligible examiner of Statistics.
- (ii) M.D./M.S. (Ayurveda) Final Examination - The answer book of final examination shall be evaluated by a team of four examiners, out of which two examiners shall be external from any other institution and two shall be the internal examiner.
- (iii) Evaluation of paper - Paper -II by one External Examiner .

Paper -III by another External Examiner
 Paper-I by the Guode /Supervisor Concern
 Paper -IV by the second internal examiner.

14.3 Appointment of Examiner (s) -

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 Khajur Kalan, Distt. Sonapat

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- (i) The examiner shall possess atleast 5 year PG teaching experience
- (ii) The External Examiners shall not be appointed for a period of more than two years at a time and may be re – appointed after interval of one year .

15. **Facilities for post-graduate students.** The stipend and contingency shall be provided at the rates decided by the Central Government for institutes of its control or respective State Government for institutes of its control or University, as the case may be.

16. **Payment of Stipend and Contingency for the Students of P.G. Course**

- a) The students admitted on stipendary seats will be paid monthly stipend as approved by the Executive Council of the University.
- b) The stipend will be paid for a period not exceeding three years (36 months) subject to his/her maintaining satisfactory attendance, research progress, conduct and hospital work.
- c) No M.D./M.S. (Ayurveda) student shall accept any paid or unpaid assignment in Government or in private firm or body during the period of his/her study.
- d) The students giving up studies in the middle of the session shall be required to refund the whole amount of stipend paid to him/her since joining the course along with the bond amount of Rs. 7,50,000 (Annexure-2). In the event of the death of a student during the study, no recovery of the stipend paid to him/her and the bond value shall be made.
- e) The contingency shall be provided as per the rates decided by the University from time to time.

17. **Discipline-**

- The student shall submit himself/herself to the disciplinary jurisdiction of the University which may be vested with the authority to exercise discipline under the rules.
- The Head of institute can remove the name of the student from the rolls in case his/her work and conduct is reported to be not satisfactory by the supervisor/chairman/Head of the Department/Institution. An undertaking to this effect shall be obtained from the student at time of admission.

18. **Teacher- student ratio.-**

18.1. The teacher-student ratio shall be such that the number of post-graduate teachers to the number of post-graduate students admitted per year is maintained as 1:3 in case of Professor and 1:2 in case of Reader or Associate Professor.

18.2. The teacher student ratio shall be 1:1 in case of Lecturer or Assistant Professor having minimum of five years teaching experience.

18.3. The maximum number of students in post-graduate course - The maximum number of students per year per specialty shall not exceed six.

19. **Award of Degree-** Candidates who have completed course and have been declared successful in the final examination shall be awarded the degree of Ayurveda Vachaspati (Doctor of Medicine- Ayurveda) or Ayurveda Dhanwantri (Master of Surgery- Ayurveda) subject concerned on payment of prescribed fee either in presence or absentia at his/her option at the succeeding convocation of the University.

20. **Fee:**

20.1. The program fee shall be paid by the candidate as per the guidelines issued by the University from time to time.

NO. OF PG SEATS	KAYACHIKITSA PG
Stipend per student per month	Aprox.- 42000/- as per analogy of SKAU, Kurukhetra
Course fee per student	250000/- per annum (7.5 lakh for 3 years)
Research fund for clinical Trial (will be sanctioned by BPSMV)	50,000/- per student, one time in three years.

21. VACATION AND LEAVES-

(A) (a) There shall be two terms in each academic year.

(b) Total vacations of 16 days each will be allowed to the students during summer

Seasons as decided by the Dean & Director/Principals of upgraded P.G. Centers of

affiliated colleges. The students will be allowed to avail these vacations in two equal halves i.e. 8 days for first half of students and 8 days for second half of students in each vacation. No any kind of leave can be attached with vacation however Director has power to sanction such leave in extraordinary circumstances.

(B) The students will be allowed casual leave (C.L.) up to 10 days each year. This leave can be joined with the holidays/Sundays and the students can enjoy such leave maximum up to 04 days at a time including holidays. In between holidays shall be considered as holidays. The casual leave cannot be joined with vacation and medical leave.

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Khanpur Kalan, Distt. Sonapat (Raj.)

1883

(C)

The students will also be allowed 10 days medical leave in a year on submission of medical certificate of a registered medical practitioner. This leave can't carry forward to the next academic year.

(D)

180 days maternity leave will be allowed once during the period of study to female students. No any kind of leave can be attached with this leave however Director has power to sanction such leave in extra ordinary circumstances. No stipend will be paid for such kind of leave which is sanctioned in extra ordinary circumstances. Maternity leaves are admissible only to candidates with less than two surviving children subject to the condition that the students will have to complete the required period of training before being allowed to appear in the examination.

(E)

The leave remaining un-availed during a particular academic year would lapse at the end of the academic year, and will not be carried over to next year of the course.

(F)

During miscarriage / abortion (induced or otherwise) total leaves of 45 days are admissible during the entire course, leaves are admissible irrespective of number of surviving children. Application should be supported by a certificate from a Registered Medical Practitioner/ Authorized Medical Attendant subject to the condition that the students will have to complete the required period of training before being allowed to appear in the examination.

(G)

Duty/Special leave shall be granted to the students who are deputed or allowed by the authority to take part in the sports, seminar etc. Such leave shall not exceed 15 days in a year. However, the leave could be extended maximum by 15 days in special case by the Vice-Chancellor only.

(H)

On absence of the student for more than 30 days without prior permission of the Chairman/ HOD concerned admission in M.D./M.S. (Ayu) will stand terminated automatically without any notice. The concerned, Head of the institution should issue a notice to the student(s), who remains absent from training without permission of competent authority (Chairman/HOD/Head of the Institution) for a period exceeding 7 days.

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(I)

Under special circumstances the candidate will be allowed to avail the sick leaves up to maximum 60 days under medical ground with the certificate from the Medical Board Subject to the condition that the students will have to complete the required period of training before being allowed to appear in examination.

(J)

The students admitted on non-stipendiary seats, if any, will also be governed by the above regulations.

Duty/Special leave shall be granted to the students who are deputed or allowed by the authority to take part in the sports, seminar etc. Such leave shall not exceed 15 days in a year. However, the leave could be extended maximum by 15 days in special case by the Director only.

18. Stipend:

18.1. Stipend for a period of not more than 36 months shall be paid to the students as per the guidelines of University/State Govt. of Haryana.

19. Post-graduate Degree to be Awarded:

After passing the final examination, a candidate shall be awarded the degree of :-

AYURVEDA VACHASPATI - KAYACHIKITSA i.e. Doctor of Medicine - M.D (Ayurveda) – Kayachikitsa.

20. General Guidelines:

20.1. Where this document is silent about any rule, the NCISM (erstwhile CCIM) guidelines/University Ordinance as amended from time to time will be applicable. Any new guidelines issued by the statutory body, i.e. NCISM shall be applicable.

20.2. Eligibility Criteria, Fee Structure, Academic Calendar, Examination Schedule, Sports the University Calendar and Cultural Calendar for the academic year shall be given in Prospectus.

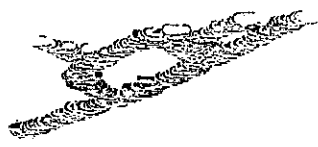
20.3. Admission, teaching schedule, preparatory holidays, examination, winter, summer vacation, shall be followed as specified in academic calendar of the University.

20.4. A student is deemed to have completed the requirements for the degree and is eligible for the award of degree if:

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Khanpur Kalan

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- 20.4.1. She has satisfied all the academic requirements as per the regulations;
- 20.4.2. She has paid all fees due from her;
- 20.4.3. There is no case of indiscipline pending against her.
- 20.4.4. Satisfied the minimum academic and residence requirements;
- 20.4.5. Satisfactorily completed the requirements for the short duration across-curricular course, industry internship and NCC/NSS as may be prescribed by the Academic Council;
- 20.4.6. A student who has completed the entire requirement listed above shall be eligible for award of degree. However, under extremely exceptional circumstances, where gross violation of the requirements is detected at any later stage, the Academic Council may recommend to withdraw the degree already awarded.
- 20.4.7. Absence of registered students from classes during a semester shall be discouraged. However, for bonafide reasons such as illness, maternity a student may be granted leave of absence as per provision of leave rules for students framed by the Academic Council.

20.5. All academic problems of the students other than those affecting the University rules and regulations framed from time to time may be looked into by a committee constituted by the Dean Academic Affairs.

20.6. A year-wise Academic Calendar shall be adopted by the Vishwavidyalaya with the exact dates for important academic events scheduled during the academic session being specified in the Calendar. In particular, the dates of the following events shall be specified: "Orientation of New Students; Registration; Late Registration; Commencement of Classes; Adding & Dropping of Courses; Last Date for Submission of Documents by New Students etc.

21. Migration:-

There will be no provision for migration.

22. The following shall be the titles of the papers in each subject:

KAYACHIKITSA			Marks		Total Marks
S.No.	Paper	Subject	Theory	Practical	
		First Year			

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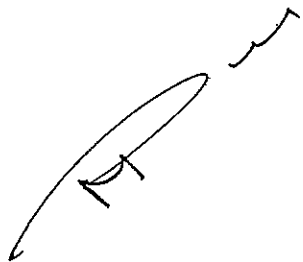
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Mahila Vishwavidyalaya
Kanjarpur Kalan, Dist. Solapur

② DRAVYA GUNA VIGYAN

S.No.	Paper	Subject	Marks		Total Marks
			Theory	Practical	
First Year					
1.	Paper-1 Preliminary	Research Methodology & Medical Statistics (Part 1&2)	100 (60+40)	100	200
2.	Paper2 DG	Dravya guna vigyan	100	100	200
Final Year (Third year)					
3.	DG Paper 1	Naam rupa vigyan	100		100
4.	DG Paper 2	Guna karma viganana	100	-	100
5.	DG Paper 3	Prayog vigyan	100	-	100
6.	DG Paper 4	Nighantu vigyan	100		100
7.	DG	Dravya guna vigyan		100	100

Syllabus:

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The following shall be the titles of the papers in each subject: SCHEME

① KAYACHIKITSA			Marks		Total Marks
S.No.	Paper	Subject	Theory	Practical	
First Year					
1.	Paper 1 Preliminary	Research Methodology & Medical Statistics (Part 1&2)	100 (60+40)	100	200
2.	Paper 2	Kayachikitsa	100	100	200
Final Year (Third year)					
3.	KC Paper 1	Fundamentals of Kayachikitsa	100		100
4.	KC Paper 2	Samanya Roga Chikitsa	100	-	100
5.	KC Paper 3	Vishishta Roga Chikitsa	100	-	100
6.	KC Paper 4	Advances in Kayachikitsa	100		100
7	KC	Kayachikitsa		100	100

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SYLLABUS FOR POST GRADUATE COURSE IN AYURVED AS PER CCIM, NEW DELHI

M.D.(AYURVEDA) PRELIMINARY - PAPER-I

RESEARCH METHODOLOGY AND MEDICAL STATISTICS

PART-A

RESEARCH METHODOLOGY

Introduction to Research

- A. Definition of the term research
- B. Definition of the term anusandhan
- C. Need of research in the field of Ayurveda

General guidelines and steps in the research process

- A. Selection of the research problem
- B. Literature review: different methods (including computer database) with their advantages and limitations
- C. Defining research problem and formulation of hypothesis
- D. Defining general and specific objectives
- E. Research design: observational and interventional, descriptive and analytical, preclinical and clinical, qualitative and quantitative
- F. Sample design
- G. Collection of the data
- H. Analysis of data.
- I. Generalization and interpretation, evaluation and assessment of hypothesis.
- J. Ethical aspects related to human and animal experimentation.
- K. Information about Institutional Ethics Committee (IEC) and Animal Ethics Committee (AEC) and their functions. Procedure to obtain clearance from respective committees, including filling up of the consent forms and information sheets and publication ethics.

Preparation of research proposals in different disciplines for submission to funding agencies taking EMR-AYUSH scheme as a model.

Scientific writing and publication skills.

- a. Familiarization with publication Guidelines-Journal specific and CONSORT guidelines
- b. Different types of referencing and bibliography.

- c. Thesis/Dissertation: contents and structure
- d. Research articles structuring: Introduction, Methods, Results and Discussions (IMRAD)

Classical Methods of Research.

Concept of Pratyakshadi Pramana Pariksha, their types and application for Research in Ayurveda.

Dravya-, Guna-, Karma-Parikshana Paddhati Aushadhi-yog Parikshana Paddhati Swastha, Atura Pariksha Paddhati, Dashvidha Parikshya Bhava, Tadvidya sambhasha, vadmarga and tantrayukti

Comparison between methods of research in Ayurveda (Pratigya, Hetu, Udaharana, Upanaya, Nigaman) and contemporary methods in health sciences.

Different fields of Research in Ayurveda

- a. Fundamental research on concepts of Ayurveda
- b. Panchamahabhuta and tridosha.
- c. Concepts of rasa, guna, virya, vipak, prabhav and karma
- d. Concept of prakriti-saradi bhava, ojas, srotas, agni, aam and koshta.

Literary Research-

Introduction to manuscriptology: Definition and scope. Collection, conservation, cataloguing.

Data mining techniques, searching methods for new literature; search of new concepts in the available literature. Methods for searching internal and external evidences about authors, concepts and development of particular body of knowledge.

Drug Research (Laboratory-based)- Basic knowledge of the following:

Drug sources: plant, animal and mineral. Methods of drug identification.

Quality control and standardization aspects:

Basic knowledge of Pharmacopoeial standards and parameters as set by Ayurvedic Pharmacopoeia of India.

Information on WHO guidelines for standardization of herbal preparations.

Good Manufacturing Practices (GMP) and Good Laboratory Practices (GLP).

Safety aspects: Protocols for assessing acute, sub-acute and chronic toxicity studies. Familiarization with AYUSH guidelines (Rule 170), CDCSO and OECD guidelines.

Introduction to latest Trends in Drug Discovery and Drug Development

-Brief information on the traditional drug discovery process
-Brief information on the latest trends in the Drug Discovery process through employment of rational approach techniques; anti-sense approach, use of micro and macro-arrays, cell culture based assays, use of concepts of systems biology and network physiology

-Brief introduction to the process of Drug development.

Clinical research:

Introduction to Clinical Research Methodology identifying the priority areas of Ayurveda
Basic knowledge of the following: -Observational and Interventional studies
Descriptive & Analytical studies

Longitudinal & Cross-sectional studies

Prospective & Retrospectives studies

Cohort studies

Randomized Controlled Trials (RCT) & their types

Single-case design, case control studies, ethnographic studies, black box design, cross-over design, factorial design.

Errors and bias in research.

New concepts in clinical trial- Adaptive clinical trials/ Good clinical practices (GCP)

Phases of Clinical studies: 0,1,2,3, and 4.

Survey studies - Methodology, types, utility and analysis of Qualitative Research methods.
Concepts of in-depth interview and Focus Group Discussion.

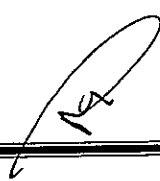

Pharmacovigilance for ASU drugs. Need, scope and aims & objectives.
National Pharmacovigilance Programme for ASU drugs.

Introduction to bioinformatics, scope of bioinformatics, role of computers in biology. Introduction to Data base- Pub med, Medlar and Scopus. Accession of databases.

Intellectual Property Rights- Different aspect and steps in patenting. Information on Traditional Knowledge Digital Library (TKDL).

.....
PART-B 40 marks

MEDICAL STATISTICS Teaching hours: 80

 
= 169/120

1. **Definition of Statistics:** Concepts, relevance and general applications of Biostatistics in Ayurveda
2. **Collection, classification, presentation, analysis and interpretation of data** (Definition, utility and methods)
3. **Scales of Measurements** - nominal, ordinal, interval and ratio scales.
Types of variables - Continuous, discrete, dependent and independent variables.
Type of series - Simple, Continuous and Discrete
4. **Measures of Central tendency** - Mean, Median and Mode.
5. **Variability:** Types and measures of variability - Range, Quartile deviation, Percentile, Mean deviation and Standard deviation
6. **Probability:** Definitions, types and laws of probability,
7. **Normal distribution:** Concept and Properties, Sampling distribution, Standard Error, Confidence Interval and its application in interpretation of results and normal probability curve.
8. **Fundamentals of testing of hypotheses:**
Null and alternate hypotheses, type I and type 2 errors.
Tests of significance: Parametric and Non-Parametric tests, level of significance and power of the test, 'P' value and its interpretation, statistical significance and clinical significance
9. **Univariate analysis of categorical data:**
Confidence interval of incidence and prevalence, Odds ratio, relative risk and Risk difference, and their confidence intervals
10. **Parametric tests:** 'Z' test, Student's 't' test: paired and unpaired, 'F' test, Analysis of variance (ANOVA) test, repeated measures analysis of variance
11. **Non parametric methods:** Chi-square test, Fisher's exact test, McNemar's test, Wilcoxon test, Mann-Whitney U test, Kruskal - Wallis with relevant post hoc tests (Dunn)
12. **Correlation and regression analysis:**
Concept, properties, computation and applications of correlation, Simple linear correlation, Karl Pearson's correlation co-efficient, Spearman's rank correlation.
Regression- simple and multiple.
13. **Sampling and Sample size computation for Ayurvedic research:**
Population and sample. Advantages of sampling, Random (Probability) and non-random (Non-probability) sampling. Merits of random sampling. Random sampling methods- simple random, stratified, systematic, cluster and multiphase sampling. Concept, logic and requirement of sample size computation, computation of sample size for comparing two means, two proportions, estimating mean and proportions
14. **Vital statistics and Demography:** computation and applications - Rate, Ratio, Proportion, Mortality and fertility rates, Attack rate and hospital-related statistics
15. **Familiarization with the use of Statistical software like SPSS/Graph Pad**

PRACTICAL

100 marks

RESEARCH METHODOLOGY

Teaching hours: 120

PRACTICAL NAME

1. Pharmaceutical Chemistry

Familiarization and demonstration of common lab instruments for carrying out analysis as per API.

2. Awareness of Chromatographic Techniques

Demonstration or Video clips of following:

- Thin-layer chromatography (TLC).
- Column chromatography (CC).
- Flash chromatography (FC)
- High-performance thin-layer chromatography (HPTLC)
- High Performance (Pressure) Liquid Chromatography (HPLC)
- Gas Chromatography (GC, GLC)

3. Pharmacology

Familiarization and Demonstration of different techniques related to:-
Drug administration techniques- oral and parenteral.

Blood collection by orbital plexuses puncturing. Techniques of anesthesia and euthanasia.
Information about different types of laboratory animals used in experimental research
Drug identification as per API including organoleptic evaluation

4. Pharmacology and toxicology

Familiarization and demonstration of techniques related to pharmacology and toxicology.

5. Biochemistry (Clinical)

Familiarization and demonstration of techniques related to basic instruments used in a clinical biochemistry laboratory – semi and fully automated clinical analyzers, electrolyte analyzer, ELISA- techniques, nephelometry. Demonstration of blood sugar estimation, lipid profiles, kidney function test, liver function test. HbA1, cystatin and microalbumin estimation by nephelometry or other suitable techniques. Interpretation of the results obtained in the light of the data on normal values.

6. Clinical Pathology

Familiarization and demonstration of techniques related to basic and advanced instruments used in a basic clinical pathology lab. Auto cell counter, urine analyzer, ESR, microscopic examination of urine.

7. Imaging Sciences

Familiarization and demonstration of techniques related to the imaging techniques.
Video film demonstration of CT-Scan, MRI-scan and PET-scan.

8. Clinical protocol development

II. MEDICAL STATISTICS

Practical hours: 20 Statistical exercises of examples from Topic number 4, 5, 8-12, 14,
15 Records to be prepared.

Distribution of Marks:

- | | |
|--|------------|
| 1. Instrumental spotting test | - 20 marks |
| 2. Clinical protocol writing exercise on a given problem | - 20 marks |
| 3. Records: | |
| 4. Research methodology | -10 Marks |
| 5. Medical statistics | -10 marks |
| 6. Viva- Voce | -40 Marks |

**M.D.-AYURVEDA PRELIMINARY
KAYACHIKITSA (Genral Medicine)**

PAPER-II

Theory- 100 marks

PART A

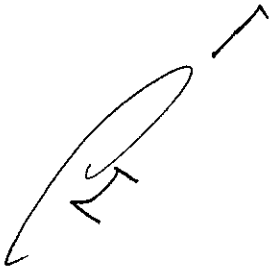
50 marks

1. Understanding of fundamental concepts of Kayachikitsa like Vriddhi and Kshaya of Dosha, Dushya, Mala with Amshaamsha Kalpana. Srotodushti, Khavaigunya, Agni, Ama (Saama and Nirama Dosha, Dhatu & Mala). Aavarana, Rogamarga, Ashayapakarsha, Dosha Gati, Kriyakala. Aushadha Sevana Kala, Anupana, Pathya-Apathya and their scientific relevance during health and disease.
2. Detailed knowledge of Rogi Roga Pariksha including detailed history taking and systemic examination of patient. Clinical implementation of Dwividha Pariksha, Trividha Pariksha, Chaturvidha Pariksha, Panchavidha Pariksha, Shadvidha Pariksha, Ashtavidha Pariksha, Dashvidha Pariksha Bhavas and Prakriyadi Dashvidha Pariksha.
3. Principles of Kayachikitsa in disease management including Shodhana, Shamana and Naimittika Rasayana.
4. Introduction of the basic principles of Modern medicine, Homeopathy, Unani, Siddha, Tibetan Medicine, Yoga and Naturopathy and their relevance in light of the basic principles of Ayurvedic medicine.

PART B

50 marks

1. Chikitsa Siddhanta of Pranavaha, Annavaha, Udakavaha, Rasadi Dhatuvaha, Malavaha & Manovaha Srotovikara.
2. Emergency medicine: Acute Severe Asthma, pulmonary oedema, myocardial infarction, cerebro-vascular accidents, water and electrolyte imbalance, haemorrhage, syncope, seizure, coma, hyperpyrexia, hypertensive encephalopathy.
3. Knowledge of conducting various medical procedures like infusions, tapping, lumbar puncture, Ryle's tube insertion, catheterization, tractions, water seal drainage, Cardio Pulmonary Ressucitation.
4. Basic knowledge of underlying principles of ECG, TMT, echo cardiography, vascular doppler studies, EEG, EMG, X-Ray, USG, CT scan, MRI, PET and their interpretation.



5. Knowledge of common Ayurvedic formulations and preparations used in treatment:

Churna- Triphala, Sitopaladi, Lavanbhaskara, Hingvashtaka, Avipattikara, Gangadhara, Shaddharana, Sudarshana, Panchasakara, Ajmodadi.

Kashaya- Dashamula, Rasnasaptaka, Asanadi, Pathyadi, Phalatrikadi, Punarnavashtaka, Gojivhadi, Mahamanjishthadi, Drakshadi Kashaya.

Asavas-Arista- Amritarishta, Kanakasava, Chitrakasava, Saraswatarishta, Ashwagandharishta, Chandanasava.

Vati- Sanjivani, Chandraprabha, Agnitundi, Chitrakadi, Khadiradi, Vyoshadi, Shankha Vati, Shiva Gutika.

Guggula-Kalpana-Triphalaguggula, Kaishoraguggula, Trayodashangaguggula, Simhanadaguggula, Yogarajaguggula, Gokshuradi guggula, Kanchanaraguggula.

Rasaushadhi- Tribhuvanakirti Rasa, Arogyavardhini Rasa, Shwasakuthara Rasa, Rasamanikya Rasa, Smritisagara Rasa, Lakshmivilasa Rasa, Sutshekhara Rasa, Pravala Panchamrita Parpati, Hemagarbhapottali Rasa.

Taila- Mahanarayana Taila, Pindataila, Prasarinyadi Taila, Ksheerabala Taila, Brihat Saindhavadi Taila, Panchaguna Taila, Amritadi Taila, Marichyadi Taila, Mahamasha Taila.

Ghrita- Mahatriphaladi Ghrita, Brahmi Ghrita, Panchtikta Guggulu Ghrita, Sukumara Ghrita, Dadimadya Ghrita, Kantakari Ghrita, Kalyanaka Ghrita.

Lehya- Chyavanaprasha Avaleha, Kushmanda Avaleha, Ashwagandha Avaleha, Agastya Hareetaki Rasayana, Drakshavaleha, Vasavaleha, Amrita-Bhallataka Rasayana.

PRACTICAL

100 marks

Content:- Daily hospital duties in OPD, IPD and casualty

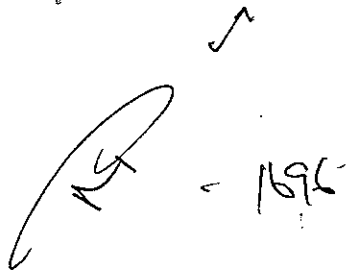
Bed-side case taking – 25 patients

Distribution of marks (practical):

1. Case records of 25 Patients in detail 20 marks

2. Bedside clinical case taking Long case

20 marks





	Short case	10 marks
3.	Medical procedures/laboratory work	15 marks
4.	Instruments and spotting	15 marks
5.	Viva voce	20 marks

REFERENCE BOOKS

- Charak Samhita -Cakrapanidutta commentry
 Sushrut Samhita -with all available commentaries.
 Ashtang Samgraha –Indu commentary
 Ashtang Hridaya –Arunḍutta and Hemadri commentry
 Cikitsadarsha - Pandit Rajesvardutta Shastri
 Kayachikitsa - Ramaraksha Pathak
 Rog Pariksha Vidhi - Priyavrat Sharma
 Panchakarma Vigyan - Haridas Sridhar Kasture
 Ayurved Nidan Chikitsa Siddhanta - Prof. R.H.Singh.
 Kayachikitsa Vol. I-IV. - Prof. Ajay Kumar
 Davidson's Principles and Practice of Medicine.
 API Text Book of Medicine.
 Harrison's Text Bok of Medicine.
 Cecil Text Book of Medicine.
 Relevant texts of concerned subjects.

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M.D.-AYURVEDA PRELIMINARY

2. DRAVYAGUNA VIGYANA

(Materia Medica & Pharmacology)

PAPER-II

Theory 100 Marks

PART - A

50 marks

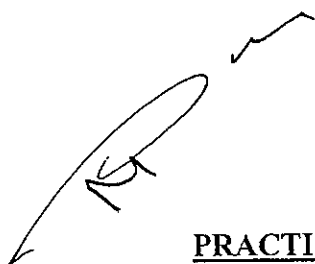
1. Panchamahabhuta siddhanta, Samanya Vishesha siddhanta, Tridosha siddhanta. Extensive study on classifications of Dravya as described in Brihatrayi.
2. Applied aspects of Rasa, Guna, Virya, Vipaka and Prabhava
3. Applied aspects of Aushdha karma with reference to Sharngadhara and Bhavaprakasha
4. Importance of Namarupa vigyan and concept of basonyms and synonyms of Dravyas
5. Applied knowledge of Bhaishajya Prayoga (marga, kalpana, matra, anupana, sevan, kala etc.)

PART - B

50 marks

6. Basic principles of Desha pravichara, Dravya sangrahana (collection), Samrakshana (preservation)
7. Evolution of Dravyaguna vigyan with special emphasis on Nighantus
8. Prashasta bhaishaj lakshana

9. Profound knowledge on applied aspects of Agrya aushadha
10. Methodology of studying controversial, pratinidhi (substitute), apamishrana (adulterant) and unidentified dravya
11. Pharmacognosy and its relevance in Dravyaguna vigyan
12. An integrated study of Charakokta Bshhaj pariksha and scientific method of drug evaluation with special reference to quality, safety and efficacy
13. Brief knowledge and importance of clinical pharmacology
14. General principles of various good cultivation practices, collection practices, storage practices and manufacturing practices
15. Pharmacovigilance and ADR issues
16. Knowledge on the Ayurvedic Pharmacopoeia of India, The Formulary of India and international pharmacopoeias



PRACTICAL

100marks

Contents:

1. Field visits for the Identification of important classical medicinal plants (Minimum two visits to neighboring forest areas)
2. Macroscopic and microscopic identification of minimum two plants of each of prayojyanga (useful parts of plants)
3. Preliminary study of pharmacoepial standards (API) of minimum 5 plants
4. Minimum two experiments on Animals.

Distribution of marks (Practical)

- | | |
|---|------------|
| 1. Herbarium sheets | -10 Marks |
| 2. Practical of macroscopic and microscopic identification of prayojyanga (one part of the plant) | -30 Marks |
| 3. Practical record book of pharamcopoeial standards and animal experimentations | -10 Marks |
| 4. Spotting | -30 Marks |
| 5. Viva-Voce | -20 Marks. |

11. KAYACHIKITSA

Theory- 400 Marks (100 Each)
Practical and Viva-Voce - 100 Marks

PAPER- I

100 Marks

FUNDAMENTALS OF KAYACHIKITSA

1. Rogi-Roga Pariksha: Nidan Panchak, Trividha pariksha, Ashtavidhpariksha, Dashvidhpariksha in the light of recent advances. Clinical methods-Detailed history taking and patient examination, Shadang pariksha (Systemic examination) as per ayurveda and recent advances.
2. Interpretation of investigations: ECG, Echo cardiography, TMT, Spirometry, X-ray, USG, CT-Scan, MRI, EEG, EMG, Etc in different pathological conditions.
3. Detailed Knowledge of Principles of Chikitsa in Ayurveda. Classification of Rogas, Types of Chikitsa. Principles and practices of Rasayana and Vajikarna.
4. National Health Programmes/NRHM and prospective role of Ayurveda services and therapeutics in them with special reference to Kayachikitsa.
5. Medical ethics, Common laws and regulations applicable to clinical practice.
6. Elaborate knowledge of undertaking common medical procedures like Ryle's tube feeding, tapping, transfusions, catheterization, tractions, nebulizations, lumbar puncture, etc.
7. Ayurveda Dietetics: Importance of Pathya, Apathya and Anupana.
8. Drug-drug interactions and adverse drug reactions, Iatrogenic disorders.

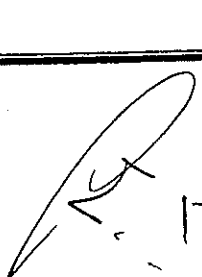
PAPER - II

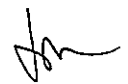
100 Marks

SAMANYA ROGA CHIKITSA

Nidana/ Chikitsa including Nidana Parivarjana, Pathya, Apathaya, Chikitsa siddhanta, Shamana, Shodhana, Panchakarma, Rasayana and Atyayika Chikitsa (Anupana, Drug/Non-drug) as per Ayurvedic and conventional therapeutics of following Srotogata vyadhi including Kshaya, Vriddhi srotodushti janya vyadis such as:

1. Pranavahasrotas: Shwasa, Hikka, Kasa, Rajajakshma, Hridroga, Parshwashoola, Urakhshata, Svarabheda.
Cardio-respiratory system: Bronchitis, Bronchiectasis, Bronchial asthma, COPD, Cor-pulmonale, Pneumonias, Occupational lung diseases, Pulmonary tuberculosis, Congenital Heart disorders, IHD, RHD- Valvular diseases, Cardiac failures, Cardiomyopathy, Pericarditis, Endocarditis, Hypertension.
2. Annavahasrotas: Agnimandya, Ajirna, Aruchi, Amadosha, Amlapitta, Chhardi, Shoola, Grahani. Gastrointestinal disorders: GERD, APD, Malabsorption Syndrome.
3. Udakavahasrotas: Trishna, Shotha, Udararoga, water and electrolyte imbalance
4. Rasavaha srotas: Jwara, Amavata, Pandu, Madatyaya, Anaemias, Rheumatoid arthritis.
5. Raktavaha Srotas: Raktapitta, Kamala, Vatarakta, Kushtha, Kshudraroga, Sheetpitta, Udarda, Kotha, Visarpa, Shvitra. Haemopoeitic disorders, Bleeding and Coagulation disorders, Leukaemias, Thrombocytopenia, Disorders of Bone Marrow, Hepatobiliary disorders, Hepatitis, Cirrhosis, Cholecystitis, Liver abscess, Jaundice, Dermatological disorders, Parasitic, Infective, Allergic, Autoimmune skin disorders such as Psoriasis, Eczemas.
6. Mamsa-Medovahasrotas: Medoroga, Sthaulya, Prameha, Galaganda, Gandamala, Urustambha, Diabetes mellitus, Obesity.
7. Asthi-Majja vahasrotas: Asthikshaya, Sandhigatavata, Osteoarthritis, Osteopenia, Osteoporesis.
8. Shukravahasrotas: Such as Klavya, Dwajabhanga, Impotence.
9. Mutravahasrotas: Mutrakricchra, Mutraghata, Ashmarl, Urinary disorders: UTI, Lithiasis, ARF, CRF, Uraemia, BPH.
10. Purishvaha srotas: Atisara, Pravahika, Anaha, Adhamana, Krimi, Udavarta, Diarrhoeas, Dysentery, Ulcerative colitis, IBS, Intestinal Worm infestation.


17/00



VISHISHTA ROGA CHIKITSA

Comprehensive knowledge of Nidan Panchak- etiology, demography, pathogenesis, symptomatology, complications, investigations, diagnosis and drug/non-drug management of following diseases as per Ayurveda/ Conventional therapeutics:

1. Vata-Vyadhi:- Pakshavadha, Ekangvata Ardhanga Vata, Sarvanga Vata, Ananta Vata, Gata Vata, Gridhrasi, Ardita, Akshepaka, Apatantraka, , Vishvachi, Avabahuka, Avarana, Urustambha.
Musculoskeletal disorders: Myopathies, Muscular dystrophies, Lumbago
Neurological disorders: Neurodegenerative disorders like Alzheimer's, Parkinsonism, CVA, Neuropathies, Facial palsy, G B Syndrome, Motor Neuron Diseases, Epilepsy, Sciatica.
2. Sankramakroga: Sheetalā, Masoorika, Updansha, Phiranga, Gonorrhoea, Chancroids, Syphilis.
3. Manasa vyadhi:- Unmada, Apasmara, Atatvabhinivesha, Mada, Moorcha, Sanyasa.
Common psychiatric disorders: Classification of psychiatric ailments. Disorders of thought like Schizophrenia. Disorders of Mood like Mania, Depression. Neurosis, personality disorders, psychosexual disorders.
4. Metabolic disorders: Gout, Dyslipidaemia, Atherosclerosis, Metabolic Syndrome.
5. Endocrinal disorders: Disorders of Pituitary, Thyroid, Adrenal Medulla, Reproductive hormones.
6. Parasitic/Infective/Communicable disorders: Shlipada, Filariasis, Vishama Jvara, Malaria, Manthara Jvara, Enteric Fever, Dengue, Chickenpox, Measles, Influenza, Kalaazar, Mumps, Rabies, Poliomyelitis, Plague, Meningitis, Encephalitis, Chikungunya, HIV/AIDS, Common worm infestations.
7. Neoplastic disorders and their management strategies. Role of Ayurvedic medicines in cancer care including palliative care.
8. Autoimmune diseases: Myopathies, Rheumatic fever, SLE.
9. Common poisonings and their management like Insecticide/Pesticide poisoning, Snake poisoning, Vegetable and chemical poisoning, Substance abuse.
10. Janapadodhvasa Vikara:- Environmental diseases Causes, impact on human health and their management.
11. Ashtonindhataya Prusha and their clinical relevance.

ADVANCES IN KAYACHIKITSA

Critical care medicine, Management of medical emergencies, ICU services, Field medical services

1. Hospital management strategies, Infrastructure, use of IT technology, essential manpower, equipment, Patient care, management and coordination with contemporary health institutions and field institutions.
2. National Health Campaigns of AYUSH and components under NRHM.
3. Clinical Research in Kayachikitsa and its application in clinical medicine as per new evidence base in different systemic disorders.
4. New emerging health challenges and ayurvedic medicines: Chikangunya, HIV/AIDS, Swineflu, Chickenflu, Dengue, Restless leg syndrome, Sick building syndrome, Fibromyalgia.
5. Role of Ayurveda in immune-protection, immuno-modulation and in management of other allergies and immunological disorders.
6. Indications and importance of Organ transplantation, Ethical and legal issues involved.
7. Knowledge of Geriatric care and terminal care medicine.
8. Basic knowledge of Gene therapy, Stem cell therapy, Genetic modeling and chromosomal disorders in different disease conditions.

9. Radio-isotopes, disease and tumor markers in diagnosis and assessment of therapy.
10. Scope and methods of independent and collaborative research in Kayachikitsa.
11. Disaster management strategies.
12. Application of advances in Rasayana and Vajikarana therapies
13. Application of emerging trends in Panchakarma in medical management.
14. Physical medication and rehabilitation.

PRACTICALS -

100 Marks

Practicals shall be held to evaluate the patient care, diagnostic and treatment expertise of the student. It should also be taken as a chance to evaluate the clinical skills.

Publication of One Scientific paper based on Thesis Research preferably in indexed journal is essential. Should have taken minimum 20 Theory and Practical classes of BAMS in concerned subject.

Clinical Ability Evaluation-60 Marks based on

- | | |
|--|-----------|
| 1. Case records of 40 IPD Patients in Detail | 10 Marks |
| 2. Long case History-1: | 20 Marks |
| 3. Short Case history-1 : | 10 Marks |
| 4. Medical procedures demonstration | 20 Marks. |
| 5. Academic Competence evaluation - 40 Marks based on: | |
| a. Viva | 30 Marks. |
| b. Teaching and communication skills/ Thesis presentation in PPT /: | 10 Marks. |

Reference Books:

- | | |
|---|----------------------------------|
| 1. Relevant portions of Brihatrayi and Laghutrayi with commentaries | |
| 2. Cikitsadarsha | - Pandit Rajeshvar Dutta Shastri |
| 3. Kayachikitsa | - Ramaraksha Pathak |
| 4. Rog Pariksha Vidhi | - Priyavrat Sharma |
| 5. Panchakarma Vigyan | - Haridas Sridhar Kasture |
| 6. Ayurvediya Nidana- Chikitsa Siddhanta | - Prof. R.H.Singh. |
| 7. Kayachikitsa Vol. 1 and 2 | - Prof. R.H.Singh. |
| 8. The Holistic Principles of Ayurvedic Medicine | - Prof. R.H.Singh. |
| 9. Essentials of Kayachikitsa -II, Vol. 1 | - Dr. Aruna |
| 10. Kayachikitsa Vol. I-IV. | - Prof. Ajay Kumar |
| 11. Panchakarma Therapy | - Prof.R.H.Singh |
| 12. Panchakarma Illustrated | - Prof.G.Shrinivasa Acharya |
| 13. Practice of Ayurvedic Medicine(Kayachikitsa) | - Prof.A.K.Tripathi |
| 14. Nidanachikitsa Hastamalaka | - Prof. R.R.Desai |
| 15. Clinical Methods in Ayurveda | - Prof. K.R. Srikantamurthy |
| 16. Aushadhi Gunadharm Shastra | - Gangadhar shastri Gune |
| 17. Introduction to Kayachikitsa | - Prof. C. Dwarakanath |
| 18. Samprapti lakshnanayoh Sambandhah | - Prof.Sadashiv Sharma |
| 19. Nidana Panchak | - Prof.S.C.Dhyani |
| 20. Kayachikitsa | - Prof.S.C.Dhyani |
| 21. Davidson's Principles and Practice of Medicine. | |
| 22. API Text Book of Medicine. | |
| 23. Harrison's Text Book of Medicine. | |
| 24. Cecil Text Book of Medicine. | |
| 25. Relevant texts of concerned subjects. | |

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4. DRAVYAGUNA VIGYAN

PAPER-I Namarupa Vigyana

100 marks

1. Importance of Namagyana of Dravya, origin of Namarupagyana of Aushadhi in Veda, etymological derivation of various names and synonyms of Aushadhi.
2. Rupagyana in relation to Aushadhi. Sthula and Sukshma description (Macroscopic and Microscopic study) of different parts of the plant.
3. Synonyms of dravyas(aushadha and Ahara) mentioned in Vedic compendia, Brihatrayee, Bhavaprakasha and Rajanighantu.
4. Basonyms, synonyms and distinguish morphological characteristic features of medicinal plants listed in Ayurvedic Pharmacopoeia of India(API).
5. Knowledge of Anukta dravya (Extrapharmacopial drugs)with regards to namarupa.
6. Sandigdha dravya(Controversial drugs) vinischaya.
7. Knowledge of biodiversity, endangered medicinal species.
8. Knowledge of TKDL, Introduction to relevant portions of Drugs and cosmetic act, Magic remedies Act, Intellectual Property Right (IPR) and Regulations pertaining to Import and Export of Ayurvedic drugs.
09. Knowledge of tissue culture techniques
10. Knowledge of Genetically Modified Plants

PAPER -II Guna Karma Vigyan

100 marks

1. Fundamental principles of drug action in Ayurveda and conventional medicine.
2. Detailed study of rasa-guna- virya- vipaka-prabhava and Karma with their applied aspects and commentators (Chakrapanidatta, Dalhana, Arunadatta, Hemadri and Indu) views on them.
3. Comprehensive study of karma as defined in Brihatrayee & Laghutrayee
4. Detailed study of Guna and Karma of dravyas listed in API and Bhavaprakasha Nighantu along with current research review.
5. Detailed study of aharadravya/ ahara varga ascribed in Brihatrayee and various nighantus along with Kritanna varga.
6. Pharmacological principles and knowledge on drugs acting on various systems.
7. Basic knowledge on experimental pharmacology for the evaluation of - analgesic, anti pyretic, anti inflammatory, anti diabetic, anti hypertensive, hypo lipidemic, anti ulcer, cardio protective, hepatoprotective, diuretics, adaptogens, CNS activites.
8. Knowledge on Heavy metal analysis, pesticidal residue and aflatoxins
9. Knowledge on evaluation of anti microbial and antimycotic activities.

PAPER - III Prayogavigyana

Marks 100

1. Bhaishjya Prayog Siddhant [Principles of drug administration] - Bhaishajya Marga (routes of drug administration), Vividha Kalpana (Dosage forms), Principles of Yoga Vijnan(compounding), Matra (Dosage), Anupana (Vehicle), Aushadha grahankal (Time of drug administration), Sevankal avadhi (duration of drug administration), Pathyapathya (Dos' /Donts' /Contraindications), complete Prescription writing (Samagra Vyavastha patra).
2. Samyoga- Viruddh Sidhanta and its importance
3. Amayika prayoga (therapeutic uses) of important plants ascribed in as well as Brihatrayee, Chakradutta, Yoga ratnakara and Bhavaprakasha.
4. Knowledge of Pharmaco-vigilance in Ayurveda and conventional system of medicine.

PG Final Year Syllabus-12

5. Knowledge of clinical pharmacology and clinical drug research as per GCP guide lines.
6. Knowledge of Pharmacogenomics

PAPER- IV

100 marks

1. Etymology of nighantu, their relevance, utility and salient features.
2. Chronological history of the following Nighantus with their authors name, period and content- Paryaya ratnamala, Dhanvantari nighantu, Hridayadipika nighantu, Ashtanga nighantu, Rajanighantu, Siddhamantra nighantu, Bhavaprakasha nighantu, Madanpala nighantu, Rajavallabha nighantu, Madhava Dravyaguna, Kaiyadeva nighantu, Shodhala nighantu, Saligram nighantu, Nighantu ratnakara, Nighantu adharsha and Priya nighantu
3. Detailed study Aushadha kalpana mentioned in Sharangadhara samhita and Ayurvedic Formulary of India (AFI).
4. General awareness on poshaka ahara(Nutraceuticals),Varnya(cosmoceuticals), food additives, Excipients etc.
5. Knowledge of plant extracts, colors, flavors and preservatives.
6. Review of important modern works on classical medicinal plants published by Govt of India, department of AYUSH and ICMR.

Syllabus of the Practical training of part two M.D. (Ayu) - Dravyaguna

Practical:-

Study tours:

Field identification of medicinal plants through at least three local Dravyaguna study tours within the state and one study tour out of state. Preparation of minimum 50 herbarium sheets, along with raw drug either from field, of plants be collected during study tours.

1. **Evaluation of Crude drugs:**
Macro and microscopic methods of examining five drugs of each of different useful parts of plants, including their powders.
2. **Phytochemical evaluation of raw material:**
Quantitative standards like foreign matter, extractive (water and alcohol), ash value, acid insoluble ash and TLC separation of various parts of minimum two plants of Ayurvedic Pharmacopoeia of India.
3. **Yoga vijnana :**
Preparation of two yoga of each kalpana of Ayurvedic Formulary of India:
4. **Pharmacology:**
 - ✓ Rasa nirdharana by Taste Threshold method of minimum one drug for each of rasas.
 - ✓ Observation of animal experimentation models (both in vitro and in vivo)- 05 models for possible rasadi gunas.
5. **Clinical**
 - ✓ Regular clinical training in the hospital for submission of Single Aushadhi Prayoga (Single drug trial/ Clinico-pharmacological studies.)
 - ✓ Survey for Amayika prayoga of aushadhi(Pharmaco epidemiology) for studying their role in clinical practice in contemporary period -observational study-minimum.
6. **Dissertation**
A Dissertation, as per the approval of Departmental Research Committee/Competent Committee for the purpose, be prepared under the guidance of approved supervisor

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in Dravyaguna and submitted 6 months before the final examination. The approval of Dissertation shall be essential before appearing the final examinations.

7. Method of practical training – Posting for minimum one month in each of the following units -

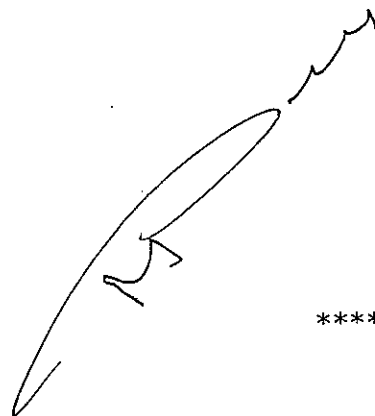
- ✓ Quality control laboratory of nearest pharmacy/institution for crude drug identification, adulterants and substitutes & understanding standardization techniques.
 - ✓ Experimental pharmacology laboratory for developing skills in animal experimentation
 - ✓ Regular clinical training in the Teaching hospital for studying Ekala Aushadhi Prayoga & Adverse drug reactions(ADR).
8. Post Graduate Scholar is expected to present minimum two scientific papers in National / international seminars during the course of study
9. Post Graduate Scholar is expected to publish / get accepted at least one paper in indexed/ peer reviewed journal under the supervision of guide.

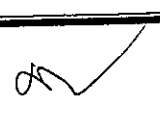
Pattern of Practical Examination-

Total =200 marks

- | | |
|--|------------|
| 1. Herbarium | - 10 Marks |
| 2. Pharmacognosy practical record | - 10 Marks |
| 3. Pharmacology practical record | - 10Marks |
| 4. Clinical records record | - 10 Marks |
| 5. Practical examination(Identification of green and raw drugs, microscopic examination, Ekala aushadha pariksha | - 60 Marks |
| 6. Thesis Presentation | - 20Marks |
| 7. Viva voce | - 80 Marks |

Reference books -







॥ आयुषे सर्वलोकानाम् ॥

भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
आयुष मंत्रालय, भारत सरकार
कार्यालय: टी-19, पहली और दूसरी मंजिल, ब्लॉक-IV, धनवंतरी भवन,
मार्ग नंबर- 66, पंजाबी बाग (पश्चिम), नई दिल्ली-110028
National Commission for Indian System of Medicine
Ministry of AYUSH, Govt. of India
Office: T-19, 1st & 2nd Floor, Block-IV, Dhanwantari Bhawan,
Road No.- 66, Punjabi Bagh (West), New Delhi-110026

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secretary@ncismindia.org

क्रमांक/Ref. No.- 26-32/MARB/2024-College.

दिनांक/Dated: 19.02.2024

Jo.

The Principal,
Shri Maru Singh Memorial Institute of Ayurveda,
B.P.S. Mahila Vishwavidyalaya VPO- Khanpur Kalan,
Distt. Sonipat-131305, Rohtak Haryana (Inst. ID-AYU0037)
E-mail ID:- principalayu@bpswomenuniversity.ac.in

Subject:- Issuance of Letter of Intent (LOI) to Shri Maru Singh Memorial Institute of Ayurveda, B.P.S. Mahila Vishwavidyalaya VPO- Khanpur Kalan, Distt. Sonipat-131305, Rohtak Haryana (Inst. ID-AYU0037) in respect of your Application/Scheme vide ref. no. BPSMU/Inst/AYU/23/284 dated 10.10.2023 to start 02 new PG courses with 08 seats in the subject namely (i) Kayachikitsa-4 seats (ii) Dravyaguna -04 seats from the academic session 2024-25, under Section 29 of NCISM Act 2020 and relevant regulation there under along with an opportunity of rectification to fulfill the shortcoming before issuance of Letter of Permission (LoP)- reg.

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that in pursuance of the provision of National Commission for Indian System of Medicine Act, 2020, the Indian Medicine Central Council Act, 1970 (48 of 1970) has been repealed with effect from the 11th day of June, 2021. With effect from the said date, the Central Council of Indian Medicine constituted under sub-division (1) of section 3 of the Indian Medicine Central Council Act, 1970 (48 of 1970) shall stand dissolved. Now, in exercise of the powers conferred by sub-section (3) of the section 1 of the said Act, the Central Government hereby notifies that all the provisions of the National Commission for Indian System of Medicine Act, 2020 has been come into force with effect from the 11th day of June, 2021 and as per regulation 59 (2) of The National Commission for Indian System of Medicine ACT, 2020, Medical standards, requirements and other provisions of the Indian Medicine Central Council Act, 1970 and the rules and regulations made thereunder shall continue to be in force and operate till new standards or requirements are specified under this Act or the rules and regulations made thereunder. Further, the provision of concerned regulations which are inconsistent with the provision of NCISM ACT 2020 shall not be applicable.

1. I am to refer to your application/scheme vide ref no. BPSMU/Inst/AYU/23/284 dated 10.10.2023 for seeking permission of Medical Assessment and Rating Board for Indian System of Medicine, National Commission for Indian System of Medicine to start 02 new PG courses with 08 seats in the subject namely (i) Kayachikitsa-4 seats (ii) Dravyaguna 04 seats from the academic session 2024-25 and to verify the available of teaching, non-teaching, Hospital staff and other infrastructure facilities available at your college for issuance of Letter of Intent (LOI), the visitation was conducted on 27.12.2023 & 28.12.2023 on hybrid mode by the visitation team of the Medical Assessment and rating Board, National Commission for Indian System of Medicine.
2. As per the direction of the President, Medical Assessment and Rating Board for Indian System of Medicine (NCISM), all other related documents were assessed in terms of the enforced regulations namely "the Establishment of New Medical College, Opening of New or Higher Course of Study or Training and Increase of Admission Capacity by a Medical College Regulations, 2019, the "Indian Medicine Central Council (Requirements of Minimum Standard for under-graduate Ayurveda Colleges and attached Hospitals) Regulations, 2016", the "Indian Medicine Central Council (Post-graduate Ayurveda Education) Regulations, 2016", provisions under the NCISM Act, 2020 and relevant Regulations there under, and visitor's observation report.
3. As per the direction of President, Medical Assessment and Rating Board for Indian System of Medicine (NCISM), the assessment report was placed in the 78th Board Meeting of Medical Assessment and Rating Board for Indian System of Medicine (NCISM) held on 02.02.2024. On careful examination of the assessment report, Board decided to provide an opportunity of hearing to your college. Thereafter, an opportunity of hearing was granted to your college on 08.02.2024 to present the case through virtual mode.
4. The observation of hearing committee based on the submission made by the college representatives during hearing and assessment report of the NCISM have been carefully re-examined in terms of Regulation 3. of the "Indian Medicine Central Council (Requirements of Minimum Standard for under-graduate Ayurveda Colleges and attached Hospitals) Regulations, 2016" the "Indian Medicine Central Council (Post-graduate Ayurveda Education) Regulations, 2016" and relevant regulations thereunder, and once again as per the direction of President, Medical Assessment and Rating

Board for Indian System of Medicine (NCISM), the recommendation of Hearing Committee was placed in the 79th Board meeting of Medical Assessment and Rating Board for Indian System of Medicine (NCISM) held on 09.02.2024. Board verified the same and found that the College is not fulfilling the basic eligibility criteria for issuance of Letter of Intent (LOI) to Start 02 New PG courses but decided to issue Letter of Intent (LOI) to Start 02 New PG courses with 08 Seats in the subject namely (i) Dravyaguna Vigyana - 04 seats (ii) Kayachikitsa- 04 seats under section 29 of the NCISM Act, 2020 from the academic session 2024-25 along with an opportunity of rectification to fulfill the shortcoming before issuance of Letter of Permission (LoP) which are mentioned as under-

i. Shortcoming in requested PG course is as under-

S.No.	Department	Minimum Requirement as per Regulations (for UG upto 100 seats)	Additional Requirement for PG as per MSR		No. Of Existing Teachers					Shortcomings of HF and LF
			Professor	Asso. Prof. / Reader	Professor	Asso. Prof. / Reader	Asst. Prof. / Lecturer	Excess	Total	
1.	Kayachikitsa (4 seats)	1P+1R+1L	1	1	0	2	1		3	1 Prof.

ii. Availability of hospital staff after hearing is $\frac{\text{Available}}{\text{Required}} \times 100\% = \frac{58}{74} \times 100$ is 78.37% which is not fulfilling the minimum requirement of 80 % as per MSR 2016 and shortcoming is as under-

S. No.	Designation	Required as per MSR	Available Hospital	Shortcoming
Hospital Staff Verification				
1.	Resident Medical Officers or Surgical or Medical Officer or Clinical Registrar (RMO or RSO or MO or CR)	9	3	6
2.	Registrar/Senior Resident Doctor (Applicable for PG Clinical Department Only)	1	0	1
3.	Assistant Matron	2	0	2
4.	Staff Nurses for In Patient Department	10	7	3
5.	Ward Boy or Ayah	5	3	2
6.	Pharmacists	4	2	2

5. In view of above, Letter of Intent (LOI) is issued to Shri Maru Singh Memorial Institute of Ayurveda, B.P.S. Mahila Vishwavidyalaya VPO- Khanpur Kalan, Distt. Sonapat-131305, Rohtak Haryana (Inst. ID-AYU-37) to Start 02 New PG courses with 08 Seats in the subject namely (i) Dravyaguna Vigyana - 04 seats (ii) Kayachikitsa- 04 seats under section 29 of the NCISM Act, 2020 from the academic session 2024-25 along with an opportunity of rectification to fulfill the shortcoming mentioned as above before issuance of Letter of Permission (LoP), failing which the Letter of Permission (LoP) shall not be issued and Letter of Intent (LOI) issued shall be deemed to be withdrawn and following condition shall also be fulfilled-

- The applicant shall fulfill all the requirements of infrastructure for teaching and training facilities as specified in "Indian Medicine Central Council (Requirements of Minimum Standard for undergraduate Ayurveda Colleges and attached Hospitals) Regulations, 2016";
- The applicant shall fulfill all the relevant provisions of Regulations namely the "Establishment of New Medical College, Opening of New or Higher Course of Study or Training and increase of Admission Capacity by a Medical College Regulations, 2019"
- The applicant shall fulfill all the requirements of the "Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Amendment Regulations, 2016";
- The applicant shall fulfill all the requirements of the "Indian Medicine Central Council (Post-graduate Ayurveda Education) Regulations, 2016" for grant of permission to start PG course;
- The applicant shall fulfill all the relevant provisions under the NCISM Act, 2020.

6. The applicant is also need to submit the requisite fixed security deposit as specified **under the section 6(2)(i)(i)** of notified Regulations namely the "Establishment of New Medical College, Opening of New or Higher Course of Study or Training and Increase of Admission Capacity by a Medical College Regulations, 2019" on demand before issuance of Letter of Permission (LOP).
7. The college administration is to ensure that no student is admitted in the PG course till the formal permission i.e. Letter of Permission (LOP) is granted.
8. The Medical Assessment and Rating Board for Indian System of Medicine (NCISM) will visit the college virtually, physically or Hybrid mode to verify the compliance/ fulfillment of the above conditions by the applicant and issuing/not issuing the LOP will be considered.
9. In the event, the applicant college fails to comply with or satisfy the conditions of the Letter of Intent; the Letter of Intent shall be deemed to have been withdrawn without further intimation to the applicant.
10. Please acknowledge the receipt of this letter.

23/12

(Dr. Raghurama Bhatta U.)
President, Medical Assessment and Rating Board for Indian System of Medicine
(NCISM)
Dr. Raghurama Bhatta U.

Copy to: -

- i. The Chairperson, National Commission for Indian System of Medicine (NCISM), Dhanwantri Bhawan, Road No. 66, Punjabi Bagh (West) New Delhi-110028
- ii. The Secretary, Govt. of India, Ministry of AYUSH, B-Block, GPO, Connaught Place, New Delhi-110028 for information. (secy-ayush@nic.in, aacc-admin-ayush@gov.in, ep1section-ayush@gov.in)
- iii. The Addl. Chief Secretary (Health & Family Welfare) Department of Health & Family Welfare, Government of Haryana, R.No. 529, 5th Floor, Haryana New Secretariate Sec-17, Chandigarh-160017 for information (acshealth2019@gmail.com).
- iv. The Directorate of AYUSH, Haryana Near Youth Hostel, Sector-3 Panchkula-134109, Haryana for information. (info.hry-ayush@nic.in)
- v. The Registrar, Bhagat Phool Singh Mahila Vishwavidyalaya, Ganaur Road, Khanpur Kalan, Sonapat-131305, Haryana information. (registrar@bps_womenuniversity.ac.in)
- vi. Guard file.

(Dr. Raghurama Bhatta U.)
President, Medical Assessment and Rating Board for Indian System of Medicine
(NCISM)

MSM Institute of Ayurveda

Bhagat Phool Singh Mahila Vishwavidyalaya

A State University Established under Haryana Legislature Act 31 of 2006 & recognised by UGC under section 2 (f) and 12 (b) of UGC act, 1956.
KhanpurKalan (Sonapat), Haryana-131305, Phone No. – 01263-283629, Email – principalmsmbpsmv@gmail.com

Ref. No.- MSM/Inst./Ayu/24/.....94...

Date: - 12.. /02/2024

MINUTES OF THE BOARD OF STUDY (BOS) MEETING HELD ONLINE MODE ON 10.02.2024 AT 07:00 P.M. THROUGH GOOGLE MEET

An online meeting of U.G. Board of Study (BOS) was called on dated 10/02/2024 at 07:00 PM through google meet by Prof. S.P. Gauttam, Principal / Dean / Convener BOS, regarding to discuss the following agenda-

Agenda - To approve the Syllabus and Scheme of examination for start new P.G. courses in MSM Institute of Ayurveda, upcoming in the Department of Dravyaguna and Kayachikitsa, and applied for Rog Nidan, PTSR & Ras Shastra department.

All the members of the committee were informed through email & telephonically for the online meeting.

Following members were presents in the meeting –

- | | | |
|---|---|--------------------------|
| 1. Dr. S.P. Gauttam Dean / Principal, MSMIOA | - | Convener |
| 2. Dr. Sanjay Goswami, Associate Professor, MSMIOA | - | Member |
| 3. Dr. Vishal Sharma, Assistant Professor, MSMIOA | - | Member |
| 4. Dr. Naresh Kumar. Registrar SKAU, KUK | - | Member as Outside Expert |
| 5. Dr. Sonam, Associate Professor, SBNM Uni. Rohtak | - | Member as Alumni |

The following was discussed and approve unanimously –

Dr. S P Gauttam emphasized that the syllabus and scheme of examination would strictly adhere to the guidelines prescribed by NCISM, without any additions or deletions. Opinions and suggestions were invited from the attendees. Dr. Naresh Bhargava expressed his approval with the stipulation that the syllabus and scheme maintain alignment with the standards set by NCISM. Dr. Vishal Sharma and Dr. Sanjay Goswami concurred, expressing their agreement and approval. Dr. Sonam Rohilla also concurred and approved of the proposed syllabus and scheme of examination.

Dr. S P Gauttam concluded the meeting by extending gratitude to all present for their valuable inputs & approval, and the meeting was ended with the vote of thanks to the Chair.

- 1709

Convener, BOS

MSM Institute of Ayurveda
Bhagat Phool Singh Mahila Vishwavidyalaya
Khanpur Kalan, Dist. Sonapat (Hr)



MSM Institute of Ayurveda

Bhagat Phool Singh Mahila Vishwavidyalaya

A State University Established under Haryana Legislature Act 31 of 2006 & recognised by UGC under section 2 (f) and 12 (b) of UGC act, 1956.
KhanpurKalan (Sonapat), Haryana-131305, Phone No. – 01263-283629; Email – principalsmsmbpsmv@gmail.com

Ref: No.- MSM/Inst./Ayu/24/...4.5....

Date: -12/02/2024

MINUTES OF THE MEETING OF FACULTY OF AYURVEDIC MEDICINE HELD ONLINE MODE ON 11.02.2024 AT 11:00 A.M. THROUGH GOOGLE MEET

An online meeting of Faculty of Ayurvedic Medicine was called on dated 11/02/2024 at 11:00 AM through google meet by Dr. S.P. Gauttam, Principal / Dean / Chairperson Faculty of Ayurvedic Medicine, regarding to discuss the following agenda-

Agenda - To approve the Syllabus and Scheme of examination for start new P.G. courses in MSM Institute of Ayurveda, upcoming in the Department of Dravyaguna and Kayachikitsa, and applied for Rog Nidan, PTSR & Ras Shastra department.

All the members of the committee were informed through email & telephonically for the online meeting.

Following members were presents in the meeting –

- | | | |
|--|---|--------------------------|
| 1. Dr. S.P. Gauttam Dean Faculty of Ayurvedic Medicine | - | Chairperson |
| 2. Dr. Veena H. Sharma, Associate Professor, MSMIOA | - | Member |
| 3. Dr. Deepmala U. Yadav, Assistant Professor, MSMIOA | - | Member |
| 4. Ms. Sangeeta Sapra, Principal, GCW, Murthal | - | Member as Outside Expert |
| 5. Dr. Neelam Malik, Registrar, BPSMV | - | Secretary |

The following was discussed and approve unanimously –

Dr. S. P. Gauttam emphasized that the syllabus and scheme of examination would strictly adhere to the guidelines prescribed by NCISM, without any additions or deletions. Opinions and suggestions were invited from the attendees. All the members have granted the approval with the stipulation that the syllabus and scheme maintain alignment with the standards set by NCISM.

Dr. S P Gauttam concluded the meeting by extending gratitude to all present for their valuable inputs & approval, and the meeting was ended with the vote of thanks to the Chair.

Chairperson, Faculty of Ayurvedic Medicine

MSM Institute of Ayurveda
BPS Mahila Vishwavidyalaya
Khanpur Kalan, Sonapat, Haryana

- 17/0

Bhagat Phool Singh Mahila Vishwavidyalaya

Khanpur Kalan (Sonapat), Haryana-131305

Department of Physical Education

Office No. 01263-211623, Fax No. 01263-283779, www.bpswomenuniversity.ac.in

Ref No. BPSMV/Phy.Edu/24/_____

Dated:-20.02.2024

Minutes of the meeting of the Faculty of Physical Education held on 20.02.2024

A meeting of the **F.O.P.E** was held on 20.02.2024 at 1:30 pm in the office of the Chairperson, Department of Physical Education. The following were present in staff council meeting to discuss the issue:

1. Dr. Suman Dalal In Chair
Chairperson, Deptt.of Phy. Edu.
2. Dr. Sandeep Khandhwal, Principal Govt. College for Women Sonipat Member
3. Ms. Sangeeta Sapra, Principal Tau Devi Lal govt. College for women Murthal (Online) Member
4. Registrar, BPSMV, Khanpur Kalan, Sonipat Secretary

At the beginning the Chairperson, Faculty of Physical Education, welcomed the Member of Faculty of Physical Education. After detail discussions the following decisions were taken unanimously.

- Agenda Item 1.** Syllabus and Scheme of 4 years programme (B.P.E.S.)
Approved
- Agenda Item 2.** Tour Policy of Adventure Trip of B.P.E.S.
Approved
- Agenda Item 3.** To start B.P.Ed Course
Approved- As an when NCTE will open portal for B.P.Ed programme BPSMV, Khanpur Kalna, Sonipat will applied for the same
- Agenda Item 4.** Change the Eligibility Criteria of M.P.E.S.
Approved
- Agenda Item 5.** Starting of M.P.Ed in BPSMV, Khanpur Kalan may be submitted to NCTE for further action as per norms and standard prescribed by NCTE.
Approved

Sandeep Khandhwal
Dr. Sandeep Khandhwal

online
Ms. Sangeeta Sapra

M. S. Sapra
20/2/24
Registrar

Suman Dalal
Dr. Suman Dalal
Chairperson, Faculty of Physical Education

3.2 Eligibility (Previous)	3.2 Eligibility (Purposed)
<p>(a) Bachelor of physical education (B.P. Ed.)/ Bachelor of Physical Education (B.P.E.)/B.P.E.S or equivalent with at least 50% marks</p> <p>OR</p> <p>(b) Bachelor of science (BSc.)in Health and Physical Education with at least 50% percent marks</p> <p>Or</p> <p>(c) The reservation in seats and relaxation</p> <p>(b) Preference will be given to those candidates who are sportsperson or had participated in Inter-University and National level.</p> <p>(c) No student who has crossed the age of 29 years as on 1st July of the relevant year will be allowed admission to M.P.E.S (Master of Physical Education and Sports) 2 years course. However, the vice-chancellor, BPSMV, has the power to relax the upper age limit by one year on the recommendation of the Head/Incharge, of the Department. The upper age limit may be relaxed by 3 years in the case of SC and ST candidates of Haryana.</p> <p>(d) Submission of Physical fitness certificate from Institute of Ayurveda, BPSMV is compulsory before admitting to the course.</p> <p>3.2.1 No candidate who is in employment (whole-time, part-time, or honorary service) shall be eligible to take admission in M.P.E.S. programme without taking leave from her institution/ office etc. from the date of admission to the termination of three year course. She has to submit an affidavit in this regard. If found in violation of this rule necessary action shall be taken against the candidate.</p>	<p>(a) Bachelor of physical education (B.P.Ed.)/ Bachelor of Physical Education (B.P.E.)/ Bachelor of Physical Education and Sports(B.P.E.S.)/Bachelor of Physical Education, Health Education and Sports Science or equivalent Graduation degree with at least 45% marks.</p> <p>or</p> <p>B.A./B.SC./B.Com or equivalent Graduation degree with at least 45% marks. Students must have minimum inter college participation/first / second /third position or Senior state/district championship participation/ first / second /third position minimum qualification for being eligible for admission.</p> <p>OR</p> <p>Bachelor of science (BSc.)in Health and Physical Education with at least 45% percent marks</p> <p>b) Preference will be given to those candidates who are sportsperson or had participated in Inter-University and National level.</p> <p>(c) No student who has crossed the age of 29 years as on 1st July of the relevant year will be allowed admission to M.P.E.S (Master of Physical Education and Sports) 2 years course. However, the vice-chancellor, BPSMV, has the power to relax the upper age limit by one year on the recommendation of the Head/Incharge, of the Department. The upper age limit may be relaxed by 3 years in the case of SC and ST candidates of Haryana.</p> <p>(d) Submission of Physical fitness certificate from Institute of Ayurveda, BPSMV is compulsory before admitting to the course.</p> <p>3.2.1 No candidate who is in employment (whole-time, part-time, or honorary service) shall be eligible to take admission in M.P.E.S. programme without taking leave from her institution/ office etc. from the date of admission to the termination of Two year course. She has to submit an affidavit in this regard. If found in violation of this rule necessary action shall be taken against the candidate</p> <p>Note: Reassertion will be followed as per Haryana State Government Rules. Only After qualifying the Physical Efficiency Test (PET) admission to M.P.Ed. /M.P.E.S. course will be processed.</p>

Amey

Khanpur Kalan (Sonapat), Haryana-131305

Department of Physical Education

Office No. 01263-211623, Fax No. 01263-283779, www.bpswomenuniversity.ac.in

Ref No. BPSMV/Phy.Edu/24/_____

Dated:-17.02.2024

Minutes of the meeting of the Post Graduate Board of Studies (PGBOS) held on 17.02.2024

A meeting of the Post Graduate Board of Studies was held on 17.02.2024 at 11:00 am in the office of the Chairperson, Department of Physical Education, BPSMV, KK. The following were present in PGBOS meeting to discuss the issue:

2. Dr. Suman Dalal In Chair
Chairperson, Deptt. of Phy. Edu.
5. Prof. Monika Verma, Department of Physical Education, CDLU, Sirsa Member
6. Prof. Arvind Malik, Department of Physical Education, KUK (Online) Member
7. Ms. Deepa, PGT Teacher Haryana Member
8. Mr. Sanjay Anand Patiala Ess Kay Sports Punjabi Bagh Patiala (online) Member


At the beginning the Chairperson, PGBOS, Faculty of Physical Education welcomed the Member of PGBOS. After detail discussions the following decisions were taken unanimously.

Agenda Item 1. Eligibility Criteria of M.P.E.S.
Approved (copy enclosed)

Any other items with permission of the Chair

Agenda Item 2. In Agenda item 4th of 59th General Body meeting of NCTE held on 4th December 2023 under the Chairmanship of Chairperson, NCTE. They decided that earlier application for M.P.Ed courses should be process further.

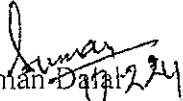
Case of starting of M.P.Ed in BPSMV, Khanpur Kalan may be submitted to NCTE for further action as per norms and standard prescribed by NCTE.


Prof. Monika Verma

Prof. Arvind Malik
(Online)


Ms. Deepa,

Mr. Sanjay
Anand
(online)


Dr. Suman Dalal
Chairperson, Faculty of Physical Education

BPS MAHILA VISHWAVIDYALAYA KHANPUR KALAN (SONEPAT)

MINUTES OF THE 27th MEETING OF THE ACADEMIC COUNCIL HELD ON 15/03/2024 AT 12:00 NOON IN THE CONFERENCE HALL, ADMINISTRATIVE BLOCK, BPS MAHILA VISHWAVIDYALAYA, KHANPUR KALAN (SONEPAT) THROUGH BLENDED MODE.

Members Present:-

- | | | |
|-----|--|---------------------------------------|
| 1. | Prof. Sudesh
Vice-Chancellor | Chairperson |
| 2. | Smt. Veena Rani,
Deputy Director
O/o DGHE, Panchkula | Ex-Officio Members
Attended online |
| 3. | Prof. Sanket Vij,
Dean Academic Affairs | Attended offline |
| 4. | Prof. Ravi Bhushan,
Dean, Faculty of Social Sciences, | -do- |
| 5. | Prof. Ashok Verma,
Dean, Faculty of Arts & Languages, | -do- |
| 6. | Prof. Vijay Nehra,
Dean, Faculty of Engineering & Technology,
Dean Faculty of Law | -do- |
| 7. | Prof. Neelam Jain, Dean,
Faculty of Pharmaceutical Sciences,
Chairperson, Deptt. of Pharmacy, | -do- |
| 8. | Prof. Shweta Singh, Dean,
Faculty of Commerce & Management,
Dean of Colleges,
Dean Students Welfare | -do- |
| 9. | Dr. Sunil Sangwan,
Dean, Faculty of Sciences,
Chairperson, Department of Mathematics | -do- |
| 10. | Dr. Bhupinder Singh, Chairperson,
Department of Chemistry | -do- |
| 11. | Dr. Sandeep Dahiya,
Controller of Examinations | -do- |
| 12. | Dr. Geeta Phogat, Chairperson,
Department of English | -do- |
| 13. | Dr. Bhavna Sharma, Chairperson,
Department of Commerce | -do- |
| 14. | Dr. Krishan Kumar, Chairperson,
Deptt.of Management Studies | -do- |
| 15. | Dr. Manju Panwar, Chairperson,
Department of Social Work | -do- |
| 16. | Dr. Kokila Malik, Chairperson,
Deptt.of Geography | -do- |
| 17. | Dr. Priyanka, Chairperson,
Department of ECE | -do- |
| 18. | Dr. Sonal, Chairperson,
Department of CSE&IT | -do- |
| 19. | Dr. Anu Balhara,
Chairperson Department of Education | -do- |
| 20. | Prof. Ipshita Bansal,
Proctor | -do- |

		- Other Members-
21.	Dr. Shalini , Associate Prof., Faculty of Arts & Languages	Attended offline
22.	Mrs. Sudesh Nandal, Associate Professor, Faculty of Engg. & Technology	Attended online
23.	Dr. Veena Agarwal, Associate Professor, Faculty of Ayurvedic Medicines	Attended offline
24.	Dr. Anshu Bhardwaj, Associate Professor, Faculty of Commerce & Management	-do-
25.	Dr. Sudipta Sil, Asstt. Prof., Faculty of Arts & Languages	-do-
26.	Dr. Anju Rani, Asstt. Prof., Faculty of Social Sciences	-do-
27.	Dr. Anu Bala, Asstt. Prof. Faculty of Law.	-do-
28.	Dr. Mamta Rani, Asstt. Prof., Faculty of Ayurvedic Medicines.	-do-
29.	Dr. Poonam, Asstt. Prof., Faculty of Education.	-do-
30.	Dr. Sunita Rani, Asstt. Prof., Faculty of Engg. & Technology.	-do-
31.	Dr. Asha, Asstt. Prof., Faculty of Sciences	-do-
32.	Dr. Sangeeta Sapra, Principal, Tau Devi Lal, Govt. College for Women, Murthal, Sonapat.	Attended online
33.	Dr. Vandana Nasa, Associate Professor of Commerce, Govt. college for Women, Sonapat.	-do-
34.	Prof. Shalini Singh, Department of Psychology, Maharshi Dayanand University, Rohtak.	-do-
35.	Prof. Manjula Choudhary, Director Centre for Distance & Online Education, (CDOE) Kurukshetra University, Kurukshetra,	-do-
36.	Dr. Kamlesh (Retd Professor), IMSAR, MDU Rohtak,	-do-
37.	Prof. Kulwinder Kaur, Deptt. of Sociology, Jamia Millia Islamia, Central University, New Delhi,	-do-
38.	Prof. Suman Singh, Department of Biochemistry, Kurukshetra University, Kurukshetra,	-do-
39.	Prof. Poonam Silotia, Department of Physics & Astrophysics, University of Delhi,	-do-
40.	Prof. Kusum Lata, Principal, Sri Aurobindo College (Evening) University of Delhi,	-Attended offline-
41.	Dr. Mudita Verma, Retired, Associate Professor from PG College Hisar,	- Attended online-

		Special invitee
42.	Dr. Mathachan K.J., In-charge, Deptt.of Foreign Languages	Attended offline
43.	Dr. Seema Dahiya, In-charge, Deptt.of Laws	-do-
44.	Dr. Pankaj Mishra, In-charge, Deptt.of Hotel Management	-do-
45.	Dr. Harinder Pal, In-charge, Deptt.of Fashion Technology	-do-
46.	Dr. Neelam Malik Registrar	Member Secretary

THE QUORUM WAS COMPLETE.

At the outset, the Vice-Chancellor welcomed all the members to the 27th meeting of the Academic Council.

After the exchange of pleasantries, the formal agenda items with the permission of the Chairperson were taken up by the Registrar.

1. Confirmation of the Minutes of the 26th meeting of Academic Council held on 14/07/2023.

RESOLVED THAT THE MINUTES OF THE 26th MEETING OF THE ACADEMIC COUNCIL HELD ON 14.7.2023 BE CONFIRMED.

2. Follow up Action Report.

RESOLVED THAT THE FOLLOW UP ACTION TAKEN ON THE DECISIONS OF THE ACADEMIC COUNCIL MEETING HELD ON 17.1.2023 BE NOTED. HOWEVER, THE DEAN ACADEMIC AFFAIRS RAISED THE OBSERVATION WITH REGARD TO FOLLOW UP ACTION ON AGENDA NO.5 OF 26TH MEETING THAT THE REGISTRATION OF TWO STUDENTS ARE STILL PENDING BECAUSE OF NON ALLOCATION OF THE ELIGIBLE SUPERVISOR (S). FURTHER RESOLVED THAT THE ELIGIBLE SUPERVISOR (S) BE ALLOTTED TO THOSE TWO STUDENTS IMMEDIATELY AND THE REGISTRATION LETTER BE ISSUED WITHIN SEVEN DAYS.

Action by – Dean Faculty of Sciences and R&S branch

3. To ratify the action taken by the Vice-Chancellor in approving the Ordinance, Scheme of Examination and Syllabus of M.A. Social Work and Ph.D Social Work from the Academic Session 2023-24 in anticipation of the approval of the Academic Council.

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action By – Academic Branch

4. To ratify the action taken by the Vice-Chancellor in the case of Ms. Priyanshu, a Student of B.Tech Programme to continue the programme and reconduct of examinations from the Academic Session 2023-24 in anticipation of the approval of Academic Council.

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action By -Examination Branch & Academic Branch

5. To ratify the action taken by the Vice-Chancellor to increase 10 (ten) seats in B.A. programme in Regional Center, from the Academic Session 2023-24 in anticipation of the approval of the Academic Council.

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action By – Academic Branch

6. To ratify the action taken by the Vice-Chancellor in anticipation of approval of Academic Council to grant permission of six months to submit M. Tech Thesis to Ms. Priya Rani, a student of M. Tech (ECE) Department of Electronics and Communication Engineering.

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action By – Academic Branch

7. To ratify the action taken by the Vice-Chancellor to increase 10 (ten) Seats in LLM, for the Academic Session 2023-24 only, in anticipation of the approval of Academic Council.

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action By – Academic Branch

8. To ratify the action taken by the Vice Chancellor to award the Ph. D. Degrees to the students in the subjects as mentioned against their name in anticipation of the approval of the academic council.

Sr. No.	Research Scholar	Name of the Supervisor(s)	Name of the Department	Registration No.	Title of the Thesis	Date of the URC
1.	Ms. Reenu Kumari D/o Sh. Ramphal	Dr. Bhavna Sharma	Department of Commerce	2014041100017524	"Financial Literacy and Retirement Planning: A Case of Salaried Individuals"	24.07.2023
2.	Ms. Sudesh Sheoran D/o S Zile Singh	Prof. Sanket V	Department of Management	2018041100030413	"Contribution of Internet of Things (IoT) in eGovernance: Evidences from Government to Citizen Services (G2C) in India."	02.08.2023
3.	Ms. Jagriti D/o Sh. Jogender Singh	Dr. Rajesh Hooda	Department of Laws	2017041100022803	"Victimization of Saxual Minorities: A Critical Study"	04.08.2023
4.	Ms. Jyoti Singh D/o Sh. Satbir Singh	Dr. Poonam	Department of Education	2016041100021501	"Effect of Remedial Instruction Programme on Academic Achievement in Science of Children with Visual Impairment"	15.09.2023

5.	Ms. Sonia Kathuria D/o S Ramsarup Kathuria	Dr. Ravi Bhushan	Department of English	12030407	"Consciousness of Nationalism and Spiritualism: A Comparative Study of Select Essays and Letters of Rabindranath Tagore and Romain Rolland"	11.10.2023
6.	Ms. Pooja Sangwan D/o Sh. Krishan Chander	Dr. Alka Bharti	Department of Laws	2019041100040513	"Environment Protection and Sustainable Development: An Indian Perspective"	07.11.2023
7.	Ms. Monika Malik D/o Sh. Kiddar Singh Malik	Dr. Reena Ran	Department of Education	2017041100013232	"Adoption of Flipped Classroom Approach for Fostering Student Engagement and Self Efficacy Among Prospective Teachers"	06.12.2023
8.	Ms. Mona D/o Sh. Satpal Madan	Dr. Meenakshi Katyal	Department of Management Studies	2017041100022962	"Performance Assessment and Impact of Select Credit Rating Agencies on Indian Stock Market : An Empirical Evidence"	08.12.2023

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action By – Academic Branch

9. To ratify the action taken by the Vice-Chancellor for granting approval for Open Elective Courses to be included in the Syllabus and Scheme of M.A. English two year programme for Affiliated Colleges w.e.f. Academic Session 2023-24 in anticipation of approval of Academic Council. (Annexure-7, page- 114-115).

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED. FURTHER, RESOLVED THAT THE SAME BE IMPLEMENTED FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

10. To consider the Registration of two students in Ph.D. in Deptt. of Economics.

Sr. No.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1	Ms. Priyanka D/o Sh. Baljit Attri 2022041100042214	STEM Education and Career Choices-What Matters? A Study of Urban Employed Women in India	Prof. Surender Singh	03.08.2023

2	Ms. Harshika D/o Sh. Narender Singh 2022041100042222	Innovation and Environmental Quality: A Cross Country Analysis with Special Reference to India	Prof. Surender Singh	03.08.2023
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RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED. FURTHER IT WAS SUGGESTED THAT THE WORD STEM MAY BE REPLACED WITH STEMM IF AGREED BY THE SUPERVISOR.

Action by- R&S Branch

11. To consider the Registration of one student namely Ms. Tanu in Ph.D. in Deptt. of Commerce.

Sr. No.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Tanu 2022041100028117	E-cart Abandonment and Retargeting Strategies for Improving Behavioral Intention: A Study of Online Shoppers in India.	Dr. Ishani Patharia	03.04.2023

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED. IT WAS ALSO RESOLVED THAT THE TOPIC BE CHECKED AGAIN AND IF THERE IS ANY TYPOGRAPHICAL ERROR/CHANGES/AMENDMENTS REQUIRED, THE SAME MAY BE APPROVED BY THE VICE CHANCELLOR.

Action by- R&S Branch

12. To consider and approve the proposal for starting Skill Development Training Programmes as per the Guidelines of Haryana State Higher Education Council issued vide Letter No. 3/49-2021 Adv./HSHEC dated 06/03/2023.

No.	Sr.	Name of the Course	Duration of the Course
1		Data Entry Operator	One-Year
2		Typing & Short Hand (Hindi)	One-Year

RESOLVED THAT THE AGENDA BE DEFERRED AND RE-EXAMINED IN VIEW OF THE FEE BEING CHARGED IN THE SIMILAR COURSES AND REMMUNERATION FOR ADDITIONAL ASSIGNMENT BEING PAID IN UNIVERSITY BY THE FOLLOWING COMMITTEE:

- | | |
|------------------------------------|------------------|
| 1. DEAN ACADEMIC AFFAIRS | CONVENER |
| 2. PROF. VIJAY NEHRA, DEPT. OF ECE | MEMBER |
| 3. DR. ANSHU BHARDWAJ, NO, CSII | MEMBER |
| 4. PRINCIPAL, POLYTECHNIC | MEMBER SECRETARY |

Action by-Principal, Polytechnic

13. To consider and approve change in the pattern of assessment of CBCS course (open elective) offered by BHM programme by the Department of Hotel Management.

Existing Assessment 60:20: 20 i.e. 60 marks for external assessment, 20 marks for external practical assessment and 20 marks for internal assessment	Proposed Assessment 80:20: i.e. 80 marks for external assessment and 20 marks for internal assessment
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RESOLVED THAT THE EXISTING PATTERN OF ASSESMENT BE FOLLOWED AS ALL THE COURSES WILL COME UNDER NEP-2020 FROM THE NEXT ACADEMIC SESSION 2024-25.

Action by- Academic Branch

14. To consider the proposal for establishment of Department of Culture & Visual Arts in light of the letter received from Director, Higher Education Haryana, Panchkula vide Memo No. 1821-2023 UNP (4) dated 01/09/2023.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- Academic Branch

15. To consider and approve the recommendations made by the Faculty of Social Sciences held on 20/11/2023, regarding change of nomenclature of M.A. Social Work to Master of Social Work (MSW) w.e.f. 2023-24.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action by- Academic Branch

16. To consider and approve the modification / clause in examination ordnance w.r.t. issuance of grace marks / re-conduct of Examinations on the basis of complaint made by students for examination.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED EXCEPT POINT NO. 2 & 4.

Action by- Examination Branch

17. To consider and approve the rules (proposed amended rules at sr No. 1 of the modification placed before Academic Council dated 20.06.2018 under item no. 16) for University Examination Re-evaluation reforms Note-Marks obtained by the candidate whichever are Higher by State University / Central University in Haryana.

Existing Rules before 20.06.2018	AMENDED RULES (recommended by the committee and approved by the State Govt.
No Condition	Eligibility Criteria for re-evaluation of answer book(s) (I). If the award (s) in the paper(s) is/are less than 20% of maximum marks (theory only), No re-evaluation of answer book(s) will be allowed.

RESOLVED THAT THE ABOVE PROPOSAL BE RE-EXAMINED BY THE FOLLOWING COMMITTEE:

1. CONTROLLER OF EXAM
2. DEAN OF COLLEGES
3. DEAN, FACULTY OF LAWS
4. DEAN FACULTY OF SCIENCES

Action by- Examinations Branch

18. To Consider and Approve the common subject (Current Issues and Societal Development), and common subject code (CISD-001) with 80+20 marks in all UG courses the Examination be conducted in the third semester for all.

RESOLVED THAT THE ABOVE PROPOSAL BE IMPLEMENTED IN LETTER AND SPIRIT IMMEDIATELY. FURTHER RESOLVED THAT NON COMPLIANCE OF THE DECISION OF THE ACADEMIC COUNCIL SHALL BE TAKEN SERIOUSLY.

Action by- Examinations Branch

19. To consider & approve the following recommendations made by the Faculty of Sciences in its meeting held on 05/01/2024:

1. Eligibility criteria for admission in M.Sc. Food and Nutrition w.e.f Academic Session 2024-25.
2. To revision of Scheme and Syllabi of Pr-Ph.D Food and Nutrition w.e.f Academic Session 2024-25 .

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED AND THE WORD PRE-Ph.D BE READ AS PH.D COURSE.

Action by- Academic Branch

20. To consider the Registration of two students in Ph.D. in Mathematics, Deptt. of Basic & Applied Sciences.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Sonia D/o Sh. Wazir Singh 22122201 2014041100005604	Analysis of Transient Problems in Generalized Thermoelasticity	Dr. Sunil Kumar	06.12.2023
2.	Ms. Parul D/o Sh. Sheeshpal 22122202 2014041100005627	Investigation of Thermomechanical Disturbances in Coupled Thermoelastic Media	Dr. Sunil Kumar	06.12.2023

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- R&S Branch

21. To consider the Registration of one student in Ph.D. in Deptt. of Fashion Technology.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Ritika Sharma D/o Sh. Ramesh	Design, Development and Assessment of Sustainable Denim	Dr. Harinder Pal, Supervisor Dr. J. N.	18.10.2023

	Kumar Sharma 202104110003 9323	Fabric	Chakraborty, Co-Supervisor	
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RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- R&S Branch

22. To consider the Registration of one student in Ph.D. in Deptt. of CSE/IT.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Rubi D/o Sh Shab Singh 20220411000 43001	Enhancing Data Security in Cloud Computing using Cryptographic Techniques	Dr. Sunita Rani, Supervisor Dr. Vinod Kumar Saroha, Co-supervisor	09.01.2024

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- R&S Branch

23. To consider the case of de-registration of Ph.D. in Deptt. of ECE.

S. No.	Name of Ph.D. Scholar	Regn. No.	Reason
1.	Mrs. Sunita Rani D/o Sh. Dalbir Singh	201704110002 2982	Due to non-submission of fee and progress report

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED AND THE WORD D-REGISTRATION BE READ AS CANCELLATION.

Action by- R&S Branch

24. To ratify the action taken by the Vice Chancellor in approving the recommendations of the committee constituted to resolve the issue of nomenclature of DMCs of all integrated programme, in anticipation of the approval of Academic Council.

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action by- Examinations Branch

25. To consider and approve the proposal for implementation the one semester internship in the Course curriculum of B.Tech (ECE) 8th Semester of Department of Electronics and communication Engineering.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25 FOR THE ALL B.TECH COURSES BEING RUN UNDER FACULTY OF ENGINEERING AND TECHNOLOGY AND AMENDMENT SHALL BE MADE IN THE ORDER OF THE CONCERNED PROGRAMME.

Action by- Academic Branch & Dean, FET

26. To consider and approve the recommendations made by the Faculty of Engineering and Technology in its meeting held on 18/01/2024 regarding revision the Scheme and Syllabus of B.Tech (CSE) and B.Tech (IT) in the Academic Council from the Academic Session i.e. 2024-2025.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- Academic Branch

27. To consider the Registration of the students in Ph.D. in Deptt. of Law.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Akansha Sangwan D/o Sh. Rajbir Singh 202204110004 1996	CYBER CRIME AGAINST WOMEN AND CHILDREN: A COMPARATIVE STUDY OF INDIA, USA AND UK	Dr. Kritika	15.09.2023
2.	Kumari Rashmi D/o Sh. Sudarshan Kumar Kingar 201804110000 5125	CYBER CRIMES IN INDIA: JUDICIAL AND LEGISLATIVE APPROACH	Dr. Seema Dahiya	15.09.2023
3.	Ms. Vanika D/o Sh. Anil Kumar 202204110004 2005	ANTI-DEFECTION LAWS IN INDIA: A CRITICAL STUDY	Dr. Anil Balhera	15.09.2023
4.	Ms. Parul D/o Sh. Satyawar 202204110004 2021	STATUS OF REFUGEES IN STATE OF ASSAM: A SOCIO LEGAL CRITIQUE	Dr. Pawan	15.09.2023

5.	Ms. Manu Kadiyan D/o Sh. Mahinder Singh Kadiyan 202204110004 2036	EMERGING TRENDS IN ALTERNATIVE DISPUTE RESOLUTION MECHANISM: A CRITICAL ANALYSIS	Dr. Rajesh Hooda Dr. Anu Bala	15.09.2023
6.	Ms. Sushila Sharma D/o Sh. Roshan Lal Sharma 202204110004 2013	LAW RELATING TO BANKING FRAUDS IN INDIA: AN ANALYTICAL STUDY	Dr. Rajesh Hooda Dr. Anu Bala	15.09.2023
7.	Ms. Nancy Dhillon D/o Sh. Jagdish Singh Dhillon 201504110000 4656	RIGHT TO PRIVACY WITH SPECIAL REFERENCE TO SOCIAL MEDIA: ISSUES AND CHALLENGES	Dr. Parmod Malik	15.09.2023

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- R&S Branch

28. To consider the Registration of student in Ph.D. in Deptt. of Economics.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Hema D/o Sh. Rohtash Singh 20220411000420 83	INSTITUTIONS, PROPERTY RIGHTS AND ECONOMIC DEVELOPMENT: A STUDY OF WOMEN IN HARYANA	Prof. Surender Singh	20.01.2024

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- R&S Branch

29. To consider the Registration of student in Ph.D. in Deptt. of Commerce.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
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1.	Ms. Kirti D/o Sh. Parveen Kumar Vasuja 201704110001 2503	Factors Affecting Adopting of Fintech Services in Haryana	Dr. Bhavna Sharma	10.02.2024
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RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- R&S Branch

30. To consider and approve implementation of Common Ph.D Course Work under Faculty of Engineering and Technology w.e.f. ongoing Academic winter session.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED and CPE-RPE-2203 BE READ AS CPE-RPE-022.

Action by- Acad Branch & Dean, FET

31. To consider the Registration of twelve students in Ph.D. in Deptt. of Education.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Kusum D/o Sh. Jai Bhagwan 2015041100012756	Effect of Token Economy on Cognitive Dissonance and Learning Autonomy among Secondary School Students	Dr. Suman Dalal	15.01.2024
2.	Ms. Neelam D/o Sh. Ajmer Singh 2017041100013127	Effectiveness of Experiential Learning Programme on the Academic Achievement in Computer Science among Secondary School Students in Haryana	Dr. Yogesh Chander	15.01.2024
3.	Ms. Neelam Rani D/o Sh. Satya Narain 2019041100001546	Effectiveness of Mindfulness based Cognitive Therapy on Impulsive Behaviour, Role Conflict and Social Acceptability of under graduate student.	Dr. Suman Dalal	15.01.2024
4.	Ms. Jyoti D/o Sh. Hawa Singh 2019041100001682	Exploring the Role of Parenting Practices: Internal and External factors with respect to Resilience, Decision Making Ability and Academic Performance among Adolescents	Dr. Poonam Punia	15.01.2024
5.	Ms. Vandana D/o Sh. Mahender 2020041100041127	Study Habits and General Well-Being in Relation to Mobile Phone Addiction Among Undergraduate	Dr. Anu Balhara	15.01.2024

		Students		
6.	Ms. Tapasya Gehlawat D/o Sh. Rambhaj Gehlawat 2020041100041135	Effect of Thinking Maps and Embodied Learning on Critical Thinking and Scholastic Achievement of Nineth Grade Students	Dr. Suman Dalal	15.01.2024
7.	Ms. Reena Devi D/o Sh. Raghbir 2020041100041143	Study of the Educational Thoughts of Dr. Sarvepalli Radha Krishnan and their Relevance in the Present System of Education	Dr. Anu Balhara	15.01.2024
8.	Ms. Seema Rani D/o Sh. Ramesh Kumar 2020041100041166	Mental Health, Study Habits and Career Aspiration of Senior Secondary School Students in relation to their Parental Encouragement	Dr. Monika	15.01.2024
9.	Ms. Ritu Rani D/o Sh. Pratap Singh 2020041100041151	Impact of Language Acquisition through Motor Planning (Lamp) Approach of Language & Communication Development Among Students with Autism Spectrum Disorder	Dr. Varuna Tehlan Dahiya	15.01.2024
10.	Ms. Vimal Sharma D/o Sh. Ghasi Ram Sharma 2020041100041182	Personality Reasoning Ability and Psychological Capital Among Secondary School Students in relation to Helicopter Parenting	Dr. Reena Rani	15.01.2024
11.	Ms. Poonam Devi D/o Sh. Manphool Singh 2020041100041197	Aadhunik samaj me satat vikasi lakshya prapti me vadik shiksha darshan ka mahtav	Dr. Varuna Tehlan Dahiya	15.01.2024
12.	Ms. Sonia Dahiya D/o Sh. Ashok Kumar 2020041100041201	Effect of an Intervention Programme in developing Resilient Behaviour in Children with Attention Deficit Hyperactivity Disorder	Dr. Varuna Tehlan Dahiya	15.01.2024

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- R&S Branch

32. To consider the case of appointment of co-supervisor for Ph.D. in Deptt. of Education.

S. No.	Name of Ph.D. Scholar	Registration No.
1.	Ms. Nidhi	20105041100010943

RESOLVED THAT THE ABOVE PROPOSAL MAY NOT BE APPROVED AS THE PROVISION FOR APPOINTMENT OF CO SUPERVISOR FROM THE SAME DEPARTMENT IS NOT AVAILABLE IN THE PH.D ORDINANCE UNDER WHICH THE STUDENT IS REGISTERED.

Action by- R&S Branch

33. To consider the Registration of student in Ph.D. in Deptt. of Commerce.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Mahak Jain D/o Sh. Ajay Kumar Jain 202204110003 0712	A comparative study of purchase behavior of customers towards traditional watches and smart watches with reference to masstige marketing in Haryana	Dr. Seema Malik	19.02.2024

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED

Action by- R&S Branch

34. To ratify the action taken by the Vice-Chancellor in sending a proposal for establishment of a new Department i.e. Department of Psychology from the session 2024-25 at BPSMV, Khanpur Kalan under the Faculty of Social Sciences .

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED.

Action by- Establishment Teaching Branch

35. To consider the Registration of seven students in Ph.D. in Deptt. of Management Studies.

S. N.	Name of the Candidate	Title	Name of the Supervisor	Date of meeting of PGBOS
1.	Ms. Savita D/o Sh. Ram Kumar Sindhu 2022041100043016	Role of Circular Economy and Supply Chain Management towards Sustainability in MSME Sector in Haryana	Dr. Anshu Bhardwaj	10.02.2024

2.	Ms. Sakshi D/o Sh. Jaikaran 2022041100043024	Consumer Barriers and Intervention towards Adoption, Policy towards Electric Vehicles	Dr. Krishan Kumar	10.02.2024
3.	Ms. Veenu Gupta D/o Sh. Krishan Kumar Goel 2022041100043032	Role of Digital Transformation in Enhancing Environmental Sustainability and Consciousness	Prof. Dr. Sanket Vij	10.02.2024
4.	Ms. Jhanvi Khurana D/o Sh. Harish Kumar Khurana 2022041100043047	Role of Artificial Intelligence Enables Digital Marketing Tools on Consumer Decision Marking Process	Prof. Dr. Sanket Vij	10.02.2024
5.	Ms. Uma Devi D/o Sh. Chander Pal 2022041100043055	Role of Digitalization in the Restructuring and Sustainability of MSME Sector	Dr. Krishan Kumar	10.02.2024
6.	Ms. Monika D/o Sh. Jashmer 2022041100043071	Carbon Footprints in Higher Education Institutions in Haryana	Prof. Dr. Shweta Singh	10.02.2024
7.	Ms. Sweety D/o Sh. Wazir Singh 2022041100043086	Role of Environmental, Social, and Governance (ESG) Factors and Firm Performance in Sustainable Development	Dr. Anshu Bhardwaj	10.02.2024

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED. FURTHER RESOLVED THAT IN THE CASE OF SERIAL NUMBER 4, THE WORD ENABLES BE READ AS ENABLED.

Action By – R & S Branch

36. To consider and approve the revise Scheme of Examination and Syllabus Ordinance of M.Sc. Geography programme with effect from Academic Session 2024-25.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action by- Acad Branch

37. To consider and approve the minor revision in B.Tech (ECE) model curriculum as per AICTE revised model curriculum of the department of Electronics and Communication Engineering.

Previous course, code and semester	Proposed course, code and semester
Internet of things and Applications (ECEL-357), B.Tech 5 th semester	Internet of Things (ECEL-357), B.Tech 5 th semester
Computer Network (ECL-360), B.Tech 6 th semester	Mobile Communication and Network (ECL-360) B.Tech 6 th semester

Mobile Programming (ECEL-475-D),
B.Tech 7th semester

Advanced Mobile Communication
(ECEL-475-D), B.Tech 7th semester

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

38. To Consider and approve the recommendations of PGBOS and Faculty of law regarding the case of shifting of dissertation paper of LLM from 3rd to 4th Semester w.e.f. the Academic Session 2024-25.

RESOLVED THAT THE ABOVE PROPOSAL NEEDS TO BE RE-EXAMINED, HENCE DEFERRED.

Action By – Academic Branch

39. To Discuss and approve the Common Ordinance for 4 Year Under Graduate Programmes: Certificate, Diploma, 3 Year Degree, 4 Year Degree (Honours/Honours with Research) semester system under Learning Outcome Based Curriculum Framework-Choice Based Credit System (LOCF-CBCS) to be implemented from Academic Session 2024-25.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action By – Academic Branch

40. To consider and approve the course content/syllabus related to Value Added Courses, Ability Enhancement Courses and Skill Enhancement Courses.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action By – Academic Branch

41. To consider and approve the proposal to introduce Bachelor of Arts (Multidisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

42. To consider and approve the proposal to introduce Bachelor of Physical Science (Multidisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

43. To consider and approve the proposal to introduce Bachelor of Computer Science (Multidisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL NEEDS TO BE RE-EXAMINED, HENCE DEFERRED.

Action By – Academic Branch & Principal, IHL

44. To consider and approve the proposal to introduce Bachelor of Life Science (Multidisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

45. To consider and approve the proposal to introduce Bachelor of Home Science (Interdisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

46. To consider and approve the proposal to introduce Bachelor of Arts (Hons./Hons. with Research) in English Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

47. To consider and approve the proposal to introduce Bachelor of Arts (Hons.) in Sanskrit Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

48. To consider and approve the proposal to introduce Bachelor of Physical Education and Sports (Hons.) Programme under National Education Policy –

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

49. To consider and approve the proposal to introduce Bachelor of Commerce (Hons./Hons. with Research) (Interdisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

50. To consider and approve the proposal to introduce Bachelor of Business Administration (Hons./Hons. with Research) (Interdisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

51. To consider and approve the proposal to introduce Bachelor of Hotel Management (Hons./Hons. with Research) (Interdisciplinary) Programme under National Education Policy – 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH EFFECT FROM THE ACADEMIC SESSION 2024-25.

Action By – Academic Branch

52. To consider and approve the recommendations of PG Board of Study of Department History and Archeology and Faculty of Social Sciences regarding to:

- To discuss and approve the Change in the Nomenclature of course CBOE - 1129 History of Haryana (Earliest time to sultanate).
- To Discuss and Approve the insertion /Addition of clause 7.9 in the ordinance of two year M.A History & Archaeology
- To discuss and approve the updation in the syllabus of course HIS-2201.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action By – Academic Branch

53. To consider the proposal to increase the intake of B.A. programme from 100 to 180 at Regional Centre, Krishan Nagar, Rewari.

RESOLVED THAT THE ABOVE PROPOSAL NEEDS TO BE RE-EXAMINED BY THE FOLLOWING COMMITTEE:

1. DEAN ACADEMIC AFFAIRS
2. DEAN FACULTY OF SOCIAL SCIENCES
3. DEAN FACULTY OF SCIENCES

Action By – Academic Branch

54. To consider and approve the proposal for setting up of the University Media and e-Content Development Center (UMECD) in the University to cater to the growing needs and essential qualitative expansion of Indian Higher Education in accordance with the mandate of NEP 2020.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED AND REFERRED TO EXECUTIVE COUNCIL AS THE FINANCIAL LIABILITY IS INVOLVED THEREIN.

Action By – Academic Branch

55. To consider the cancellation of Registration of Ph.D. in Deptt. of Commerce.

S. No.	Name of Ph.D. Scholar	Regn. No.	Reason
1.	Ms. Priya	2016041100007072	Due to personal reason

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action By – R&S Branch

56. To consider and approve the Scheme of Examination and Syllabus of Ph.D Political Science w.e.f. the Academic Session 2023-24.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action By – Academic Branch

57. To ratify the action taken by the Vice-Chancellor in approving the Ordinance, Scheme of Examination and syllabus of Ph.D Course work (Economics) from the Academic session 2023-24 in anticipation of the approval of the Academic Council.

RESOLVED THAT THE ACTION TAKEN BY THE VICE CHANCELLOR BE APPROVED. FURTHER, RESOLVED THAT THE WORD ORDINANCE IN TITLE BE DELETED.

Action By – Academic Branch

58. To consider and approve the ordinance (Syllabus and Scheme of examination) for the following new PG courses to be introduced at MSM Institute of Ayurveda. (Annexure-69, Page-1665-1705)

1. PG Course in Kayachikitsa, (MD Ayurveda in kayachikitsa)
2. PG Course in Dravyaguna Vigyan (MD Ayurveda in Dravyaguna Vigyan)

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action By – Academic Branch

59. To consider and approve the annual fee for the following programmes mentioned as under:-

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|---------------------------------|----------------------|
| 1. M.A. Hindi | Rs. 5000/- per annum |
| 2. M.A. Sanskrit | Rs. 5000/- per annum |
| 3. M.A. Psychology | Rs. 5000/- per annum |
| 4. M.Sc Environment Science | Rs. 7500/- per annum |
| 5. Master of Mass Communication | Rs. 7500/- per annum |
| 6. M.A. Fine Arts | Rs. 7500/- per annum |

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED WITH AN ENHANCEMENT OF THE FEE OF M.A. PSYCHOLOGY FROM RS. 5000/- TO RS. 7500/-. FURTHER RESOLVED THAT THE MATTER BE REFERRED TO THE FEE COMMITTEE FOR BIFURCATION OF FEE.

Action By – Academic Branch

60. To consider and approve the change of the Eligibility Criteria of Master of Physical Education & Sports (M.P.E.S.) programme in the Department of Physical Education under the Faculty of Physical Education

Further, the existing and proposed eligibility criteria of Master of Physical Education (M.P.E.S.) programme are as under:

3.2 Eligibility (Existing)	3.2 Eligibility (Purposed)
<p>(a) Bachelor of physical education (B.P. Ed.)/ Bachelor of Physical Education (B.P.E.)/B.P.E.S or equivalent with at least 50% marks</p> <p>OR</p> <p>(b) Bachelor of science (BSc.)in Health and Physical Education with at least 50% percent marks</p> <p>Or</p> <p>(c) The reservation in seats and relaxation</p> <p>(b) Preference will be given to those candidates who are sportsperson or had participated in Inter-University and National level.</p> <p>(c) No student who has crossed the age of 29 years as on 1st July of the relevant year will be allowed admission to M.P.E.S (Master of Physical Education and Sports) 2 years course. However, the vice-chancellor, BPSMV, has the power to relax the upper age limit by one year on the recommendation of the Head/Incharge, of the Department. The upper age limit may be relaxed by 3 years in the case of SC and ST candidates of Haryana.</p> <p>(d) Submission of Physical fitness certificate from Institute of Ayurveda, BPSMV is compulsory before admitting to</p>	<p>(a) Bachelor of physical education (B.P.Ed.)/ Bachelor of Physical Education (B.P.E.)/ Bachelor of Physical Education and Sports (B.P.E.S.)/Bachelor of Physical Education, Health Education and Sports Science or equivalent Graduation degree with at least 45% marks.</p> <p>or</p> <p>B.A./B.SC./B.Com or equivalent Graduation degree with at least 45% marks. Students must have minimum inter college participation/first / second /third position or Senior state/district championship participation/ first / second /third position minimum qualification for being eligible for admission.</p> <p>OR</p> <p>Bachelor of science (BSc.)in Health and Physical Education with at least 45% percent marks</p> <p>b) Preference will be given to those candidates who are sportsperson or had participated in Inter-University and National level.</p> <p>(c) No student who has crossed the age of 29 years as on 1st July of the relevant year will be allowed admission to M.P.E.S (Master of Physical Education and Sports) 2 years course. However, the vice-chancellor, BPSMV, has the power to relax the upper age limit by one year on the recommendation of the Head/Incharge, of the Department. The upper age limit may be relaxed by 3 years in the case of SC and ST candidates of Haryana.</p> <p>(d) Submission of Physical fitness certificate</p>

<p>the course.</p> <p>3.2.1 No candidate who is in employment (whole-time, part-time, or honorary service) shall be eligible to take admission in M.P.E.S. programme without taking leave from her institution/ office etc. from the date of admission to the termination of three year course. She has to submit an affidavit in this regard. If found in violation of this rule necessary action shall be taken against the candidate.</p>	<p>from Institute of Ayurveda, BPSMV is compulsory before admitting to the course.</p> <p>3.2.1 No candidate who is in employment (whole-time, part-time, or honorary service) shall be eligible to take admission in M.P.E.S. programme without taking leave from her institution/ office etc. from the date of admission to the termination of Two year course. She has to submit an affidavit in this regard. If found in violation of this rule necessary action shall be taken against the candidate</p> <p>Note: Reassertion will be followed as per Haryana State Government Rules. Only After qualifying the Physical Efficiency Test (PET) admission to M.P.Ed. /M.P.E.S. course will be processed.</p>
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The Vice Chancellor has considered the matter and ordered to place the same before the Academic Council for its approval.

RESOLVED THAT THE ABOVE PROPOSAL BE APPROVED.

Action By – Academic Branch

The meeting ended with a vote of thanks to the Chair.


20/3/24

Vice Chancellor


20/3/24
Registrar