

**BHAGAT PHOOL SINGH MAHILA
VISHWAVIDYALAYA, KHANPUR KALAN
(SONEPAT)**



**Institute of higher Learning
Department of Home Sc.
Curriculum and Scheme of Examination of three Year
B. Sc. (home science)
W.e.f. July 2022
Programme code- 056**

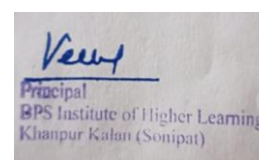
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Programme outcomes/ (POs)

- Interpret the relevance of Home Science's multidisciplinary approach, as well as the domains of physics, chemistry and zoology.
- Explain the domains of child development and how life cycle and therapeutic nutrition relate to the physiological basis of nutrition.
- Integrate scientific knowledge and soft skills into fashion, interior space planning, and resource management designs, as well as improve entrepreneurial and professional abilities.
- Apply practical skills to all parts of Home Science that are connected.
- Create environmental communication and sustainable development extension programmes.

Programme Specific outcomes (PSOs)

- To impart knowledge of different textile fibres and fabrics available in the market and Indian traditional textiles
- To develop skills in garment construction and dress designing
- To provide the knowledge of different textile finishes like dyeing and printing.
- To develop entrepreneurial skills in textiles and fashion.
- To develop understanding of various nutrients and their requirements and how to improve nutritional quality of food.
- To be familiar with the common nutritional problems of the community and schemes/ programmes and policies of government of India to combat malnutrition.
- To analyse nutrients, food quality and manage diseases using diet therapy.
- To apply skill-based knowledge in food industry
- To impart knowledge about interior decoration and management of family resources like income and expenditure pattern.
- To introduce the students with stages of human developments and various problems faced during different stages of lifecycle and ways to solve them.
- To relate the principles of human development with self, family and society.
- To enhance people's capacity for social functioning towards better quality of life.
- To evaluate competency in rural development practices.
- To achieve desirable change in the development and empowerment of people.
- To understand the role of consumer in the market and awareness regarding marketing conditions like rights and responsibilities of consumers.
- To impart knowledge about different developmental programme and technologies in rural areas through extension education.



**Curriculum And Scheme of Examination Three Year
B. Sc. (Home Science)
W.e.f. July 2022**

Evaluation and Grading:

The assessment will be 20% internal and 80% external.
The students have to qualify internal as well as external tests separately.
The weightage for internal evaluation (20%) is as follows:

Class tests/Minor test/Sessional tests	10%	(10 marks out of 100)
Assignments/Presentations/Seminars/Group Discussions	5%	(05 marks out of 100)
Attendance	5%	(05 marks out of 100)

Distribution of Marks for Attendance

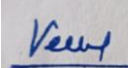
75% to 80%	2 Marks
80% to 85 %	3 Marks
85% and above	5 Marks

Credits:

The **classes/periods** in BPSIHL are of **45 Minutes** each. So, the **3 credits** of theory paper refer to **4 periods** and **1 credit** of practical refers to **3 periods/ 2 hours**.

CONSOLIDATED PROGRAMME DETAILS

Sr. No.	Semester	Total Credits	Total Marks
1	I	21.5	550
2	II	24.5	600
3	III	23	550
4	IV	23	550
5	V	23	550
6	VI	22	500
TOTAL CREDITS/MARKS		137	3300



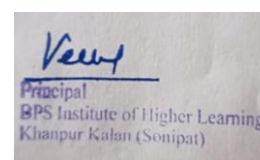
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Course Curriculum & Scheme of Examinations (w.e.f. July 2022)

B.Sc. Home Sc. 1st Semester

Sr. No	Code	Course Title	Periods/ week		No. of Credits	Marks distribution		
			T	P		Internal Marks	External Marks	Total Marks
1.	FON-101	Fundamentals of Nutrition	4		3	10	40	50
	FRP-101	Practical		3	1	10	40	50
2.	TIC-101	Textiles and its Care	4		3	10	40	50
	TIP-101	Practical		3	1	10	40	50
3.	ENG-101	English	4	2	4.5	10	40	50
4.	ICH-101	Introductory Chemistry	3		2	10	40	50
	ICP-101	Practical		3	1	10	40	50
5.	BOC-101	Basics of Computer	2		1	10	40	50
	BOP-101	Practical		6	2	10	40	50
6.	ALH-101	Applied Life Science & Human Physiology I	3		2	10	40	50
	ALP-101	Practical		3	1	10	40	50
7.	EVS-101	Environment studies	2			10	40	50
Total Periods/Credits			22	20	21.5	110	440	550

Pass Percentage — 40% and above- Both in External and Internal examination separately.

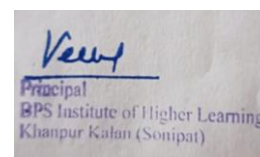


Course Curriculum & Scheme of Examinations (w.e.f. July 2022)

B.Sc. Home Sc. 2nd Semester

Sr. No	Code	Course Title	Periods/ week		Credits	Marks distribution		
			T	P		Internal Marks	External Marks	Total Marks
1.	FFM-102	Family Finance Management	4		3	10	40	50
	FFP-102	Practical		3	1	10	40	50
2.	FRM-102	Fundamentals of Family Resource Management	4		3	10	40	50
	FRP-102	Practical		3	1	10	40	50
3.	ENG-102	English	4	2	4.5	10	40	50
4.	OCH-102	Organic Chemistry	3		2	10	40	50
	OCP-102	Practical		3	1	10	40	50
5.	APH-102	Applied Physics	3		2	10	40	50
	APP-102	Practical		3	1	10	40	50
6.	CAP-102	Computer Applications	1		1	10	40	50
	CPP-102	Practical		6	2	10	40	50
7.	ALH-102	Applied Life Science & Human Physiology II	4		3	10	40	50
8.	EVS-101	Environment studies	2			10	40	50
Total Contact Hours/Credits			25	20	24.5	120	480	600

Pass Percentage — 40% and above- Both in External and Internal examination separately.



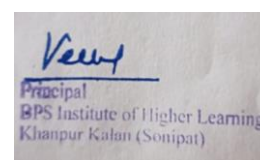
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Course Curriculum & Scheme of Examinations (w.e.f. July 2022)

B.Sc. Home Sc. 3rd Semester

Sr. No	Code	Course Title	Periods/ week		Credits	Marks distribution		
			T	P		Internal Marks	External Marks	Total Marks
1.	HEE - 201	Introductory Home Science and Extension Education	4		3	10	40	50
	HEP -201	Practical		3	1	10	40	50
2.	PCI-201	Prenatal Care and Infant	4		3	10	40	50
	PCP-201	Practical		3	1	10	40	50
3.	ITS-201	Introduction to Sociology	4		3	10	40	50
4.	ICL-201	Introductory Clothing	4		3	10	40	50
	ICP-201	Practical		3	1	10	40	50
5.	FSC-201	Food Science	4		3	10	40	50
	FSP-201	Practical		3	1	10	40	50
6.	FAI-201	Fundamentals of Art and Interior Decoration	4		3	10	40	50
	FAP-201	Practical		3	1	10	40	50
Total Contact Hours/Credits			24	15	23	110	440	550

Pass Percentage — 40% and above- Both in External and Internal examination separately.

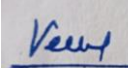


Course Curriculum & Scheme of Examinations (w.e.f. July 2022)

B.Sc. Home Sc. 4th Semester

Sr. No	Code	Course Title	Periods/ week		Credits	Marks distribution		
			T	P		Internal Marks	External Marks	Total Marks
1.	CNT-202	Community Nutrition	4		3	10	40	50
	CNP-202	Practical		3	1	10	40	50
2.	DCA-202	Development in Childhood & Adolescent	4		3	10	40	50
	DCP-202	Practical		3	1	10	40	50
3.	DDA-202	Dress Designing & Apparel making	4		3	10	40	50
	DDP-202	Practical		3	1	10	40	50
4.	MBS-202	Microbiology & Sanitation	4		3	10	40	50
5.	ERD-202	Extension Education and Rural development	4		3	10	40	50
	ERP-202	Practical		3	1	10	40	50
6.	HSM-202	Housing & Space Management	4		3	10	40	50
	HSP-202	Practical		3	1	10	40	50
Total Contact Hours/Credits			24	15	23	110	440	550

Pass Percentage — 40% and above- Both in External and Internal examination separately.

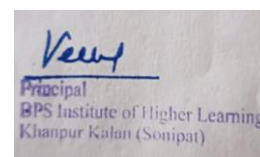

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Course Curriculum & Scheme of Examinations (w.e.f. July 2022)

B.Sc. Home Sc. 5th Semester

Sr. No	Code	Course Title	Periods/ week		Credits	Marks distribution		
			T	P		Internal Marks	External Marks	Total Marks
1.	CED-301	Consumer Education	4		3	10	40	50
2.	ITA-301	Introduction to Adulthood	4		3	10	40	50
	ITP-301	Practical		3	1	10	40	50
3.	NBC-301	Nutritional Biochemistry- I	4		3	10	40	50
	NBP-301	Practical		3	1	10	40	50
4.	NMG-301	Nutritional Management	4		3	10	40	50
	NMP-301	Practical		3	1	10	40	50
5.	TTI-301	Traditional Textiles of India	4		3	10	40	50
	TTP-301	Practical		3	1	10	40	50
6.	EEC-301	Extension Education & Communication	4		3	10	40	50
	EEP-301	Practical		3	1	10	40	50
Total Contact Hours/Credits			24	15	23	110	440	550

Pass Percentage — 40% and above- Both in External and Internal examination separately.



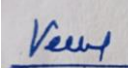
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Course Curriculum & Scheme of Examinations (w.e.f. July 2022)

B.Sc. Home Sc. 6th Semester

Sr. No	Code	Course Title	Periods/ week		Credits	Marks distribution		
			T	P		Internal Marks	External Marks	Total Marks
1.	FDP-302	Family Dynamics & Personal Empowerment	4		3	10	40	50
2.	NBC-302	Nutritional Biochemistry- II	4		3	10	40	50
	NBP-302	Practical		3	1	10	40	50
3.	THN-302	Therapeutic Nutrition	4		3	10	40	50
	THP-302	Practical		3	1	10	40	50
4.	PSY-302	Psychology	4		3	10	40	50
5.	DPF-302	Dyeing Printing & Finishing	4		3	10	40	50
	DPP-302	Practical		3	1	10	40	50
6.	HEE-302	Household Equipment & Energy	4		3	10	40	50
	HEP-302	Practical		3	1	10	40	50
Total Contact Hours/Credits			24	12	22	100	400	500

Pass Percentage — 40% and above- Both in External and Internal examination separately.



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B.SC (HOME SCIENCE)
Fundamentals of Nutrition (1st semester)
Paper code:-FON-101

External marks: 40
Internal marks: 10
Time: 3 hrs.

Total Credits: 03
Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To develop understanding of various nutrients and their requirements for healthy living.
- To develop skills to improve nutritional quality of food.

UNIT I

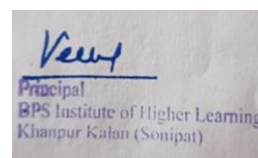
1. Nutrition: brief history, meaning and importance.
2. Functions, digestion and absorption of food.

UNIT II

1. Classification, sources, functions, recommended dietary allowances, deficiency and excess of macro nutrients – carbohydrates, fats, proteins, energy 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
2. Minerals: Calcium, Iron, Zinc, Fluorine, Iodine, Selenium, Copper, Manganese.

UNIT III

1. Nutritional problems of the community and implications for public health .
2. Common Nutritional Problems in India - Incidence, Causes, signs, and symptoms.
 - Protein Energy Malnutrition (PEM)
 - Micro-nutrient deficiencies – vitamin -A, iron, iodine, fluorosis
 - Hazards to community health and nutritional status



UNIT IV

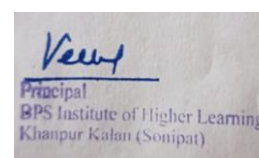
1. Adulteration in foods
2. Pollution of water
3. Basic terminology in food preparation
4. Methods of cooking- advantages and disadvantages, effect on nutritive values
5. Improving nutritional quality of foods: germination, supplementation, fortification, and enrichment.

Course outcomes: Students will be able to

1. The functions and sources of nutrients, role of nutrients in maintenance of good health.
2. The nutritional problems in community and able to understand the methods of improvisation in nutritional status.
3. The method and media of cooking food and their nutritive value.
4. Various adulterants found in food.

References:

1. Robinson,C.H.Lawler,M.R.Chenoweth W.L.and GarwickA.E.(1986): Normal and Therapeutic Nutrition, 17th Ed.Macmillan Publishing House.
2. Swaminathan M.S.(1985) ;Essentials of food and Nutrition VI:Fundamental Aspects.
3. ShuklaP.K.(1985) Nutritional Problems of India.
4. Park J.E.and Park K.(1994) Textbook of Social and Preventive Medicine.



Practical
Fundamentals of Nutrition (1st semester)
Paper code:-FOP-101

External marks: 40

Internal marks: 10

Time: 3 hrs.

Total Credits: 01

Total Marks: 50

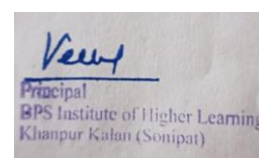
Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. Use and Care of Kitchen Equipment
2. Standard weights and measures
3. Household measures for raw and cooked food
4. Ingredients for standard recipe
5. Sensory and textural evaluation of food items according to source of nutrient
6. Preparation of recipes rich in: Vitamin A, B, C, D, energy carbohydrate, protein, fat, fiber, Iron and calcium.

References:

1. Robinson, C.H. Lawler, M.R. Chenoweth W.L. and Garwick A.E. (1986): Normal and Therapeutic Nutrition, 17th Ed. Macmillan Publishing House.
2. Swaminathan M.S. (1985) ; Essentials of food and Nutrition VI: Fundamental Aspects.
3. Shukla P.K. (1985) Nutritional Problems of India.
4. Park J.E. and Park K. (1994) Textbook of Social and Preventive Medicine.



B.SC (HOME SCIENCE)
Textile and its Care (1st semester)
Paper code: TIC- 101

External marks: 40

Internal marks: 10

Time: 3 Hrs.

Total Credits: 03

Total Marks: 50

Note:

1. The examiner will set 9 questions, including one objective type questions covering the entire syllabus and 4 questions from each unit
2. The candidate shall attempt 5 questions in all including the compulsory question
3. All questions carry equal marks.

Course Objectives:

- To impart knowledge of different textile fibres
- To enhance the understanding of yarns and fabric construction
- To familiarizes students with different types of fabric available in the market
-

UNIT-I

Textile fibres:

1. Classification of Textile fibers.
2. Manufacturing, Properties and their importance to the consumer
Natural: Cotton, Linen, Silk, Wool (Pashmina, Angora) and Jute.
Manmade: Rayon, Nylon, and Polyester.

UNIT-II

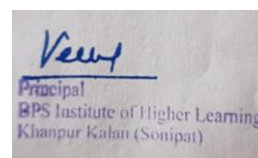
Yarn Construction:

1. Methods of Yarn Construction: Mechanical Spinning and Chemical spinning.
2. Classification of yarns: Simple, Novelty and Bulk yarns and the effect of yarns on finished fabric.

UNIT-III

Fabric construction:

1. Methods of fabric construction:
2. Weaving, knitting, Felting, braiding, lacing and bonding.
3. Simple or basic weaves, Fancy or decorative weaves Laundry Supplies.



UNIT-IV

Supplies necessary for laundry:

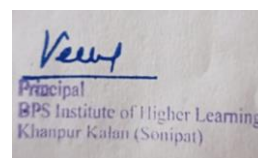
1. Soaps and detergents- Method of preparation, Difference between soap and detergent.
2. Starches blues and bleaches.
3. Other reagents: acids alkalies, solvents, and absorbents, different methods of laundry
4. Stain removal- classification of stains, methods of removing stains.
5. Water- Types of water and methods of softening water.

Course Outcomes: Students will be able to:

1. Gain understanding of different textile materials like Fibre and Yarn.
2. Develop understanding regarding the identification of various fabrics.
3. Learn various methods of knitting, weaving, felting, lacing etc.
4. Understand about different methods of removing stains and laundry etc.

References:

1. Corbman, B.P.(1985): textile Fibre to Fabric, Mc Graw Hill, New york.
2. Hollen, N. and Saddler, J: textile Latest Education, Mac Millian & Co., New York
3. Joseph, M.L. (1972) introductory textile Science, Holt Ribenhart of Winston, New York.
4. Tortora, P.G. (1978): understanding Textiles, New York, Mac Millian Publishing CO.



Practical
Textile and its Care (1st semester)
Paper code: - TIP- 101

External marks: 40

Internal marks: 10

Time: 3 Hrs.

Total Credits: 01

Total Marks: 50

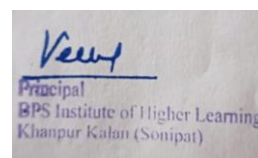
Note :

In practical candidate has to attempt three questions from the entire syllabus along with viva-voce and class report.

1. Identification of Textile fibers:
visual, microscopic, burning & chemical test
2. Laundry of cotton, Silk, Wool & Synthetic fibers
3. Removal of any 10 stains from white cotton fabrics
4. Fabric Identification: i. Thread count
ii. Weave identification

References:

1. Corbman, B.P.(1985): textile Fibre to Fabric, Mc Graw Hill, New York.
2. Hollen, N. and Saddler, J: textile Latest Education, Mac Millian & Co., New York
3. Joseph, M.L. (1972) introductory textile Science, Holt Ribenhart of Winston, New York.
4. Tortora, P.G. (1978): understanding Textiles, New York, Mac Millian Publishing CO.



B.SC (HOME SCIENCE)
English (1st semester)
Paper code: ENG-101

External marks: 40
Internal marks: 10
Time: 3 Hrs.

Total Credits: 4.5
Total Marks: 50

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.

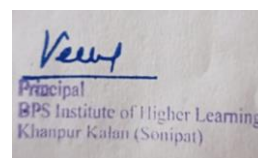
Short Stories – 3 Stories

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
(Usha Bande and Krishan Gopal (ed.), *The Pointed Vision*, O.U.P.)

Unit II

Short Stories – 3 Stories (Indian Writers)

1. 'The Blind Dog' by R.K. Narayan
(Jaiveer Hooda, Randeep Rana, Loveleen Mohan (ed.) *Language and Literature II*, Orient BlackSwan)
2. 'The Child' by Premchand
(Jaiveer Hooda, Randeep Rana, Loveleen Mohan (ed.) *Language and Literature II*, Orient BlackSwan)
3. 'Pigeons at Daybreak' by Anita Desai
(Jaiveer Hooda, Randeep Rana, Loveleen Mohan (ed.) *Language and Literature II*, Orient BlackSwan)



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
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Course Outcomes:

CO1-Understanding stories (FICTION) as a literary genre

CO2- Enhancing grammatical competence using stories

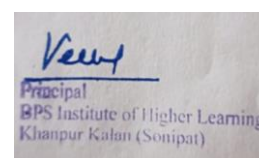
CO3- Appreciation of life as reflected in stories

CO4- Developing story writing as one of the hobbies

CO5- Story telling: an effective communicative tool

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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B.SC (HOME SCIENCE)
Introductory Chemistry (1st semester)
Paper code: ICH- 101

External marks: 40

Total Credits: 02

Internal marks: 10

Total Marks: 50

Time: 3Hrs

Note:

- The examiner will set 9 questions, including one objective type questions covering the entire syllabus and 4 questions from each unit
- The candidate shall attempt 5 questions in all including the compulsory question
- All questions carry equal marks.

Course Objectives:

- Understand with the basic concepts of chemistry
- Understand the molecular structure of elements and compounds
- Develop skills for measurement of physical properties

Unit –I

1. General Introduction to the structure of atom (electron, proton and neutron), Quantum numbers, Aufbau, s principle, Hund's rule, Pauli's exclusion principle.
2. Electronic configuration of atoms (upto atomic no. 30).

Unit II

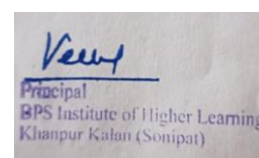
1. Periodic classification of elements (s, p, d and f block).
2. Periodic trends in properties (Atomic radii, Ionisation energy, Electron affinity, Valency).
3. Chemical bonding (Covalent, Ionic, Coordinate and Hydrogen bonding).
4. Chemical equations: balancing and chemical calculations.

Unit III

1. Chemical energetics: exothermic and endothermic reactions, enthalpies of formation, combustion, neutralization, fusion, solution, vaporization and sublimation, Calorific values of foods and fuels.
2. Mole concept and Concentration units: molarity, molality, formality and normality.

Unit-IV

1. Concepts of acids and bases: Arrhenious , Bronsted and Lewis concept of acid and bases
2. Acid base equilibrium, pH, pH Scale and buffer solutions
3. Concept of oxidation - reduction, oxidising and reducing agents, some examples of redox reactions.



Course outcomes: Students will be able to:

1. The basic idea about structure of atom and the rules regarding filling of electrons in orbitals.
2. Periodic classification of elements and periodic trends in properties of elements.
3. Types of bonds in molecules.
4. Chemical equations and calculations based on mole concept.
5. Ways of expressing the concentration of solution.
6. The concept of Acids and Bases, Redox reactions.

References:

1. Sienko/ Plane : Chemistry: Principles & Application ,Mc Graw Hill.
2. Robert J. Silbey & Robert A. Albert: Physical Chemistry, John Wiley sons.
3. P.L.Soni: 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 -1I,Vijaya pub.

Practical
Introductory Chemistry (1st semester)
Paper code: ICP- 101

External marks: 40

Internal marks: 10

Time: 3 Hrs.

Total Credits: 01

Total Marks: 50

Note:

In practical candidate has to attempt three questions from the entire syllabus along with viva-voce and class report.

1. Detection of extra elements (N, S, X).
2. To find out the strength of given Sodium hydroxide (NaOH) solution by titrating it with given Hydrochloric acid (HCl) solution.

References:

- 1 Sienko/ Plane: Chemistry: Principles & Application , Mc Graw Hill.
- 2 Robert J. Silbey & Robert A. Albert: Physical Chemistry, John Wiley sons.
3. P.L.Soni: 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.

B.Sc. (Home Science)
Basics of Computer (1st Semester)
Paper Code: BOC-101

External Marks: 40

Internal Marks: 10

Time: 3 Hrs

Total Credits: 01

Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type questions covering the entire syllabus and 4 questions from each unit
- The candidate shall attempt 5 questions in all including the compulsory question
- All questions carry equal marks.

Course Objectives:

- To impart understanding of computer use
- To develop skills in use of computers

Unit-1

1. Overview of computer.
2. Components of computer.
3. Input unit output unit Arithmetic unit.
4. Central processing unit- The system concept.

Unit –II

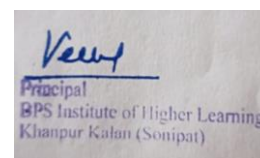
1. Input / output Devices.
2. Secondary storage devices

Unit –III

1. Number system: Decimal, Binary, Octal, Hexadecimal.
2. Representation of information: BCD, EBCDIC, ASCII

Unit –IV

1. Representation of data: Filed Record files.
2. File organization and access.
3. Security and operating.
4. Introduction to operating system.



Course outcomes: Students will be able to:

1. Acquire skill and acumen to use computers in the working of offices, education, business etc.
2. The concept of evolution of computer, different types of models of computer, application of computer, analyse the working various input, output and storage devices.
3. Analyse the concept of software, its types and review of operating system and learn features of Microsoft Windows &MS Word.

References:

1. P.K.Sinha: Computer Fundamental
2. V.Rajaraman: Fundamental of Computers
3. B.Ram: Computer Fundamental and organization
4. Sibramanian N: Introduction to Computer

Practical
Basics of Computer (1st Semester)
Paper Code: BOP-101

External Marks: 40

Internal Marks: 10

Time: 3 Hrs

Total Credits: 02

Total Marks: 50

Note:

In practical candidate has to attempt two questions from the entire syllabus along with viva-voce and class report.

MS windows: -

- (A) Introduction.
- (b) Exploring the desk top.
- (c) Running multiple programmers.
- (d) Accessories.
- (e) Control panel.
- (f) Managing documents and folders.

MS Word: -

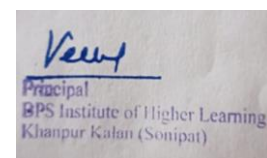
- (a) Starting MS Word.
- (b) Creating and formation a Document.
- (c) Changing fonts and fonts size.
- (d) Table creating and operating.
- (e) Auto correct, auto text, spell check, thesaurus.
- (f) Word art, inserting objects.
- (g) Mail Merge, letter, Label
- (h) Page setup, print preview.
- (i) Printing document.

MS Excel: -

- (A) starting Excel
- (b) Worksheet, Inserting Date in rows columns.
- (c) Alignment: - text cropping.
- (d) Sorting date, auto sum.
- (e) Use of function, referring formula cells other formula.
- (f) Alarming cells and ranges, goal seeks.
- (g) Creation of graphs.
- (h) Integrating work sheet date and charts with word (i) crating Hyperlink to a word document.
- (j) Page setup print preview printing work sheet: -

References:

1. P.K.Sinha: Computer Fundamental
2. V.Rajaraman: Fundamental of Computers
3. B.Ram: Computer Fundamental and organization
4. Sibramanian N: Introduction to Computer



B.Sc. (Home Science) (1st Semester)
Applied life Science and human physiology - I
Paper Code: ALH-101

External Marks: 40

Total Credits: 02

Internal Marks: 10

Total Marks: 50

Time: 3 Hrs

Note:

- The examiner will set 9 questions, including one objective type questions covering the entire syllabus and 4 questions from each unit
- The candidate shall attempt 5 questions in all including the compulsory question
- All questions carry equal marks.

Course Objectives:

- To impart knowledge about life science.
- To develop understanding human systems.

Unit-I

1. Introduction to Biology:

- Living and non-living things, General characteristics of living being
- Branches of biology
- Role of biology in human welfare and its contribution to solve food and environmental problems.

2. Cell Biology:

- Cell as a unit of life, electron microscopic study of cell.
- Structure and functions of its organelles
- Cell division: mitosis and meiosis

Unit-II

1. Histology:

- Study of animal tissues.
- Structure and functions of tissues: Epithelial, Muscular, Connective and Nervous

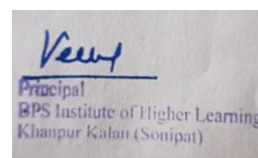
Unit-III

1. Digestive System:

Structure and function of GI track, oral cavity, teeth, stomach, liver, intestine and pancreas.

2. Cardiovascular System:

Composition and functions of blood, structure and functions of heart cycle and heart control, venous and arterial system.



Unit-IV

1. **Respiratory System:**

Structure and functions of lungs and respiratory tract
Inspiratory and expiratory mechanism, respiratory volumes

2. **Excretory System:**

Structure and functions of skin and kidney, urine formation, composition of urine and urea cycle.

Course outcomes: Students will be able to:

1. General characteristics of living things
2. Other branches of biology
3. Role of biology in human welfare
4. Various systems of our body

References:

1. Guyton, A.C., Hall, J.E. (1996): Text book Medical Physiology, 9th Ed. Prisma Books (Pvt.) Ltd Bangalore.
2. Winwood (198): Sear's Anatomy and Physiology for nurses, London, Edward Arnold.
3. Wilson (1989) : anatomy and Physiology in Health and illness, Edinburgh, Churchill Livingstone.
4. Chatterjee Charan (1988) : Text book of Medical Physiology, London, W.B.

Practical (1st Semester)
Applied life Science and human physiology - I
Paper Code: ALP-101

External Marks: 40

Internal Marks: 10

Time: 3Hrs

Total Credits: 01

Total Marks: 50

Note:

In practical candidate has to attempt two questions from the entire syllabus (Practical work) along with viva voce and class report.

1. To study permanent slides of blood and tissues hemoglobin measurement in blood.
2. To study the human skeleton system.
3. To measure the blood pressure and make a chart of blood pressure under different physical condition.
4. To determine presence of glucose in urine sample.
5. To study system of human body through charts.
Digestive system, Respiratory system, Circulatory system,
Excretory system and Reproductive system

References:

1. Guyton, A.C., Hall, J.E. (1996): Text book Medical Physiology, 9th Ed prism Books (Pvt.) Ltd Bangalore.
2. Winwood (198): Sear's Anatomy and Physiology for nurses, London, Edward Arnold.
3. Wilson (1989) : anatomy and Physiology in Health and illness, Edinburgh, Churchill Livingstone.
4. Chatterjee Charan (1988) : Text book of Medical Physiology, London, W.B.

B.Sc. (Home Science)
Environmental Studies (Paper Code: EVS-101)

External Marks: 40

Internal Marks: 10

Total Credits: 00

Total Marks: 50

Time :3 hrs

Note:

- The examiner will set 9 questions, including one objective type questions covering the entire syllabus and 4 questions from each unit
- The candidate shall attempt 5 questions in all including the compulsory question
- All questions carry equal marks.

Course Objectives:

- To develop an awareness about environmental issues.
- To increase public awareness and to lay foundations for a fully informed and active participation of individual in the protection of environment
- Conservation of natural resources, ecological balance and biodiversity to achieve sustainable development.
- To avoid environmental pollution and Global Problems

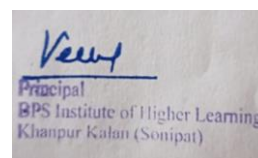
Unit-I

1. Definition, scope and importance need for public awareness.
2. The Multidisciplinary nature of environmental studies.
3. Renewable and non-renewable resources:
 - Forest resources: deforestation, mining, dams and their effects on forest and tribal people.
 - Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water.
 - Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.
 - Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture fertilizer-pesticide problems, water logging, salinity.
 - Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.
 - Land resources: Land as a resource, land degradation, man induced landslides, soil erosion, and desertification.
 - Role of individual in conservation of natural resources.

Unit-II

Ecosystem:

- Concept of an ecosystem.
- Structure, functions of an ecosystem.
- Producers, Consumers and decomposers.
- Energy flow in an ecosystem.
- Food chain, food web and ecological pyramids.
- Ecological succession.



- Introduction, types, characteristics features, structure and functions of the Following ecosystems: 1 Forest ecosystem 2 Grassland ecosystem 3. Desert ecosystem 4. Aquatic ecosystem

Unit-III

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.
- Climate change, global warming, acid rain, ozone layer depletion.
- Wasteland reclamation.
- Consumerism and waste products.

Unit-IV

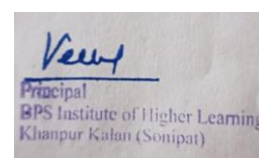
Field Work (As per UGC core module syllabus)

Course outcomes: Students will be able to:

1. The key concepts about the ecosystem diversity, its values and also about the importance of endemic species and different techniques involved in its conservation.
2. About ecosystem and also about its functions like food chain, ecological pyramids etc.
3. The different types of resources like land, water, mineral and energy and also about the effects of environment by the usage of these resources.
4. About the different types of pollutions and their control technologies, waste water treatment, Bio-medical waste management etc.

References:

1. Singh.S (2009) Environmental Geography (Eng)Prayag Pustak Bhawan ,Allahabad
2. Singh.S (2009) Environmental Geography (Hindi)Prayag Pustak Bhawan ,Allahabad
3. Singh ,R.B (1996),Disaster Environment and development oxford &IBH publishing house ,New Delhi
4. Singh ,R.B (2006),Natural Hazards and Disaster Management ,Rawat publishers ,Jaipur



B.SC (HOME SCIENCE)
Family Financial Management (2nd semester)
Paper code:-FFM-102

External marks: 40

Total Credits: 03

Internal marks: 10

Total Marks: 50

Time : 3 hrs.

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To understand the concept of family income and expenditure pattern.
- To critically analyze the saving and investment avenues.
- To enable students to handle their personal finances.

UNIT-I

1. Introduction of family finance management: Importance and Scope.
2. **Family income:** Definition and types of family income-money income, real income and psychic income, meaning & sources; Factors affecting personal family income, factors influencing variation in family expenditure; Engle's law of consumption.
3. **Budget:** definition, advantages, limitations of budgeting, types of budgets, steps in budget making.

UNIT-II

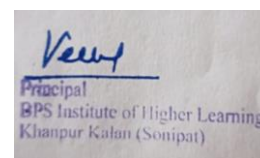
1. **Record keeping:** importance, formal and informal method of keeping account of income and expenditure, account ledger, balance sheet or net worth.
2. **Savings:** meaning, objectives and its need; type of savings: compulsory and voluntary, formal and informal.

UNIT-III

1. **Investments:** Meaning & its objectives, types of investments formal and informal viz., shares, stocks, etc.
2. **Insurance:** meaning and various types of insurance.

UNIT-IV

1. **Taxation:** meaning, advantages, types of taxes direct and indirect, tax saving Schemes, calculation of income tax.
2. **Will:** meaning, writing a will.
3. **Credit:** meaning, need of credit, advantages & disadvantages of credit, types of credit, basis of credit, sources of credit.



Course outcomes: Students will be able to:

1. The management of family finances, family income.
2. The types of budget and steps involved in making of budget.
3. About the investment s, share, stocks and insurance.
4. The type of taxes and various tax saving schemes.

References:

1. Gross I.H.& Crandell E.W 1963 Management for modern familiar Appleton centurion crofte, New York.
2. Nickell, I.P. Dorsary, J.M.1983, Management in the family living, Wiley easternLtd. New Delhi.
3. Steidle and Bratton 1967 work in the Home John wiley and sons, New York.
4. Seetharaman P, Batra S.& Mehran P 2005. An introduction to family resource management, CBS
5. Mundel M 1978 Motion and time study, prentice hall.
6. Sharon V 2005 Modern Home management, Sreenivas Publishers
7. Patni,manju &Sharma,Lalit 2005, Home management,Star publication,Agra.

Practical
Family Financial Management (2nd semester)
Paper code:-FFP-102

External marks: 40
Internal marks: 10
Time: 3 hrs.

Total Credits: 01
Total Marks: 50

Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. Analysis of family income
2. Analysis of family expenditure
3. Making personal budget
4. Making Family Budget
5. Planning budget for various income groups, Low, Medium and High income.
6. Growing or miniature kitchen garden for supplementation of money.
7. Family record keeping
8. Filling bank forms like withdrawals and deposits.
9. Method of taking insurance policies
10. Calculation of tax

References:

1. Gross I.H. & Crandell E.W 1963 Management for modern families Appleton century crofts, New York.
2. Nickell, I.P. Dorsary, J.M. 1983, Management in the family living, Wiley eastern Ltd. New Delhi.
3. Steidle and Bratton 1967 work in the Home John Wiley and sons, New York.
4. Seetharaman P, Batra S. & Mehran P 2005. An introduction to family resource management, CBS
5. Mundel M 1978 Motion and time study, Prentice Hall.
6. Sharon V 2005 Modern Home management, Sreenivas Publishers
7. Patni, Manju & Sharma, Lalit 2005, Home management, Star publication, Agra.

B.SC (HOME SCIENCE)
Fundamentals of Family Resource Management (2nd semester)
Paper code:-FRM-102

External marks: 40

Total Credits: 03

Internal marks: 10

Total Marks: 50

Time: 3Hrs

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To understand the fundamentals of family resource management.
- To impart knowledge regarding maximization and conservation of resources.
- To understand the principles of work simplification and ergonomics.

UNIT-1

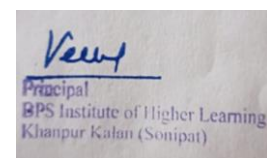
1. Management: Importance, definition and scope of family resource management.
2. Family: type of family, stages of family life cycle.
3. Value: Characteristics development of value pattern sources of value classification.
4. Goals: meaning, Type of goals, priority setting in goals.

UNIT-II

1. Standards: Meaning Classification of standards, source of standards, standard of living. Interlinking of values, goals & standards.
2. Decision-making: Importance, types of decision, decision-making process, factors affecting decision-making.
3. Management process: Planning: importance, types of plan; Implementing: controlling the action, checking the progress and adjusting the plan Evaluation: and feedback.

UNIT- III

1. Resources: Classification, characteristics and factors affecting use of resources.
2. Time as a resource: Need for time management, Basis of making time & activity Plan, factors to be considered in making time plan, Process of time management.
3. Energy as a resource: Importance of energy management; Fatigue: Types of fatigue, methods of avoiding of fatigue, energy requirement for household activities, Process of energy management.



UNIT-IV

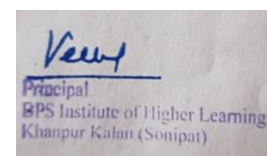
1. Work simplification: definition, importance, techniques of work simplification
2. Classes of mundel change, storage, principles and guidelines.
3. Ergonomics: definition, importance. Work, Worker and Workplace Relationship.

Course Outcomes: Students will be able to:

- Deal with Family Resources and will be able to organize/manage recordkeeping, Time management, money/budget management.
- Find managing the family finances much easier.
- Simplify their work.
- Understand the duties and responsibilities of Home Maker.

References:

1. Ruth E. Deacon, Francille M. Firebaugh (1975): Family Resource Management – Principle and Application, Roy Houghton Mifflin Company.
2. Irma, H. Gross, Elizabeth Grandall, Marjoris M. Knoll (1973): Management for Modern Families, Prentice Hall, Inc, Englewood Cliffs, New Jersey.
3. Nickell, P. and Dorsey D. M, Management in Family living. John Wiley and sons, 1976.
4. Swanson, B., Introduction to Home Management, Macmillan and Co., 1981.
5. Dalela S. & Saurabh 1999, textbook of work study and ergonomics. Standard



Practical
Fundamentals of Family Resource Management (2nd semester)
Paper code: -FRP-102

External marks: 40

Total Credits: 01

Internal marks: 10

Total Marks: 50

Time: 3 Hrs.

Note:

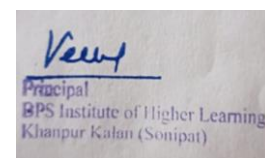
The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report

PRACTICAL

1. To analyze family: type, size, composition and stage of family life cycle
2. Identifying a problem and finding solution of it through decision making process
3. Time plans for working day and holiday, implementation and evaluation/feedback
4. Application of work simplification techniques; postures for various activities,
5. pathway chart, process and operation chart.
6. Mundel's classes of change.

References:

1. Ruth E. Deacon, Francille M. Firebaugh (1975): Family Resource Management – Principle and Application, Roy Houghton Mifflin Company.
2. Irma, H. Gross, Elizabeth Grandall, Marjoris M. Knoll (1973): Management for Modern Families, Prentice Hall, Inc, Englewood Cliffs, New Jersey.
3. Nickell, P. and Dorsey D. M, Management in Family living. John Wiley and sons, 1976.
4. Swanson, B., Introduction to Home Management, Macmillan and Co., 1981.
5. Dalela S. & Saurabh 1999, textbook of work study and ergonomics. Standard



B.SC (HOME SCIENCE)
English (2nd semester)
Paper code:-ENG-102

External marks: 40

Total Credits: 4.5

Internal marks: 10

Total Marks: 50

Time: 3Hrs

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

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.

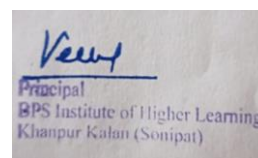
Non-Fiction – 3 Essays

1. 'My Financial Career' by Stephen Leacock
(Suman Dalal (ed.), *Effective English I*, BPSMV)
2. 'The Generation Gap' by Benjamin Spock
(Loveleen Mohan, Randeep Rana, Jaiveer Hooda (ed.) *Language and Literature I*, Orient BlackSwan)
3. 'How to Avoid an Argument' by Sam Horn
(Amrita Sharma (ed.), *Effective English IV*, BPSMV)

Unit II

Non-Fiction – 3 Essays/Speeches (Indian Writers)

1. 'Mind and Meditation' by Sri Sri Ravi Shankar (<http://www.huffingtonpost.com>)
2. 'Address to the Students of IIT-Hyderabad' by APJ Abdul Kalam
(<http://www.youthconnect.in>)
3. 'The Responsibility of Young Men' by Lal Bahadur Shastri
(Loveleen Mohan, Randeep Rana, Jaiveer Hooda (ed.) *Language and Literature I*, Orient BlackSwan)



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 – Leave Letter, Informal Letter

Course Outcomes

CO1- Understanding NON-FICTION as a literary genre

CO2- Enhancing grammatical competence through essays/articles/speeches

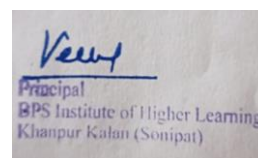
CO3- Appreciation of life as reflected in selected essays/prose

CO4- Learning paragraph writing using cohesion and coherence

CO5- Promoting national integration through essays on iconic figures

Suggested /Recommended Reading for Semester I & II

3. Asha Kadyan (ed.), *Chronicles of Time*, O.U.P.
4. Usha Bande and Krishan Gopal (ed.), *The Pointed Vision*, O.U.P.
5. Dinesh Kumar and V.B. Abrol (ed.), *Ideas Aglow*, Publication Bureau, K.U.Kurukshetra
6. Raymond Murphy, *Murphy's English Grammar*, C.U.P
7. N. Krishnaswamy, *Modern English*, Macmillan India
8. *Oxford Advanced Learners' Dictionary*, O.U.P.



B.SC (HOME SCIENCE)
Organic Chemistry (2nd semester)
Paper code:-OCH-102

External marks: 40

Total Credits: 02

Internal marks: 10

Total Marks: 50

Time: 3Hrs.

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To acquaint the students with the products beneficial for mankind.
- To make the students familiar with bio molecules.
- To develop competence in food analysis.

Unit –I

1. Classifications of organic compounds.
2. General rules for IUPAC nomenclature of organic compounds.
3. Nomenclature of hydrocarbons (aliphatic and aromatic), haloalkanes, alcohols, carboxylic acids, esters, amines, amides.

Unit- II

1. Types of structural Isomerism.
2. General introduction to geometrical (Cis-trans) and optical isomerism (chiral carbon, monochromatic light, plane polarised light and specific rotation) .

Unit –III

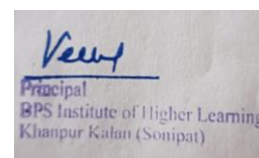
1. Hybridization: sp, sp², sp³ hybridization.
2. Orbital picture diagrams of alkanes, alkenes,alkynes and benzene.

Unit –IV

1. Elementary knowledge of analgesics, antipyretics, antimalarials, antibiotics, antiseptics and disinfectants.
2. General Introduction to biomolecules- Carbohydrates, fat and proteins.

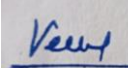
Course outcomes: Students will be able to

1. Naming of organic compounds
2. Types of isomerism present in organic compounds
3. Types of hybridisations in different organic compounds
4. Types of drugs
5. Understanding of Biomolecules



References:

- 1 Ray Q. Brewster, Organic Chemistry, William E McEwen Prantice Hall Publication.
- 2 Chatwal: Organic Chemistry of Natural products,
- 3 Morrison & Boyd: Organic Chemistry, Prantice Hall Publication.
- 4 Linus Pauling: General Chemistry, Dover publication.
- 5 P.L. Soni Fundamental organic Chemistry, S. Chand & Co.


Principal
BPS Institute of Higher Learning
Khanpur Kalan (Sonapat)

Practical
Organic Chemistry (2nd semester)
Paper code:-OCP-102

External marks: 40
Internal marks: 10
Time: 3hrs.

Total Credits: 01
Total Marks: 50

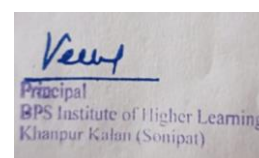
Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. Analysis of functional groups (alcohol, phenol, carboxylic acid, ester, aldehyde, ketone and carbohydrates)
2. Preparation of standard solution of oxalic acid and to find the strength of given sodium hydroxide NaOH solution.
3. Study of simple reactions of carbohydrates, fats and protein (two each).

References:

1. Ray Q. Brewster, Organic Chemistry, William E McEwen Prantice Hall Publication.
2. Chatwal: Organic Chemistry of Natural products,
3. Morrison & Boyd: Organic Chemistry, Prantice Hall Publication.
4. Linus Pauling: General Chemistry, Dover publication.
5. P.L. Soni Fundamental organic Chemistry, S. Chand & Co.



B.SC (HOME SCIENCE)
Applied Physics (2nd semester)
Paper code: - APH-102

External marks: 40
Internal marks: 10
Time: 3 hrs.

Total Credits: 02
Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objective:

- conceptual understanding of Fundamental Physics principles
- learn the basic Principle of mechanics and their applications
- learn the basics of various household equipments.

Unit-I

Introduction of properties of matter:

1. Properties of solids-Elasticity (Stress, strain, Hooke's Law, & Elastic Constants) Hardness, Malleability, ductility, Properties of liquids-Surface tension, Viscosity.
2. Archimedes's principle, Properties of gases– Postulate of Kinetic theory of gases, Atmospheric pressure, Brownian motion and Gas equation.

Unit-II

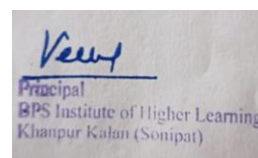
Mechanics:

1. Introduction of Mechanics, Scalar & Vector Quantity, Newton Laws of motion, Equation of Motion.
2. Type of forces (Centripetal, Centrifugal and Gravitational forces) Friction & its types.
3. Advantages and disadvantages of friction, concepts of ball bearing.

Unit-III

Electricity:

1. Introduction and Units of Charge, Conservation of Charge, Columba's Law, Electric Current , Electric Potential and their measurement.
2. Ohm's law, Resistance, Joule's Law of Heating and its application (Heater, Electric Iron, Electric Fuse, Toaster and



Geyser.

3. Electric Power & its Units, Transformer, House wiring and circuits.

Unit-IV

Heat and Light:

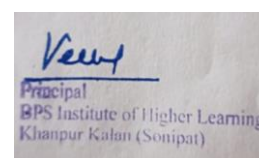
1. Introduction, Units, Sources and Properties of heat, Temperature and its measurement.
2. Methods of heat transfer, Household Equipment's - Refrigerator, Pressure cooker, Vacuum cleaner, Washing machine.
3. Light and its phenomenon (Refraction, Reflection, Scattering and Dispersion), Velocity of Light.

Course outcomes: Students will be able:

1. different types of applications in day today's life
2. concept of household electricity
3. develop skills for handling the equipment
4. To gain practical knowledge of instruments and their application.

References:

1. A.N. Puri & K.K. Muhirendru : Intermediate Physics
2. Prof Ganesh Prasad Dube : Heat
3. M.N. Kapoor: A revision Course in Physics
4. Prof. J.P.Goyal & Dr. J.C. Garg: Intermediate Physics
5. Allison Anee: Running our Home/management equipment
6. Avery Madelyn - Household physics, Macmillan company
Narcys Abraham; Physics for modern



Practical
Applied Physics (2nd semester)
Paper Code: APP-102

External Marks: 40

Total Credits: 01

Internal Marks: 10

Total Marks: 50

Time :3 hrs.

Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. To find the volume of a given cylindrical body using vernier calipers.
2. To find out the diameter of wire using screw gauge.
3. To find the value of 'g' using simple pendulum.
4. To find the specific heat of solid.
5. Conductivity by simple method.
6. To verify law of refraction using glass slab.
7. To verify $i + e = a + d$ using glass prism.
8. To track the magnetic lines of force with earth towards North Pole using given magnet.
9. To verify ohm's law.
10. To find out frequency of a given tuning fork.

References:

1. A.N. Puri & K.K. Muhirendru : Intermediate Physics
2. Prof Ganesh Prasad Dube : Heat
3. M.N. Kapoor: A revision Course in Physics
4. Prof. J.P.Goyal & Dr. J.C. Garg: Intermediate Physics
5. Allison Anee: Running our Home/management equipment
6. Avery Madelyn–Household physics, Macmillan company
7. Narcys Abraham; Physics formo

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B.SC (HOME SCIENCE)
Computer Application (2nd semester)
Paper code:-CAP-102

External marks: 40

Internal marks: 10

Time: 3 hrs

Total Credits: 01

Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To develop understanding of computer languages
- To develop skills in use of computers

Unit - I

1. Algorithms, Flowcharts, Decision tables
2. Computer language: Machine Languages and assembly languages
3. High level Languages

Unit - II

1. Compilers, Interpreters
2. Introduction to Basic Languages (Basics, Pascal, C)

Unit - III

1. Types of Communication with and among computers
2. Internet and World Wide Web
3. Computer Network Topology

Unit - IV

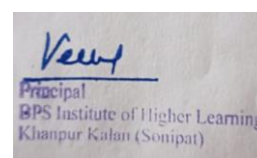
1. Interconnecting Network
2. Communication Protocol
3. Introduction to operating system

Course outcomes: Students will be able to

1. Different languages of computer
2. The internet, world wide web and their use in daily life
3. Various operating systems

References:

1. P.K.Sinha: Computer Fundamental
2. V.Rajaraman: Fundamental of Computers
3. B.Ram: Computer Fundamental and organization



Practical
Computer Application (2nd semester)
Paper code:-CPP-102

External marks: 40
Internal marks: 10
Time:3 hrs.

Total Credits: 02
Total Marks: 50

Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. MS Power Point:
2. Starting MS Power Point
3. Auto Wizard, creating presentation using Autotcontent Wizard
4. Creating and saving a presentation
5. Adding a slide to a presentation
6. Navigating a slide through a presentation, slide sorter, slide show, editing slides
7. Using ClipArt, Word Art Gallery
8. Adding Transition and animation effects, setting timings for slide show, preparing audience handouts

Internet:

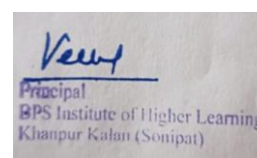
1. Genesis and use of Internet
2. Software and Hardware requirement for Internet
3. Accessing the internet, web pages, using a Search Engine, Accessing the internet from MS Office's application.

MS Access:

1. Crating Database
 2. Using database
 3. Creating table with table wizard
 4. Creating a table from scratch
 5. Entering and editing data
 6. Sorting, Filtering and finding data
 7. Creating from with from wizard
 8. Entering data in from

References:

1. P.K.Sinha: Computer Fundamental
2. V.Rajaraman: Fundamental of Computers
3. B.Ram: Computer Fundamental and organization
4. Sibramanian N: Introduction to Computer



B.SC (HOME SCIENCE)
Applied life science and human physiology-II (2nd semester)
Paper code:-ALH-102

External marks: 40
Internal marks: 10
Time: 3 hrs.

Total Credits: 03
Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To develop understanding about human system, parasites and pest.
- To develop understanding about pest which help in storage of food grains at family level

Unit-I

1. Musculo-skeletal system:

- Types of muscles and its functions.
- Skeleton system- formation of bone and teeth.

2. Reproductive System:

- Structure and function of male and female reproductive organs
- Structure of sperm and ovum, elementary knowledge of fertilization.
- Structure and function of sex glands and organs including hormones.
- Menstrual cycle.
- Physiology of pregnancy, parturition, lactation and menopause.

Unit-II

1. Nervous system:

- Elementary anatomy of nervous system.
- Functions of different parts of the brain in brief.
- Automatic, sympathetic and parasympathetic nervous system.
- Special sense.

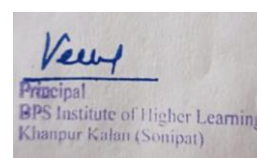
2. Endocrine glands:

- Functions of pituitary, thyroid, parathyroid and adrenal glands.

Unit-III

1. Common parasitic infections

- Malaria parasite; physiology and life history
- Entamoeba histolytica
- Nematodes



2. Pests

- Lesser grain borer (Rhizopertha), cowpea weevil, (gram dhora), Tribolium
- Cockroach, termites and other non-insect pest like rats, mice and birds.
- Grain storage: Principles and toxicology.

Unit-IV

1. Human Genetics:

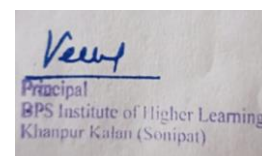
- Human chromosomes, inheritance and variation in man.
- Abnormalities of autosomal chromosomes and chromosome structure.
- Genetic basis of human disease-sickle cell, anemia, hemophilia, colour blindness and diabetes
- Genetic Counselling

Course outcomes: Students will be able to:

1. The male and female reproductive systems
2. The nervous system and special senses acquired by the humans
3. Various parasitic infections and pests
4. Human chromosomes, anemia, diabetes etc.

References:

1. Guyton, A.C., Hall, J.E. (1996): Text book Medical Physiology, 9th Ed prism Books (Pvt.) Ltd Bangalore.
2. Winwood (198): Sear's Anatomy and Physiology for nurses, London, Edward Arnold.
3. Wilson (1989) : anatomy and Physiology in Health and illness, Edinburgh, Churchill Livingstone.
4. Chatterjee Charan (1988) : Text book of Medical Physiology, London, W.B.



B.Sc. (Home Science)
Environmental Studies (2nd Semester)
Paper Code: EVS-102

External Marks: 40

Total Credits: 00

Internal Marks: 10

Total Marks: 50

Time : 3hrs

Note :

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To develop an awareness about environmental issues.
- To increase public awareness and to lay foundations for a fully informed and active participation of individual in the protection of environment
- Conservation of natural resources, ecological balance and biodiversity to achieve sustainable development.

Unit-1

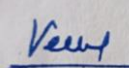
Biodiversity and its conservation:

1. Introduction-Definition: genetic, species, ecosystem diversity.
2. Biogeographical classification of India.
3. Value of biodiversity: consumptive, productive, social, ethical, aesthetic and option value.
4. Biodiversity at globe; local, national level.
5. India as a mega-diversity nation.
6. Hot spots of biodiversity.
7. Endangered species of India.
8. Threats to biodiversity: Habitat loss, Poaching & Man - wildlife conflicts, in -situ & ex -situ conservation of biodiversity.

Unit-II

Environmental Acts and conventions

1. Environment Protection Act.
2. Air (prevention & control of pollution) Act.
3. Water (prevention & control of pollution) Act.
4. Wildlife Protection Act.
5. Forest Conservation Act.
6. Issues involved in enforcement of environmental legislation.
7. Some important Environmental Conventions



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Unit-III

Environmental Pollution:

1. Definition, causes and effects and control measures of-
 1. Air pollution
 2. Water pollution
 3. Soil pollution
 4. Marine pollution
 5. Noise pollution
 6. Nuclear Hazards
1. Role of individual in prevention of pollution.
2. Solid waste management: causes, effects and control measures of Solid waste.
3. Disaster management: floods, earthquake, cyclone, landslides.
4. Role of individual in prevention of pollution.

Unit-IV

Human Population and the Environment

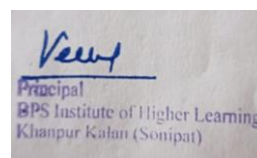
1. Population growth. Variation among nations.
2. Population explosion-Family Welfare Program.
3. Environment and human health.
4. Human Rights.
5. Value Education.
6. HIV/AIDS
7. Role of Information Technology in Environment & human health.
8. Women & Child Welfare.

Course outcomes: Students will be able to:

1. The key concepts about the ecosystem diversity, its values and also about the importance of endemic species and different techniques involved in its conservation.
2. The environmental act and legislations
3. the different types of resources like land, water, mineral and energy and also about the effects of environment by the usage of these resources.
4. about the different types of pollutions and their control technologies, waste water treatment, Bio-medical waste management etc.
5. Human rights , Women and Child welfare.

References:

1. Singh.S (2009) Environmental Geography (Eng)Prayag Pustak Bhawan ,Allahabad
2. Singh.S (2009) Environmental Geography (Hindi)Prayag Pustak Bhawan ,Allahabad
3. Singh ,R.B (1996),Disaster Environment and development oxford &IBH publishing house ,New Delhi
4. Singh ,R.B (2006),Natural Hazards and Disaster Management ,Rawat publishers ,Jaipur



B.SC. (HOME SCIENCE)
Introductory Home Science and Extension Education (3rd semester)
Paper code: HEE-201

External Marks: 40
Internal Marks; 10
Time; 3 Hours

Total Credits; 3
Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- To impart knowledge about home science.
- To develop understanding about extension education.

UNIT -1

1. Important concepts: Education, formal and informal, observation, inferences objective, home, home maker, home making, home scientist etc.....
2. Home science education —meaning, philosophy, need and objectives.
3. Structure and areas of home science.

UNIT -11

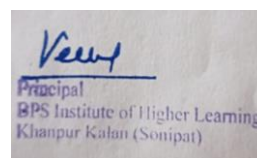
1. Job opportunities in home science.
2. Institutions offering home science under agricultural and conventional/traditional universities.
3. Role of home science education in development of individual family and communities.

UNIT -111

1. Important periodicals and personalities in home science.
2. Extension education — definition, meaning, objectives and scope.
3. Need for extension education in India.

UNIT -IV

1. Elements of extension education.
2. Role and qualities of an extension worker.
3. Extension education and its relationship with other social sciences.



Course Outcomes: The students will be able to:

- Understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities.
- Understand the sciences and technologies that enhance the quality of life of people
- Acquire professional and entrepreneurial skills for economic empowerment of self in particular, and community in general

References:

1. Chandra , A. 1995 .Introduction to home science, new Delhi metropolitan book Co.
640 Ar 897 C .2
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.

Practical
Introductory Home Science and Extension Education (3rd semester)
Paper code: HEP-201

External Marks: 40
Internal Marks; 10
Time; 3 Hours

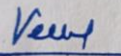
Total Credits; 1
Total Marks; 50

Note for examiner: The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

- Orientation of various extension and development programmes.
- Analysis of different job avenues in home science.

References:

- 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.
- Devdas, R.P. 1978. Methods of teaching home science, new Delhi, national council of education, research and training.



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B.SC (HOMESCIENCE)
Prenatal Care and Infant (3rd semester)
Paper code: PCI-201

External Marks: 40
Internal Marks; 10
Time; 3 Hours

Total Credits; 3
Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- To introduce the students with stages of human developments.
- To develops awareness regarding the developing phases of infancy.

UNIT -1

1. Introduction to human development- concept and principles, role of heredity and environment.
2. Stages of human development.

UNIT-II

1. Prenatal care and development- signs of pregnancy, conception, prenatal development, discomforts of pregnancy.
2. Child birth process, complications during birth, prenatal hazards, types of delivery and care of expectant mother.

UNIT-III

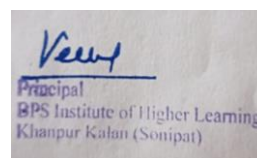
1. The neonate- physical appearance, sensory and perceptual abilities.
2. Care of new born- bathing, clothing and hygiene.
3. Feeding of infant- breast feeding verses artificial feeding.

UNIT-IV

1. Weaning- meaning and importance, method of weaning.
2. Infancy (0-2 years)- development tasks, physical development, motor development, cognitive development and moral development.

Course Outcomes: The students will be able to:

- Gain knowledge of variables that influence development throughout the life span and apply this knowledge to become more effective parents, professionals, and citizens of the global community.
- Relate the scientific knowledge of development from conception to death including the biological, emotional, cognitive, and psychosocial influences in order to make effective personal and professional decisions.
- Apply critical thinking to analyze the problem and solve the development concerns.



References:

1. Bark,L.E.(1993) Infants, Children and Adolescents Allyn and Bacon,ed.2 Allon and , 1996.
2. Harris,(1986) Child Development West Publishing Company.
- 3 . Stewart, Clarke A, and Fried man, S.(1987) Child Development: Infancy threrugh Addescence, John Wiley and Sons. N. York.
3. Papalia, D.E and olds, S.W(1978) Human Development:, Mc Grow Hill Book Company New York.
4. Mussen, P, H., Conger, J.J &Kagan, J. (1978) Child Development, & Personality, Harper & Row Publisher, New York.
5. Hurlock, E.B. (1992) Personality Development Mc Graw Hill Book Company New Delhi.
6. Santrock, JW(1996)Child Development, Brown and Branch Mark Publishers, Madison.
7. Arni, K And Wolf G (1999)Child Art with Every Day Materials Tara Publishing.
8. David T. (1999) Teaching Young Children Sage Publication.
9. Ghosh, S (1989)You and your child VHAI.
10. Khan-na, S, Wolf, G and shanker, A.(1999) Toys and tales with Everybody Materials Tare Publishing.

Practical
Prenatal Care and Infant (3rd semester)
Paper code: PCP-201

External Marks: 40

Internal Marks; 10

Time; 3 Hours

Total Credits; 1

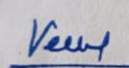
Total Marks; 50

Note for examiner: The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

- 1 Observing physical and motor development in infancy.
- 2 Visit to maternity wards: Observation of newborn babies and premature babies, observation of babies: Feeding, bathing, dressing and bed making of infants
- 3 Visit to crèche.
- 4 Planning and conducting recreational activities for children: Rhymes, songs, creative activity.

References:

1. Arni, K And Wolf G (1999) Child Art with Every Day Materials Tara Publishing.
2. David T. (1999) Teaching Young Children Sage Publication.
3. Ghosh, S (1989) You and your child VHAJ.
4. Khan-na, S, Wolf, G and shanker, A.(1999) Toys and tales with Everybody Materials Tare Publishing.
5. Swaminathan, M.(1998) The First Five Years stage Publications.



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B.SC (HOMESCIENCE)
Introduction to Sociology (3rd semester)
Paper code: ITS-201

External Marks: 40
Internal Marks; 10
Time; 3 Hours

Total Credits; 3
Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- To understand the socio-economic structure and systems.
- To recognize once own role in the development process.

Unit-I

1. Introduction: Definition, scope, subject matter and importance.
2. Relationship to other social sciences: History, economics, political science and psychology.
3. Some basic concepts: Society, relationship between individual and society, culture.

Unit-II

1. Groups: Primary and secondary.
2. Marriage: Definition, Hindu marriage- aims, types, prohibition under Hindu marriage endogamy, exogamy and hypergamy.
3. Social legislations and their effects on marriage: Hindu Widow Remarriage Act 1856, Reliant Act 1929, Special Marriage Act 1954.

Unit-III

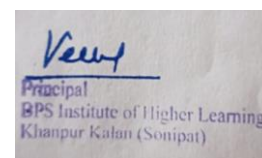
1. Social processes: Cooperation, accommodation, assimilation, conflict and competition.
Poverty: Causes and cure.

Unit-IV

1. Social change: Industrialization, urbanization, westernization, factors affecting social change.
2. Unemployment: Causes and cure.

Course Outcomes: The students will be able to:

- Understand the socioeconomic structure and system in the society.
- Recognise the once own role in the development process.



References:

1. Gibsert p., Fundamentals of Sociology, Orient Longman, New Delhi.
2. Davis Kingsley, 1948 Human Society, New York Mcamillan.
3. Madan T .N and Majumdar D.N 1956, An Introduction to Social Anthropology Calcutta Publishing House.
4. Moore, Wilbet•t 1974 Social Change, Prentice Hall, New Delhi.

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B.SC (HOME SCIENCE)
Introductory Clothing (3rd semester)
Paper code: ICL-201

External marks: 40
Internal marks: 10
Time; 3 Hours

Total Credits: 03
Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- To acquaint with proper notions regarding choice of fabrics.
- To develop skills in clothing constructions techniques.

UNIT- I

Sewing:

1. Common sewing terms, equipment and tools used for sewing: Measuring, Drafting, Pinning, Marking, Cutting and sewing different types of needles, threads.
2. Sewing machine: Parts and function, Basic operations, Machine defects and its remedies, Care and maintenance required.

UNIT-II

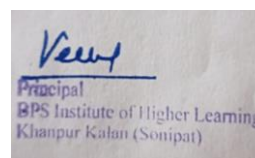
Clothing:

1. Invention and evolution of clothes; importance of clothing; biological, sociological and psychological function of clothing.
2. Factors influencing selection of fabrics, Budget, age, occasion, season, figure, occupation and fashion.

UNIT-III

Clothing construction:

1. General principles of clothing construction: Proportion, Harmony, Balance, Emphasis, Rhythm.
Elements of clothing construction: Line, shape, colour, size and texture.
2. Taking body measurements for different types of garments, Drafting and making paper pattern.
3. Preparation of fabrics for garments making, laying out of patterns as per fabric, Plain, Plaid (check), Printed: one directional, two directional, Piled or napped fabric, cutting and marking.



UNIT-IV

Care of clothes:

1. Care and storage of cotton, woollen and silken garments
2. Readymade garment: Comparative study of home-made, ready-made and tailor-made garments as per size, finishing and fabric texture.

Course Outcomes: The students will be able to:

- Develop entrepreneurial skills in garments construction.
- Create awareness regarding clothing practices in their daily life.

References:

1. Alexander, RR (1977)' Textile product selection, use and care' Boston Houghton.
2. Anna, J (1993): Art of sewing —UBS PD, New Delhi.
3. Bane, A(1974): Tailoring, Mc Graw Hill Publication, New York.
4. Carbman, B.P (1985): Manual fibre to fabric, Mc Graw Hill, New York.
5. Joseph, M.L. (1976): Essentials of textile, Halt Ripen hart of Winston, New York.

Practical
Introductory Clothing (3rd semester)
Paper code:- ICP-201

External Marks: 40
Internal Marks; 10
Time; 3 Hours

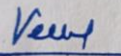
Total Credits; 1
Total Marks; 50

Note: The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. Hand stitches: Functional: Temporary and permanent, Basting, Invisible Hemming, Running, Backstitch, Buttonhole, over casting stitch.
2. Decorative stitches: Lazy-Daisy, Satin, Stem, Bullion, French knot and Herring bone
3. Seams: Plain seams, seam finishing, disposal of fullness, finishing of necklines, plackets and fasteners
4. Taking body measurements
5. Drafting of Child's bodies block and sleeve block
6. Drafting, cutting and stitching of child frock

References:

1. Anna, J (1993): Art of sewing —UBS PD, New Delhi.
2. Bane, A(1974): Tailoring, Mc Graw Hill Publication, New York.



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B.SC (HOME SCIENCE)
Food Science (3rd semester)
Paper code: - FSC-201

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 3
 Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

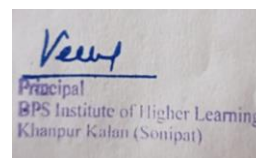
- To develop understanding of various nutrients and their requirements for healthy living
- To develop skills to improve nutritional quality of food.

UNIT-I

1. Cereals and millets: Production, structure, processing, storage, use in various preparations, variety, selection, cost, cereal products, breakfast cereals, fast foods.
2. Pulses and legumes: Production, structure, selection and variety, processing, storage and variety, use in various preparations, cost, nutritional aspects.

UNIT 11

1. Milk and milk products: Composition, classification, selection, quality, cost, processing, storage, use in various preparations nutritional aspects, shelf life and spoilage.
2. Eggs: Production, grade, quality, selection, storage, and spoilage, cost, nutritional aspects, use in various preparations.
3. Meat, fish, and poultry: Types, selection, purchase storage, uses, cost, spoilage of fish, poultry and meat cost, nutritional aspects, use in various preparations



UNIT-111

1. Vegetables and fruits: Variety, selection, purchase, storage, availability, cost, use and nutritional aspects of raw and cooked products, use in various preparations.
2. Sugar and sugar products: Types of natural sweeteners, manufacture, selection, storage and use as preserves, stages in sugar cookery.
3. Fats and oils: Types and sources (animal & vegetable) processing, storage, and spoilage, cost, nutritional aspects, use in various preparations.

UNIT IV

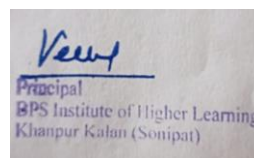
1. Raising and leavening agents: Types, constituents, uses in cookery and bakery, storage
2. Spices and condiments: Herbs, extracts, concentrate origin, classification, specifications, procurement, uses and storage
3. Beverages: Tea, coffee, chocolate, and Cocoa powder production, processing, cost and nutritional aspects, use in various preparations and other beverages — aerated, juices etc.
4. Food processing methods: germination, fermentation, boiling, steaming, roasting, broiling, frying and baking.

Course Outcomes: Students will be able to:

1. Understand the different Food processing methods:
2. Be aware of the various aspects of nutrition.
- 3.

References:

1. Levis. (1998) Food Commodities, Heinemann Ltd. London.
2. Goghes. O&Bannion (1970) Introductory Foods, McMillan & Co, New York.



Practical
Food Science (3rd semester)
Paper code: FSP-201

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 1
 Total Marks; 50

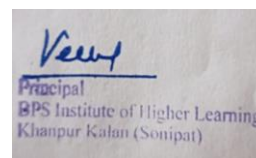
Note:

The candidate has to attempt two questions from the entire syllabus (practical work) along with viva voce and class report.

1. Use and care of kitchen equipment
2. Table setting and service
3. Preparing, serving and evaluating food items
4. Preparing, serving and evaluating beverages - fruit and milk based, punches, juices etc
5. Cereals: Variations in parantha, puri , rice, pulao, biryani, lemon rice, tamalind rice, dosa, idli, preparations using noodles and macaroni, spaghetti
6. Pulses — khatta channa, rajmah, sambher vadas, dhokla,kandavi, kadi etc
7. Vegetables — vegetable koftas , cutlets, baked vegetable dishes & fancy preparations
8. Soups: Variations in soups
9. Stews: Vegetable and mutton
10. Salads and salad dressing: vegetable salads, whole meal salads, frozen salads
11. Milk, paneer & khoa preparation: burfis, gulabjamun, chennamurgi, sandesh, rasgulla
12. Meat, fish and poultry: roasted, baked, fried, curries, kababs and tandoori preparations
13. Desserts: Halwas, variations in ice-creams, soufflés and steamed desserts
14. Cakes variations: creamed, sponge: pastries, swiss rolls, etc. biscuits /cookies and their variations, short crust pastry, choux pastry, flaky pastry & their preparation
15. Sand-witches: open and toasted
16. Snacks: Savoury, mathri, kachori, samosa, sweet ladoos, gujias, malpuras, peanut chikki, til ladoos

References:

1. Levis. (1998) Food Commodities, Heinemann Ltd. London.
2. Goghesh. O&Bannion (1970) Introductory Foods, McMillan & Co, New York.



B.SC. (HOME SCIENCE)
Fundamentals of Arts and Interior Decoration (3rd semester)
Paper code:-FA1-201

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 3
 Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

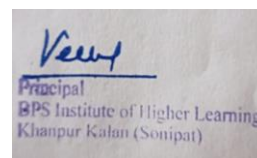
- Understand elements and principle of art and design.
- Gain knowledge of different furnishings.

UNIT-I

1. Elements of Art: Line, size, shape and texture.
2. Principles of design: Balance, harmony, proportion, rhythm and emphasis.
3. Application in home: Application of elements and principles in interior designing and decoration.
4. Design: Definition and type.

UNIT-II

1. **Colour:** Colour theories, characteristics (hue, value and intensity); colour wheel, and Colour schemes, warm and cool colours, effect and importance of colour in interior decoration.
2. **Interior Decoration:** Objectives of home furnishings, changing styles in interior designing and decoration.
3. **Furniture and furnishings:** Selection, care and maintenance of furniture and furnishings, materials used for construction of furniture and furnish arrangement of furniture.
4. **Floor and floor coverings:** Classification — Hard and semi hard finishes, soft floor coverings- carpets and rugs, factors affecting their selection, general care and cleaning of floorings.



UNIT-111

1. **Window treatments:** curtains and draperies: Types, problem windows cornices, valances and headings.
2. **Lighting:** Types of lighting incandescent and fluorescent, kinds of lighting: direct, indirect, semi-direct and diffused lighting, effect of architectural and decorative lighting in interior decoration, intensity of light, lighting requirement for various activities and areas, lighting fixtures, optical illusion.

UNIT-IV

1. **Accessories:** Types-functional and decorative, guidelines in selection and use of accessories.
2. **Flower arrangement:** Flower selection and arrangement, types of flowers arrangements.
3. Table setting and table Etiquettes.

Course Outcomes: the student will be able to:

- Understand factors affecting the housing needs in India.
- Understand the role of government and local housing agencies in solving India's housing problem.
- Apply the skill of interior decoration in planning different spaces.
- Choose appropriate furnishing material keeping in mind characteristics of room, family needs, style and financial considerations.
- Understand furniture arrangements and styles.
- Be familiar with functional and decorative accessories.

References:

1. Tssie, A. The house, its plan and use. Oxford and IBH Publishing Co. New Delhi
2. Anna Hung, R. (1961). Home furnishing, Wiley, eastern Pvt. Ltd.
3. Goldstein, H. and G V (1967). Art in everyday, New Delhi.
4. Bhat Pranav and Goenka, shanita (1990). the Foundation of art and design, Bomday Lakhani Book Depot.
5. Dr Sharma, K. Home Management Shiva prakashan Indore M. P.

Practical
Fundamentals of Arts and Interior Decoration (3rd semester)
Paper code: -FAP-201

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 1
 Total Marks; 50

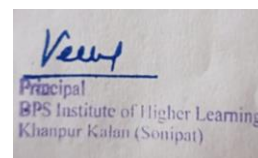
Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. Free hand drawing, memory drawing and sketching.
2. Preparation of colour wheel and colour schemes.
3. Floor decoration.
4. Gift-wrapping.
5. Table setting: formal, informal and buffet
6. Optical illusion created by line and colour.
7. Visit to hotels and furniture shop.
8. Furniture arrangement in different rooms.
9. Preparation of accessories for interior decoration.
10. Reports on market surveys on furnishing.
11. Window treatment.
12. Computer added interior designing.

References:

1. Tssie, A. The house, its plan and use. Oxford and IBH Publishing Co. New Delhi
2. Anna Hung, R. (1961). Home furnishing, Wiley, eastern Pvt. Ltd.
3. Goldstein, H. and G V (1967). Art in everyday, New Delhi.
4. Bhat Pranav and Goenka, shanita (1990). the Foundation of art and design, Bomday Lakhani Book Depot.
5. Dr Sharma, K. Home Management Shiva prakashan Indore M. P.



B.SC (HOME SCIENCE)
Community Nutrition (4th semester)
Paper code: CNT-202

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 3
 Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- Be familiar with the common nutritional problems of the community.
- Get exposed to the schemes programmes and policies of government of India to combat malnutrition.

Unit-1

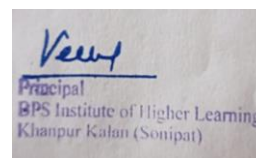
1. Concept and scope of community
2. Food habits and dietary patterns in India.
3. Factors affecting foods habits: Family size, composition, structure, economic status, education, working status of parents, education and Socio-cultural factors.

Unit-II

1. Nutritional problems: Protein energy malnutrition, fluorosis, anaemia, vitamin deficiency.
2. Nutrition education

Unit-III

1. Hazards to community health and nutritional status.
2. Food adulteration, food standards, common adulterants and their ill effects on health.
3. Common household methods to detect adulterants.
4. Consumer protection from adulterated food.



Unit-IV

1. Nutrition and health intervention programs in India:
2. School lunch programs- objectives.
3. Mid- day meal programs for school children.
4. Special Nutrition Programs (SNP).
5. Integrated Child Development Services (ICDS).
6. Tamilnadu government nutrition's meal programmes.
7. Tamilnadu Integrated Nutrition Programmes (TINP).

Course Outcomes: Students will be able to:

- Understand about community nutrition and nutritional education
- Be aware of National nutritional programmes.
- Be aware of objectives and functions of national and international agencies working in the field of nutrition.
- Understand the concept of health and primary health care.

References:

1. Levis. S (1998) Food Commodities, Heinemann Ltd. London.
2. Goghes. O and Bennion m (1970) Introductory Foods, McMillan & Co. New York.
3. Pyke M (1974) Catering services & Techonology, John Murey Pub. London.
4. Phillip T.E (1988) Modem Cookery for Teaching and the trade, 4th Edition Orient Longman Bombay.
5. Pruthi J.S (1979) Spices and Condiments, National Book Trust, New Delhi.
6. Prevention of Food Adulteration Act (1994) Govt. of India publishing company.

Practical
Community Nutrition (4th semester)
Paper code: CNP-202

External Marks: 40
Internal Marks; 10
Time; 3 Hours

Total Credits; 1
Total Marks; 50

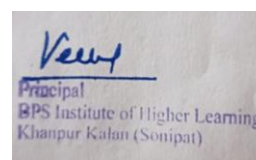
Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

- Preparation of low cost nutritious recipes.
- Preparation of nutritious recipes
- Collection of food samples from local market and detection of common adulterants.

References:

1. Levis. S (1998) Food Commodities, Heinemann Ltd. London.
2. Goghes. O and Bennion m (1970) Introductory Foods, McMillan & Co. New York.
3. Pyke M (1974) Catering services & Techonology, John Murey Pub. London.
4. Phillip T.E (1988) Modem Cookery for Teaching and the trade, 4^{dl} Edition Orient Longman Bombay.
5. Pruthi J.S (1979) Spices and Condiments, National Book Trust, New Delhi.
6. Prevention of Food Adulteration Act (1994) Govt. of India publishing company.



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B.SC (HOME SCIENCE)
Development in Childhood and Adolescence (4th semester)
Paper code: DCA-202

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 3
 Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- To understand the various stages of development in childhood.
- To make the students aware of various problems of childhood.

UNIT -1

I. Concept of early and late childhood.

Developmental tasks (2-12 years)

- Physical
- Motor
- Cognitive
- Language
- Emotional
- Social development

UNIT -11

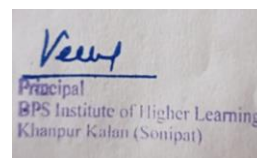
School: Significance and functions of school in childhood

- Effects of success & failure in school
- Common childhood problems
- Role of parents in solving the problems of childhood

UNIT- 111

I. Concept of adolescent: definition

- Different views regarding the menstrual cycle.
- Physical development, growth spurt, primary and secondary sexual characteristics.
- Early and late maturing adolescents
- Developmental Tasks: educational and vocational guidance



UNIT- IV

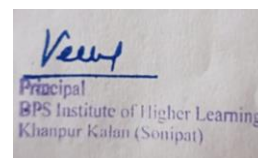
1. Identity: Definition, factors affecting positive and negative outcomes.
2. Heightened emotionality: Meaning, causes, expression.
3. Problems of an adolescent, role of parents in solving them.

Course Outcomes: The student will be able to:

- Gain knowledge of various aspects and concerns of development with special focus from conception to middle childhood stages.
- Analyze and effectively deal with developmental and adjustment issues from prenatal period to childhood stages.
- Understand parent child relationships, role of family, school and community in child development
- Appreciate the needs of exceptional children

Reference:

1. Bark,L.E.(1993)Infants ,Children,and Adolescents Allyn and Bacon ,ed .2Allonand 1996.
2. Harris ,(1986) Child Development West Publising Company.
3. Stewart, Clarke A. and Fried man .S.(1987)Child Development :Infancy through ADDEescence.John Eiley and Sons .N.York.
4. Papalia, D.E. and olds, S.W.(1978) Human Development, Mc Grow Hill Book Company New York.
5. Mussen, P.H., Conger, J.J. & Kagan, J. (1978) Child Development , & Personality, Harper & Row Publisher. New York
6. Hurlock, E.B. (1992) personality Development Mc Graw Hill Book Company New Delhi.
7. Santrock, JW (1996) Child Development , Brown and Branch Mark Publishers, Madison.



Practical
Development in Childhood and Adolescence (4th semester)
Paper code: DCP-202

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 1
 Total Marks; 50

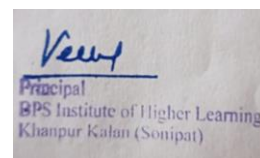
Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. Technique and methods used in the study of child and adolescent
2. Observing relevant development in each of the following stages- pre-school, (Motor, emotional and social) parent child interaction, child-child interaction.
3. Planning and conducting recreational activities for children.
4. Visit to Bal Bhawan, Creche, play school.
- 5.

Reference:

1. Arni, K. And Wolf G (1999) Child Art with Every Day Materials Tara Publishing
2. David T.(1999) Teaching Young Children Sage Publication. I I . Ghosh, S (1989) You and your child VHAI
3. Khanna , S, Wolf , G. and shanker, A. (1999) Toys and tales with Everyday Materials Tare Publishing.
4. Sawminathan , M. (1998) The First Five Years stage Publications.



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 Khanpur Kalan (Sonapat)

B.SC (HOME SCIENCE)
Dress Designing and Apparel Making (4th semester)
Paper code: DDA-202

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 3
 Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- To provide the knowledge pertaining to basic principle of dress designing.
- Familiarize with the essentials of apparel making.

UNIT-I**Designing:**

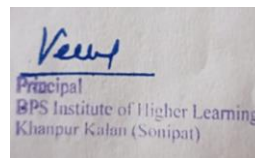
1. Meaning, scope and importance of apparel designing.
2. Elements of design: Line, form, shape, colour and texture, and its appropriate use.
3. Principles of design: such as balance, harmony, rhythm, proportion and emphasis.

UNIT-II**Fashion:**

1. Fashion terminology: Fashion, Style, FAD, and Stereo-type.
2. Fashion cycle: Introduction, Rise, Culmination, decline.
3. Sources of fashion, Theories of fashion.
4. Factors favouring & retarding fashion.

UNIT-111**Apparel making Techniques:**

1. Meaning and scope of Drafting.
2. Methods of pattern making: Flat pattern- slash method, pivot method.
3. Principles of pattern making: Dart manipulation and fullness.
4. Paper pattern: flat pattern making, process of designing by flat pattern technique.
5. Draping: meaning and importance of draping in designing process.



UNIT-IV

Fitting:

1. Fitting standards
2. Factors responsible for good fit
3. Common fitting problem and their remedies

Fabric for garment making:

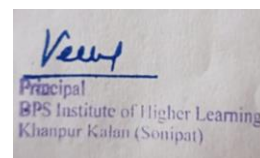
1. Working with different types of fabrics: Knits, Velvet, Satin, Beaded, Laced, Sheer, metallic and Leather fabric
2. Estimation of material required for different garments.

Course outcomes: The student will be able to:

1. Adapt their artistic abilities to support their future design careers.
2. Assess, propose, and apply various techniques related to drafting, draping, and constructing of garments.
3. Develop a systematic, critical approach to problem solving at all levels of the design process.

References:

1. Bane, A. (1 974); Tailoring McGraw Hill.
2. Bane, A. (1 979); Flat pattern design, McGraw Hill.
3. J. Bray Nathalie (1 978); Dress pattern designing, London, Crosby Lockwood & staples.
4. Sodhia. M. (2008); Design studies, Kalyani publishers, New Delhi
5. Mullick, P. (2007); Garment construction skills, Kalyani publishers, New Delhi



Practical
Dress Designing and Apparel Making (4th semester)
Paper code: - DDP-202

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 1
 Total Marks; 50

Note:

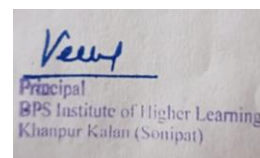
The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

Computer aided designing:

1. Fundamental of designing softwares; detailed use of designing, drawing and editing tools
2. Creating motifs and design development; use of computer colour palettes for colouring the design.
3. Developing designs for various end uses; designing the dresses for the casual and party wears
4. Survey and dress making:
 Survey of different fabrics available in market

References:

1. Bane, A. (1 974); Tailoring McGraw Hill.
2. Bane, A. (1 979); Flat pattern design, McGraw Hill.
3. J. Bray Nathalie (1 978); Dress pattern designing, London, Crosby Lockwood & staples.
4. Sodhia. M. (2008); Design studies, Kalyani publishers, New Delhi
5. Mullick, P. (2007); Garment construction skills, Kalyani publishers, New Delh



B.SC (HOME SCIENCE)
Microbiology and Sanitation (4th semester)
Paper code: MBS-202

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 3
 Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- To develop the awareness among the students about role of microorganisms in the spoilage of different kinds of food.
- To aware the students about food born infection and various diseases.
- To aware the students about sanitation and personal hygiene.

UNIT-I

1. Classification and characteristics of microorganisms.
2. Introductory knowledge of bacteria and fungi.
3. Primary sources of microorganism

UNIT-II

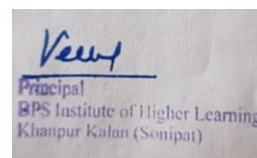
1. Role of microorganisms in the spoilage of different types of food.
2. Preservation of cereal products, eggs and poultry products, milk and milk products and canned foods.
3. Fermented foods and their benefits.

UNIT-III

1. Public health hazards due to contaminated food; food borne infections and intoxication, symptoms, mode and sources of infection transmission.
2. Investigation and defection of food borne diseases.
3. Chemical Methods used in destruction of microorganism sterilization and disinfections.

UNIT-IV

1. Sanitary indices of food, milk and water sedentary qualities, bacteriological analysis of food, water and milk.
2. Community sanitation, food sanitation and personal hygiene.



Course outcomes: students will be able to:

1. Gain knowledge about different types of microorganism and their significance.
2. Gain knowledge and investigation and infection of food born disease.
3. Provide knowledge about the community sanitation, food sanitation and personal hygiene.

References:

1. Adams, M.R. and moss, M.O.(1995), Food Microbiology, New Age International Pvt. Ltd.
2. Ananthanrayan, R. and Jayarann Paniker, C.K. [1 986], Text Book of Microbiology.
3. Frazier, C. and west off, C.(1998), Food Microbiology, Tata McGrawHill Publishing Co.Ltd.Powar, C.B. and Daginawala. H.F. [1986], General Microbiology, Himalaya Publishing House, New Delhi.
4. Sethi, M. and Surjeet, M. [1993], Catering Management, New time Internation Pvt. Ltd.

B.SC (HOME SCIENCE)
Extension Education and Rural Development
Paper code: -ERD -201

External Marks: 40
 Internal Marks; 10
 Time; 3 Hours

Total Credits; 3
 Total Marks; 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Course Objectives:

- Appreciate the role of extension; especially in home science and community development.
- To develop and understand the importance of extension education.
- To impart knowledge about different developmental programme and technologies in rural areas.

UNIT -1

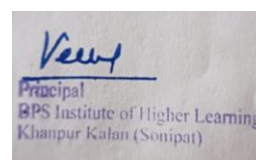
1. Principles, philosophy and importance of extension education.
2. Role of extension education in development.
3. Extension methods.

UNIT -11

1. Role of home scientist in community development.
2. Community development: meaning, concept, and objectives, set up and functions of community development program at central, state, district and village level.
3. Community development for national integration.

UNIT -111

1. Corrective approaches for sustainable extension education services in rural India.
2. Low-cost appropriate technologies for rural areas.
3. Panchayati raj: three tier system of administration.



UNIT -IV

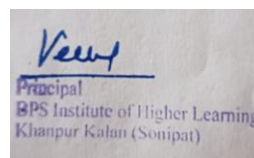
1. Developmental program's for the welfare of women and children.
2. Role of home science in solving rural problems of illiteracy, poverty and poor health.
3. Programme planning; meaning, definition, nature, scope and importance of programme planning in extension.

Course Outcomes: The students will be able to:

1. Apply scientific knowledge to the outside world.
2. Acquire knowledge about low-cost technology.
3. Understand the sciences and technologies that enhance the quality of life of people.
4. gain knowledge between formal and non-formal education, adult education and can apply for community development.
5. Understand the principles of Programme planning
6. Acquainted with various government sponsored programs for children and family welfare

References:

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 .2
3. Dhama, O.P. and Bhatnagar, O.P. 1991. Communication for development. New Delhi, oxford and [BH 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. Singh.R.(1987), A textbook of Extension Education. Ludhiana Publishing Co.



Practical
Extension Education and Rural Development (4th semester)

Paper code:-ERP -201

External Marks: 40

Internal Marks; 10

Time; 3 Hours

Total Credits; 1

Total Marks; 50

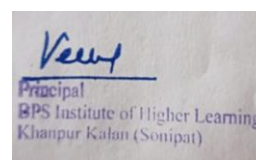
Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

- Visit to women and children welfare learn the organizational set up and functions.
- Visit to primary health centre and sub centre of primary health centre.
- Observing activities of women extension work in the field.
- Construction, use and maintenance of low-cost rural technologies.

References:

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 .2
3. Dhama, O.P. and Bhatnagar, O.P. 1991. Communication for development. New Delhi, oxford and [BH 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



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B.SC (HOME SCIENCE)
Housing and Space Management (4th semester)
Paper code:-HSM-202

External marks: 40

Total Credits: 03

Internal marks: 10

Total Marks: 50

Time; 3 Hours

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. I is compulsory.
- All questions carry equal marks.

Objectives:

- Understand Housing schemes, Selection of site, House plan functional designs of house.
- Main knowledge about building materials.
- Understand about paints and distemper.

UNIT-I

1. House: Importance needs at different stages of family life cycle, difference between house and home.
2. Selection of site: Physical conditions, practical convenience, future community development and legal aspects.

UNIT-II

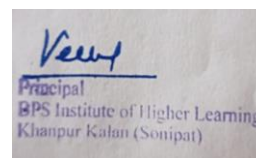
1. Self-owned and rented houses: Advantages and disadvantages.
2. Housing schemes for rural and urban families.
3. Building byelaws.

UNIT-III

1. House plan: Architectural symbols, making floor plan making, types of plan, planning of rooms for different activities, factors affecting planning of a house orientation, roominess, grouping, circulation, privacy, flexibility, sanitation, ventilation, economy elegance, fire protection.
2. House wiring and electrical fitting.

UNIT-IV

1. Functional designing: Designing of work area like various kitchen layouts, kitchen centers; storage area; planning storage in kitchen bathroom and other rooms.
2. Building materials: various building materials like stone, clay, steel, cement, timber etc, low-cost building materials like hollow bricks etc.
3. Paints and distempers: various paints and finishing materials.



Course Outcomes: The students will be able to:

1. Understand factors affecting the housing needs in India.
2. Understand the role of government and local housing agencies in solving India's housing problem.
3. Apply the skill of interior decoration in planning different spaces.
4. Choose appropriate furnishing material keeping in mind the characteristics of room, family needs, style and financial considerations.
5. Understand furniture arrangements and styles.
6. Familiar with functional and decorative accessories used in home.

References:

1. Tssie, A. The house, its plan and use. Oxford and IBH Publishing Co. New Delhi
2. Deshpande R.S. modern Ideal Homes for India, Poona united Book Corporation J. Devdas, R. 1970 Better Homes Oxford University Press New Delhi
3. Sharma, K. Home Management Shiva prakashan Indore M. P.
4. Craig & Rush 1969. Home with character UBS, Delhi.
5. Deshapande, R.S. 1981. Build your own home, united book Corporation.
6. Megarth, H. 1982. About the house. Oxford University Press, New Delhi.

Practical
Housing and Space Management (4th semester)
Paper code: -HSP-202

External marks: 40

Total Credits: 01

Internal marks: 10

Total Marks: 50

Time; 3 Hours

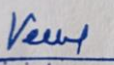
Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

1. Architectural symbols used in house plans.
2. House plans for different income groups.
3. Planning storage areas in store and other room.
4. Planning of multipurpose room.
5. Planning different type of kitchens.

References:

1. Tssie, A. The house, its plan and use. Oxford and IBH Publishing Co. New Delhi
2. Deshpande R.S. modern Ideal Homes for India, Poona united Book Corporation J. Devdas, R. 1970 Better Homes Oxford University Press New Delhi
3. Sharma, K. Home Management Shiva prakashan Indore M. P.



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B.SC (HOME SCIENCE)
Consumer Education (5th Semester)
Paper Code: - CED-301

External marks: 40

Internal marks: 10

Time: 3hrs

Total Credits: 03

Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal mark

Course Objectives:

- Understand the role of consumer in the market.
- Become aware of marketing conditions, rights and responsibilities of consumers.
- Recognize the problems in buying and know the means of redressal.

UNIT-1

1. Consumer Education: Meaning and Definition.
2. Consumer: Role and importance of consumer, consumer choice like rational, impulsive, habitual choice and factors influencing consumer choice.
3. Consumerism: Concept of consumerism and its growth.

UNIT-11

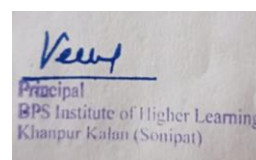
1. Consumer rights and responsibilities: Right of safety, to choose, to be heard, to be informed, to seek redressal, to healthy environment; Consumer responsibilities.
2. Market: Types of market, segmentation and characteristics, functions, market information news and channels of distribution.

UNIT-111

1. Consumer Needs: What to buy, when to buy, how to buy, how to buy and how much to buy.
2. Consumer buying problems: Adulteration, faulty weights & measures and other mal practices in the market like unfair trade practices, selling tactics to promote sales.
3. Consumer Information: Advertising- its nature, scope and types: packages and labels.

UNIT-1V

1. Consumer Protection: Standards and standardization.
2. Consumer Welfare: Government laws and legislations, consumer organizations.
3. Guidelines: to become better buyer-consumer.



Course Outcomes: The students will be able to:

- Having an opportunity to learn about the practical aspect of money management.
- About the importance of money savings and investments.
- To learn practical aspects of market strategies.

References:

1. Tripath, Naresh Chander and Tripathi, Garima, “**Consumer Economics**”, Vinod Pustak Mandir, Agra-2.
2. Sharma, Karuna and Verma, Sandhya (2008), “**Family Finance & Consumer Education**”, Shiva Publication, Indore.
3. Aggarwal, S.C (2004), “**Principles of Marketing**”, Dhanpat Rai Publishing Company, New Delhi.
4. Welers, Don (1974), “**Who Buys-A Study of the Consumer**”, Unit I, IV and VI.
5. Sarkar, A., “**Problem of Consumers in Modern India**”, Discovery Publication House, (Unit VII-X).

B.SC (HOME SCIENCE)
Introduction to Adulthood (5th Semester)
Paper Code: -ITA-301

External marks: 40

Internal marks: 10

Time: 3 hrs.

Total Credits: 03

Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To develop the understanding of various stages of development in human life.
- To understand the problems faced during different stages of lifecycle and ways to solve them.

UNIT-1

1. Characteristics of Adulthood
2. Developmental tasks of adulthood
3. Hazards of adulthood

UNIT II

1. Adjustment in adulthood: vocational, marital- mate, in laws, sexual, parenthood.
2. Marriage-functions, types and alternatives of marriage.
3. Family- functions, stages, lifecycle, forms of family

UNIT III

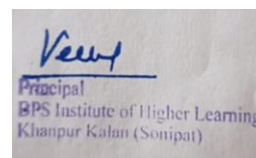
1. Characteristics of middle age
2. Developmental tasks of middle age
3. Personal and social, vocational, family hazards of middle age

UNIT IV

1. Characteristics of old age
2. Developmental tasks of old age
3. Personal, social, physiological hazards of Old age

Course outcomes: The students will be able to:

- The students will be able to develop an understanding about the discipline of Lifespan Development.
- The students will acquire a detailed understanding of developmental milestones and domains from conception to middle childhood.
- Students will understand salient features of child development by using primary and secondary methods of data collection.



- The students will gain insight about the depiction of children through the use of secondary sources.

References:

1. Sharma,(1999),Understanding Adolescence New Delhi ,NBT.
2. Balk, D.E.(1995),Human Development N.Ybooks /code publishing company
3. Rice ,F.P.(1995),human Development A life Span Approach N.Y.Prentic Santrock ,
4. J.W.(1997),Life Span Development London .Brown and bench
5. Bark,L.E.(1997),Life Span Development .N.Y.Aiiyn and Bacon.
6. Elizabeth B. Herlock- Development psychology

Practical
Introduction to Adulthood (5thsemester)
Paper code:-ITP-301

External marks: 40
 Internal marks: 10
 Time: 3hrs.

Total Credits: 01
 Total Marks: 50

Use of interview Method to study adult roles...

1. Father/Husband
2. Home maker, professional, working women
3. Mother /wife
4. Single mother /father
5. Grandfather /mother
6. College going adults

Note:

1. The candidate has to attempt two questions from the entire syllabus (practical work) along with viva voce and class report.

References:

- Balk, D.E.(1995),Human Development N.Ybooks /code publishing company
- Rice ,F.P.(1995),human Development A life Span Approach N.Y.Prentic Santrock ,
- J.W.(1997),Life Span Development London .Brown and bench
- Bark,L.E.(1997),Life Span Development .N.Y.Aiiyn and Bacon.

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B.SC (HOME SCIENCE)
Nutritional Bio Chemistry-1 (5th Semester)
Paper Code: -NBC-301

External marks: 40

Internal marks: 10

Time: 3hrs.

Total Credits: 03

Total Marks: 50

Note :

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To introduce the students with the chemical changes taking place in living organisms.
- To make the students familiar with bio molecules.
- To develop competence in food analysis.

Unit –I

1. Carbohydrates -Definition, classification, structure and properties of monosaccharides (glucose, fructose, galactose), disachharidse (maltose, lactose, sucrose) and polysachhrides (Starch, Cellulose).
2. Metabolism of Carbohydrates – Glycolysis, glycogenesis, gluconeogenesis and glycogenolysis.

Unit –II

1. Proteins – Definition, classification, structure & properties of amino acids and proteins.
2. Metabolism of Proteins – General reaction of amino acid metabolism, urea cycle.

Unit III

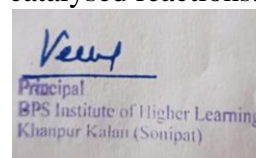
1. Enzymes- definition, classification of enzymes, specificity of enzymes, Factors affecting velocity of enzyme catalyzed reactions.
2. Lock and key hypothesis of enzyme action, Enzyme inhibition, Iso-enzymes, anti-enzymes.

Unit - IV

1. Lipids – Definition, classification, structure and properties of lipids, Significance of acid value, saponification value and iodine value.
2. Metabolism of Lipids: β -Oxidation and biosynthesis of fatty acids, synthesis and utilization of ketone bodies, ketosis, fatty liver.

Course outcomes: The students will be able to:

- Carbohydrate and their metabolic process
- Proteins and their metabolic process
- Lipids and their metabolic process
- Enzymes and their action, specificity and velocity of enzyme catalysed reactions.



References:

1. Eric E. Conn ,Paul K. Stumpf: Outlines of biochemistry, John Wiley & sons.
2. Edward Stanton West, Wibert R. Todd:Text book of biochemistry, Oxford Publication
3. Robert K. Murray & Daryl K.Granner: Harper' biochemistry ,Mc Graw Hill.
4. David T.Plummer Tata: An Introduction to practical biochemistry, Mc Graw Hill.
5. Keith Wilson & John Walker : Practical biochemistry – Principles & Techniques , Cambridge Edition.

Practical
Nutritional Bio Chemistry-1(5thsemester)
Paper Code: -NBP-301

External marks: 40

Internal marks: 10

Time: 3 hrs.

Total Credits: 01

Total Marks: 50

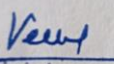
1. **Carbohydrates:** Reactions of carbohydrates and their identification
2. **Fats:** Reactions of fats and oils.
Determination of acid value and saponification value.

Note:-

1. The candidate has to attempt two questions from the entire syllabus (practical work) along with viva voce and class report. _

References:

1. Eric E. Conn ,Paul K. Stumpf: Outlines of biochemistry, John Wiley & sons.
2. Edward Stanton West, Wibert R. Todd:Text book of biochemistry, Oxford Publication
3. Keith Wilson & John Walker : Practical biochemistry – Principles & Techniques , Cambridge Edition.



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B.SC (HOME SCIENCE)
Nutritional Management (5th Semester)
Paper Code: -NMG-301

External marks: 40

Internal marks: 10

Time: 3 hrs.

Total Credits: 03

Total Marks: 50

Note :

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objectives:

- To develop understanding of various nutrients and their requirements for healthy living.
- To develop skills to improve nutritional quality of food.

UNIT-I

1. Definition of health and nutrition, effect of nutrition on health.
2. Energy requirement: Factors affecting energy requirements, BMR, activity, age, diet induced thermogenesis, (SDA), Physiological conditions.

UNIT II

1. Concept of nutritionally adequate diet and meal planning, importance and factors affecting meal planning, nutritional, socio-cultural, religious, geographic, economic, availability of time and material resources.

UNIT-III

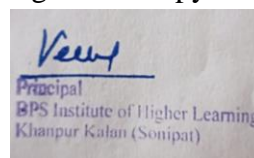
1. Nutrition through the life cycle (at different activity and socio-economic levels
 Nutritional Requirements, nutritional problems, food selection for: -
 - Infancy
 - Preschool child
 - School going child
 - Adolescence male and female

UNIT IV

1. Nutritional requirements, problems, and food selection during
 - Adulthood
 - Pregnancy
 - Lactation
 - Old age

Course outcomes: The students will be able to:

- To develop understanding of various nutrients and their requirements and how to improve nutritional quality of food.
- To analyse the nutrients, food quality and manage diseases using diet therapy.



References:

1. Krause.M.V. and Mahan, L.K.(1986):Food Nutrition and Diet Therapy;AlanR.Lissners Co. London
2. Passmore.R and Davidson's (1986): Human Nutrition and Dietitics, Livingstone Publishers
3. Robinson,C.H. Lawler,M.R.Chenoweth,W.L.Garwisk, A.E.(1986) Normal and Therapeutic Nutrition, Macmillan Publishing House Co.
4. Willams,S.R.(1989):Nutrition and Diet Therapy 4th edition,C.V. Mosby Co.
5. Shils, M.E.Olson J.A.Shike,M.ed.s.(1994) Modern Nutrition In Health and Disease, 8th ed. Lea and Febiger Awaverly Co.

Practical
Nutritional Management (5th semester)
Paper code:-NMP-301

External marks: 40

Internal marks: 10

Time: 3 hrs.

Total Credits: 01

Total Marks: 50

Planning & preparation of diets for different age groups at different socio-economic and activity levels in relation to nutrient requirements

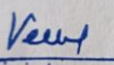
- Adult hood
- Pregnancy
- Infancy
- Preschool
- School going
- Adolescence
- Old age

Note:

1. The candidate has to attempt two questions from the entire syllabus (practical work) along with viva voce and class report.

References:

1. Krause.M.V. and Mahan, L.K.(1986):Food Nutrition and Diet Therapy;AlanR.Lissners Co. London
2. Passmore.R and Davidson's (1986): Human Nutrition and Dietitics, Livingstone Publishers



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B.SC (HOME SCIENCE)
Traditional Textiles of India (5th semester)
Paper code: TTI-301

External marks: 40

Internal marks: 10

Time: 3 hrs.

Total Credits: 03

Total Marks: 50

Note :

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks

Course Objective:

- To impart knowledge regarding Indian traditional textiles.
- To impart knowledge regarding Indian traditional Embroideries.
- To impart knowledge regarding woven textiles of Indian.

UNIT-- I

Importance of Indian traditional textiles in historical perspective

- **Cotton:** Muslins and Jamdanis of Bengal and UP Dhotis and saris of Andhra Pradesh, Madhya Pradesh Maharashtra, Karnataka and Tamil Nadu.
- **Silks:** brocades of Varanasi (Kunkhabs), Bengal (Baluchari) Maharashtra (Paithani), Gujrat (Tancois), Andhra Pradesh, Tamil Nadu and Karnataka.
- **Woollen** – Shawls of Kashmir, Punjab, Himachal Pradesh

UNIT-- II

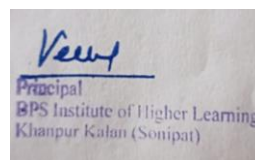
Indian Hand Embroidery

- Origin of embroidery in India and its place in everyday life
- Traditional embroideries of India: Kashida of Kashmir, Chamba rumal of Himachal Pradesh, Phulkari and chope of Punjab, Kasuti of Karnataka, chikankari and zari work of Uttar Pradesh, Kantha of Bengal, Manipuri embroidery, appliqué and patch work of Bihar, Kutch and Kathiawar embroideries of Gujarat.

UNIT –III

Printed textiles and carpets:

- Bandhanis of Rajasthan and Gujrat.
- Batik of Coromandal
- Printing and painting – Styles and methods of printing (Hand block printing, Kalamkari)
- Carpets of India: Kashmir, Uttar Pradesh, Warangal and Amritsar;



UNIT- IV

Woven textiles:

- Study of traditional woven textiles of India: Dacca muslin, brocades
- Sarees - Jamdani, Baluchari, Pochampalli, Patola, Ikat, Kanchipuram, Chanderi, Maheshwari and Vichitrapuri;
- Woven shawls of Kashmir, Himachal Pradesh and North Eastern states;

Course outcomes: The students will be able to:

- To develop entrepreneurial skills in embroidery.
- To develop skills in dyeing and printing.

References:

1. Kadolph, Sara, j. & Langboard, Annal.,(1998), Textiles,(Eight edition), Prentice-Hall Inc., New jersey.
2. Tortora, P.G., (1974), Understanding textiles, Macmillan publishing ,Co., Inc.,New York.
3. Corboman, B.P. (1985), Textile fiber to fabric, Gragg division Mc-Graw Hill Inc. New Delhi.
4. Grosicki Z.I. Wastson : Textile Dyeing and colour Newness. Butterworths, London.
5. Blinow, I. and Belay, S. (1988): Design of Woven Fabrics, Mir Publishers, Moscow.

Practical
Traditional Textiles of India (5th semester)
Paper code:- TTP- 301

External marks: 40
Internal marks: 10
Time: 3 hrs.

Total Credits: 01
Total Marks: 50

1. Making four Knitting patterns (6'x6') any designs.
2. Making samples of traditional Embroideries, Kasida of Manipur, Kantha of Bangal, Phulkari of Punjab.
3. Making one article of Chickenkari

References:

- Tortora, P.G., (1974), Understanding textiles, Macmillan publishing ,Co., Inc.,New York.
- Grosicki Z.I. Wastson : Textile Dyeing and colour Newness. Butterworths, London.
- Blinow, I. and Belay, S. (1988): Design of Woven Fabrics, Mir Publishers, Moscow.

B.SC (HOME SCIENCE)
Extension Education and Communication (5th semester)
Paper code:-EEC-302

External marks: 40

Internal marks: 10

Time: 3hrs

Total Credits: 03

Total Marks: 50

Note :

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory
- All questions carry equal marks.

Course Objectives:

- To develop and understand the importance of communication
- To aware the students with different contact methods
- To understand the audio and visual aids

UNIT -1

1. Meaning, scope, function and importance of communication.
2. Elements of communication process.

UNIT -11

1. Problems and barriers of communication.
2. Communication effectiveness.

UNIT -111

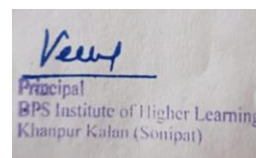
1. Communication methods- meaning and classification according to use and form.
2. Advantage and limitation of individual contact methods farm and home visit, telephone call, office call, result demonstration, meeting, group discussion, tour, small group training etc.

UNIT -1V

1. Audio visual Aids: Classification, scope, advantages, limitation and factors the selection and use of audio-visual aids.
2. Role of media in rural development.

Course outcomes: The students will be able to:

- Acquire knowledge, skill and attitude to work with the communities.
- Get sensitized on the issues of society.
- Impart skill training programmes.



References:

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.

Practical
Extension Education and Communication (5th semester)
Paper code: -EEP-302

External marks: 40

Total Credits: 01

Internal marks: 10

Total Marks: 50

Time 3 hrs.

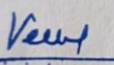
1. Preparation and use of different Audio-Visual Aids in urban and slum area, chart, poster, leaflets, pamphlets, flash card, flip card.
2. Preparation of puppet as a media of communication and writing drama for puppetry.
3. Preparation and user of suitable material for rural women regarding health, nutrition, family planning and supplementing occupation.
4. write a news article for a Newspaper
5. write a script for Radio programme
6. write a script for a TV programme

Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report.

References:

1. Chandra, A. 1995. Introduction to home science, new Delhi metropolitan book Co. 640 Ar 897.
2. Dhama, O.P. and Bhatnagar, O.P. 1991. Communication for development. New Delhi, oxford and IBH Publishing Co.
3. Devdas, R.P. 1978. Methods of teaching home science, new Delhi, national council of education, research and training
4. Pattni M. Thakur. U.S. 2002. Extension education and community development, Indore, shiva publication.



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B.SC (HOME SCIENCE)
Family Dynamics and Personal Empowerment (6th semester)
Paper code:-FDP- 302

External marks: 40

Internal marks: 10

Time: 3 hrs.

Total Credits: 03

Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks.

Course Objectives:

- Understand the dynamics of families in distress and crises.
- Acquire knowledge and insights about the dynamics of contemporary marriage and family system in India.
- To develop an insight into the issues and strategies for empowerment of women in India.

UNIT-I

1. Family: Meaning, definition, joint family, characteristics, merits and demerits
2. Causes of lower position of Hindu women.
3. Status of Indian women before Independence.
4. Position of women in present India.

UNIT-II

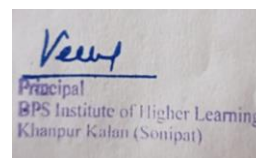
1. Causes of reform in the status of Indian women.
2. Families with marital disharmony and disruption judicial separation and divorce Act.
3. Families in violence and abuse, Dowry victimization, Dowry prohibition Act 1961.
4. Sexual discrimination and exploitation of Indian women.

UNIT-III

1. Prostitution Suppression of immoral traffic in women and girls Act 1956.
2. Marriage: Meaning, definition, objectives and problems.
3. Special issues and problems concerning women: -Infanticide, feticide, unmarried mothers and child marriage.
4. AIDS awareness and Education

UNIT-IV

1. Mass media and women Empowerment.
2. Social welfare programs and their impact.
3. Education and employment.

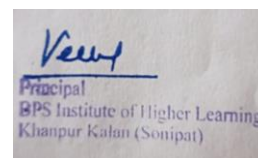


Course outcomes: The students will be able to:

- Understand different concepts related to marriage
- Know the areas, obstacles and techniques of marital adjustments
- Understand the changing trends in gender roles
- Aware of the causes for marital dissolution, divorce and family under distress
- Aware of different Laws related to marriage

References

1. Auguston, J.N. (Ed.) (1992), The family in Transition. New Delhi. Vikash publishing house.
2. Coleman. J.C. (1986); Intimate relationship. Marriage and the family, Chicago, Macmillan publishing Co.
3. Coser. Rose (1975); The family, its structure, and function. New York, Macmillan publishing Co.
4. Gupp, G.R. (1976) Family and social change in Modern india. New Delhi, Vikas publishing house.
5. Gore M.S. (1978) Urbanization and family and change in India Bombay Popular prakashan.
6. Hurter Mark (1981); The changing family; comparative Perspective, New York John Wiley and Sons.
7. Lal A.K, (1990) The urban family; A study of Hindu social system, New Delhi; Vikas Publishin g House.



B.SC (HOME SCIENCE)
Nutritional Bio Chemistry-II (6th Semester)
Paper Code: -NBC-302

External marks: 40
 Internal marks: 10
 Time: 3 hrs.

Total Credits: 03
 Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt any one from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks.

Course Objectives:

- To introduce the students with the chemical changes taking place in living organisms.
- To make the students familiar with bio molecules.
- To develop competence in food analysis.

Unit –I**Biological oxidation:**

1. Biological oxidation – Respiratory carriers, Redox potentials of respiratory carriers, Electron transport chain.
2. Oxidative phosphorylation, energy rich compounds.
3. Citric acid cycle.

Unit-II**Nucleic acids:**

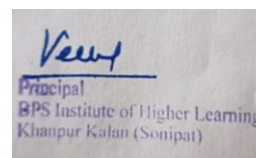
1. Components and organization of nucleic acids, Covalent structure of RNA and DNA , Neuclic acid double helices Modified DNAs .Functions of DNA and RNA.
2. Replication, transcription, genetic code. Biosynthesis of Proteins.

Unit –III**Vitamins:**

1. Chemistry and biochemical role of fat-soluble vitamins – A, D, K & E.
2. Chemistry and biochemical role of water-soluble vitamins - B1, B2, B6, Niacin and C.

Unit -IV**Hormones and Minerals:**

1. Hormones – Biological role of hormones of pituitary, Adrenal Cortex and Medulla, Thyroid, Parathyroid, Pancreas.
2. Minerals – Biochemical role of inorganic elements.



Course outcomes: The students will be able to know about:

- Carbohydrate and their metabolic process
- Proteins and their metabolic process
- Electron transport chain and energy changes
- Formation of ATP
- Citric acid cycle
- Structure and functions of nucleic acids

References:

- Eric E. Conn, Paul K. Stumpf: Outlines of biochemistry, John Wiley & sons.
- Edward Stanton West, Wibert R. Todd: Text book of biochemistry, Oxford Publication .
- Robert K. Murray & Daryl K. Granner: Harper's biochemistry, Mc Graw Hill.
- David T. Plummer Tata: An Introduction to practical biochemistry, Mc Graw Hill.
- Keith Wilson & John Walker : Practical biochemistry – Principles & Techniques , Cambridge Edition.

Practical
Nutritional Bio Chemistry-II (6th semester)
Paper Code: -NBP-302

External marks: 40

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Time: 3 hrs

Total Credits: 01

Total Marks: 50

1. Study of reaction of amino acids in Protein
2. Separation of amino acid mixture by paper Chromatography.
3. Estimation of Lactose in Milk.
4. Estimation of ascorbic acid content of food (Titrimetric method)

Note:

The candidate has to attempt two questions from the entire syllabus (practical work) along with viva voce and class report.

References:

1. David T. Plummer Tata: An Introduction to practical biochemistry, Mc Graw Hill.
2. Keith Wilson & John Walker : Practical biochemistry – Principles & Techniques , Cambridge Edition.

B.SC (HOME SCIENCE)
Therapeutic Nutrition (6th semester)
Paper code:-THN 302

External marks: 40

Internal marks: 10

Time: 3hrs

Total Credits: 03

Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks.

Course Objectives:

- To develop understanding of various nutrients and their requirements for healthy living.
- To develop skills to improve nutritional quality of food.

UNIT-I

1. Principles of Diet Therapy
2. Functional foods –Antioxidants, Detoxifying Agents, Blocking/Suppressing Agents, Dietary Fibre, Prebiotics and Probiotics.

UNIT II

1. Modification of normal diet for therapeutic purposes; full diet, soft diet, fluid diet, bland diet, high protein diet, high fiber diet, low fiber diet, calorie restricted diet.

UNIT-III

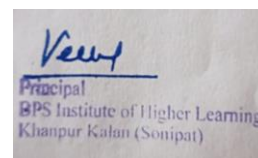
1. Nutritional management in common ailments.
 - Diarrhoea
 - Constipation
 - Fevers- Typhoid, Tuberculosis

UNIT IV

1. Nutritional management in common ailments.
 - Diabetes
 - Hypertension
 - CHD
 - Peptic ulcer
 - Weight Management

Course outcomes: The students will be able:

- To Know the effect of various diseases on nutritional status & dietary requirement.
- To recommend & provide nutritional care for prevention & treatment of diseases.
- To diagnose sign & symptoms of various diseases.
- To prevent the disease through proper nutrition.



References:

1. Krause.M.V.andMahan,L.K.(1986):FoodNutritionand DietTherapy;AlanR.Lissners Co. London.
2. Passmore.R and Davidson's.(1986):Human Nutrition and Dietitics , Livingstone Publishers.
3. Robinson,C.H.Lawler,M.R.Chenoweth,W.L.Garwisk,A.E.(1986) Normal and Therapeutic Nutrition, Macmillan Publishing House Co.
4. Willams,S.R.91989):Nutrition and Diet Therapy 4th edition,C.V.Mosby .Co.
5. Shils M.E.Olson J.A.Shike,M.ed.s.(1994) Modern Nutrition In Health and Disease 8th ed. Lea and Febiger –Awaverly Co.

Practical
Therapeutic Nutrition (6th semester)
Paper code:-THP -302

External marks: 40
 Internal marks: 10
 Time: 3 hrs.

Total Credits: 01
 Total Marks: 50

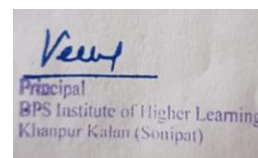
1. Planning and Preparation of therapeutically modified diets
 - Full diet;
 - Soft diet
 - Bland diet
 - High protein diet
 - High fiber diet
 - Low fiber diet
 - Calorie restricted diet
2. Planning and Preparation of therapeutically modified diets in following disease Conditions
 - Constipation
 - Diarrhoea
 - Fevers- Typhoid, Tuberculosis
 - Diabetes
 - Hypertension
 - CHD
 - Peptic ulcer
 - Obesity
 -

Note:

The candidate has to attempt two questions from the entire syllabus (practical work) along with viva voce and class report.

References:

1. Passmore.R and Davidson's.(1986):Human Nutrition and Dietetics , Livingstone Publishers.
2. Robinson,C.H.Lawler,M.R.Chenoweth,W.L.Garwisk,A.E.(1986) Normal and Therapeutic Nutrition, Macmillan Publishing House Co.
3. Willams,S.R.91989):Nutrition and Diet Therapy 4th edition,C.V.Mosby .Co.
4. Shils M.E.Olson J.A.Shike,M.ed.s.(1994) Modern Nutrition In Health and Disease 8th ed. Lea and Febiger –Awaverly Co.



B.SC (HOME SCIENCE)
(6th semester) Psychology
Paper code:-PSY- 302

External marks: 40

Internal marks: 10

Time: 3 hrs

Total Credits: 03

Total Marks: 50

Note :

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks.

Course Objectives:

- To understand the basics of human nature.
- To make the students understand the different aspects of human behaviour.

UNIT I

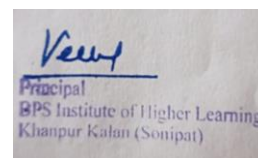
1. Introduction: Nature, scope and methods of psychology.
2. Biological basics of behavior
 - Nervous system
 - Endocrine system
 - Genes and behaviour

UNIT II

1. Sensation and Perception:
 - Vision and audition: Sensory loading of color pattern and loudness
 - Nature and determinants of attention
 - Perception: Definition, perceptual organization, space perception, role of experience in perception.
2. Learning:
 - Role of motivation in learning
 - Theories of learning
 - Factors affecting learning

UNIT III

1. Intelligence:
 - Definition and types
 - Measurement of intelligence
 - Theories of intelligence
1. Memory:
 - Stages of memory, (encoding stage and retrieval)
 - Types of memory: sensory, STM, LTM
 - Causes of forgetting, improving memory.



UNIT IV

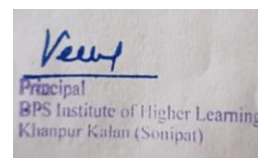
1. Motivation and emotion:
 - Nature of motivation
 - Different types of motives
 - Theories of emotions, characteristics of emotions, physiological correlates of emotion.
2. Personality:
 - Definition, psycho-analytical theory of personality
 - Types, approaches to personality, traits approach to personality
 - Determinants of personality: biological factors, environmental factors.
 - Measurement of personality

Course outcomes: The students will be able to:

- Develop a working knowledge of psychological contents, areas and applications of psychology.
- Develop a base in cognitive psychology with the help of relevant examples of everyday life.
- Comprehend and analyse situations in real life appropriately and enable others to exercise in the same way.
- Appreciate and apply various theories of learning in the practical world.
- Identify the importance of experiments in the field of memory and other cognitive aspects and analyse the way it shaped cognitive psychology.

References:

1. Brotha, K.D. and Patri, V.R. (Eds) Foundation of Psychology. New Delhi: Wiley Eastern.
2. Morgan, C.T. Killian, R.T. Weisz, J.R. and Schopler, J. (1993). Introduction to psychology. New Delhi: Tata Mc Graw-Hill.
3. Minimum, E.W. King, B. in Psychology. and education. 3rd New York John Wiley.
4. Papalia D.R. and Olds, S.W. (1987) Psychology New York Tata Mc Graw-Hill
5. Fieldman, R.S. (1990) Understanding Psychology Tata Mc Graw-Hill
6. Garrett, H.E. (1981) Static's in Psychology and education Bombay; Vakits, Fetter and Simon pvt. Ltd.



B.SC (HOME SCIENCE)
Dyeing, Printing and Finishing (6th semester)
Paper code: DPF-302

External marks: 40

Internal marks: 10

Time: 3 hrs

Total Credits: 03

Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks.

Course Objectives:

- To develop a complete awareness about dyeing and printing with respect to application and mode of action.
- To develop a complete awareness among students regarding different types of finishes.

UNIT-I

Dyeing:

1. Classification of different types of Dyes: - Indigenous and synthetic dyes;
2. Synthetic dyes: application and properties - direct, acid, basic, vat, naphthol, disperse, fibre reactive, pigment;
3. Selection of suitable dyes; dyeing methods: fibre, yarn and fabric;
4. Resist dyeing: tie and dye and batik

UNIT-II

Printing:

1. Printing styles: direct, mordant, resist and discharge;
2. Printing methods: hand , block, stencil, screen, roller, transfer, flock, duplex and resist printing
3. Common dyeing and printing defects, causes and preventive measures.

UNIT-III

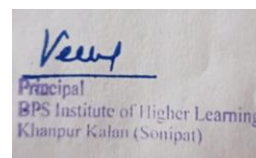
Finishes:

1. Meaning, objectives and classification of application of finishes.
2. Basics: Bleaching, Sizing and Dressing, Singing, Tentering, Belting, mercerizing and calendaring.

UNIT-IV

Finishes:

1. Texturing: Embossing, Moiring, Napping, Flocking, Acidic & basic finishes.
2. Functional: Antistatic, moth proofing, Flame retardant, Water repellent & water proofing, crease resistant, wash & wear and permanent press.



Course outcomes: The students will be able to:

- understand the basic dyeing, printing and finishing techniques
- understand the skill of dyeing at household level and hand printing

References:

1. Shenai, V.A.(1997), History of textile design. Sevak Publication, Mumbai.
2. Waston and William, (1998), Textile design and colour, Bombay University, Publication, Mumbai.
3. Hess, K.P.(1959), Textile fibers and their use, Oxford and IBH Publication Co. New Delhi.
4. Grosicki Z.I. Wastson : Textile product: selection, use and care, Miffin company, London.
5. Shenai, V.A.(1991): Technology of printing, Sevak Publication, Mumbai.

Practical
Dyeing, Printing and Finishing (6th semester)
Paper code:- DPP-302

External marks: 40
Internal marks: 10
Time: 3 hrs.

Total Credits: 01
Total Marks: 50

1. Dyeing:

Preparation of samples of tie & dye following different tying methods

2. Printing

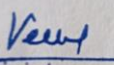
Preparation of samples according to different specification. (Arrangement, Purpose, type of motive theme) using following techniques- Block printing stencil printing.

Note:

The candidate has to attempt two questions from the entire syllabus (practical work) along with viva voce and class report.

References:

- Waston and William, (1998), Textile design and colour, Bombay University, Publication, Mumbai.
- Grosicki Z.I. Wastson : Textile product: selection, use and care, Miffin company, London.
- Shenai, V.A.(1991): Technology of printing, Sevak Publication, Mumbai.



Principal
BPS Institute of Higher Learning
Khanpur Kalan (Sonapat)

B.SC (HOME SCIENCE)
Household Equipment and Energy (6th semester)
Paper code:-HEE-302

External marks: 40
 Internal marks: 10
 Time: 3 hrs.

Total Credits: 03
 Total Marks: 50

Note:

- The examiner will set 9 questions, including one objective type question covering the entire syllabus and 4 questions attempt from each unit.
- The candidate shall attempt 5 questions, selecting one question from each unit and question No. 1 is compulsory.
- All questions carry equal marks.

Course Objectives:

- To understand the fundamentals of electricity.
- Electrical, non-electrical & motor driven equipments – their use, maintenance and care.
- Conventional, non-conventional & energy sources.

UNIT-I

1. Basic Manufacturing process: Classing of utensils, forming the utensils and assembling the utensils.
2. Non-electrical equipment and Electrical equipment: Heating appliances like Iron, Toasters, Ovens, Geysers and immersion rods-their use, care and maintenance.

UNIT-II

3. Motor Driven equipment: Food mixer/Processor, washing machine, Vacuum cleaner, refrigerator, Microwave, Dishwasher

UNIT-III

4. Fundamentals of electricity: Basics of electricity in the home, wiring, circuits and safety.
5. Energy sources: Conventional and non-conventional energy sources, their introduction and application.

UNIT-IV

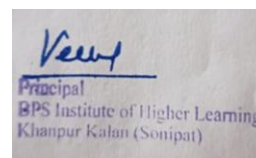
6. Energy crisis, application of solar energy, energy solar equipments.
7. Low-cost fuel saving technologies.

Course outcomes: The students will be able to:

- Become aware about the fundamentals of electricity in home.
- Develop and acquire skills in maintenance of household equipments.
- Become aware about the energy crisis and Low-cost fuel saving technologies.
- Know the recent trends in household appliances

References:

1. Household equipment by Peet, L.J., Pickett. M.S.
2. Varghese, M.A., Ogale, N.N. and Srinivasan, K 1997. Home Management, New Age International (P) Limited.
3. Dr Sharma K home management shiva prakashan Indore M P.



Practical
Household Equipment and Energy (6th semester)
Paper code:-HEP-302

External marks: 40

Internal marks: 10

Time 3 hrs.

Total Credits: 01

Total Marks: 50

1. Identification of base materials, insulation material and finishes used in household equipment and market survey.
2. Use, care and maintenance of electrical and non-electrical equipment (mentioned in theory).
3. Conducting laboratory test for commonly used household equipment.
4. Fuse replacement and making electrical connections.
5. Demonstration on low-cost solar household technologies.

Note:

The candidate has to attempt 2 questions from the entire syllabus (practical work) along with viva voce and class report

References:

1. Household equipment by Peet, L.J., Pickett. M.S.
2. Equipment in home – Ehrenkranz, F & Inman, L.L.
3. Dr Sharma K home management shiva prakashan Indore M P.

