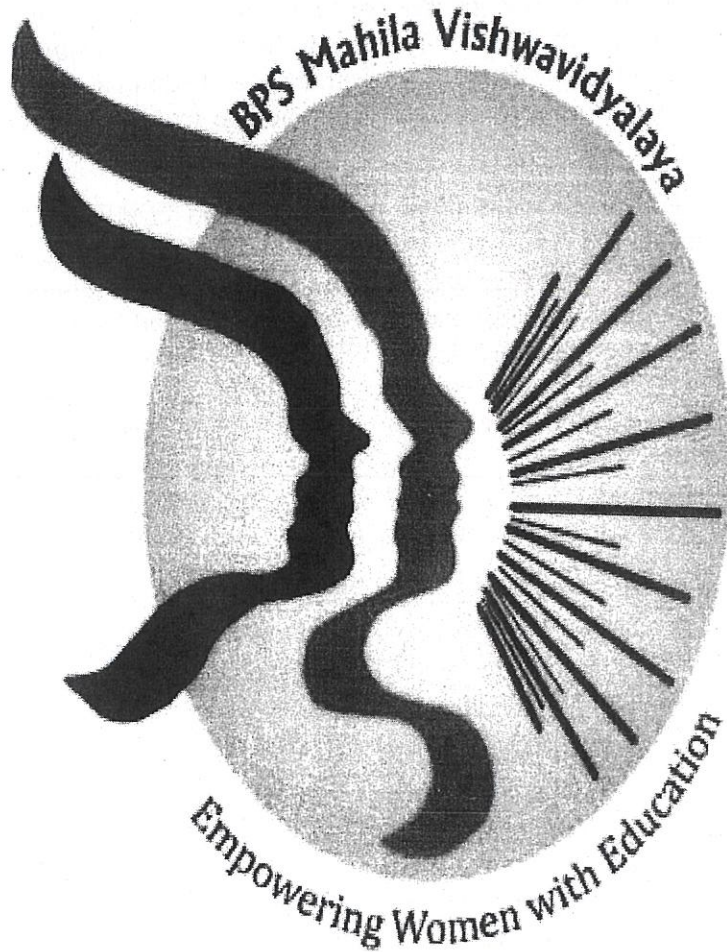# BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA
DEPARTMENT OF ECONOMICS
(A State Women University, B++ Accredited by NAAC)
Khanpur Kalan, Sonipat, Haryana, India

BPS Mahila Vishwavidyalaya

Empowering Women with Education

Ph.D. COURSE WORK AND CURRICULUM

W.e.f. session (2023-24)

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Dept. of Economics
B.P.S Mahila Vishwavidyalaya
Khanpur Kalan
Sonipat, Haryana, India

03/06/2024

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ABOUT THE DEPARTMENT

Established in 2009, the Department endeavours to impart specialised knowledge in economics to create a class of skilled professionals and intellectuals to cope with the globalisation era's challenges. Department enables students to become agents of change in the social and economic development of the country. The Department foresees and creates a platform for the empowerment of girls to become agents of change in the social and economic development of the country. The Department of Economics aims to provide students with opportunities to understand the discipline of economics and develop analytical skills and scientific aptitude. Further, it will train young minds ready to undertake teaching and research in economic science and create an intensive understanding of economic theory with excellent rapport development with the students to fulfil society's aspirations. It strives to enable students to evolve as efficient and intelligent academicians and administrators and to train students as professional economists with a multidisciplinary approach so that they can cope with uncertain and ever-changing markets.

The Department revised a course curriculum to develop and enable students to become skilled professionals in economics who have immense job opportunities teaching at universities, colleges, and various research institutes. There are various research institutes in economics where students can work as research associates. There are various services like Indian Economic Services, Indian Administrative Services, State PSCs, RBI, and NITI Aayog where the students can impart their services. The curriculum includes field surveys, project reports, and research dissertations, and primary research work is conducted regularly to understand rural areas' social and economic problems. The teaching and training are provided through expert lectures, seminars, documentaries, language laboratories, and study tours/industrial visits—experienced and highly dedicated teaching faculty. Focus on student participation, rapport development, and value-based education.

Research on social and economic problems in rural areas is one of the thrust areas of the Department. The Department has evolved a holistic environment for research activities, which is reflected in research work undertaken by students at UG, PG, and PhD levels. The Department has a modern state-of-the-art library, a computer lab with an internet facility, a smart classroom, a conference and seminar hall with all advanced teaching aids, and a common room.

PROGRAMME OUTCOMES (POs)

PO1: Candidates will have a strong foundation in economic theory, research methods, and quantitative analysis;

PO2: Candidates will get expertise in understanding complex economic problems and will be able to analyse socio-economic scenario and policy decisions;

PO3: Candidates will be acquainted with the latest development in economics and will be equipped with the methodology of social science research in general and of economics in particular; and

PO4: Candidates with research in Economics can make a career in academia, research institutes, financial organizations and international organizations as economic advisor, economic consultant, financial manager, policy analyst, litigation consultant, mutual funds manager etc.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: The program enriches the candidates with the skills to undertake various government and non-government research projects;

PSO2: Candidates will better understand the real world economic and social problems and suggest the solutions in more realistic way;

PSO3: Candidates will be acquainted with the development of advanced analytical skills, and will be able to conduct original research and contribute through publications and policy papers; and

PSO4: Candidates will acquire adequate training in the analysis of quantitative data through different computer software.

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SCHEME OF EXAMINATION & COURSE CURRICULUM
Ph.D. (Economics) Course Work

Paper Code	Nomenclature	Workload			Total Credit	Marks division		
		L	T	P		Internal	External	Total
ECP-3101	Research Methodology	4	0	0	4	20	80	100
ECP-3102	Methodology of Economics	4	0	0	4	20	80	100
ECP-3103	Review of Literature	0	0	2	2	25	25	50
CPE-RPE-022	Research and Publication Ethics	2	0	0	2	10	40	50
Students are required to choose one paper from the followings as per their thrust area opted At the time of PhD admission.								
ECP-3104A	Dynamics Macroeconomics	4	0	0	4	20	80	100
ECP-3104B	Development Economics	4	0	0	4	20	80	100
ECP-3104C	International Trade and Development	4	0	0	4	20	80	100
ECP-3104D	Environment and Sustainable Development	4	0	0	4	20	80	100
ECP-3104E	Contemporary Issues in Indian Economy	4	0	0	4	20	80	100
ECP-3104F	Contemporary Issues in Indian Agriculture	4	0	0	4	20	80	100
ECP-3104G	Advanced Economic Theory	4	0	0	4	20	80	100
ECP-3104H	Gender and Development	4	0	0	4	20	80	100
ECP-3104I	Economics of Innovation	4	0	0	4	20	80	100
ECP-3104J	Economics of Entrepreneurship	4	0	0	4	20	80	100
ECP-3104K	Database for Research in Economics	4	0	0	4	20	80	100
ECP-3104L	Artificial Intelligence in Economic Analysis	4	0	0	4	20	80	100
ECP-3104M	Applied Econometrics	4	0	0	4	20	80	100
Total Marks and Credit 400 Marks and 16 Credit					16	80	320	400

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RESEARCH METHODOLOGY

Course code: ECP-3101
L-T-P
4-0-0
Time: 3 Hrs

Max.Marks:100
External:80
Internal: 20

Course Objective: The aim of this course is to give the thorough knowledge about the research methods and techniques which could be applied for conducting the research. The course would also enable the students to handle the time series and panel data sets with the use of software and statistical packages to analyse the data.

Course Outcomes: At the end of the course the students will be able to:
CO_1: understand the role of research in economics, types and design of research;
CO_2: acquire knowledge of collecting the required data, construct a questionnaire/schedule;
CO_3: know various tools for the processing and interpretation of data; and
CO_4: present the research report in an effective manner.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I
Research: Nature and Scope; Formulation of a research problem; Research design (Exploratory, descriptive and Experimental). Basics of Qualitative Methods- Case studies FGD, Ethnographic studies, content analysis, Sampling design; Sampling techniques.

Unit-II
Scaling techniques; Reliability and Validation; Attitude Scaling; Thurston's scale, Likert's scale, Cumulative scaling; Multivariate analysis techniques; Discriminate Analysis, Canonical Analysis, Factor Analysis, Cluster Analysis.

Unit-III
Regression Analysis: Simple and Multiple regression model, OLS and its properties, Significance of test of estimates. The problems of Multicollinearity, Heteroscedasticity and Autocorrelation; Dummy Variables, Qualitative regression models: Logit,Probit and Tobit Model.

Unit-IV
Time Series Analysis: Stationary and Random walk model, Unit Root tests- ADF, PP, KPSS, Co-integration, Engle Granger Test, Johansen Test- Error Correction Model; Determinant of Trend and Seasonal indices; Forecasting technique ARIMA; Overview of Regression with Panel data- Fixed Effect and Random Effect Models.

Suggested Readings:

1. Malhotra, Naresh K. 2016. Marketing Research an Applied Orientation. 5th edition, Pearson.
2. Cooper and Schindler. 2011. Business Research Methods. 8th edition. Tata McGraw Hill.
3. Joseph F. H., William C. B., Barry J. B. and Rolph. E. A. 2013.Multivariate Data Analysis. Pearson Education.
4. Fred N.Karlnger. 1986. Foundations of Behavioural Research. 3rd Edition. New York, Rinehart and Winston.
5. Gream, W. 2000. Econometrics Analysis. 5th Edition, Prentice Hall.
6. Goldberder,A.S. 1998. Introductory Econometrics.Harvard University Press, Cambridge.
7. Gujarati, D. 2002. Basic Econometrics. 4th Edition, McGraw Hill.
8. Gujarati, D. 2012. Econometrics by Example. Palgrave Macmillan.
9. Amemiya, T. 1985. Advanced Econometrics, Harvard University Press, Cambridge, Mass.
10. Intrilligator, M.D. 1978. Econometric Methods, Techniques and Applications. Prentice Hall Englewood Cliffs, New Jersey.
11. Johnson, J. 1991. Econometric Methods.McGraw Hill.
12. Kmenta, J. 1998]. Elements of Econometrics. University of Michigan Press, NewYork.
13. Koutsoyiannis, A. 1977. Theory of Econometrics. The Macmillan Press.
14. Maddala, G.S.1993. Econometric Methods and Application, Aldershot U.K.
15. Theil, H. 1981. Introduction to Econometrics. Prentice Hall of India, New Delhi.
16. Wooldridge, J.E. 2014. Introductory Econometrics: A Modern Approach. 5th Edition, Cengage Publication.
17. Cameron, A.C. and Trivedi P. K. 2010. Microeconometrics Using STATA: Revised Edition, Stata Press.

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METHODOLOGY OF ECONOMICS

Course code: ECP-3102
L-T-P
4-0-0
Time: 3 Hrs

Max.Marks:100
External: 80
Internal: 20

Course Objective: The aim of this course is to enable students learn method of economics as well as academic writing with research ethics and various styles of references and citation methods.

Course Outcomes: At the end of the course the students will be able to:
CO_1: explore the scientific knowledge and evolution economics as science;
CO_2: understand the subject of economics as a theoretical system;
CO_3: know the mechanism of thesis writing;
CO_4: gain understanding on the structure of thesis and from to research paper.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Evolution of Scientific Knowledge: Propositions, Syllogism; Scientific Method; Deductive and Inductive analysis; Mills's method of Experimental Enquiry, Evolution of Economics in terms of Paradigm Shift and MSRP (Karl Popper, Thomas Kuhn and Imre Lakatos).

Unit-II

Theoretical system of Economics and its Methodology; Economic theory and Economic laws; Role of assumptions in Economics, Economic Models- Various Concepts: Function, Variable, Equilibrium-Partial and General, Static; Nominal and Real Value.

Unit-III

Basic Concepts in Thesis writing: Literature Review, Methodology, Argumentation Analysis, Synthesis, Comprehension, Knowledge, Analogy, Homology, Criticism.

Unit-IV

Structure and content of the thesis and research paper; Indicators of good research/thesis; Referencing and citation: Styles of citing sources/ references the in text (APA, Chicago, and IEEE).

Suggested Readings:

1. Lerary, Z.O. 2005. The Essential Guide to Doing Research. Vistaar Publications, New Delhi.
2. Cohen, Morris R. and Nagel E. 1934. An Introduction to Logic and Scientific Method. Simon Publications.
3. Blaug, M. 1985. "Economic Theory in Retrospect", CIP, Cambridge.
4. Diana, R. 2008. "The Literature Review: A Step-by-Step guide for students" Sage Publication.
5. Goode W. J. and Pual K. Hatt, 1952. Methods in Social Research. McGraw Hill.
6. Kuhn, T.S. 1962 (2012 Edition). The structure of scientific revolution. University of Chicago Press
7. Kate, T. 2007. A Manual for writers of Research Papers, Theses and Dissertation. University of Chicago.
8. Mishra, V. 1980. From the autobiography of Economic theory and Other Reflections. Kalyani Publications, New Delhi
9. Mishra V. 1984. The study of Product Behaviour- the Nature of the Theoretical System of Economics. Vishal Publications
10. Nicholas, W. 2011. Research Methods: The Basics" Routledge.
11. Scale, C. 2008. Social Research Methods. Routledge.
12. Hart, C. 1998. Doing a Literature Review. Sage Publications, New Delhi.
13. Walliman, N. 2003. Your Research Project. Sage Publications, New Delhi.
14. Thomas R. M. 2003. Blending Quantitative & Quantitative Research Methods in Thesesand Dissertations. Corwin Press.
15. Punch, K. F. 2000. Developing Effective Research Proposals, Sage Publications, New Delhi.
16. Glatthorn, A. 1998. Writing the Winning Dissertation - A Step-by-Step Guide, Corwin Press.
17. RudestamKjell E. & Newton Rae R. 2001. Surviving Your Dissertation. 2nd Edition. Sage Publications, New Delhi.
18. Philips Estelle M. & Pugh D. S. 1987. A Handbook for students and their supervisors. UBS Publishers' Distributors Ltd., New Delhi.

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REVIEW OF LITERATURE

Course code: ECP-3103
L-T-P
0-0-2

Max.Marks:50
Internal-25
External-25

Time: 1.5 Hrs.

Course Objectives: The purpose of this course is to gain and understanding the existing research and debates relevant to a particular topic and area of study. Further, it enables students to conduct the review of literature and learn the research gap after Review of Literature. Further, to prepare and present seminar papers on contemporary issues

Course Outcomes: At the end of the course the students will be able to:

CO_1: help the students learn the way to present that knowledge in the form of a report;

CO_2: conduct of a literature review and help build knowledge in their respective field of work;

CO_3: help in prevent duplication of work and engages the learners in a formal discussion and debates; and

CO_4: promotes involvement of students in group and team work and to address socio-economic issues.

Instruction for examiners/examinees:

➤ The candidate will get necessary guidance from her supervisor/coordinator for the paper 'Review of Literature and Seminar' till the end of semester.

➤ The Candidate shall review at least 30 research papers on the given topic. The research papers should be from Scopus Indexed/ Web of Science/ UGC CARE Listed journals.

➤ A report of about 50 pages in print form will be submitted by the candidate consisting of comparative analysis of research methodology, data analysis techniques and findings from different papers and duly signed by the candidate and the concerned supervisor at least two weeks before commencement of the theory examination in office of Department of Economics.

Assessment Procedure: -

➤ **Internal Assessment-** (25 Marks): The candidate present the said work before the following committee constituted by Head of Department.

1. Chairperson
2. Concerned Supervisor
3. . One Faculty Member

Note: - Presence of at least two committee member is mandatory

➤ **External Assessment-** (25 Marks)- by external examiner from the approved panel of experts.

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RESEARCH AND PUBLICATION ETHICS

Course code: CPE-RPE-022
L-T-P
2-0-0
Time: 1.5 Hrs.

Max.Marks:50
External: 40
Internal: 10

Course Objectives: The course aims to sensitize researchers regarding publication ethics and publication misconducts.

Course Outcomes: *At the end of the course, the student will be able to:*
CO₁: acquire awareness about publication ethics and publication misconducts;
CO₂: identify research misconduct and predatory publications;
CO₃: understand indexing and citation databases, open access publications, research metrics; and
CO₄: understand the usage of various plagiarism tools.

Instructions for examiner/examinees: The question paper will contain 8 questions of 10 marks each and student will be required to attempt 4 questions (1 question from each unit).

Unit I

Philosophy and Ethics: Introduction to philosophy: definition, nature and scope, concept, branches; Ethics: definition, moral philosophy, nature of moral judgements and reactions. Scientific Conduct: Ethics with respect to. science and research; Intellectual honesty and research integrity; Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP); Redundant publications: duplicate and overlapping publications, salami slicing; Selective reporting and misrepresentation of data.

Unit II

Publication Ethics: Publication ethics: definition, introduction and importance; Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.; Conflicts of interest; Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types; Violation of publication ethics, authorship and contributorship; Identification of publication misconduct, complaints and appeals; Predatory publishers and journals Practice.

Unit III

Open Access Publishing: Open access publications and initiatives; SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies; Software tool to identify predatory publications developed by SPPU; Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc. Publication Misconduct: Subject specific ethical issues, FFP, authorship; Conflicts of interest; Complaints and appeals: examples and fraud from India and abroad; Use of plagiarism software like Turnitin, Urkund and other open-source software tools.

Unit IV

Databases And Research Metrics: Databases - Indexing databases; Citation databases –Web of Science, Scopus, SCI, etc.; Research Metrics - Impact Factor of journal as per Journal Citation Report, SNIP, SIR, IPP, Cite Score; Metrics: h-index,g-index, i-index, Altimetric, journal database.
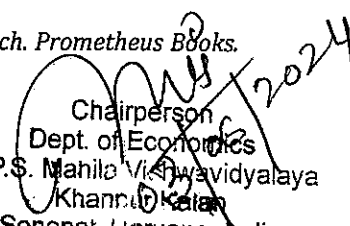
Suggested Readings:

1. Anderson B.H. 1997. *Thesis and assignment writing. Wiley Eastemn.*
2. Beall, J. 2012. *Predatory publishers are corrupting open access. Nature, 489(7415), 179-179.* https://doi.org/10.1038/489179a
3. Bird, A. 2006. *Philosophy of Science. Routledge.*
4. Bordens K.S. and Abbott, B.B. 2008. *Research Design and Methods, Me Graw Hill.*
5. Brooks, R., Kitty teRiele& Maguire, M. 2014. *Ethics and Education Research, Sage Publication.*
6. Carroll, J. 2015. *A handbook for Deterring Plagiarism in Higher Education. Oxford Centre for Staff and Learning Development.*

7. Chaddah, P. 2018. *Ethics in Competitive Research: Do not get scooped; do not get plagiarized*, National Academy of Sciences,

8. Francisco M. Salzano, A. & Magdalena Hurtado. 2004. *Lost Paradises and the Ethics of Research and Publication*. Oxford University Press. New York.

9. Graziano, A. M., and Raulin, M.L. 2007. *Research Methods - A process of Inquiry*. Sixth Edition, Pearson.

10. Hammersley, M. &Traianou, A. 2012. *Ethics in Qualitative Research Controversies and Contexts*. SAGE - Publications Ltd.

11. Loue, S. 2000. *Textbook of Research Ethics: Theory and Practice*, 2000th Edition. Springer.

12. MacIntyre, A. 1967. *A Short History of Ethics*. London.

13. Miller, T., Birch, M., Mauthner, M. & Jessop, J. 2012. *Ethics in Qualitative Research*. Oxford Brookes University, UK.

14. Nicolas H. Steneck. 2007., *Introduction to the Responsible Conduct of Research Office of*

15. Oliver, P. 2003. *The student's guide to research ethics*. Open University Press, Maidenhead, Philadelphia.

16. Resnik, D. B. 2011. *What is ethics in research & why is it important. National Institute of Environmental Health Sciences*, 1-10. Retrieved from *https://wwwv.niehs.nih.gov/research/resouices/bioethics/whatis/index.cfm*

17. Sales, Bruce, D. & Folkman, S. 2002. *Ethics in Research with Human participants*. American Psychological Association, Washington D.C.

18. Shamoo, Adil E. & Resnik, David B. 2003. *Responsible conduct of research*. Oxford university press.

19. Stewart, Neal C.2011. *Research Ethics for Scientists: A Companion for Students*. Wiley.

20. Todorovich, M., Paul K. & Hook, S. 1977. *The Ethics of Teaching and Scientific Research*. Prometheus Books. Buffalo, NY.

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DYNAMIC MACROECONOMICS

Course code: ECP-3104A
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course objectives: The course gives a step-by-step introduction to the key theoretical concepts relating to static and dynamic analysis and to the corresponding model types. In the analysis we are also able to integrate the market for foreign exchange and the choice of monetary policy regime (instruments and targets) and to show that the dynamic response of the macro economy is regime-dependent.

Course Outcomes: At the end of the course the students will be able to:
CO_1: understand the issues of contemporary relevance in macroeconomic theory.
CO_2: explore researchable areas from New and Keynesian economics;
CO_3: analyse the monetary policy and its implications on economy; and
CO_4: grain knowledge on role of state in solving economics issues.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Economic growth and the neoclassical model; Growth accounting and growth empirics: Solow model, AK model, Romer model; Neo-classical growth model in discrete time and dynamic programming; Consumption theories.

Unit –II

Linear Rational Expectations Models; Three Ways of Solving Linear Rational Expectations Models; The Real Business Cycle model; The New Keynesian model

Unit -III

The monetary economy; Monetary non-neutrality, the Phillips curve, nominal rigidities; Advanced Macroeconomics Monetary policy; monetary policy: goals, strategies, implementation

Unit-IV

Government expenditures and fiscal multipliers; Budget deficits and debt sustainability; the yield curve and the zero lower bound; Unemployment: Search-and-matching model.

Suggested Readings:

1. David Romer. 2018. Advanced Macroeconomics. McGraw-Hill Economics, 5th edition.
2. Dirk Niepelt. 2019. Macroeconomic Analysis. MIT Press.
3. Daron Acemoglu. 2009. Introduction to Modern Economic Growth. Princeton University Press.
4. Olivier J. Blanchard and Stanley Fischer. 1989. Lectures on Macroeconomics. MIT press.
5. Thomas J. Sargent. 1987. Dynamic Macroeconomic Theory. Harvard University Press.
6. Thomas J. Sargent and Lars Ljungqvist. 2018. Recursive Macroeconomic Theory. MIT Press, 4th edition.
7. Angus Deaton. 1992. Understanding Consumption. Oxford University Press.
8. George McCandless. 2008. The ABCs of RBSs: An Introduction to Dynamic Macroeconomic Models. Harvard University Press.
9. JordiGal'i. 2015. Monetary policy, inflation, and the business cycle: an introduction to the new Keynesian framework and its applications. Princeton University Press, 2nd edition.

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DEVELOPMENT ECONOMICS

Course code: ECP-3104B
L-T-P
4-0-0
Time: 3 Hrs.

Max. Marks: 100
External: 80
Internal: 20

Course Objectives: The main objectives of this course on development economics are to enable students with knowledge of various approaches to underdevelopment. The course also covers various dimensions of development policy like role of state and trade theory for economic development.

Course Outcomes: *At the end of the course the students will be able to:*
CO$_1$: understand the issues of developed and low-income economies and international trade;
CO$_2$:gain knowledge on the rural and development issues;
CO$_3$:know the issues related to labour and migration in the economy; and
CO4:analyse the implications of environmental changes on economy.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

The current problem of least developed and low-income economies; trade and economic development; foreign assistance in general and various specific alternatives of foreign development cooperation; the application of distinctive measurement concepts of inequality and poverty.

Unit II

Urbanisation and development; Rural development; Community and development; the main theories of capital market imperfections in developing countries

Unit-III

Labour and migration; Health and education; Gender and development; Governance and the political economy of development; the role of the state in advancing economic development

Unit-IV

Environment and development; Natural resource and Dutch disease – technological progress, human capital and increasing return; an overview of endogenous growth models and its evaluation.

Suggested Readings:
1. Bardhan, P.K. and C. Udry. (1999. Development Microeconomics, Oxford University Press.
2. Banerjee, A. and E. Dufflo. 2012. Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty, Public Affairs.
3. Ravallion, Martin. 2016. The Economics of Poverty: History, Measurement & Policy, Oxford University Press.
4. Morduch, J. and B. A. de Aghion. 2005. The Economics of Microfinance, The MIT Press.
5. Baland, J-M & J-P Platteau. 1996. Halting Degradation of Natural Resources, Oxford University Press.
6. Constant, Amelie F. and Klaus F. Zimmermann. 2013. International Handbook on the Economics of Migration, Edward Elgar
7. Johnes, Geraint and Jill Johnes. 2004. International Handbook on the Economics of Education, Edward Elgar.
8. Weingast, Barry R. and Donald Wittman. 2011. The Oxford Handbook of Political Economy, Oxford University Press.
9. Oliver Morissey. 2017. Handbook of Trade and Development, Edward Elgar.
10. Christopher Bliss. 1989. Trade and Development. In Chenery and Srinivasan (ed) Handbook of Development Economics, Vol 2, Edward Elgar: 1187-1240.
11. Ronald Findlay. 1973. International Trade and Development Theory. Columbia University Press, New York.
12. Paul Krugman. 1991. Increasing returns and economic geography. Journal of Political Economy, 99(3):483-499

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INTERNATIONAL TRADE AND DEVELOPMENT

Course code: ECP-3104C
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: To strengthen and deepen the understanding of the scholars on modern trade theories and the problem of managing the balance of payments. This paper also deals with the institutional factors constraining the development process and difficulty in utilisation of the natural resources. The environmental economics also forms a unit of this paper.

Course Outcomes: At the end of the course the students will be able to:

CO_1: understand the various theories of international trade;

CO_2: explore researchable in various economic blocks worldwide;

CO_3: know the issue of market failures and role of state; and

CO_4: analyse the implications of regionalism and multilateralism.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit: I

Theories of International Trade, Trade under increasing Return – Imperfect competition, Intra-industry trade – Product Life Cycle Theory.

Unit II

Balance of Payments Convertibility – current and capital Accounts, Theories of Regional trade Block, Evolution of European Union, BREXIT, Optimum Currency area, SAPTA, SAFTA and BRICS.

Unit III

Basic issues and Factors in Development Problems of market: its immaturity, imperfect information, lack of credibility, property rights, and externality; Problems in the development of market: adverse selection and moral hazards; Role of State: Peter B Evans' State as the problem and solution: Predation embedded autonomy and structural change.

Unit IV

Trade Policy as input to Transition, Development and Integration Regionalism and multilateralism, extent of regionalism: coexistence and conflicts, developing countries: growth crisis and need for reform, trade as input to development, transition and liberalization, theory of economic integration, effects of economic integration.

Suggested Readings:

1. Meier, G. M. and Rauch, J. E.2005. Leading Issues in Economic Development, Oxford University Press, 7th edition.

2. Macho-Stadler, I and Perez-Castillo, J D. 2001. An Introduction to the Economics of Information. Oxford University Press.

3. Mikic, Mia.1998. International Trade, Macmillan Education, St. Martin's Press, Scholarly and Reference Division, New York.

4. Soderston, B. 1997. International Economics, Prentice Hall, Upper Saddle River, N J New York

5. Salvator, D. 1997. International Economics, Prentice Hall, Upper Saddle River, N J New York.

6. Markandya A and Harou Patrice. 2002. Environmental Economics for Sustainable Growth, Edward Elger, USA,

7. Pearce, D. W. 1992. Environmental Economics, Longman, London.

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Khanpur Kalan
Sonepat, Haryana, India

ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

Course code: ECP-3104D
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: It will acquaint students with the socio-economic benefits of a project often outweighed the environmental costs. Guided by objectivity, the syllabus prepared for environmental economics addresses the major environmental issues emanating from different kinds of activities.

Course Outcomes: At the end of the course the students will be able to:
CO₁: To understand the various techniques of environmental valuation;
CO₂: To learn about sustainable development goals and polices;
CO₃: To gain understanding about major environmental agreements; and
CO₄: To analyse the functions of pollution boards India.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question

Unit-I
Environmental Valuation Methods and its Application Values of environmental goods, need for environmental valuation, Valuation methods: Revealed preference (Direct proxy method) - Productivity change method, Substitute cost method – Revealed preference (non- proxy method)- travel cost and Hedonic price method (conceptual Framework and case studies); Stated preference – Contingent valuation method.

Unit-II
Sustainable Development and Environmental Policies Issues of sustainable development, green accounting of national income, rules to sustainability, sustainable development goals.

Unit-III
United Nations Environmental Programmes, NEP; Conference of parties-Agenda for developed and developing Courtiers; Major internationals environmental agreements,

Unit-IV
Environmental policies in India and its evaluation, National Green Tribunal: Functionand Initiative; Central Pollution Control Boards-Power and function; State Pollution Control Boards-Power and Functions.

Suggested Readings:

1. Rangarajan, Mahesh. 2006. *Environmental Issues in India: A Reader. Pearson.*
2. Gadgil, Madhab and Ramachandra, Guha.1992. *This Fissured land: An Ecological History of India. Oxford University Press, New Delhi.*
3. Hanley N, J.F. Shogern and Ben White.1997. *Environmental Economics in Theory and Practice, Macmillan.*
4. Chary S.N. and Vyasulu V. 2000. *Environmental Management - An Indian Perspective, Macmillan, New Delhi.*
5. Cropper, Maureen. 1999. *Valuing Environmental Benefits, Edward Elgar.*
6. Hussen A.M. 1999. *Principals of Environmental Economics, Routledge London.*
7. James, A.J., M. N. Murty and Smita Misra. 1999. *Economics of Water Pollution–The Indian Experience, Oxford University Press, New Delhi.*
8. Jeroen. C.J.M. van den Berg. 1999. *Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd.,U.K.*
9. Kolstad, C. 2010. *Intermediate Environmental Economics, 2nd Ed. Oxford University Press.*
10. Pearce D.W. and Turner R. 1991. *Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore*

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11. Perman R., Ma Y., McGilvray J. and Common M. 2011. 3rd Ed, *Natural Resource and Environmental Economics*, Pearson Education
12. Shankar, U. 2001. *Environmental Economics*, Oxford University press, New Delhi.

CONTEMPORARY ISSUES IN INDIAN ECONOMY

Course code: ECP-3104E
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: To acquaint the students with the conditions of the Indian economy and its institutional structure – in many instances the students find economic dealing with the problems of the developed countries in depth and only touching tangentially the 'real' problems of the developing countries, including India.

Course Outcomes: *At the end of the course the students will be able to:*
CO₁: understand the issues of contemporary relevance in microeconomics and macroeconomics;
CO₂: explore researchable areas for their relevant contribution in research;
CO₃: forecast the future course of changes and developmental policies of the government; and
CO₄: analyse the implications of changes in economic policies.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit I
Poverty alleviation programmes; Recent Employment Generation Programmes and Social Safety framework in India, Issues in Health and Education. Inclusive growth – Evaluation of Five-year plans with special emphasis on the 11th and 12th five-year plans.

Unit II
Contemporary economic issues in India- Infrastructural Development- Environmental Issues; Global Warming in the Indian Context- Pigovian taxes –taxable permits and tradable permits in the Indian context, Externalities and its measurement.

Unit III
Contemporary Issues in Social Sector Rural Livelihood Mission, MGNREGA, NRHM, SSA, Social Security; Impact of the Covid19 pandemic on the Indian Economy. Impact on Employment and Labour Market, Labour migration.

Unit IV
Contemporary Issues in Banking, Finance and Corporate Restructuring Banking reform: Nationalization, Non-performing assets and privatization of banks; Recent Tax reforms (GST) and Expenditure reforms and Deficit, Inflation Targeting and monetary policy in India. Interfaces of Monetary and Fiscal policy in India.

Suggested Readings:
1. Ahluwalia, I J aNd IMD Little. 1999. *India's Economic Reforms and development (Essays in honour of Manmohan Singh)*, Oxford University Press, New Delhi.
2. Bardhan, P. 1991. *The Political Economy of development in India*, Oxford University Press, New Delhi.
3. Government of India, *Economic Survey (annual)*, Ministry of Finance, New Delhi.
4. Mishra K Deepak. 2016. *Internal Migration in Contemporary India*, Sage Publications, New Delhi.
5. Mishra K Deepak and Vandana Upadhyay. 2017. *Rethinking Economic Development in North East India: The Emerging Dynamics*, Rutledge, London/New Delhi.
6. Mishra K Deepak and Pradeep Nayak. 2020. *Land and Livelihoods in Neoliberal India*, Springer, Palgrave Macmillan, Singapore.
7. Jalan, B. 1992. *The Indian Economy – Problems and Prospects*, Vikash, New Delhi.
8. Kapila, Uma. 2021. *India's Economic Reforms*, Academic Foundation, New Delhi.
9. Kapoor, R. 202). *COVID-19 and the State of India's Labour Market. ICRIER Policy Series'*

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~~10~~. Khera, Reetika. 2011. *The Battle for Employment Guarantee*, Delhi: Oxford University Press
11. 12. Sahoo, P., & Ashwani. 2020. *COVID-19 and Indian economy: Impact on growth, manufacturing, trade and MSME sector. Global Business Review*, Vol. 21(5), 1159- 1183

CONTEMPORARY ISSUES IN INDIAN AGRICULTURE

Course code: ECP-3104F	**Max.Marks:100**
L-T-P	**External:80**
4-0-0	**Internal: 20**
Time: 3 Hrs.	

Course Objectives: Agriculture is still considered to be the backbone of the Indian economy. However, the sector is subject to many challenges. Hence, this paper aims to give an insight about the state of Indian agriculture in recent times, its functioning and the significance of the agricultural factor markets and the basic issues concerning the sector.

Course Outcomes: At the end of the course the students will be able to:

CO_1: understand the functions of agricultural markets;

CO_2: learn about the factors required agricultural operations;

CO_3: analyse the causes of farmers misery; and

CO_4: examine the implications of climate change on agriculture operations.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Agriculture and Factor Markets State of Agriculture in India- share in GDP and employment, cropping pattern, crop diversification towards HYV seeds, cropping intensity, irrigation, and mechanization.

Unit-II

Small and fragmentation of holdings and markets of primary inputs of agriculture – land, labour, capital and water; Market for support services-credit, extension service and insurance

Unit-III

Farmers' distress; Green Revolution and environment; Recent agricultural reforms- The Farmer's Produce Trade and Commerce (Promotion and Facilitation) Act, 2020, The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020, The Essential Commodities (Amendment) Act, 2020.

Unit-IV

Climate change and its impact on agriculture; Farm income and the Goal of doubling of farmer's income; CACP and MSP; Artificial Intelligence in agriculture

Recommended Readings:

1. Chand, R. 2016. *Doubling Farmers' Income: Strategy and Prospects*, Presidential address, Seventy sixth annual conference, The Indian Society of Agricultural Economics.
2. Goswami, Binoy, M P Bezbaruah and Raju Mandal. 2018. *Indian Agriculture after the Green Revolution: Changes and Challenges*, Routledge: Abingdon, Oxfordshire, UK and New York, USA.
3. Kapila, Uma. 2021. *India's Economic Reforms*, Academic Foundation, New Delhi.
4. Ministry of Agriculture & Farmers' Welfare. 2017. *Report of the Committee on Doubling Farmers' Income*, Volume II, Department of Agriculture, Cooperation and Farmers' Welfare.
5. Ray, Debraj. 2011.*Development Economics*, Oxford University Press, New Delhi.

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ADVANCED ECONOMIC THEORY

Course code: ECP-3104G

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: This is the paper covering a wide range of topics: advanced demand theory, oligopoly and asymmetric information from economics, business cycles, rational expectation and policy ineffectiveness from macroeconomics and also deals with financial economics.

Course Outcomes: At the end of the course the students will be able to:

CO_1: understand the utility and demand functions;

CO_2: explore the asymmetric information in the oligopolistic markets;

CO_3: know the impact of various macroeconomics policies on economy; and

CO_4: analyse the implications of changes in economic policies.

Instruction for examiners/Examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Demand Theory Shape of the utility function and risk: von Neumann-Morgenstern Utility Theorem, Envelop Theory; Duality in demand theory: Properties of Marshallian and Hicksian demand functions; Empirical estimation of demand (Rotterdam Model): Kaldor's theory of distribution.

Unit II

Market Oligopoly: application of both cooperative and non-cooperative games to the solution of oligopoly problems, Asymmetric information and market: Adverse selection and moral hazard, Akerlof's theory of market for lemons, elements of auction theory

Unit III

Macro Economics in Closed and Open Economy New Classical Macro Model: Adaptive expectation, Rationale expectation and Policy ineffectiveness; Real business cycle model; New Keynesian Model and their critique. Open Economy Macro Model: Mundell-Fleming Model, flexible exchange rate and problems of Monetary and Fiscal Policy in the open Economy model.

Unit IV

Financial Economics Debt and equity financing of a business; Cost of Capital: Net Income Approach, Net Operating Income Approach, Traditional Theory of Gearing, Modigliani-Miller Theory; Derivatives: Types, Binominal pricing model and Black-Scholes model of derivative pricing.

Recommended Readings:

1. *Birman H Scot & L Fernandez. 2003. Game Theory with Economic Application, Pearson Education.*
2. *Froyen, R. T. 1999. Macroeconomics, Delhi: Pearson.*
3. *Hoover, K. D. 1988. The New Classical Macro-Economics, Oxford: Blackwell.*
4. *Elton, E. J. and Grucer, M. J.2001. Modern Portfolio Theory and Investment Analysis, Singapore, John Wiley.*
5. *Mclaney, E. J. 2000. Business Finance: Theory and Practice, Delhi: Pearson.*
6. *Paul, Davidson. 2011. Post Keynesian Macroeconomic Theory. Second edition.*
7. *Sharpe, W. F., Alexander, G. J. and Bailey, J. V. 1995. Investments, New Delhi: Prentice Hall.*
8. *Sheffrin, M Steven. 1996. Rational Expectations', Cambridge University Press, 1996.*

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GENDER AND DEVELOPMENT

Course code: ECP-3104H

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: The paper will provide an analysis of the location of women in processes of development and to understand the centrality of gender in each case. Further, to examine the theoretical and conceptual frameworks for the analysis including an understanding of gender divisions and their interaction with other forms of inequality such as caste, class, race, and ethnicity and their spatiality.

Course Outcomes: At the end of the course the students will be able to:

CO_1: understand the roe of gender in developmental process;

CO_2: know the researchable areas for gender empowerment;

CO_3: learn about the regional dimensions of gender and development; and

CO_4: analyse the implications of gender budgeting;

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Gender in Development Process-Theoretical framework – Classical and neo-classical theories of human capital formation, institutions and their feminist critique; gender theories- contextualizing patriarchy and its importance for understanding gender relations and their implication for development processes.

Unit-II

Locating Gender in Development Process- Conceptual shift in the women and development discourse from 'Women in Development' (WID) to 'Gender in Development' (GID) and 'Gender and Development' (GAD). Feminist critique of gender perspective in the Indian Planning: from welfare to 'empowerment and women's agency approach. Gender and structural adjustment

Unit-III

Regional Dimension of Gender and Development Access and control over resources and assets; the cross-cutting issues of caste and class and space; Gendered livelihoods and poverty; workforce trends and implications for emerging regional patterns; caste/class/region overlap; Health: Gender biases in access and utilization of health including reproductive health and its consequences;

Unit-IV

Gender budgeting; Institutionalizing gender concerns and gender empowerment in policies and interventions. Gender and political participation: national, state and local, Indigenous knowledge and gender development. Role of educational institutions in removing gender disparities in Haryana; Gender Issues in Haryana.

Recommended Readings:

1.*Agarwal, Bina. 1994. A field of one's own: gender and land rights in South Asia. Cambridge University Press. Cambridge.*

2.*Boserup, Ester. 1989. Woman's Role in Economic Development. Earthscan, London. 283 pp.*

3.*Unwin Hyman Coltrane, S. 1994. 'Theorizing Masculinities in Contemporary Social Science', in Theorizing Masculinities. H. Brod and M. Kaufman (eds.), pp. 39-60. Thousand Oaks: Sage*

4.*Drèze Jean and A. Sen. 2002. India: Development and participation, Delhi: Oxford University Press.Human Development in South Asia 2000: The Gender Question,*

5. *The Mahbub ul Haq. 2000. Human Development Centre. Delhi, Oxford University Press,*

6. *Kabeer Naila. 2002. Reversed Realities. Oxford University Press*

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7. Kapadia Karin. 2002. *The Violence of Development: The Politics of Identity, Gender and Social Inequalities in India, New Delhi*
7.Moser, Caroline O.N. 1989. *Gender planning in the Third World: Meeting practical and strategic needs. World Development, 17(11).*

ECONOMICS OF INNOVATION

Course code: ECP-3104I
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: This course presents students with a solid understanding of the economic fundamentals of innovation, emphasizing two complementary approaches to innovation: micro and macroeconomic. It will provide training of the student in a broader framework of interpretation of phenomena of economic dynamics, at the level of companies, technologies, sectors and the economy. Innovation is one of the most important economic and business phenomena of our time.

Course Outcomes: At the end of the course the students will be able to:

CO$_1$: know the fundamentals of innovation economics;

CO$_2$: understand the techniques for measurement of innovation;

CO$_3$: learn about various innovation systems in economy; and

CO4: analyse the implications of innovation drivers in the digital era.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Innovation in the history of economic thought; Introduction to the Economics of Innovation, Innovation and Economic Growth; Neoclassical theory, evolutionary theories, (neo) Schumpeterian approaches; Demand pull vs. technology push debate; Adoption and diffusion of technologies; Innovation and Inequality

Unit-II

Measurement of Innovation, The Supply of Inventors; Invention, innovation and diffusion, Technologic innovation, Taxonomies of innovation, Indicators of Science Technology & Innovation; Immigration and Innovation; Intellectual Property Rights

Unit-III

Innovation, economic growth and structural change; Long waves and techno-economic paradigms, National innovation systems; Innovation and international competitiveness - technological gap model; Research and Innovation.
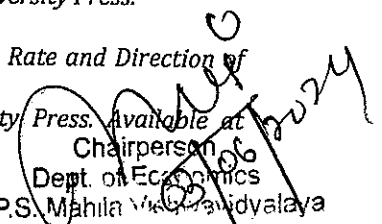
Unit-IV

Drivers: network externalities; the consumer as innovator, co-creation and mass customization in the era of Industry 5.0; the democratization of innovation and the relevance of other stakeholders; Open innovation: an introduction; Innovation in the digital era: new business models; digital platforms
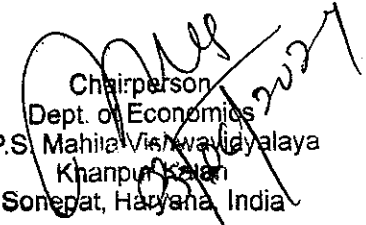
Suggested Readings:

1. Angrist, Joshua and Jörn-Steffen Pischke. 2008. *Mostly Harmless Econometrics, Princeton University Press.*
2. Scotchmer, Suzanne. 2004. *Innovation and Incentives, MIT Press.*
3. Arrow, Ken. 1962. *Economic Welfare and the Allocation of Resources for Invention," in The Rate and Direction of Inventive Activity:* 609-619, *National Bureau of Economic Research.*
4. Boldrin, M. and D. K. Levine. 2008. *Against Intellectual Monopoly, Cambridge University Press.* Available at http://www.dklevine.com/general/intellectual/againstnew.htm
5. Hall, B. and N. Rosenberg. 2010. *Handbook of the economics of innovation, Elsevier.*

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6. Leveque and Meniere. 2004. *The Economics of Patents and Copyright*, Berkeley Electronic Press. Available at http://www.bepress.com/leveque

7. Kogan, Leonid, Papanikolaou, Dimitries, Seru, Amit, and Stoffman, Noah. 2017. *Technological Innovation, Resource Allocation, and Growth*, The Quarterly Journal of Economics, 132(2), 665-712.

8. Agarwal, Ruchir and Patrick Gaule. 2018. *Invisible Geniuses: Could the Knowledge Frontier Advance Faster?* IMF Working Paper No. 18/268

9. Moser, Petra, Alessandra Voena, and FabianWaldinger. 2014. *German Jewish Émigrés and US Invention*, American Economic Review 104(10): 3222–3255.

10. Hvide, Hans K., and Benjamin F. Jones. 2018. *University Innovation and the Professor's Privilege*, American Economic Review 108.7: 1860-98.

11. Sampat, Bhaven and Heidi L. Williams. 2019. *How Do Patents Affect Follow-On Innovation? Evidence from the Human Genome*, American Economic Review 109(1): 203–36.

12. Moretti, Enrico and Daniel J. Wilson. 2017. *The Effect of State Taxes on the Geographical Location of Top Earners: Evidence from Star Scientist"*, American Economic Review 107(7): 1858–1903.

13. Azoulay, Pierre, Joshua S. Graff Zivin, Danielle Li, and Bhaven N. Sampat. 2019. *Public R&D Investments and Private-sector Patenting: Evidence from NIH Funding Rules*, Review of Economic Studies 86(1): 117–152.

14. Jaravel, Xavier. 2019. *The Unequal Gains from Product Innovations: Evidence from the U.S. Retail Sector*, Quarterly Journal of Economics 134(2): 715–783

15. Church, J. and R. Ware. 2000. *Industrial Organization: A Strategic Approach*, Irwin McGraw-Hill. Available at: http://works.bepress.com/je§rey_church/23

16. Besen, S. and L. Raskind. 1991. *An Introduction to the Law and Economics of Intellectual Property*, The Journal of Economic Perspectives 5 (1), pp. 3-27

17. David, P., 1985, *Clio and the Economics of QWERTY*, The American Economic Review papers and proceedings 75 (2), pp.332-337

18. Liebowitz, S.J. and S.E. Margolis. 1994. *Network externality: an uncommon tragedy*, Journal of Economic Perspectives 8 (2), pp.133-150.

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ECONOMICS OF ENTREPRENEURSHIP

Course code: ECP-3104J
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course objectives: The paper aims to acquaint students with the most influential theoretical and empirical contributions on entrepreneurship in the economics literature, with an emphasis on recent work. The course will enable scholars to understand the importance of small business to the national economy besides identifying firm factors viz. technological knowledge, adaptive capability, network, institutional support, cost etc.

Course Outcomes: At the end of the course the students will be able to:

CO_1: understand the connect between entrepreneurship and development;

CO_2: explore the motivation for entrepreneurship;

CO_3: gain knowledge about entrepreneurial policies; and

CO_4: analyse the implications entrepreneurship on industry dynamics.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

The Economics of Entrepreneurship; Entrepreneurship and Organization Design;The returns to entrepreneurship - Who becomes an entrepreneur? Entrepreneurial entry: benchmark model for the transition between paid work and entrepreneurship; The Relation between Entrepreneurship and Economic Development; Entrepreneurship: Productive, Unproductive and Destructive.

Unit-II

Does Entrepreneurship Pay? An Empirical Analysis of the Returns to Self-employment; the Returns to Entrepreneurial Investment: A Private Equity Premium Puzzle? Non-pecuniary motivations for entrepreneurship and empirical strategies to identify such motivations; Notion of entrepreneurship as a luxury good, Entrepreneurship and happiness

Unit-III

Entrepreneurs and personal traits; Public policy; entrepreneurs are fundamentally different from non-entrepreneurs. Why Do Entrepreneurial Parents Have Entrepreneurial Children; Entrepreneurship and Network Externalities? Innovation and Diffusion in Small Firms: Theory and Evidence; Macro-economic relevance of entrepreneurship.

Unit-IV

Are entrepreneurs substitutable? Entrepreneurs are crucial in starting up new firms, but are they crucial once the firm has been founded? And for how long? What is a firm anyway? Entry, Exit, Growth, and Innovation over the Product Life Cycle, Entrepreneurship and industry dynamics;; Entry and Competition in Concentrated Markets Entrepreneurship and the Business Cycle.

Suggested Readings:

1. Shane, S. 2003. A General Theory of Entrepreneurship.Edward Elgar.
2. Shane, S. 2003. New Horizons in Entrepreneurship. Edward Elgar
3. Parker, S. 2009. The Economics of Self-employment and Entrepreneurship. Cambridge University Press.
4. Bhidé, Amar. 2000. The Origins and Evolution of New Businesses. Oxford University Press.
5. Aldrich, H. 1999. Organizations Evolving. Sage Publications Ltd.
6. Angrist, J. D. & J.S. Pischke. 2009. Mostly Harmless Econometrics. Princeton University Press

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DATABASE FOR RESEARCH IN ECONOMICS

Course code: ECP-3104K

L-T-P

4-0-0

Time: 3 Hrs.

Max.Marks:100

External:80

Internal: 20

Course Objectives: This course is introduced to enrich the students with the knowledge of various data sources of national and international importance.

Course Outcomes: At the end of the course the students will be able to:

CO_1: understand the architecture of Indian data system;

CO_2: know the National Accounts Statistics (NAS) and National Sample Survey (NSS) data;

CO_3: learn about National Family Health Survey (NFHS) and Periodic Labour Force Survey (PLFS) data; and

CO_4: analyse the data on environmental economy form reputed internal sources.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

Secondary Data Sources of India: Architecture of Indian Data System – NSO, Ministries and its allied organizations and DES of States; Independent and International Data Systems or Sources – reliability, comparability and validity; Issue of National versus International Data Sources.

Data Sources on: National Income, Population, Poverty, Employment, Inequality, Wages, Agriculture, Industry, Health, Education, FDI, Foreign Trade, Environment, Government Finance, Monetary and Banking System.

Unit-II

NAS: Structure, Designing, Concepts, Recent debate on Issues in Methodology; limitations NSSO: Types of surveys – Household, Enterprise and Individuals; Concepts, sampling and definitions in different rounds; Detailed discussion on quinquennial rounds and PLFS; Issue of congruence between NAS and NSS. Population Census: Structure of different tables; Changes in definition over time; Issues covered over time; Available data till now.

Unit-III

NFHS: Themes covered; Sampling, Concept, Definitions – changes over time; Limitations. ASI: Survey design; Concepts used; Limitations Labour Bureau: Types of surveys, sampling; limitations; Types of available data; Sources and method of collection of available data; Cautions to be used in using DES data.

Unit-IV

Data on Environmental Economics- World Bank, Ministry of Statistics & Plan Implementation, and Ministry of Environment, Forest and Climate Change, UN Commodity Statistics Trade Database (UNSTD), Directorate General of Commercial Intelligence & Statistics (DGCIS), International Financial Statistics (IFS), International Trade Centre (ITC), World Economic Outlook (WEO); Extraction of Unit Level Data of different sources such as NSS, NFHS, Population Census.

Suggested Readings:

1. Nagaraj, R. 1999. How Good Are India's Industrial Statistics? An Exploratory Note, Economic and Political Weekly, 34 (6).

2. Nagaraj, R. (2002. How to Improve India's Industrial Statistics', Economic and Political Weekly, 37 (10).

3. Rao, C. R. 1972. Data Base of Indian Economy, Vols. I and II, Statistical Publishing Society, Calcutta.

4. Raza, M., S. Naqvi and J. Dhar. 1978. Sources of Economic and Social Statistics of India, Eureka Publications, New Delhi.

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ARTIFICIAL INTELLIGENCE IN ECONOMIC ANALYSIS

Course code: ECP-3104L
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objectives: The course introduces learners with the operations of Artificial Intelligence The paper will be a mixed bag of tools (imported from the Computer Science literature), theoretical results (from the Economics literature) and empirical evidence (from the marketing literature). The course integrates the study of key algorithms used in digital marketplaces as well as the study of theoretical models that employing a stylized approach.

Course Outcomes: *At the end of the course the students will be able to:*
CO_1: understand the history and fundamentals of Artificial intelligence (AI);
CO_2: explore the applications of AI in regression;
CO_3:know the AI techniques along with machine learning (ML) algorithms: and
CO_4: analyse the implications of AI in frauds.

Instruction for examiners/examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I

History of AI – key events and timelines; Current state of AI- capabilities & applications, AI as a GPT: productivity boost; Machine Learning and Economics; Use cases of AI methods in Economics; Introduction to basic concepts and notations; Ethics in AI, Concerns of model explain ability and Data privacy

Unit-II

Data pre-processing- Outlier detection, Scaling, Missing value imputation, Curse of dimensionality & dimensionality reduction methods; Linear & Logistic Regression; Elements of Reinforcement Learning;

Unit-III

Regularization & Model Selection; Tree-based methods; ML algorithms – SVM, KNN; Bagging & Boosting concepts; ANN – Basics of GD, Activation functions, Optimizers, Regularization – focus on MLP, CNN, RNN models, back propagation; Clustering methods

Unit-III

Uses of AI: Demand estimation/estimation of elasticity's; Credit Scoring (Finance and Banking); Load Forecasting; Operational Risks for Banks

Unit-IV

Applications of AI in Fraud Detection (Insurance, Finance), Claims Prediction (Insurance); Quitting behaviour and change of service provider of customers (Insurance, Banking) .

Suggested readings:
1. Acemoglu, D., & Restrepo, P. 2019. *Automation and New Tasks: How Technology Displaces and Reinstates Labor. The Journal of Economic Perspectives: A Journal of the American Economic Association, 33(2), 3–30.* https://doi.org/10.1257/jep.33.2.3
2. Aggarwal, C. C. 2016. *Recommender Systems: The Textbook. Springer, Cham.* https://doi.org/10.1007/978-3-319-29659-3
3. Agrawal, A., Gans, J., & Goldfarb, A. 2018. *Prediction Machines: The Simple Economics of Artificial Intelligence. Harvard Business Press.*
4. Agrawal, A., Gans, J., & Goldfarb, A. 2019. *Economic Policy for Artificial Intelligence. Innovation Policy and the Economy, 19, 139–159.* https://doi.org/10.1086/69995

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5. Agrawal, A., Gans, J., & Goldfarb, A. 2019. *The Economics of Artificial Intelligence: An Agenda.* University of Chicago Press.

6. Assad, S., Clark, R., Ershov, D., & Xu, L. 2020. *Algorithmic Pricing and Competition: Empirical Evidence from the German Retail Gasoline Market.* Brown, Z., & MacKay, A. (2021). *Competition in Pricing Algorithms,* SSRN working paper.

7. Athey, S. 2019. *The Impact of Machine Learning on Economics.* In *The economics of artificial intelligence* (pp. 507–552). University of Chicago Press.

8. B. Edelman, M. Ostrovsky and M. Schwarz. 2007. *Internet Advertising and the Generalized Second-Price Auction: Selling Billions of Dollars' Worth of Keywords,* American Economic Review, 97 (1), 242-259. https://doi.org/10.3386/w11765

9. Brynjolfsson, E., Mitchell, T., & Rock, D. 2018. *What Can Machines Learn, and What Does It Mean for Occupations and the Economy?* AEA Papers and Proceedings, 108, 43–47. https://doi.org/10.1257/pandp.20181019

10. Brynjolfsson, E., Rock, D., & Syverson, C. 2017. *Artificial intelligence and the modern productivity paradox: A clash of expectations and statistics.* National Bureau of Economic Research. https://doi.org/10.3386/w24001

11. Calvano, E., Calzolari, G., Denicolò, V., & Pastorello, S. 2020. *Artificial Intelligence, Algorithmic Pricing, and Collusion.* The American Economic Review, 110(10), 3267–3297. https://doi.org/10.1257/aer.20190623

12. Calvano, E., Calzolari, G., Denicoló, V., & Pastorello, S. 2021. *Algorithmic collusion with imperfect monitoring.* International Journal of Industrial Organization, 102712. https://doi.org/10.1016/j.ijindorg.2021.102712

13. Claussen, J., Peukert, C., & Sen, A. 2021. *The Editor and the Algorithm: Returns to Data and Externalities in Online News.* https://doi.org/10.2139/ssrn.3479854

14. Cowgill, B., & Tucker, C. E. 2020. *Algorithmic Fairness and Economics.* In preparation for the Journal of Economic Perspectives. https://doi.org/10.2139/ssrn.3361280 Policy

15. Daniel Zhang, Saurabh Mishra, Erik Brynjolfsson, John Etchemendy, Deep Ganguli, Barbara Grosz, Terah Lyons, James Manyika, Juan Carlos Niebles, Michael Sellitto, Yoav Shoham, Jack Clark, and Raymond Perrault. *The AI Index 2021 Annual Report,* AI Index Steering Committee, HumanCentered AI Institute, Stanford University, Stanford,

16. F. Decarolis and G. Rovigatti. 2019. *From Mad Men to Maths Men: Concentration and Buyer Power in Online Advertising,* CEPR Discussion Paper 13897, American Economic Review, forthcoming.

17. F. Decarolis, M. Goldmanis and A. Penta. 2020. *Marketing Agencies and Collusive Bidding in Online Ad Auctions,* Management Science, 66(10), pp. 4359-4919.

18. Fleder, D., &Hosanagar, K. 2009. *Blockbuster culture's next rise or fall: The impact of recommender systems on sales diversity.* Management Science. https://pubsonline.informs.org/doi/abs/10.1287/mnsc.1080.0974

19. Goldfarb, A., & Tucker, C. 2019. *Digital Economics.* Journal of Economic Literature, 57(1), 3–43. https://doi.org/10.1257/jel.20171452

20. Johnson, J., Rhodes, A., &Wildenbeest, M. R. 2020. *Platform Design When Sellers Use Pricing Algorithms.* In Available at SSRN. https://doi.org/10.2139/ssrn.3691621 Recommender Systems

21. Kleinberg, J., Ludwig, J., Mullainathan, S., & Obermeyer, Z. 2015. *Prediction Policy Problems.* The American Economic Review, 105(5), 491–495. https://doi.org/10.1257/aer.p20151023

22. Lambrecht, A., & Tucker, C. 2019. *Algorithmic Bias? An Empirical Study of Apparent GenderBased Discrimination in the Display of STEM Career Ads.* Management Science, 65(7), 2966– 2981. https://doi.org/10.1287/mnsc.2018.3093

23. Lee, D., &Hosanagar, K. 2019. *How do recommender systems affect sales diversity? A crosscategory investigation via randomized field experiment.* Information Systems Research. https://pubsonline.informs.org/doi/abs/10.1287/isre.2018.0800

24. Mullainathan, S., & Spiess, J. 2017. *Machine Learning: An Applied Econometric Approach.* The Journal of Economic Perspectives: A Journal of the American Economic Association, 31(2), 87– 106. https://doi.org/10.1257/jep.31.2.87 Reinforcement Learning

25. O'Connor, J., & Wilson, N. E. 2021. *Reduced demand uncertainty and the sustainability of collusion: How AI could affect competition.* Information Economics and Policy, 54, 100882. https://doi.org/10.1016/j.infoecopol.2020.100882

26. Rambachan, A., Kleinberg, J., Mullainathan, S., & Ludwig, J. 2020. *An Economic Approach to Regulating Algorithms.* https://papers.ssrn.com/abstract=3597843

27. Sutton, R. S., & Barto, A. G. 2018. *Reinforcement learning: An introduction.* MIT press.

28. Wan, X. (shawn), Kumar, A., & Li, X. 2020. *How Beneficial are Recommendations to Consumers? Estimates of Relative Benefits of Product Recommendations to Consumers and Retailers.* https://doi.org/10.2139/ssrn.3702762 Auctions and algorithmic bidding

29. Yeomans, M., Shah, A., Mullainathan, S., & Kleinberg, J. 2019. *Making sense of recommendations. Journal of Behavioral Decision Making,* 32(4), 403–414. https://doi.org/10.1002/bdm.2118

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APPLIED ECONOMETRICS

Course code: ECP-3104M
L-T-P
4-0-0
Time: 3 Hrs.

Max.Marks:100
External:80
Internal: 20

Course Objective: The aim of this course is to enable students learn the methodology of econometric along with estimation process. The students shall be able to use the statistical and econometric criteria of model evaluation. It enables the students to know the estimation process of qualitative repressors in their research work. The course would also enable the students to handle the time series, cross section and panel data sets with the use of software and statistical packages to analyse the data.

Course Outcomes: *At the end of the course the students will be able to:*
CO_1: *understand the Econometrics modelling;*
CO_2: *learn about sampling distributions and their applications;*
CO_3: *gain input on use of qualitative regression models; and*
CO_4: *analyse the implications of time series analysis.*

Instruction for examiners/Examinees: There will be 9 questions in all. The first question is compulsory consisting of 8 short answer type questions (30-35 words) of 2 marks each, set from the whole syllabus. The remaining 8 questions shall be from the four units, i.e. 2 questions from each of the four units of 16 marks each. The examinees have to attempt one question from each unit besides the compulsory question.

Unit-I
Econometrics- Nature, Meaning, Scope and Methodology; Types of Econometrics Models: - OLS with Assumptions, Estimation and Properties; Statistical Tests of Significance of the Estimates- Tests of Goodness of Fit with R^2 Adjusted R^2.

Unit-II
Sampling Distribution of the Least Square Estimates, Standard Error Test of Least Square Estimates, Confidence Interval of Least Square Estimates, Z test, T test Econometric Problems- Nature, Causes, Consequences, Detection and Remedial Measures of the Problems of Multicollinearity and Heteroscedasticity.

Unit-III
Nature, Causes, Consequences, Detection and Remedial Measures of the Problems of Autocorrelation; Test Procedures and Model Selection- Tests of Specification and Mis-Specification, Measurement, Criteria for Model Selection; Dummy Variables, Qualitative regression models: Logit, Probit and Tobit Model.

Unit-IV
Time Series Analysis: Stationary and Random walk model, Unit Root tests- ADF, PP, KPSS, Co-integration, Engle Granger Test, Johansen Test- Error Correction Model;
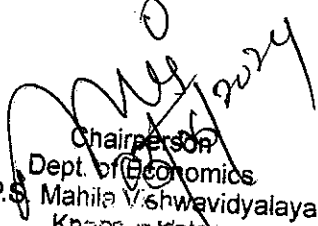
Suggested Readings:
1. Gream, W. 2000. *Econometrics Analysis.* 5th Edition, Prentice Hall.
2. Goldberder, A.S. 1998. *Introductory Econometrics. Harvard University Press, Cambridge.*
3. Gujarati, D. 2002. *Basic Econometrics.* 4th Edition, McGraw Hill.
4. Gujarati, D. 2012. *Econometrics by Example. Palgrave Macmillan.*
5. Amemiya, T. 1985. *Advanced Econometrics, Harvard university Press, Cambridge, Mass.*
6. Intrilligator, M.D. 1978. *Econometric Methods, Techniques and Applications. Prentice Hall Englewood Cliffs, New Jersey.*
7. Johnson, J. 1991. *Econometric Methods. McGraw Hill.*
8. Kmenta, J. 1998). *Elements of Econometrics. University of Michigan Press, New York.*
9. Koutsoyiannis, A. 1977. *Theory of Econometrics. The Macmillan Press.*
10. Maddala, G.S. 1993. *Econometric Methods and Application, Aldershot U.K.*
11. Theil, H. 1981. *Introduction to Econometrics. Prentice Hall of India, New Delhi.*

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12. Wooldridge, J.E. 2014. Introductory Econometrics: A Modern Approach. 5th Edition, Cengage Publication.
13. Cameron, A.C. and Trivedi P. K. 2010. Microeconometrics Using STATA: Revised Edition, Stata Press.

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BPS Women University

Chairperson, Economics <doeco@bpswomenuniversity.ac.in>

Agenda for approval through email circulation
4 messages

Dean Faculty of Social Sciences <deanfss@bpswomenuniversity.ac.in>   Fri, Jun 7, 2024 at 8:27 AM

To: "Chairperson, Economics" <doeco@bpswomenuniversity.ac.in>, manju panwar <panwarmanju@gmail.com>, Rampal Bhatti <bhattirampal09@gmail.com>, Archana malik <malikarchana9@gmail.com>, kokila malik <drkokilamalik@gmail.com>, Deepali Mathur <deepali@bpswomenuniversity.ac.in>, anjurani.bps@gmail.com, Registrar Bpsmv Kk.<registrar@bpswomenuniversity.ac.in>, gcwmurthal@gmail.com, gcwmadlauda@gmail.com, Social Work <DOSW@bpswomenuniversity.ac.in>, chairperson history history <DOHA@bpswomenuniversity.ac.in>, chairperson political science <DOPS@bpswomenuniversity.ac.in>, DOG@bpswomenuniversity.ac.in
Cc: VC office <vc@bpswomenuniversity.ac.in>

Esteemed Members of the Faculty of Social Sciences.
Greetings

I am happy to share the following agenda submitted by the Department of Economics for approval of the FSS.

1. Agenda item for consideration and approval of minor rectification in scheme and syllabus of Pre-Ph.D. Economics 2023-24.
It is stated that the department of Economics has revised the Scheme and Syllabus of Pre-Ph.D. Economics 2023-24 which has been duly approved by the Academic Council. However, one of papers entitled 'review of literature' - course code ECP-3103 needs minor rectification in scheme and instructions for assessment. The revised documents are attached for perusal.

The esteemed members are requested to approve the proposed agenda for placing it before the meeting of the academic council scheduled to be held on 14.06.2024.

regards

Dean, FSS

📑 **Scheme and Syllabus PhD Economics.pdf**
10404K

Chairperson, Economics <doeco@bpswomenuniversity.ac.in>   Fri, Jun 7, 2024 at 8:34 AM
To: Dean Faculty of Social Sciences <deanfss@bpswomenuniversity.ac.in>

Approved.
[Quoted text hidden]

Deepali Mathur <deepali@bpswomenuniversity.ac.in>   Fri, Jun 7, 2024 at 9:37 AM
To: Dean Faculty of Social Sciences <deanfss@bpswomenuniversity.ac.in>
Cc: "Chairperson, Economics" <doeco@bpswomenuniversity.ac.in>, manju panwar <panwarmanju@gmail.com>, Rampal Bhatti <bhattirampal09@gmail.com>, Archana malik <malikarchana9@gmail.com>, kokila malik <drkokilamalik@gmail.com>, anjurani.bps@gmail.com, Registrar Bpsmv Kk <registrar@bpswomenuniversity.ac.in>, gcwmurthal@gmail.com, gcwmadlauda@gmail.com, Social Work <DOSW@bpswomenuniversity.ac.in>, chairperson history history <DOHA@bpswomenuniversity.ac.in>, chairperson political science <DOPS@bpswomenuniversity.ac.in>, DOG@bpswomenuniversity.ac.in, VC office <vc@bpswomenuniversity.ac.in>

Respected all,

Approved.   — 418

Regards,
Dr. Deepali Mathur
[Quoted text hidden]

Archana malik <malikarchana9@gmail.com>   Fri, Jun 7, 2024 at 10:55 AM
To: Deepali Mathur <deepali@bpswomenuniversity.ac.in>
Cc: Dean Faculty of Social Sciences <deanfss@bpswomenuniversity.ac.in>, "Chairperson, Economics" <dueco@bpswomenuniversity.ac.in>, manju panwar <panwarmanju@gmail.com>, Rampal Bhatti <bhattirampal09@gmail.com>, kokila malik <drkokilamalik@gmail.com>, anjurani.bps@gmail.com, Registrar Bpsmv Kk <registrar@bpswomenuniversity.ac.in>, gcwmurthal@gmail.com, gcwmadlauda@gmail.com, Social Work <DOSW@bpswomenuniversity.ac.in>, chairperson history history <DOHA@bpswomenuniversity.ac.in>, chairperson political science <DOPS@bpswomenuniversity.ac.in>, DOG@bpswomenuniversity.ac.in, VC office <vc@bpswomenuniversity.ac.in>

Respected sir
Approved

Regards
Incharge
History & Archaeology
[Quoted text hidden]