



Estd. 1962
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With CGPA 3.52

SHIVAJI UNIVERSITY, KOLHAPUR - 416 004,
MAHARASHTRA
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शिवाजी विद्यापीठ, कोल्हापूर - ४१६ ००४, महाराष्ट्र
दूरध्वनी - ईपीएबीएक्स - २६०९०००, अभ्यासमंडळे विभाग - ०२३१-२६०९०९४



जा.क्र./शिवाजी वि./अ.मं./अर्थशास्त्र/११६
प्रति,

दि.१९/१२/२०२२

१. मा. प्राचार्य/संचालक,
सर्व संलग्नित महाविद्यालये/मान्यताप्राप्त संस्था,
शिवाजी विद्यापीठ, कोल्हापूर

२. मा. अधिविभाग प्रमुख,
अर्थशास्त्र अधिविभाग,
शिवाजी विद्यापीठ, कोल्हापूर

विषय : एम. ए. भाग १ अर्थशास्त्र कोर्सच्या अभ्यासक्रमाबाबत...
संदर्भ : या कार्यालयाचे पत्र क्र.३३३ दि.१९/०९/२०२२.

महोदय,

उपरोक्त संदर्भिय विषयास अनुसरून आपणास आदेशान्वये कळविण्यात येते की, शैक्षणिक वर्ष २०२२-२३ पासून लागू करण्यात आलेल्या एम. ए. भाग १ अर्थशास्त्र कोर्सच्या अभ्यासक्रमामध्ये किरकोळ दुरुस्ती करण्यात आलेली आहे. सोबत सदर अभ्यासक्रमाची प्रत जोडली आहे. तसेच विद्यापीठाच्या www.unishivaji.ac.in (Online Syllabus) या संकेतस्थळावर ठेवण्यात आला आहे.

सदर अभ्यासक्रम सर्व संबंधित विद्यार्थी व शिक्षकांच्या निदर्शनास आणून द्यावी ही विनंती.

कळावे,

आपला विश्वासू,

उपकुलसचिव

सोबत : अभ्यासक्रमाची प्रत.

- प्रत : १. अधिष्ठाता, मानवविज्ञान विद्याशाखा.
२. समन्वयक, अर्थशास्त्र अभ्यास मंडळ.
३. संचालक, परीक्षा व मुल्यमापन मंडळ कार्यालयास.
४. परिक्षक नियुक्ती ए व बी विभागास.
५. इतर परीक्षा २ विभागास.
६. संगणक केंद्र/आय. टी. सेल विभागास.
७. दूरस्थ व ऑनलाईन शिक्षण विभाग.

माहितीसाठी व पुढील कार्यवाहीसाठी.

Shivaji University, Kolhapur



Estd. 1962

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**CHOICE BASED CREDIT SYSTEM WITH MULTIPLE ENTRIES AND MULTIPLE
EXIT OPTION IN THE POST GRADUATE DEGREE PROGRAMME**

**Revised Syllabus For
Master of Arts (M. A. Economics)**

**Faculty of Humanities
M. A. Part - I (Sem. I and II)**

**(Structure and Syllabus in accordance with National Education Policy 2020 to be
implemented from academic year 2022 – 2023 onwards)**

(Subject to the modifications to be made from time to time)

Shivaji University, Kolhapur
Economics
M. A. I, SEM – I & II
From June, 2022 Onwards

SEMESTER – I

Discipline Specific Core Course

DSC - 1 : Micro Economic Analysis

DSC - 2 : Monetary Economics



Compulsory: Discipline Specific Core Course

Discipline Specific Elective

DSE- 1 : Economics of Environment

DSE- 2 : Agricultural Economics

DSE- 3 : Economics of Insurance

DSE- 4 : Principles and Practice of Co-operation

DSE- 5 : Economics of Education

DSE- 6 : Human Resource Development

DSE- 7 : Economics of Gender and Development

DSE- 8: Indian Capital Market

DSE- 9 : Economics of Livestock

DSE- 10 : Economy of Maharashtra



Choose any Two from DSE- 1 to DSE-10

Internship / Apprenticeship -

Compulsory

Skill Enhancement Compulsory Course -

Compulsory

SEC – I: Choose from the Basket of SEC made available by Shivaji University, Kolhapur

SEMESTER – II

Discipline Specific Core Course

DSC - 3 : Public Economics

DSC - 4 : Ecological and Resource Economics

Compulsory: Discipline Specific Core Course

Discipline Specific Elective

DSE- 11 : Agricultural Development in India

DSE- 12 : Industrial Economics

DSE- 13 : Rural Development

DSE- 14 : Managerial and Business Economics

DSE- 15 : Financial Markets and Institutions

DSE- 16 : Regional Economics

DSE- 17 : Contribution of Nobel Laureates to
Economics

DSE- 18: Economic Thoughts of Dr. B.R.
Ambedkar

DSE- 19 : Economics of Infrastructure

DSE- 20 : Mathematical Economics-I

Choose any Two from DSE- 11 to DSE-20

Research Project -

Compulsory

Skill Enhancement Compulsory Course

Compulsory

SEC – II: Choose from the Basket of SEC made available by Shivaji University, Kolhapur

M. A. Programme Structure Semester I and II
(As per National Education Policy-2020)

Structure of Level 8 of M. A. Part I Economics											
Semester-I											
Teaching Scheme						Examination Scheme					
Sr. No.	Theory (TH)				Practical (PR)	Semester-end Examination (SEE)			Internal Assessment (IA)		
	Course Type	No of Lectures	Hours	Credits		Paper Hours	Max	Min	Internal	Max	Min
1	DSC-1	4	4	4		3	80	32		20	08
2	DSC-2	4	4	4		3	80	32		20	08
3	DSE-1	4	4	4		3	80	32		20	08
4	DSE-2	4	4	4		3	80	32		20	08
5	Internship/ Apprenticeship	-	-	4		-	100	40		-	-
6	SEC-I	2	2	2		2	50	20		-	-
Total		18	18	22			470	188		80	32
										SEE+IA=470+80=550	

Semester-II											
Teaching Scheme						Examination Scheme					
Sr. No.	Theory (TH)				Practical (PR)	Semester-end Examination (SEE)			Internal Assessment (IA)		
	Course Type	No of Lectures	Hours	Credits		Paper Hours	Max	Min	Internal	Max	Min
1	DSC-3	4	4	4		3	80	32		20	08
2	DSC-4	4	4	4		3	80	32		20	08
3	DSE-3	4	4	4		3	80	32		20	08
4	DSE-4	4	4	4		3	80	32		20	08
5	Research Project	-	-	4	Dissertation Marks		80	32	Viva-Voce Marks	20	08
6	SEC-II	2	2	2		2	50	20		-	-
Total		18	18	22			450	180		100	40
										SEE+IA=450+100=550	
Semester I and II		36	36	44	-	-	920	368	SEE+IA=920+180=1100		
Total Credits Required for Completing Level 8: 44 Credits											

DSC: Discipline Core Course- There will be two compulsory courses for each semester.
DSE: Discipline Specific Elective- Student can opt any two courses (Subjects) from the group of Elective courses.
Internship: Student have to complete Internship of 60 Hours in Semester I of 4 Credits
SEC: Skill Enhancement Course- Students have to complete one SEC each in both semesters selecting from the platform suggested in NEP Regulations of Shivaji University, Kolhapur or from the Basket of SEC made available by Shivaji University, Kolhapur
Research Project: Student have to complete one research project in Semester II of 4 Credits out of which 3 credits will be for Project and 1 Credit for Viva-voce.

Structure of Level 9 of M. A. Part II Economics

Semester-III

Teaching Scheme					Examination Scheme						
Sr. No.	Theory (TH)				Practical (PR)	Semester-end Examination (SEE)			Internal Assessment (IA)		
	Course Type	No of Lectures	Hours	Credits		Paper Hours	Max	Min	Internal	Max	Min
1	DSC-5	4	4	4		3	80	32		20	08
2	DSC-6	4	4	4		3	80	32		20	08
3	DSE-5	4	4	4		3	80	32		20	08
4	DSE-6	4	4	4		3	80	32		20	08
5	SEC-III	2	2	2		2	50	20		-	-
Total		18	18	18			370	148		80	32
										SEE+IA=370+80=450	

Semester-IV

Teaching Scheme					Examination Scheme						
Sr. No.	Theory (TH)				Practical (PR)	Semester-end Examination (SEE)			Internal Assessment (IA)		
	Course Type	No of Lectures	Hours	Credits		Paper Hours	Max	Min	Internal	max	Min
1	DSC-7	4	4	4		3	80	32		20	08
2	DSC-8	4	4	4		3	80	32		20	08
3	DSE-7	4	4	4		3	80	32		20	08
4	DSE-8	4	4	4		3	80	32		20	08
5	SEC-IV	2	2	2		2	50	20		-	-
Total		18	18	18			370	148		100	40
										SEE+IA=370+80=450	
Sem III and IV		36	36	36	-	-	740	296		160	
										SEE+IA=740+160=900	
Grand Total SEM I, II, III and IV		72	72	80	-	-	1660	664		340	
										SEE+IA=1660+340=2000	

Total Credits Required for Completing Level 9: 36 Credits

DSC: Discipline Core Course- There will be two compulsory courses for each semester.

DSE: Discipline Specific Elective- Student can opt any two courses (Subjects) from the group of Elective courses.

SEC: Skill Enhancement Course, Students have to complete one SEC each in both semesters selecting from the platform suggested in NEP Regulations of Shivaji University, Kolhapur or from the Basket of SEC made available by Shivaji University, Kolhapur

Teaching Scheme for Semester-I					
Sr. No.	Theory (TH)				
	Course Type	Course title	No of Lectures	Hours	Credits
1	DSC-1	Micro Economic Analysis	4	4	4
2	DSC-2	Monetary Economics	4	4	4
3	DSE-1* DSE-2*	Elective Courses 1. Economics of Environment 2. Agricultural Economics 3. Economics of Insurance 4. Principles and Practice of Co-operation 5. Economics of Education 6. Human Resource Development 7. Economics of Gender and Development 8. Indian Capital Market 9. Economics of Livestock 10. Economy of Maharashtra	4	4	4
4			4	4	4
5	Internship/ Apprenticeship		-	-	4
6	SEC-I		2	2	2
Total			18	18	22

* For DSE-1 and DSE-2 students have to opt any two from the list of 1 to 10 papers.

Teaching Scheme for Semester-II					
Sr. no.	Theory (TH)				
	Course Type	Course title	No of Lectures	Hours	Credits
1	DSC-3	Public Economics	4	4	4
2	DSC-4	Ecological and Resource Economics	4	4	4
3	DSE-3** DSE-4**	Elective Courses 1. Agricultural Development in India 2. Industrial Economics 3. Rural Development 4. Managerial and Business Economics 5. Financial Markets and Institutions 6. Regional Economics 7. Contribution of Nobel Laureates to Economics 8. Economic Thoughts of Dr. B.R. Ambedkar 9. Economics of Infrastructure 10. Mathematical Economics-I	4	4	4
4			4	4	4
5	Research Project		-	-	4
6	SEC-II		2	2	2
Total			18	18	22

** For DSE-3 and DSE-4 students have to opt any two from the list of 1 to 10 papers.

Table-1: P.G. M.A. Programme/Course Structure (80 Credits)

SEMESTER	DSC	DSE/OEC/GE C/IDS	AECC/Languages	Skill Enhancement Courses (SEC) Multidisciplinary	Total
I	2x4= 8	2x4= 8	Internship/ Apprenticeship (4)	SEC-I (2)	22
II	2x4= 8	2x4= 8 1x4= 4 Research		SEC-II (2)	22
III	2x4= 8	2x4= 8		SEC-III (2)	18
IV	2x4= 8	2x4= 8		SEC-IV (2)	18

Abbreviations:

DSC: Discipline Core Course

DSE: Discipline Specific Elective (Elective Courses Offered under the main discipline/Subject of Study are referred to as Discipline Specific Elective Course).

AECC: Ability Enhancement Compulsory Courses

SEC: Skill Enhancement Compulsory Courses SEC courses are value based and/or skill based and are aimed at providing hands on training, competencies, skills, etc. these courses may be chosen from a pool of courses design to provide value- based and/or skill-based knowledge.

M. A. Part - I Sem-I

MICRO ECONOMIC ANALYSIS EC-1 (Core/ Compulsory Paper)

Preamble:

This paper analyses the economic behaviour of individuals, firms and markets. It is mainly concerned with the objective of equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm in modern non-profit maximizing framework in theory and applications as well. The paper also deals with the micro and macro theories of distribution, welfare economics, and general equilibrium in closed and open systems and analysis of economic behaviour under uncertainty.

Outcomes:

1. Understanding the methods of elasticity of demand & Demand Forecasting.
2. Explaining production and cost theory.
3. Ability to classify actual Market structure
4. Illustrate the value and use of managerial theories of firm.

UNIT I: Basic Concepts and Demand Analysis (15 Periods)

- 1.1: Deductive and Inductive Methods of Analysis; Positive and Normative Economics; Characteristics of Equilibrium and Disequilibrium Systems.
- 1.2: Indifference curve: income, price and substitution effects, Hicks and Slutsky Approach,
- 1.3: Compensated demand curve and their applications; Revealed preference theory;
- 1.4: Revision of demand theory by Hicks.

UNIT II: Theory of Production and Costs (15 Periods)

- 2.1: Least cost combination of inputs; Multi-product firm; Elasticity of substitution; Euler's theorem;
- 2.2: Cobb-Douglas, CES, VES
- 2.3: Translog production functions and their properties;
- 2.4: Traditional and modern approaches to cost curves.

UNIT III: Market Structure: Price and Output Determination (15 Periods)

- 3.1: Monopolistic competition – general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group
- 3.2: Oligopoly – Non-collusive: Cournot, Bertrand, Edgeworth, Chamberlin, Kinked demand curve and Stackelberg's solution - Collusive: Cartels and mergers, price leadership and basing point price system models.
- 3.3: Price and output determination under monopsony
- 3.4: Price and output determination under bilateral monopoly.

UNIT IV: Alternative Theories of Firm and Distribution (15 Periods)

- 4.1: Critical evaluation of marginal analysis; Baumol's sales revenue maximization model; Williamson's model of managerial discretion;

- 4.2: Marris model of managerial enterprise; Full cost pricing rule; Bain's limit pricing theory
 4.3: Neo-classical approach – Marginal productivity theory; Product exhaustion theorem;
 4.4: Elasticity of technical substitution, technical progress and factor shares.

READING LIST

1. Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.
2. Koutsoyiannis, A. (1979), Modern Microeconomics (2nd Edition), Macmillan Press, London.
3. P. R. G. and A. W. Alters (1978), Microeconomic Theory, McGraw Hill, New York.
4. Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
5. Stigler, G. (1996), Theory of Price, (4th Edition), Prentice Hall of India, New Delhi.
6. Varian, H. (2000), Microeconomic Analysis, W. W. Norton, New York.
7. Baumol, W. J. (1982), Economic Theory and Operations analysis, Prentice Hall of India, New Delhi.
8. Hirshleifer, J. and A. Glazer (1997), rice Theory and Applications, Prentice Hall of India, New Delhi.
9. Green, H. A. G. (1971), Consumer Theory, Penguin, Harmondsworth.
10. Henderson, J. M. and R. E. Quant (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
11. Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.
12. Healthfields and Wibe (1987), An Introduction to Cost and Production Functions, Macmillan, London.
13. Archibald, G. C. (Ed.) (1971), Theory of the firm, Penguin, Harmondsworth.
14. Bain, J. (1958), Barriers to New Competition, Harvard University Press, Harvard.
15. Bronfenbrenner, M. (1979), Income Distribution Theory, Macmillan, London.
16. Broadway, R. W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.
17. Graff, J. De V. (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.
18. Mishan, E. J. (1969), Welfare Economics: An Assessment, North Holland, Amsterdam.
19. Green, H. and V. Walsh (1975), Classical and Neo-classical Theories of General Equilibrium, Oxford University Press, London.
20. Hansen, B. (1970), A Survey of General Equilibrium Systems, McGraw Hill, New York.
21. Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
22. Weintrub, E. R. (1974), General Equilibrium Theory, Macmillan, London.
23. Arrow, K. J. and M. D. Intrilligator (Eds.) (1981), Handbook of Mathematical Economics, Vol. I, North Holland, Amsterdam.
24. Borch, K. H. (1968), The Economics of Uncertainty, Princeton University Press, Princeton
25. Diamond and Rothschild (Eds.) (1978), Uncertainty in Economics, Academic Press, New York.

MONETARY ECONOMICS

EC – 2 (Core/ Compulsory Paper)

PREAMBLE:

This paper analyses the significant role of 'Money' in the economy. It provides essential and thorough knowledge to the economics students relating to the theoretical aspects of money. It covers various approaches towards evolution of money, demand for money, supply of money, and rate of interest, inflation, agencies which creates and supplies money and operates monetary policy. The paper also deals with Keynesian and post-Keynesian economics, which is a most essential part of the monetary economics. Since reforms introduced in financial sector, many new concepts have emerged in this sector. For the students of economics it is essential to understand and analyze these new concepts as well as monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international level.

Outcomes:

1. Understanding the significant role of Money in the economy.
2. Examining the theoretical aspects of money.
3. Awareness regarding Role of Monetary and Fiscal Policy
4. Demonstrating Money Multiplier
5. Distinguishing Fiscal and Monetary Policy

UNIT I: Evolution and flow of Money: (15 Periods)

- 1.1: Evolution of Money-Money and Near Money - Stock & Flow concept of money
- 1.2: Functions of Money– Significance of Money in Economy
- 1.3: Circular Flow of Money; Importance of Circular Flow of Money,
- 1.4: Velocity of Circulation of Money, Concept of Value of Money.

UNIT II: Money Supply and Money Multiplier: (15 Periods)

- 2.1: Money Supply- Determinants of Money Supply – Money supply function- Approaches to Money Supply – Money Supply & Liquidity
- 2.2: H theory of Money Supply – Factors affecting H – Adjusted H--- Is H autonomous policy variable? 2.3: Money Multiplier Process: Determinants –
- 2.4: Derivation of Money Multiplier, Deposit Multiplier

UNIT III: Demand for Money and Interest Rate: (15 Periods)

- 3.1: Classical & Neo-classical views on Holding Money – Keynesian theory of Demand for Money– Post Keynesian (Baumol-Tobin approach) - Friedman’s Quantity Theory of Money.
- 3.2: Money & Prices: Fisher’s Cash Transaction Approach – Cambridge Cash Balances Approach- Phillips Curve Hypothesis – Rational Expectations theory.
- 3.3: Theories of Interest Rates: Classical Theory – Loanable Fund Theory –
- 3.4: Liquidity Preference Theory- Hicks-Hansen Theory

UNIT IV: Monetary and Fiscal Policies: Income and Interest Rate Determination: (15 Periods)

4.1: Factors Determining the Term Structure of Interest Rates- Theories of Term Structure of Interest Rates (Expectation Theory, Segmented Market Theory, Risk Premium Theory and Preferred Habitat Theory).

4.2: Real balance Effect – Patinkin’s General Equilibrium Model,

4.3: Transmission Mechanism in Monetary Theory, Relative Effectiveness of Monetary and Fiscal Policy 4.4: Monetary Theories of Business Cycles (Hawtrey, Hayek), Easy & Dear Monetary Policy

READING LIST :

1. Bain, Keith & Howells, Peter (2009), Monetary Economics: Policy and Its Theoretical Basis, Palgrave.
2. Friedman, Ben & Hahn F.H. (Eds.), (1990), Handbook of Monetary Economics, Vols. 1, 2, & 3, North Holland Publishers.
3. Gupta, S.B. (1983), Monetary Economics, S. Chand & Company, New Delhi.
4. Mankiw N. Gregory (2012), Macroeconomics, Worth Publisher, New York
5. Mishkin Frederic (2007), The Economics of Money Banking and Financial Markets, 8th ed Addison Wesley Longman Publishers.
6. Niehans, J. (1984), International Monetary Economics, John Hopkins University Press, New York.
7. Sheth. M. L (2016), Monetary Economics, Lakshi Narain Agarwal, Agra.
8. Keynes, J. M., General Theory of Employment, Interest and Money. A. E. A., Readings in Monetary Theory
9. Halm, G. N., Monetary Economics
10. Einzing, P., Monetary Policy: Ends & Means
11. Newlyn, W. E., theory of Money
12. Chandler, L. V., Economics of Money and Banking.
13. Scammel, W. M., International Monetary Policy
14. Sen, S. N., central Banking in Underdeveloped Money Markets
15. H. Johnson, Essays in Monetary Theory
16. Don Patinkin, Money, Interest and Prices
17. Shaw, E. S., Money, Income and Monetary Policy A. C. L. Day, An Outline of Monetary Economics
18. M. Friedman, Essay on Money
19. Ghosh, B. N. & Ghosh Rama, Monetary Economics
20. Claassen Emil-Maria, (1996) Global Monetary Economics, Oxford University Press
21. Harris, L., Monetary Theory
22. J. D. Von Pischke, Finance at the Frontier: Debt, Capacity and Role of Credit in Private Economy
23. RBI Reports
24. World Bank Reports
25. IMF Reports
26. Friedman M, Essays on Money
27. Bhole, L. M., Financial Institutions and Markets: Structure, Growth and Innovation

M A Part I Semester I

ECONOMICS OF ENVIRONMENT

EO 1 - (Elective/ Optional Paper)

Introduced From June 2022

PREAMBLE:

Environment is a part and parcel of living things in general and human beings in particular. Hence increase in wellbeing, environmental balance its preservation and protection is of crucial importance. Environmental degradation very badly affects all living things coupled with human beings in particular. Environment can have economic dimension which is the neglected issue in the studies in main stream economics and its branches as well. This poses the need for studying Economics of Environment as an Elective course at post graduate level in both the theoretical as well as applied perspectives. The prime objective of this course is well equip the students with economic dimension of environment and development.

COURSE OUTCOMES:

- 1) Students familiar with the Economics of Environment as a branch of mainstream Economics.
- 2) Analyse the environmental problems of development and suggest remedies thereon.
- 3) Fully equip with the environmental theory of development and its applications.
- 4) Critically assess the environmental policy of India and its implementation.

UNIT I: ECONOMICS OF ENVIRONMENT: (15 Periods)

- 1.1:** Economics of Environment: Meaning, Nature, Scope and Importance
- 1.2:** Common Property Resources
- 1.3:** Hardin's Hypothesis of The Tragedy of Commons
- 1.4:** Eco-systems - Loss of Bio-diversity

UNIT II: ENVIRONMENTAL PROBLEMS OF DEVELOPMENT (15 Periods)

- 2.1:** Environmental Pollution: Water, Air, Noise and Land Pollution: Causes and Remedies
- 2.2:** Global Environmental Problems: Depletion of Ozone Layer – Global Warming and Climate Change
- 2.3:** Trade and Environment - Polluter Pays Principle
- 2.4:** Technological Changes in Agriculture and Environment - Natural Farming – Large sized dams and Environment - Forest Depletion and

Social Forestry.

(15 Periods)

UNIT III: ENVIRONMENTAL THEORY OF DEVELOPMENT

- 3.1:** Development and Environment Nexus – Environmental Kuznets Curve (EKC) Hypothesis
- 3.2:** Sustainable Development – Green Economy - Carbon Footprint and Carbon Trading
- 3.3:** Environment Friendly Size of Firm - Limits to Growth Theory.
- 3.4:** System of Environmental and Economic Accounting (SEEA) - Environmentally Corrected / Adjusted NDP / EDP

UNIT IV: ENVIRONMENTAL POLICY:

(15 Periods)

- 4.1:** Role of Public, Private, and Co-operative Sector in Environmental Protection
- 4.2:** Environment Management Techniques: Cost Benefit Analysis
- 4.3:** Environmental Impact Assessment- Environmental Audit
- 4.4:** India's Environmental Policy: Environmental Protection Laws
Pollution Control Boards : CPCB and SPCBs

1. **Project Report / Journal / Field Survey / On Site Study/ Study Tour Report / Oral Examination / Test** : (20 Marks)
2. Teaching: 04 Hours per Week
3. Practical: 04 Hours per Week for a batch of 10 students
4. Open Access to Environmental Economics as an Elective / Optional Paper
5. Study Tour for Environmental knowledge and awareness of students

READING LIST:

1. Baumol, W. J. & W. E. (1997), The Theory of Environmental Policy, Prentice Hall, Englewood-Cliffs.
2. Bhardwaj, R. (1983), Managing Limits to Growth, Asian and Pacific Development Centre, Kuala Lumpur.
3. Dorfman, R. & N. Dorfman (Eds.) (1977), Economics of the Environment, W. W. Norton, New York.
4. Nijkamp, P. (Ed.) (1976), Environmental Economics, Vol. I & II, Martinus Nijhoff, Leiden.
5. Charles Peering (1987), Economy and Environment Cambridge University Press, New York.
6. Ali, S. A. (1979), Resources for Future Economic Growth, Vikas Publishing House, New Delhi.
7. Rathore, M. S. (Ed.) (1996), Environmental and Development, Rawat Publications, Jaipur.

8. Garge, M. R. (Ed.) (1996), Environmental Pollution and Protection, Deep and Deep Publications, New Delhi.
9. Lodha, S. L. (Ed.) (1991), Economics of Environment, RBSA Publishers, Jaipur.
10. Rajlakshmi N. and Dhulasi B. (1994), Environomics, Allied Publishers Ltd., New Delhi.
11. Singh, G. N. (Ed.) (1991), Environmental Economics, Mittal Publications, New Delhi.
12. Mehta, C. S. (1994), Environment and Law, RBSA Publishers, New Delhi.
13. Karpagam, M. (1993), Environmental Economics, Sterling Publishers, New Delhi.
14. World Bank Report on Human Development.
15. The Hindu Survey of Environment: Annual Reports.
16. Bhattacharya R N (2006), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi.
17. Ulaganathan, Sankar (2006), Environmental Economics, Oxford University Press, New Delhi.
18. Hanley, Shogren and White (2004), Environmental Economics in Theory and Practice, McMillan India Limited, Delhi.
19. Hanley And Spash (1998), Cost Benefit Analysis and the Environment, Edward Elgar Publishing Limited, Glos, UK.
20. Singh & Shishodia (2010), Environmental Economics: Theory and Applications, Sage Publications, New Delhi
21. Government of India, Ministry of Environment and Forests, Annual Reports
22. Journal Down to Earth, New Delhi.
23. सिंग आणि शिशोदिया (२०१७), सेज पब्लिकेशन इंडिया, नवी दिल्ली

Agricultural Economics
EO- 2 (Elective / Optional Paper-)

Preamble:

The objective of this course is to provide a detailed treatment of issues in agricultural economics to those intending to specialize in this area. It intends to familiarize students to analyze the issues related with agricultural and economic development, agricultural production function, agricultural demand and supply, farm management and agricultural risk management.

Outcomes:

1. Acquaint with the policies and performance of Agriculture in Indian Economy.
2. Understanding the nature, scope, challenges and opportunities in Agricultural Sector
3. Analyzing the causes of agrarian distress and its remedies.
4. Awareness regarding the importance of farm management

UNIT I: Agricultural Economics and Theories of Agricultural Development: (15 Periods)

- 1.1: Introduction to Agricultural Economics: Nature & scope of agricultural economics - utility of agricultural economics,
- 1.2: Role of agriculture in economic development.
- 1.3: Demand and supply behaviour in Agriculture: Elasticity of Demand – Approaches to study supply response- factors affecting supply response.
- 1.4: Theories of agricultural development: (Schultz, Mellor, Hayami and Ruttan)

UNIT II: Economics of Agricultural Production: (15 Periods)

- 2.1: Basic concepts in agricultural Production: Agricultural production visà-vis industrial production – Features of modern agricultural production.
- 2.2: Factor- Product Relationship: Meaning & uses of agricultural production function- Agro-technology & production functionproduction function with one variable factor (traditional & modern approach).
- 2.3: Factor-Factor Relationship: Optimum factor combination- Effects of changes in factor price on factor usage –
- 2.4: Product-Product Relationship: Optimum Product Combination – Types of Enterprises Combinations-Isocline.

UNIT III: Economics of Farm Management: (15 Periods)

- 3.1: Farm management: Scope- Objectives- Farm management decisionsTypes of Farming- Farm Size and Productivity – Farm Efficiency Measures.
- 3.2: Principles of farm management: Principles of Factor SubstitutionPrinciples of Equi-Marginal Returns – Opportunity Cost Principle –
- 3.3: Minimum Loss Principle – Principle of Comparative Advantage – Time Comparison Principle
- 3.4: Management of farm Resources: Land, Labour and Capital.

UNIT IV: Economics of Agricultural Risk Management: (15 Periods)

- 4.1: Nature of Uncertainty in Agriculture: Price, Yield and Technological.
- 4.2: Risks in Agriculture: Types of Risks: Climate, Drought, Production, Price, Financial, Market & Management Strategy.

4.3: Risk Management Strategies: National Agricultural Insurance Scheme (NAIS), Crop Insurance as Risk Mitigation Tool,

4.4: Crop Insurance, Weather Insurance, Farm Income Insurance, Livestock Insurance and Package Insurance.

Reading List :

1. Desai R G (2001): Agricultural Economics - Models Problems and Policy Issues, Himalaya Publishing House, Mumbai.
2. Kumar K N R (2015): Agricultural Production Economics, Volume-I, Daya Publishing House, A Division of Astral International Pvt. Ltd, New Delhi.
3. Lekhi R K & Singh Jogindar (2013): Agricultural Economics, Kalyani Publisher, New Delhi.
4. Reddy, Ram, Sastry & Devi (2010): Agricultural Economics Oxford & IBH publishing Co. Pvt. Ltd, New Delhi.
4. Sadhu A. N. & Singh Amarjit, Fundamentals of Agricultural Economics, (1996), Himalaya Publishing House, Bombay.
5. Soni, R. N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.
6. Agriculture in Economic Development (1964), Carl Eicher and Lawrence Wit, McGraw Hill Book Company, New York
7. Bilgram, S. A. R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
8. Bhende, M.J., 2005, Agricultural Insurance in India: Problems and Prospects, NABARD, Occasional Paper-44
9. Christopher Ritson (1977), Agricultural Economics – Principles and Policy, Czosby Luckwood Staples, London
10. Donald J. Epp & John W. Malone (1981), Introduction to Agricultural Economics, Mc-Million Publishing Company, Inc. New York.
11. GOI (2007), Report of The Working Group on Risk Management in Agriculture for the Eleventh Five Year Plan (2007-2012) , GOI, New Delhi
12. Ghatak, S. and K. Ingerscent (1984), Agriculture and Economic Development, Select books, New Delhi

ECONOMICS OF INSURANCE

EO 3 – (Elective Paper)

PREAMBLE:

Insurance industry is an important constituent of financial services industry in India. It is a major investment institution and prominent player in the capital market. However, in our country, study of the course insurance has largely remained neglected. With the opening of the insurance sector for private Indian and foreign players, the interest in the subject has been kindled. This course on insurance economics attempts to give a fairly comprehensive view of the subject to the postgraduate students in Economics and; pave the way for possible future expansion of the teaching of an important branch of economics. Various studies would be conducted for better understanding of the subject.

UNIT I: Introduction to Insurance Economics: (15 Periods)

- 1.1: Economic security; Human quest for economic security through time; Exposure to losses;
- 1.2: Role of insurance; Definition of insurance; Evolution of insurance, Economic and legal perspectives, Social vs. private insurance; Life vs. non-life insurance; Classification of life, health and general insurance policies.
- 1.3: Fundamentals of uncertainty and risk; Pure risk and speculative risk;
- 1.4: Expected utility and Decision making under uncertainty; Expected utility and the demand for insurance

UNIT II: Risk and Risk Management: (15 Periods)

- 2.1: Moral hazard and insurance demand; risk pooling and Risks transfer; Concept of risk management; Essentials of risk management; Elements of risk management –risk assessment; Risk control and risk financing; Worldwide risk sharing
- 2.2: Concept of reinsurance, Fundamentals of reinsurance, Types of reinsurers; Reinsurance distribution systems, Reinsurance markets in developing countries.
- 2.3: Risk management and insurance in economic development, Insurance institutions as financial intermediaries; Insurance institutions as investment institutions; Insurance institutions in Indian capital market;
- 2.4: Regulations governing investments of insurance institutions in India; Insurance Regulatory Development Authority (IRDA) rules in this regard.

UNIT III: Essentials of Life and Health Insurance: (15 Periods)

- 3.1: Fundamentals of life and health insurance; Functions of life and health insurance; Mathematical basis of life insurance; Plans of life insurance;
- 3.2: Legal aspects of life insurance; Provisions of policies; Selection and classification of risks; Basics of premium construction; Valuation and distribution of surplus.
- 3.3: Individual health insurance; uses, types, evolution; Principles of underwriting of life and health insurance
- 3.4: Group insurance and superannuation (pension) schemes; Set-up and management of insurance companies.

UNIT IV: Essentials of General Insurance: (15 Periods)

- 4.1: Definition, Types, Importance- General insurance and economic development

- 4.2: Fundamentals of the following concepts: Common law Equity, Proposal/accidence, Indemnity, Insurable interest, Contribution subrogation, Representation; Utmost good faith, Material fact, Physical hazard, Moral hazard;
- 4.3: Policy Endorsements conditions/warranties; Selection of risks; Inspection of risks; Rating and Calculation of premiums; Tariffs and non-tariffs
- 4.4: Marketing of general insurance; Technology development and general insurance.

READING LIST

1. Bailey, R. (Ed.) (199), Underwriting in Life and Insurance, LOMA, Atlanta, Ga.
2. Bhole, L. M. (1990), the Indian Financial System, Tata McGraw Hill, New Delhi.
3. Bickelhaupt, D. L. (1992), General Insurance, Irwin Inc., Burr. Ridge, III.
4. Black, K. Jr. and H. D. Skipper Jr. (2000), Life and Health Insurance, Prentice Hall, Upper Saddle River, New Jersey.
5. Finsinger, J. and M. V. Pauly (Eds.) (1986), The Economics of Insurance Regulation: A Cross National Study, Macmillan, London.
6. Graves, E. E. and L. Hayes (Eds.) (1994), McGill's Life Insurance, The American College Bryn Mawr, Pa.
7. Head, G. L. and S. Horn II (1991), Essentials of Risk Management, Volume I, Insurance Institute of America, Malvern, Pa.
13. Skipper, Jr. H. D. (Ed.) (1998), International Risk and Insurance: An Environmental Managerial Approach, Irwin McGraw Hill, Boston.
14. Tacchino, K. B. and D. A. Little (1993), Planning for Retirement Needs, The American College, Bryn Mawr, Pa.
15. Dionne, G. and S. E. Harrington (Eds.) (1997), Foundations of Insurance Economics, Kluwer Academic Publishers,
16. Boston Pteffer, I. and D. R. Klock (1974), Perspectives on Insurance, Prentice Hall Inc., Englewood-Cliffs.
8. Yaari, M. E. (1965), 'Uncertain Life Time, Life Insurance and the Theory of Consumer,' Review of Economic Studies, Volume 32.
9. Brockelt, P. L., R. C. Witt and P. R. Hind (1991), An Overview of Reinsurance and the Reinsurance Markets, Journal of Insurance Regulation, volume 9, No. 3.
10. Elliot, M. W., B. L. Webb, H. N. Anderson and P. R. Kensicki (1995), Principles of Reinsurance, Insurance Institute of America, Malvern, Pa.
11. Friedman, M. and L. J. Savage (1947), the Utility Analysis of Choices Involving Risk, Journal of Political Economy, Vol. 56.
12. Ward, G. L., C. C. Lily III, d. S. Malecki and J. S. Rosenbloom (1984), Personal Risk Management and Insurance, Volume I, American Institute of Property and Liability Underwriters, Malvern, Pa.
13. William Jr., C. A. M. L. Smith and P. C. Young (1995), Risk Management and Insurance, McGraw Hill, New York.
14. Wu, C. and P. Colwell (1988), 'Moral Hazard and Moral Imperative', Journal of Risk and Insurance, Volume 55, No.1.
15. Coolier, P. and C. Mayer (1989), Financial Liberalization, Financial Systems and Economic Growth, Oxford Review of Economic Policy, Volume 6, No.4.
16. Outreville, J. F. (1990), The Economic Significance of Insurance Markets in Developing Countries, The Journal of Risk and Insurance, Volume 57, No.3.

17. Skipper, Jr., H. D. (Ed.) (1998), *International Risk and Insurance: An environmental Managerial Approach*, Irwin McGraw Hill, Boston.
18. United Nations Conference on Trade and Development (1987), *The Promotion of Risk Management in Developing Countries*, UNCTAD, Geneva.
19. Black, K. Jr. and H. D. Skipper Jr. (2000), *Life and Health Insurance*, Prentice Hall, Upper Saddle River, New Jersey.
20. Insurance Institute of India, *Life Assurance Underwriting*, (IC-22), Mumbai.
21. Benjamin, B. (1991), *General insurance*, Heinemann, London.
22. Drofman, M. S. (1994), *Risk and Insurance*, Prentice Hall, Englewood-Cliffs.
23. Insurance Institute of India, *General Insurance* (IC-34), Mumbai.
24. Casner, A. J. (1995), *Estate Planning*, Little Brown, Boston.
25. Government of India (1998), *Old Age and Income Security (OASIS) Report* (Dave Committee Report), Government of India, New Delhi.
26. Ivers, J. I. III and E. T. Johnson (Eds.) (1991), *Readings in Wealth Accumulation Planning*, The American college, Bryn Mawr, Pa.
27. Insurance Regulation and Development Authority (2001), *IRDA Regulations*, New Delhi.
28. Klein, R. W. (1995), *Insurance Regulation in Transition*, *Journal of Risk and Insurance*, Volume 62, No.3.
29. Meier, K. J. (1988), *The Political Economy of Regulation: The Case of Insurance*, The State University of New York Press, Albany, N. Y

PRINCIPLES AND PRACTICE OF CO-OPERATION

EO 4– (Elective / Optional Paper)

PREAMBLE

Cooperative institutions have become an integral part of the success of Indian Financial Inclusion story. They have achieved many landmarks since their creation and have helped a normal rural and urban Indian to feel empowered and secure. The cooperative movement has a long history of more than hundred years. Indian cooperative structure is one of the largest networks in the world. It has about 67% penetration in villages and fund 46% of the rural credit. Under this backdrop the student should study the principles and role of cooperation in the modern era. The paper deals with structure of cooperatives, different types of credit and non credit cooperatives. It also covers various cooperative institutions operating at the national level.

Outcomes:

1. Recognizing the nature of co-operative movement
2. Interpreting the long history of co-operation
3. Identifying the role of co-operative movement in economic development
4. Analyzing the progress and problems of Cooperative Institutions

UNIT I: Meaning, Principles of Co-operation: (15 Periods)

- 1.1: Meaning of Cooperation – Main Principles of Cooperation – Reformulation of principles – Significance of cooperation.
- 1.2: Growth of Cooperation in India after Independence.
- 1.3: Cooperative Credit Structure – Progress and Problems of Primary Agricultural Cooperative Societies, District Central Cooperative Banks, and State Cooperative Banks.-
- 1.4: Long term Rural Credit Structure

UNIT II: Non-Agricultural Co-operatives in India: Organization, Progress and Problems with Special Reference to India (15 Periods)

- 2.1: Cooperative Consumers Societies,
- 2.2: Cooperative Housing Societies,
- 2.3: Cooperative Labour Societies
- 2.4: Industrial Cooperatives

UNIT III: Agro Based Cooperatives: (15 Periods)

- 3.1: Agricultural Cooperative Marketing,
- 3.2: Dairy Cooperatives,
- 3.3: Sugar Cooperatives
- 3.4: Fertiliser Cooperatives: IFFCO. KRIBHCO

UNIT IV: Co-operative Institutions in India: (15 Periods)

- 4.1: National Bank for Agriculture and Rural Development,
- 4.2: National Cooperative Development Corporation - National Agricultural Cooperative Marketing Federation –
- 4.3: National Cooperative Union of India
- 4.4: KVIC

READING LIST

1. Bedi, R. D., Theory, History and Practice of Co-operation with reference to Cooperation in Foreign countries.
2. Mathur, B.S., Cooperation in India (Latest Edition).
3. Hajela, T. N., Principles, Problem and Practice of cooperation, Ane Books Pvt. Ltd.; Student Edition edition (2015)
4. NABARD – Statistical Statement Relating to the Cooperative Movement in India – Part I & II.
5. Digby , World Cooperative Movement
6. Kulkarni, K. R. , Theory and Practice of cooperation in India and Abroad, Vols. I, II & III.
7. Kamat, G. S., New Dimensions in Cooperatives, Himalaya Publishing House
8. Dr. R. C. Dwivedi, (1997), Co-operative Identity, Concept and Reality, M/S Paramount Publishing House, New Delhi
9. Jugale, V. B., Koli, P. A., (2005) Reasserting the Co-operative Movement, Serials Publications, New Delhi,
10. Patil, J. F. &Patil, V. S., (2006) Problems and Prospects of Co-operative Movement, Shivaji University, Kolhapur

ECONOMICS OF EDUCATION

EO – 5 (Elective / Optional Paper)

PREAMBLE:

Education plays a vital role in human resource development as well as development of the economy as a whole. Hence it is of crucial importance to study the economic dimension of education. It is being studied in the Economics of Education as a branch of main stream Economics. It is therefore the course / paper of Economics of Education has been introduced at post graduate level in Economics. The major objective of this course is to enable the learners to develop an understanding of planning, financing and cost of education, the link between the educational system and economic development, educational problems in both the theoretical and applied perspectives.

UNIT I: INTRODUCTION TO ECONOMICS OF EDUCATION (15 Periods)

- 1.1: Meaning, scope and importance of Economics of Education
- 1.2: Relationship between education and the economic system.
- 1.3: Role of the economic system in financing of education, and absorbing the educated manpower
- 1.4: Education as an industry- Education as consumption and Education as individual, social and national investment - Spill-over and inter-generational effects of education

UNIT II: EDUCATION AND ECONOMIC DEVELOPMENT (15 Periods)

- 2.1: Education and Economic Development: interrelationship between education and economic development - Education as a prerequisite as an accelerator and a major determinant of economic development
- 2.2: Measuring the Contribution of Education to Economic Growth: Cost Benefit Analysis- Correlation Approach, Residual approach, Manpower Forecasting Approach, Wagedifferential Approach.
- 2.3: Productivity and Wastage in Education: Productivity of the educational system and Learning for productivity objectives
- 2.4: Internal and external efficiency of the Educational system Dual approach, Process approach, Product approach- Wastage in education

UNIT III: COST –BENEFIT ANALYSIS IN EDUCATION (15 Periods)

- 3.1: Meaning of cost-benefit analysis- importance and problems
- 3.2: Costs of Education - Benefits of Education – Calculation of cost -benefit ratio
- 3.3: Cost Effectiveness Analysis in Education
- 3.4: Pricing of Education: Micro and Macro aspects of pricing of education - Practical solution to the pricing of education

UNIT IV: FINANCING OF EDUCATION (15 Periods)

- 4.1: Sources of finance for education: private, public, fees, donations, endowments and grants. Grant-in- aid principles Practices with special reference to higher education
- 4.2: Government's role in financing education at different levels
- 4.3: Allocation of funds to Education in the 5-year Plans
- 4.4: Expenditure of education - public education at different levels (central state level) in India

READING LIST:

1. Balsara, M. (1996) New Education policy and Development Challenge, New Delhi. Kanishka Publishers.
2. Baxter C. And O'Leary, P. J. and Westoby A. (1977) Economics and Education Policy a Reader London Longman Group Ltd.
3. Banker G. S, (1964) Human Capital New York: University press.
4. Blaug. M (1972) an Introduction to the Economics of Education London: Penguin
5. Blaug, M. (ed) (1968). Economics of Education selected Readings. Vol. 1 and 2 London: Penguin Books.
6. Cohn, E. and Gesker (1990) T. G. The Economics of Education Oxford: Pergamon Press
7. Creedy J. The Economics of Higher Education: analysis of Taxes Versos Fees Able shot: Edward Elgar publishing limited
8. Enaohwo J. O (1990) economics of Education and the planning Challenge. New Delhi. Anmol Publications.
9. Garg V. P. (1985) The Cost Analysis in higher Education New Delhio, Metropolitan Book Co. Pvt Ltd.
10. Goel S. C. (1975) Education and Economics Growth in India Delhi. Macmillan,
11. Hallak J. (1990) Investing in the Future UNESCO: Pergamon press
12. Heggade, O. D. (1992) Economics of Education Bombay: Himalaya Publishing House
13. Johns R. I. & Morphet I: (1976) The Economics and financing of Education A system Approach New Jersey Prentice-Hall Inc.
14. Knight, J. B. and Sanot R. II (1990) duction. Productivity and Inequality. The World Bank Laxmidevi (ed) (1996) Encyclopaedia of Education Development and Planning Economics of Education Vol. V New Delhi. Anmol Publications Pvt. Ltd.
15. Levin M. R. & Shank A (eds.) (1970) Educational Investment in an Urban Society: Costs, Benefits and Public Policy, New York Teachers College press
16. Majumdar, T. (1983) Investment in Education and social Choice, Cambridge, Cambridge University Press.
17. Mingat A. & Tan Hee-peng (1988) Analytical tools for sectoral work in Education Baltipore: the joins Hopkins University press.
18. Muray T. R. (1990) The Encyclopededia of Human Development and Education Oxford. Pergamon
19. Muzammil, M. (1989) Financing of Education. New Delhi House.
20. Naik J.P. (1965) Educational planning in India Bombay: Allied Publishers
21. Natarajan S. (1990) Introduction to Economics of Education New Delhi. Sterling
22. O'Donohue. M (1971) Economics Dimensions in Education Chicago: Aldine Alterton
23. Padmanabhan C. B. (1971) Economics of Educational Planning in India New Delhi. Arya Book Depot.
24. Pancharukhi P. R. (ed) (1989) Economics of Educational Finace Bombay, Himalaya publishing House
25. Pascharopoulos. G. (ed) 1987 Economics of education Research and Studies Oxford, Pergamon Press.
26. Psacharopoulos G. and Woodhall (1986). Education of Development Washington The World Bank.
27. Ritzen J. M. M. (1977) Education Economic Growth and Income Distribution New York NorthHoland Publishing Co.

28. Saxena S. (1979) Educational Planning in India New Delhi Sterling Publishers Pvt. Ltd.
sjeehan J. Economics of Education London George Allen and Unwin Ltd.
29. Shriprakash, Cost of Education (1996) New Delhi: Anamika Publishers and distributors.
30. Shriprakash and Chowdhurty S. Expenditure on Education, Theory, Models and Growth,
New Delhi: NIEPA
31. Singh R. P. (ed) (1993) Private Initiative and Public Policy in Education New Delhi:
Federation of Managements of Educational institutions.
32. Tilak J. B. G. (1989) Education and its Relation to Economic Grow Poverty and income
distribution: past Evioen and Further Analysis washington D. C. The World Bank.
33. Tilak J. B. G. (1994) Education for Development in Asia New Delhi Sage publications.
34. Tilak J. B. G. (1992) Educational Planning at Grassroots New Delhi: Ashish publishing
House.
35. Tilak , J. B. G. (1987). The Economics of Inequality in Education New Delhi: Sage
publications.
36. Unesco (1972) Educational cost Analysis in Action : Case Studies for Planners Paris
37. Vaisey, J. (1958) The Costs of Education London: George and Allen & Unwin Ltd.
38. Vaisey, J. (1972) Economics of Education London: G Duck Worth and Co.
39. Vaizey, J. et al (1972). The Political Economy of Education London Gerald Duckworth & co.
Ltd.
40. Veena, D. R. (1987) Education of Economic Growth New Delhi: Ashish publishing House.
Ward, F. C. (ed) (1974) Education and Development Reconsidered New York: Praegar
Publishers
41. Wykstra R. A. (ed) (1971) Education and the Economics of Human Capital New York: The
Free press.

HUMAN RESOURCE DEVELOPMENT

EO – 6 (Elective / Optional Paper)

Preamble:

In most of the corporate bodies, the training and extension activities are integral part of the business enterprises. Most of the post-graduate students find an employment opportunity in such corporate bodies. With this intension our students should learn the bases of the HRD.

UNIT I: Human Capital: (15 Periods)

- 1.1: Human capital: Meaning, Sources, Human and Physical Capital
- 1.2: Human Capital and Economic Growth-
- 1.3: Human Capital and Human Development
- 1.4: Distinction between Human Resource Development (HRD) and Human Development (HD)

UNIT II: Education, Health and Human Development (15 Periods)

- 2.1: Education: Education as a tool of HR development and social change Education (Pre-primary to Higher Education) system in India Problems and issues (Universalisation of education, vocationalisation of education, Quality improvement, Dropout rate etc.)
- 2.2: National Knowledge Commission, National Commission for Higher Education and Resaearch, IITs, IIMs,
- 2.3: Health: As an essential and major component of HRD- Vital Statistics World Health Organisation (WHO): Objectives, structure, functions and its programmes
- 2.4: Govt. Health policies, schemes and programmes.

UNIT III: Human Resource Development in India (15 Periods)

- 3.1: Present status of population in India - quantitative aspects: size and growth, Sex, Age, Urban and Rural - Qualitative aspects: Education and Healthcare. Population policy 2000- Population projection
- 3.2: Importance of Human Resource planning in modern society Components and factors involved in planning of Human Resources Nature, types and problems of unemployment in India- Trends in Employment in India.
- 3.3: Governmental and Voluntary Institutions engaged in development of manpower: NCERT, NIEPA, UGC, Open Universities
- 3.4: Problems and issues related to HRD

UNIT IV: Measurement of Human Development: (15 Periods)

- 4.1: Need for indices – limitations of per capita GDP as an indicator, Earlier indices:
- 4.2: Physical Quality of Life Index (PQLI), Disability Adjusted Life Years (DALYs), Social Capability Index.
- 4.3: Emergence of Human Development Index: HDI as compared to per capita GDP- Method of computing HDI- Critique of HDI
- 4.4: Other indices: Human Poverty Index (HPI I / HPI II)-Gender-related Development Index (GDI)- Gender Empowerment Measure (GEM)- Happiness Index (HI)

READING LIST:

- 1) Aghion, P., E. Caroli, and C. Garcia-Penalosa, 1999, 'Inequality and Economic Growth: The Perspective of the New Growth Theories', Journal of Economic Literature, 37 (3).

- 2) Ahmad, E. J., Dreze, J. Hills and A. Sen (eds.), 1991, *Social Security in Developing Countries*, Clarendon Press for Wider, Oxford.
- 3) Ahn, T. K., Ostrom, E., (eds.), 2003, *Foundations of Social Capital*, Edward Elgar Publishing Ltd., Cheltenham, U. K.
- 4) Aksah, M. M., 2000, 'Rights Based Approach to Development and Right to Land', Background Paper for HDR, 2000, UNDP, New York.
- 5) Alderman, Harold, 2002, *Gender Dimensions of Safety Nets*, The World Bank, WashingtonD.C., <http://w.w.w.worldbank.org/wbi/socialsafetynets/courses/dc2002/index.html>.
- 6) Alesina, Alberto, and Roberto Perotti, 1994, 'The Political Economy of Growth: A Critical Survey of the Recent Literature', *World Bank Economic Review*, 9 (3).
- 7) Anand S. and S.M.R., Kanbur, 1993, 'Inequality and Development: A Critique', *Journal of Development Economics*, 41 (1).
- 8) Bardhan, Pranab, 1993, 'Symposium on Democracy and development', *Journal of Economic Perspectives* 7(9).
- 9) Chenery, H. and M. Ahluwalia, 1974, *Redistribution with Growth*, Oxford University Press, London.
- 10) Chenery, H. and T. N. Srinivasan (eds.), 1988-1989), *The Handbook of Development Economics*.
- 11) Dasgupta, Partha and Martin Weale, 1992, 'On Measuring the Quality of Life', *World Development* 20(1).
- 12) DasguptaSukti, 2002, *Organizing for Socio-Economic Security in India*, International Labour Organisation, Geneva.
- 13) Evans, P., 1996, 'Government Action, Social Capital and Development: Reviewing the Evidence on Synergy', *World Development*, 24(6).
- 14) Field, J., 2004, *Social Capital*, Routledge, London and New York.
- 15) Fukuyama Francis, 1995, 'Social Capital and the Global Economy', *Foreign Affairs* 74(5).
- 16) Grinspun, A. (ed.), 2001, *Choices for the Poor, Lessons from National Poverty Strategies*, UNDP, New York.
- 17) Hooghe, M., D. Stolle (eds.), 2003, *Generating Social Capital: Civil Society and Institutions in Comparative Perspective*, Palgrave, New York.
- 18) Huntington, Samuel, 1987, 'The Goals of Development', in Myron Weiner and Samuel P. Huntington, (eds.), *Understanding Political Development*, Little Brown and Com., Boston.
- 19) Kakwani, N., 1993, 'Performance in Living Standards: An International Comparison', *Journal of Development Economics*", 41(2).
- 20) Larrain, J., 1989, *Theories of Development: Capitalism, Colonialism and Dependency*, Polity Press, Cambridge.
- 21) Lewin, W. Arthur, 1955, *The Theory of Economic Growth*, Irwin, Homewood, IL.
- 22) Nussbaum Martha and AmartyaSen (eds.), 1991, *The Quality of Life*, Oxford University Press, Oxford.
- 23) Portes, Alejandro and Patricia Landolt, 1996, 'The Downside of Social Capital', *The American Prospect*, 7 (26).
- 24) Ranis, Gustav, Frances Stewart and Alejandro Ramirez, 2000, 'Economic Growth and Human Development', in Sakiko Fukuda-Parr and A. K. Shiva Kumar (eds.), *Readings in Human Development: Concepts, Measures and Policies for a Development Paradigm*, Oxford University Press, New Delhi.

- 25) Ray, Debraj, 1998, *Development Economics*, Princeton University Press, Princeton.
- 26) Sen, Amartya, 1985, 'Well-being, Agency and Freedom: The Dewey Lectures, 1984', *Journal of Philosophy*, 82 (4).
- 27) Sen, Amartya, 1988, 'Capability and Well-being, WIDER Conference paper.
- 28) Sen, Amartya, 1988, 'Freedom of Choice: Concept and Content', *European Economic Review*, 32 (2&3).
- 29) Streeten, Paul, Shahid Javed Burki, Mahbubul-Haq, Norman Hicks, and Frances Stewart, 1981, *First Things First: Meeting Basic Human Needs in Developing Countries*, Oxford University Press, New York.
- 30) Streeten, Paul, 2003, 'Shifting Fashions in Development Dialogue', in Sakiko Fukuda-Parr and A. K. Shiva, Kumar (eds.), *Readings in Human Development*:
- 31) *Concepts, Measures and Policies for a Development Paradigm*, Oxford University Press, New Delhi.
- 32) Streeten Paul, 1972, *The Frontiers of Development Studies*, Macmillan, London.
- 33) Todaro, Michael, P., 1997, *Economic Development*, 6th edition, Longman, New York.
- 34) United Nations Development Programme, 1990, *Human Development Report, 1990*, Oxford University Press, New York.
- 35) United Nations Development Programme, 2001, *Human Development Report, 2001*, Oxford University Press, New York.
- 36) World Bank, 1992, *Governance and Development*, Washington, D.C.,
- 37) World Bank, 1997, *The State in a Changing World: World Development Report, 1997*, Oxford University Press, Oxford.
- 38) Alkire, S., 2002, 'Dimensions of Human Development', *World Development*, 30(2)
- 39) Sen, Amartya, 1997, 'Human Capital and Human Capability' in SakikoFakuda- Parr and A. K. Shiva Kumar (eds.), *Readings in Human Development: Concepts, Measures and Policies for a Development Paradigm*, Oxford University Press, New Delhi.
- 40) Sen, Amartya, 1989, 'Development as Capability Expansion ', in Sakiko Fukuda- Parr and A. K. Shiva Kumar (eds.), *Readings in Human Development : Concepts, Measures and Policies for a Development Paradigm*, Oxford University Press, New Delhi

ECONOMICS OF GENDER AND DEVELOPMENT

EO – 7 (Elective / Optional Paper)

PREAMBLE

Gender biases in societal practices and development policies have resulted in persistent gender inequalities. It is increasingly being realized that mitigating such inequalities and enhancing women's capabilities and entitlements are crucial to the overall development of the country. The course "Economics of Gender and Development" provides students an understanding of the nature of the economic role of women and their contribution to the national economy.

UNIT I: Introduction to Gender Studies (15 Periods)

- 1.1: Importance and concepts of women studies: Difference between Gender and Sex – Patriarchy - Feminism - Schools of feminism – Gender Division of Work – Invisibility of Women's work – Gender Budget , Eco feminism - Gender Audit – Gender Mainstreaming
- 1.2: Women in patriarchal and matriarchal societies and structures, patrilineal and matrilineal systems and relevance to present day society in India; Economic basis and functioning of patriarchy in developed and LDCs, particularly India.
- 1.3: The concept of Gender Economics: Gender concerns in Economic theory –
- 1.4: Amrtya Sen's Contribution to Women's issues

UNIT II: Women and Development (15 Periods)

- 2.1: Bias in Conceptualizing and Measuring Women's Contribution to National Income
- 2.2: Measuring Gender Inequality in Human Development – Gender Related Development Index – Gender Empowerment Measure.
- 2.3: Women in Agriculture – Women in Industry – Women in Services –
- 2.4: Gender Dimensions of SAP and International trade.

UNIT III: Women and Labour Markets (15 Periods)

- 3.1: Factors affecting Supply and demand for female labour in Developing countries.
- 3.2: Studies of female work participation in agriculture, non-agricultural rural activities, informal sector, cottage and small-scale industries, organized industry, and service sector;
- 3.3: Wage differentials in female activities: determinants of wage differentials: gender, education, skill, productivity, efficiency, opportunity.
- 3.4: Structures of wage across regions and economic sector.

UNIT IV: Social Security and Social Protection for Women: (15 Periods)

- 4.1: Social security of women: Need, Need for Gender Concerns in designing Social Security Policy, entitlements, ensuring economic independence and risk coverage, access to credit and insurance markets.
- 4.2: Role of voluntary organizations, self-help groups in providing social security;
- 4.3: Education and Health for Empowerment: State Policy and Programmes for promoting Women's Education, Gender dimension of National Health Policy –
- 4.4: Health Programmes, National Rural Health Mission, Reproductive and Child Health Programme.

READING LIST:

1. Boserup, E. (1970), *Women's Role in Economic Development*, George Allen and Unwin, London.
2. Desai, N. and M. K. Raj (Eds.) (1979), *Women and society in India*, Research Centre for Women Studies, SNDT University, Bombay.
3. Government of India (1974), *Towards Equality – Report of the Committee on the Status of Women in India*, Department of Social Welfare, Ministry of Education and social Welfare, New Delhi.
4. Krishnaraj, M. R. M. Sudarshan and A. Shariff (1999), *Gender, Population and Development*, OxfordUniversity Press, New Delhi.
5. Seth, M. (2000), *Women and Development: The Indian Experience*, Sage Publications, New Delhi.
6. Srinivasna, K. and A. Shroff (1998), *India: Towards Population and Development Goals*, OxfordUniversity press, New Delhi.
7. Venkateswaran, S. (1995), *Environment, Development and the Gender Gap*, Sage Publications, New Delhi.
8. Wazir, R. (2000), *The Gender Gap in Basic Education: NGOs as Change Agents*, Sage Publications, New Delhi.
9. Kabeer, N. (1994), *Reversed Realities: Gender Hierarchies in Development Thought*, Kali for Women, New Delhi.
10. Kabeer, N. and R. Subramanyam (Ed.) (1999), *Institutions, Relations and Outcomes : A Framework and Case Studies for Gender-aware Planning*, Kali for Women, New Delhi.
11. Mies, M. (1998), *Patriarchy and Accumulation on a world Scale: Women in the International Division of Labour*, Zed Books, London.
12. Sen, G. and K. Brown (1985/1987), *Development, Crises and Alternate Visions*, Monthly Review Press, New York.
13. Amsdden, A. H. (Ed.) (1980), *The Economics of Women and Work*, Penguin, Harmondsworth.
14. ILO (1978), *Women's Participation in the Economic Activity of Asian Countries*, ILO, Geneva.
15. Papola, T. S. and A. N. Sharma (Eds.) (1999), *Gender and Employment in India*, Vikas Publishing House, New Delhi.
16. Jhabwala, R. and R. K. Subramanya (2000) (eds.), *The Unorganized Sector: Work Security and Social Protection*, Sage Publications, New Delhi.
17. Narasimhan, S. (1999), *Empowering Women: An Alternative Strategy from Rural India*, Sage Publications, New Delhi.
18. Purushothaman, S. (1998), *The empowerment of women in India: Grassroots Women's Networks and the State*, Sage Publications, New Delhi
19. AmartyaSen and Jean Drèze (1995) *India: Economic Development and Social Opportunity*,Oxford University Press.
20. Mary E. John (2008), *Women's Studies in India – A Reader*, Penguin Books, New Delhi
21. VinaMazumdar (1985), *Emergence of Women's Question and Role of Women's Studies*, Occasional Paper, Centre for Women's Development Studies, New Delhi.
22. Bowles Gloria and Dueli Klein Kenate, (1989) *Theories of Women Studies*, New York.
23. Gandhi, Nandita and Nandita Shah, 1992 *The issues at Stake:Theory and practice in the Women's Movement in India*, New Delhi, Kali for India

24. Sanjoy Roy (2010) Women in Contemporary India: Realities and Perspectives, Akansha Publishing House, New Delhi
25. Vibhuti Patel (2003) Gender Budget – A case Study of India, Department of Economics, Centre for Advanced Study in Economics Working Paper UDE (CAS) 7(7)/2003

Shivaji University, Kolhapur

Draft Syllabus For Master of Arts in Economics

M.A. I, Sem I

INDIAN CAPITAL MARKET

EO-8 (Elective Course)

Preamble: This elective course examines Indian financial system in general and capital market in particular. Its focus is on structure, instruments and players of Indian capital markets. It encompasses legal and regulatory framework of Indian financial services. It also intended to provide practical experience and skill development modules in capital market.

Course Outcome: By the end of this course student will be able to :

CO1 : understand and analyze Indian financial system with its regulations

CO2 : identify primary and secondary market operations

CO 3 : recognize relation between financial system and economic development

CO4 : understand working of DEMAT and depository system

Module	Content	Periods
Module I	Indian Financial System 1.1 Financial System: Meaning and Components; Financial Market, Institutions, Instruments and Services 1.2 Financial System and Economic Development 1.3 Legal and Regulatory Framework of Financial Services 1.4 SEBI – Role and Functions	15
Module II	Primary Market 2.1 Capital Market : Meaning and Structure 2.2 Primary Market: Concept, Role, advantages and disadvantages 2.3 Types of Primary Market issues 2.4 Initial Public Offering(IPO) and Book building process	15
Module III	Secondary Market 3.1 Secondary Market: Concept, Instruments, Functions and Limitations 3.2 Stock exchange-Role and Functions, BSE & NSE 3.3. Risk-Return relationship 3.4 Clearing and Settlement process	15
Module IV	Accessing Capital Market 4.1 Methods of Accessing Capital Market- Direct Vs Indirect methods: Pros and Cons 4.2 Mutual Fund: Concept- Types and Advantages. 4.3 Credit Rating: Need- Process- Factors- Agencies with their Rating Symbols and Defects 4.4 Constraints in the functioning of Indian Capital Market	15

References :

- 1) Avadhani V.A., (2017), Securities Analysis and Portfolio Management, Himalaya Publishing House.

- 2) Alex Kuznetsov (2006), The Complete Guide to Capital Markets for Quantitative Professionals, McGraw Hill Professional
- 3) Bhole, L. M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- 4) Chakravarti R., (2010), Capital Markets in India, SAGE Publishing, India
- 5) Deepak R. Raste (2011), Capital Market in India: Reforms and Regulations, New Century Publications
- 6) Fisher, G. E. and R. J. Jordon (1992), Security Analysis and Portfolio Management, Eastern Economy Edition, New Delhi
- 7) Gary Strumeyer (2017), The Capital Markets: Evolution of the Financial Ecosystem Wiley
- 8) Kanuk A.R., (2007), Capital Markets of India: An Investor's Guide, Johan Wiley & Sons
- 9) Khan, M. Y. (1996), Indian Financial System, Tata McGraw Hill, New Delhi
- 10) Machiraju H. R. , (2013), Indian financial System , Vikas Publishing House PVT. LTD, (UP) India.
- 11) Niti Bhasin (2010), Financial Institutions and Financial Markets in India: Functioning and Reforms, New Century Publications
- 12) Ohlson, J. A. (1987), The Theory of Financial Markets and Institution, North Holland, Amsterdam.
- 13) Pandey A., (2014), Capital Market and Financial System in India, New Century Publications
- 14) Ramchandra G.S., Dongare K., (2015), A Practical Approach to the Study of Indian Capital Markets, Partridge India
- 15) Smith, P. F. (1978), Money and Financial Intermediation: The theory and Structure of Financial System, Prentice Hall, Englewood-Cliffs, New Jersey
- 16) देशपांडे श्रीधर आणि देशपांडे विनायक , (२००४) , वित्तीय संस्था आणि वित्तीय बाजार, हिमालय पब्लिशिंग हाउस.

Economics of Livestock EO –9 (Elective Paper)

Preamble:

The animal production system in India is principally part of mixed crop-livestock farming system and important for the security and survival of large number of poor population. In such system livestock generates income; provide ample job, brought power and manures. This production system assumes special significance in economic growth, increasing income, increasing urbanization, change in taste and preference that have leads to nutritional changes reflecting the importance of milk, meat, egg and fish. It provides self-employment to millions of people. People involved in this industry are small land holders and landless. The livestock sector has been faster than many other sectors of agriculture and if this trend continues then the sector will contribute as main sector for development of Indian economy. This paper analyses livestock production, management and policies.

Unit 1: Economics of Livestock Production

- 1.1: Livestock farm techniques and economics- Animal techniques and farm economics- Livestock farm system- Animal production system- Feeding and Forage system.
- 1.2: Livestock production in India and world
- 1.3: Problems faced by livestock production industry.
- 1.4: Importance of livestock in farming practices

Unit 2: Employment Opportunities in Livestock Production

- 2.1: Employment opportunities in livestock farming- Livestock management- livestock marketing
- 2.2: Opportunities in breeding: Cattle and buffalo breeding- processing- grading- daily care
- 2.3: Livestock Market: demand, supply and pricing- Quality and sanitary issues for livestock products: international standards
- 2.4: Employment opportunities in Livestock Industry

Unit 3: Management of livestock

- 3.1 Feeding management System of feeding livestock's, feeding standards for livestock
- 3.2 Shelter management; Housing system, selection of sites and lay outs for animal houses, space required for livestock- environment and automation in livestock farming.
- 3.3 General principles of management- Marketing Management- Women in livestock management
- 3.4 Importance and Methods of Breeding and reproduction management- breeding records Climate and reproduction- causes of fertility Disturbances.

Unit 4: Agriculture and livestock policies

- 4.1: US Farm Bill- WTO: bilateral Agreement
- 4.2: Export of beef, meet and pork etc. Regulation for safe meet export
- 4.3: Global Practices of Livestock Management- International market for dairy, pork, beef, meat etc.
- 4.4: Pink revolution- Livestock Insurance

READING LIST:

1. 16th India Livestock Censes, Summery report All India Volume- IA, Livestock and Poultry, 1997, Governnet of India, Ministry opf Agriculture.
2. Archana Ruhela and Malini Sinha, 2010, Livestock Economics, Oxford Book Company, Delhi.
3. Eiri Board, 2008, Hand Book on Poultry Farming and Feed Formulation, Engineers India Research Institute, Delhi.
4. Humenik and Frank James, 1983, Livestock Waste Management, Beter World Books, Mishawaka, USA.
5. Jadhav, 2010, Handbook of poultry production and Management, Jaypee Brothers Medical Publisher Private Limited, London, UK
6. K. S. Gangadhar, 2009, Livestock economics: Marketing, Business management and accountancy, New India Publishing Agency, New Delhi
7. M. a. Iqbal, 2012, Livestock revolution and economic viability of the Farmers, Rajat Publication, Daryaganj, Delhi
8. N. S. R and C. K. Thomas, 2016, Livestock Production Management, Kalyani Publisher, New Delhi.
9. Report of the National commission on Cattle, July 2012, Department of Animal Husbandry and Dairying, Ministry of Agriculture, government of India.
10. Richard A. Battaglia, , 2006, Handbook on Livestock Management, Pearson Publication
11. S. das, 2016, Livestock Management, State Council of Educational, Research and Training, Kerla.
12. U S Bureau of Agriculture economics, 1940, The livestock situation, U S Bureau.

Economy of Maharashtra EO-10 (Elective Paper)

Preamble:

This paper would enable the students to know about basic features of economy of Maharashtra. The students would also be able to understand aspects of development of the state with various sectors. This paper introduces the problems faced by the economy of Maharashtra as well as various efforts of the institutions, NGOs and the Government to tackle them.

Outcomes:

1. Demonstrate the importance of the Maharashtra economy in the national economy.
2. Identify the new techniques to develop agriculture in Maharashtra.
3. Discuss the scope of industrial development of Maharashtra.
4. Evaluate the public finance in Maharashtra.
5. Discuss the scope of service sector in Maharashtra.

Unit I Introduction to Economy of Maharashtra (15 Periods)

- 1.1 Basic features of the economy of Maharashtra: Location, Structure, Land, Forest, Environment and Mineral resources.
- 1.2 Demography of Maharashtra: Size, Growth rate, Literacy rate, Sex ratio, Urban and rural population, Migration.
- 1.3 Growth and Structural changes in SGDP since 1991.
- 1.4 Place of Maharashtra in economic development of India.

Unit II Agricultural Development of Maharashtra (15 Periods)

- 2.1 Significance of agriculture in the economy of Maharashtra: Contribution in SGDP, Land use and cropping pattern, Production and productivity, Horticulture, Fisheries and Livestock
- 2.2 Agriculture finance: Credit provided by banks and financial institutions, Crop insurance, Agriculture and budget of Maharashtra.
- 2.3 Irrigation in Maharashtra: Watershed Development Programme, Jalyukt Shivar, Pani Foundation movement.
- 2.4 Agrarian distress in Maharashtra- Agricultural policy of Maharashtra

Unit III Industry and Service Sector of Maharashtra (15 Periods)

- 3.1 Role of MIDC, SICOM, MSFC in industrial development
- 3.2 Strategy for industrial development in Maharashtra: SEZ, FDI
- 3.3 Role of service sector in economic development- Government initiatives for service sector development.
- 3.4 Regional disparities in Maharashtra: Causes and remedies

Unit IV Public Finance of Maharashtra (15 Periods)

- 4.1 Revenue: Structure and trends in revenue- GST.
- 4.2 Expenditure: Growth and composition
- 4.3 Public debt: Growth and composition- Trends in deficit
- 4.4 District Planning and Development Council (DPDC): Structure, objectives, functions and Process of district planning

READING LIST

- 1) Dastane Santosh- Asa Ha Maharashtra (Marathi Edition)
- 2) Government of Maharashtra : Economic Survey of Maharashtra, Various Issues.
- 3) Government of Maharashtra: Yojana magazine, Various Issues.
- 4) Kurulkar R. P. (1997) : Maharashtrachi Arthvyavastha (Marathi) Vidya Prakashan, Ruikar Marg, Nagpur.
- 5) Maharashtra Rajya Niyojan Mandal (2002) :Manav Vikas Ahawal, Maharashtra.
- 6) Munagekar Bhalchandra (2003) :The Economy of Maharashtra – Changing Structure and Emerging Issues, Dr. Ambedkar Institute of Social and Economic Change, Mumbai
- 7) PansareGovind (2012) :Maharashtrachi Arthik Pahani – Paryayi Drushtikon
- 8) Patil J.F.(2010) :Suvarna Mahotsavi Maharashtrachi Badalati Arthvyavastha (Marathi), Abhijit Pratap Pawar, Sakal Papers Ltd., 595, Budhwar Peth, Pune
- 9) Reserve Bank of India: Handbook of Statistics of Indian Economy
- 10) World Bank (2002) India : Maharashtra Reorienting Govt. to Facilitate Growth and Reduce Poverty

M. A. Part - I Sem-II

PUBLIC ECONOMICS (EC – 3 Core / Compulsory Paper)

PREAMBLE

Role and functions of the Government in an economy have been changing with the passage of time. The term 'Public Finance' has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures while budgetary policy is an important part to understand the basic problems of use of resources, distribution of income, etc. There are vast array of fiscal institutions – tax systems, expenditure programmes, budgetary procedures, stabilization instruments, debt issues, levels of government, etc., which raise a spectrum of issues arising from the operations of these institutions. Further, the existence of externalities, concern for adjustment in the distribution of income and wealth, etc. require political processes for their solution in a manner, which combines individual freedom and justice. This course/ paper combines a thorough understanding of fiscal institutions with a careful practical analysis of the issues which underline budgetary policies.

Outcomes:

1. Understanding the role of government in economic planning and development.
2. Distinguishing public choice and public policy.
3. Interpreting the theories of public expenditure and project evaluation.
4. Ability to explain the role of taxation and public debt.

UNIT I: ROLE OF GOVERNMENT (15 Periods)

- 1.1: Role of Government in a mixed economy; Government as an agent for economic planning and development;
1.2: Classification, Meaning and Features of Human Wants and Goods; Private, Public, and Merit
1.3: Causes of Market failure; Imperfections, Decreasing costs,
1.4: Externalities : Economies and Diseconomies

UNIT II: THEORY OF PUBLIC CHOICE AND PUBLIC POLICY (15 Periods)

- 2.1: Private and Public Mechanism for Allocating of Resources
2.2: Problems of Revelation and Aggregation of Preferences; Absolute and Relative Unanimity Principle – Political Interactions Costs Theory Arrow's Impossibility theorem- An Economic Theory of Democracy Politico-eco-bureaucracy Theory
2.3: Provision of Public Goods: Voluntary exchange model of Wicksell and Lindahl- Impossibility of decentralized provision of public goods (Contributions of Samuelson and Musgrave)
2.4: Demand Revealing Schemes for Public goods; Tiebout model, Theory of Club goods.

UNIT III: THEORY OF PUBLIC EXPENDITURE AND PROJECT EVALUATION (15 Periods)

- 3.1: Theories of Public Expenditure: Smuelson's Pure theory of Public Expenditure - Wagner's law of increasing state activities, Wiseman Peacock hypothesis, Colin Clark Hypothesis
3.2: Criteria of Public investment- Project evaluation;
3.3: Social Cost-Benefit Analysis
3.4: Public Budget: Classification of Public Budget- Performance and Programme budgeting, Zero base budgeting.

UNIT IV: THEORY OF TAXATION AND PUBLIC DEBT (15 Periods)

- 4.1: Meaning of Tax Incidence- Alternative Concepts of Tax incidence – Theories of Tax Incidence- Measurement of Tax Incidence

- 4.2: Theories of Taxation: Benefit and Ability to pay approaches, Theory of optimal taxation- Excess burden of taxes –
- 4.3: The problem of double taxation- Laffer Curve Theory – Goods and Services Tax (GST)
- 4.4: Theory of Public Debt: Importance, Sources, Classification of Public Debt-Burden of Public Debt: Views- Methods of Redemption Principles of Debt Management

READING LIST

1. Atkinson, A. B. and J. E. Stiglitz (1980), Lectures on Public Economics, Tata McGraw Hill, New York.
2. Auerbach, A. J. and M. Feldstern (Eds.) (1985), Handbook of Public Economics, Vol. I, North Holland, Amsterdam.
3. Buchanan, J. M. (1970), The Public Finances, Richard D. Irwin, Homewood.
4. Goode, R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
5. Houghton, J. M. (1970), The Public Finance: Selected Readings, Penguin, Harmondsworth.
6. Jha, R. (1998), Modern Public Economics, Routledge, London.
7. Menutt, P. (1996), The Economics of Public Choice, Edward Elgar, U. K.
8. Musgrave, R. A. (1959), The Theory of Public Finance, McGraw Hill, Kogakusha, Tokyo.
9. Musgrave, R. A. and P. B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
10. Shoup, C. S. (1970), Public Finance, Aldine, Chicago.
11. Shome, P. (Ed.) (1970), Tax Policy: Handbook, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D. C.
12. Cornes, R. and T. Sandler (1986), The Theory of Externalities, Public
13. Goods and Club Goods, Cambridge University Press, Cambridge.
14. Duff, L. (1997), Government and Market, Orient Longman, New Delhi.
15. Herber, B. P. (1967), Modern Public Finance, Richard D. Irwin, Homewood.
16. Spulber, N. (1998), Redefining the State, Cambridge University Press, Cambridge.
17. Buchanan, J. M. (1968), The Demand and Supply of Public Goods, Rand McNally, Chicago.
18. Mueller, D. C. (1979), Public Choice, Cambridge.
19. Spulber, N. (1998), Redefining the State, Cambridge University Press, Cambridge.
20. Stiglitz, J. E. (1986), Economics of Public Sector, Norton, New York.
21. Dorfman, R. (Ed.) (1970), Measuring the Benefits of Government Investment, Brookings Institution, Washington.
22. Friedman, A. (1986), Welfare Economics and Social Choice Theory, Martins Nijhoff, Boston.
23. Glennester, H. and J. Hills (1998), The State of Welfare: The economic and Social Spending Oxford University Press, London.
24. Mishan, E. J. (1982), Cost-Benefit Analysis: An Informal Introduction, George Allen and Unwin, London.
25. Peacock, A. and D. J. Robertson (Eds.) (1963), Public Expenditure: Appraisal and Control, Oliver and Boyd, Edinburgh.
26. Phyr, P. (1970), Zero Base Budgeting: A Practical Management Tool for Evaluating Expenses, John Wiley, New York.
27. Premchand, A. (1966), Control of Public Expenditure in India, Allied Publishers, New Delhi.
28. Sahni, B. S. (Ed.) (1972), Public Expenditure Analysis : Selected Readings, Rotherdam University Press.
29. Bird, R. and O. Oldman (1967), Readings on Taxation in Developing Countries, the John Hopkins University Press, Baltimore.
30. Cutt, J. (1969), Taxation and Economic Development in India, Frederick A Praegar Publishers, New York.
31. Kaldor, N. (1955), An Expenditure Tax, George Allen and Unwin, London.

32. Musgrave, R. A. and C. Shoup (Eds.) (1970), *Readings in the Economics of Taxation*, George Allen and Unwin, London.
33. Barman, K. (1986), *Public Debt Management in India*, Uppal Publishing House, New Delhi.
34. Buchanan, J. M. (1958), *Principles of Public Debt, A Defence and Restatement*, Richard D. Irwin, Homewood.
35. Ferguson, J. M. (Ed.) (1964), *Public Debt and Future Generations*, North Carolina University Press, Chapel Hill.
36. Sreekantaradhya, B. S. (1972), *Public Debt and Economic Development in India*, New Delhi.
37. American Economic Association (1955), *Readings in Fiscal Policy*, George Allen and Unwin, London.
38. Chelliah, Raja J. (1971), *Fiscal Policy in Underdeveloped Countries*, George Allen and Unwin, London.
39. Government of India (1985), *Long Term Fiscal Policy*, New Delhi.
40. Peacock, A. and G. K. Shaw (1976), *The Economic Theory of Fiscal Policy*, George Allen and Unwin, London.
41. Bhargava, R. N. (1967), *The Theory and Working of Union finance in India*, Chaitanya Publishing House, Allahabad.
42. Bhargava, P. K. (1982), *Centre State Resource Transfers in India*, The Academic Press, Gurgaon.
43. Chelliah, Raja J. (et. al.) (1981), *Trends and Issues in India's Federal Finance*, National Institute of Public Finance and Policy, New Delhi.
44. Gulati, I. S. (1979), *Centre State Financial Relations: An Assessment of the Role of Finance Commission*, M. S. University of Baroda, Baroda.
45. Lakdawala, D. T. (1967), *Union State Financial Relations*, Lalwani Publishing House, Mumbai.
46. Musgrave, R. A. (1977), *Essays in Fiscal Federalism*, Greenwood West Port.
47. Oates, W. E. (1972), *Fiscal Federalism*, Harcourt Brace and Johanowich, New York.
48. Reports of various Finance Commissions, Govt. of India.
49. Srivastava, D. K. (Ed.) (2000), *Fiscal Federalism in India*, Har-Anand Publications Ltd., New Delhi.
50. Bhargava, R. N. (1969), *Indian Public finances*, B. D. Bhargava and Sons, Chandausi.
51. Bhargava P. K. (1976), *Taxation of Agriculture in India*, Vora and Co., Bombay.
52. Bhargava, P. K. (1984), *Some Aspects of Indian Public Finances*, Uppal Publishing House, New Delhi.
53. Bhargava, P. K. (1991), *India's Fiscal Crisis*, Ashish Publishing House, New Delhi.
54. Borkar, V. V. (1971), *Income Tax Reform in India*, Popular Prakashan, Bombay.
55. Chelliah, Raja J. (Ed.) (1997), *Towards, Sustainable Growth*, Oxford University Press, New Delhi.
56. Dutt, R. (Ed.) (2001), *Second Generation Economic Reforms in India*, Deep & Deep Publications, New Delhi.
57. Gandhi, V. P. (1970), *Some Aspects of India's Tax Structure*, Vora and Company, Bombay.
58. Government of India (1992), *Reports of the Tax Reforms Committee – Interim and Final (Chairman: Raja J. Chelliah)*.
59. Jain, A. K. (1975), *Taxation of Income in India*, Macmillan Company of India Ltd., New Delhi.
60. Jain, I. (1988), *Resource Mobilization and Fiscal Policy in India*, Deep & Deep Publications, New Delhi.
61. Kumar, A. (1999), *The Black Economy in India*, Penguin, Harmondsworth.
62. Mundell, S. (1999), *Public Finance Policy: Issues for India*, Oxford University Press, New Delhi.
63. Singh, T. (2000), *The Corporation Tax in India*, Classical Publishing Company, New Delhi.

ECOLOGICAL AND RESOURCE ECONOMICS

EC – 4 (Core/ Compulsory Paper)

From June 2022

PREAMBLE

Since 1972 onwards, the new branches of Economics such as Resource Economics, Environmental Economics, and Ecological Economics have been emerged. The efforts being undertaken for rapid and all round development which is contributing to rapid deterioration of quantity and quality of the natural resources. As a result, there is much discussion going on the planned use of the natural resources. This core course / paper discusses the concept of resources, rational use of resources, theoretical approaches regarding the use of natural resources and many others, coupled with their applications and the various measures to control the quantity and quality of natural resources.

COURSE OUTCOMES:

- 1) Students familiar with the natural resources and their scarcity.
- 2) Analyse the sustainable development in its various perspectives.
- 3) Fully equip with the models of harvesting of renewable and non-renewable natural resources.
- 4) Critically assess the problem of pollution and environmental policy.

UNIT I: SCARCITY OF NATURAL RESOURCES: (15 Periods)

- 1.1:** Introduction to Ecological & Resource Economics
- 1.2:** Natural Resources : Renewable and Non-renewable
- 1.3 :** Scarcity of Natural resources- Natural Resources and Economic Development
- 1.4:** Methods of Valuation of Natural Resources: Direct and Indirect

UNIT II: SUSTAINABLE DEVELOPMENT (15 Periods)

- 2.1:** Approaches to Sustainable Development: Club of Rome approach – Steady State School
- 2.2:** Sustainable development Concept and Indicators; Strong and Weak Sustainability - Possible Sustainability Rules
- 2.3:** Bio-sphere and Economic growth - Intellectual Property Rights and Natural resources - Recycling of Natural Resources
- 2.4:** Optimal Extraction of Natural Resources: Gray model – Hotelling Model

UNIT III: BIOECONOMICS (15 Periods)

- 3.1:** Bionomic Equilibrium
- 3.2:** Market Structure and Exploitation of Nonrenewable Natural resources

- Population growth models – Static economic models of Renewable
3.3: Natural Resources with references to Fisheries
3.4: Regulation of Harvesting: Taxes, Quota, Sole Ownership

UNIT IV: EXTERNALITIES AND POLLUTION

(15 Periods)

- 4.1:** Externalities: Meaning, Types and Measures
4.2: Pollution: Air, Water, Noise and Land; Causes and Measures
4.3: Environmental Policy: Market Processes/ Pricing/ Fiscal Techniques / Economic Incentives; a) Effluent Charge/ Pollution tax b) Subsidies ,c) Refundable Deposits, d) Pollution Permits , e) Allocation of Property Rights;
4.4: Coase's theory of bargaining solution and collective action

READING LIST

1. Faber, Manstetten & Proops (2002). Ecological Economics, Edward Elgar Publishing Limited Glos, UK .
2. Barbier Edward (2003). Role of Natural Resources in Economic Development, Research Article Australian Economic Papers, Blackwell Publishing Ltd, University of Adelaide & South Australia
3. USAID, 2006, The Role of Property Rights in Natural Resource Management, Good Governance, and Empowerment of Poor
 Schlager & Ostrom, 1992, Property Rights Regime and Natural Resources: A Conceptual Analysis, University Wisconsin Press
4. Karpagam M (2007) , Environmental Economics, Sterling Publishers Private Limited , New Delhi
5. Hanley and Spash (1998), Cost Benefit Analysis and the Environment, Edward Elgar Publishing Limited, Glos, UK.
6. Hanley, Shogren and White(1997), Environmental Economics; In Theory and Practice , Macmillan India Limited, Delhi.
7. Singh and Shishodia (2010), Environmental Economics; Theory and Applications, Sage Publications India Private Limited, New Delhi.
8. Sen, Amartya (1981-2011), Poverty and Famines, Oxford University Press, New Delhi.
9. Hartwick, J. M. & Olewiler, N. D., The Economics of Natural Resource Use.
10. Randall, A., Resource Economics
11. Barnett, H. J. and Morse, C. , Scarcity and Growth : The Economics of Natural Resource Activity.
12. Conrad, J. M. & Clark, C. W., Natural Resource Economics: Notes and Problems.
13. Dasgupta, P., The Control of Resources.
14. Dasgupta, P. and Heal, G. M., Economics Theory and Exhaustible Resources.
15. Nadkarni, M. V. and others, Political Economy of forest Use and Management in India.
16. World Resource Institute, World Resources, Annual Reports, Other publications.
17. The Hindu Survey of Environment, Various issues.
18. Report on NCA. World Bank Reports, UNO Publications.

AGRICULTURAL DEVELOPMENT IN INDIA
EO- 11 (Elective / Optional)

PREAMBLE:

The paper analyses the development of Indian agriculture after the independence. The efforts made by the Government in the five year plans are included in this course. The role of technology, bio-technology, trade, agricultural marketing and price policy has to be studied with reference to Indian economy. The input services such as agricultural credit, irrigation, and changing crop pattern like organic and contract farming are included in the present syllabus.

Outcomes:

1. Understanding the nature, scope, challenges and opportunities in Agricultural Sector.
2. Analyze the causes of agrarian distress and remedies.
3. Elaborate the possible measures to reduce agrarian distress
4. Ability to prepare a plan for reforms regarding the Agriculture sector

UNIT I: Agriculture and Economic Development: (15 Periods)

- 1.1: Role of Agriculture in Indian Economy – National Agricultural Policy Since 1991
- 1.2: Changing Land use and cropping pattern in India –
- 1.3: Contract farming - Organic farming
- 1.4: Food security & Agricultural Development-Buffer Stock and Public Distribution System (PDS)

UNIT II: Agricultural Technology and Irrigation: (15 Periods)

- 2.1: Challenges before Agriculture Development-White Revolution (Dairy)
- 2.2: - Blue Revolution (Fisheries), Need of Second Green Revolution.
- 2.3: Agricultural Technology: Mechanization of Agriculture Biotechnology and Agriculture
- 2.4: Irrigation: Sources, Progress, Policies & Strategies in India – utilization of surface & ground water

UNIT III: Agricultural Finance and Trade: (15 Periods)

- 3.1: Sources of Agricultural Finance – Institutional & Non-institutional System.
- 3.2: NABARD
- 3.3: RRBs - Kisan Credit Card scheme.
- 3.4: Agriculture and International trade - WTO and Agriculture – Competitiveness of Indian agriculture

UNIT IV: Agricultural Marketing and Prices: (15 Periods)

- 4.1: Agricultural Marketing: Marketing functions and efficiency marketable surplus-Farmer's Share, price spread - Marketing Margin, Marketing Costs - Agricultural Marketing: problems and measures.
- 4.2: Regulated Markets - Co-operatives Marketing – Direct marketing - Farmers Organisation in marketing –
- 4.3: Role of government in agricultural marketing; NAFED - NCDC- eNAM.
- 4.4: Agricultural Prices: Need of Price Policy – Instruments of price policy CACP –National commission on Agriculture- Impact of GST on Agriculture.

READING LIST :

1. Acharya S S & Agrawal N L (2014): Agricultural Marketing in India, Oxford & IBH PVT. Co. Ltd, New Delhi.
2. Desai R G (2001): Agricultural Economics- Models Problems and Policy Issues, Himalaya Publishing House, Mumbai.
3. Lekhi R K & Singh Jogindar (2013): Agricultural Economics, Kalyani Publisher, New Delhi.
4. Mishra & Puri (2016): Indian Economy, Himalaya Publishing House, Mumbai.

5. Reddy, Ram, Sastry & Devi (2010): Agricultural Economics Oxford & IBH publishing Co. Pvt. Ltd, New Delhi.
6. Sadhu A. N. & Singh Amarjit, Fundamentals of Agricultural Economics, (1996), Himalaya Publishing House, Bombay.
7. Soni, R. N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.
1. 8 Agriculture in Economic Development (1964), Carl Eicher and Lawrence Wit, McGraw Hill Book Company, New York
8. Bilgram, S. A. R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
9. Bhalla G S (2004): Globalization and Indian Agriculture, State of Indian Farmer, A Millennium study, Department of Agriculture & cooperation, Ministry of Agriculture, Government of India , Published by Academic Foundation , New Delhi.
10. Chand Ramesh (2002); Trade liberalization, WTO and Indian Agriculture, Mittal Publication, New Delhi.
11. Government of India (1976), Report of the National Commission on Agriculture, New Delhi.
12. Ghatak, S. and K. Ingerscent (1984), Agriculture and Economic Development, Select books, New Delhi.
13. Government of India, Five Year Plans, New Delhi.
14. Government of India (2001), Report of the Working Group on Organic and Biodynamic Farming for Tenth Five Year Plan, Planning Commission, GOI, N. Delhi
15. Gulati Ashok, Sharma & Others (1994): How Competitive is India in Agro Export? An analysis of selected Agro-products, Margin Vol.6, No.4 pp-844-864
16. Gulati & Hussain (2017): Farm & the Tax, The Indian Express, dated 5th June 2017, PP-11.
17. Harold G. Halcrow, (1981), Economic of Agriculture, Mc-Graw Hill, International Book Company, Tokyo.
18. John W. Goodwin (1977), Agricultural Economics, Reston Publishing Company, Virginia.
19. John B. Penson, Oral Capps, C. Parr Rosson, (1999), Introduction to Agricultural Economics, Prentice Hall, New Jersey.
20. Meier, G. M. (1995), Leading Issues in Economic Development, Oxford University Press, New Delhi.

INDUSTRIAL ECONOMICS
EO- 12 (Elective/ Optional Paper)

PREAMBLE

In the contemporary World with globalization and liberalization more and more attention is being given to industry. This course intends to provide knowledge to the students on the basic issues such as productivity, efficiency, capacity utilization and debates involved in the industrial development of India. The objective is to provide a thorough knowledge about the economics of industry in a cogent and analytical manner, particularly in the Indian context. This paper deals applications on various issues.

UNIT I: Firms and Market Structure **(15 Periods)**

- 1.1: Concept and organization of a firm – ownership, control and objectives of the firm; Passive and active behaviour of the firm.
- 1.2: Sellers' concentration; Product differentiation; Entry conditions; Economies of scale;
- 1.3: Market structure and profitability; Market structure and innovation;
- 1.4: Theories of industrial location – Weber and Sargent Florence; Factors affecting location.

UNIT II: Market Conduct and Performance **(15 Periods)**

- 2.1: Product pricing – Theories and evidence;
- 2.2: Investment expenditure – Methods of evaluating investment expenditure; Theories and empirical evidence on Mergers and acquisitions and diversification.
- 2.3: Growth of the firm – Size and growth of a firm; Growth and profitability of the firm; Constraints on growth;
- 2.4: Productivity, efficiency and capacity utilization – Concept and measurement, Indian situation.

UNIT III: Indian Industrial Growth and Pattern: **(15 Periods)**

- 3.1: Classification of industries; Industrial policy in India – Role of Public and private sectors;
- 3.2: Recent trends in Indian industrial growth; MNCs and transfer of technology; Liberalization and privatization;
- 3.3: Regional industrial growth in India; Industrial economic concentration and remedial measures;
- 3.4: Issues in industrial proliferation and environmental preservation; Pollution control policies.

UNIT IV: Industrial Finance: **(15 Periods)**

- 4.1: Owned, external and other components of funds;
- 4.2: Role, nature, volume and types of institutional finance – IDBI, IFCI, SFCs, SIDC, commercial banks, etc.;
- 4.3: Financial statement – Balance sheet, Profit and loss account; assessment of financial soundness, ratio analysis,
- 4.4: GDRs and ADRs, Trends in External Resources flow.

READING LIST

- 1) Ahluwalia, I. J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
- 2) Barthwal, R. R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
- 3) Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- 4) Desai, B. (1999), Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.
- 5) Divine, P. J. and R. M. Jones et. al. (1976), An Introduction to Industrial Economics, George Allen and Unwin Ltd., London.
- 6) Government of India, Economic Survey (Annual).

- 7) Hay, D. and D. J. Morris (1979), *Industrial Economics: Theory and Evidence*, Oxford University Press, New Delhi.
- 8) Kuchhal, S. C. (1980), *Industrial Economy of India (5th Edition)*, Chaitanya Publishing House, Allahabad.
- 9) Reserve Bank of India, *Report on Currency and Finance (Annual)*.
- 10) Singh, A. and A. N. Sadhu (1988), *Industrial Economics*, Himalaya Publishing House, Bombay.
- 11) Bains, J. S. (1996), *Industrial Organization*, Cheltenham, U. K.
- 12) Harndeen, J. B. (1975), *The Economics of Corporate Economy*, Dunellen Publishers, New York.
- 13) Kamien, M. T. and N. L. Schwartz (1982), *Market Structure and Innovation*, Cambridge University Press, Cambridge.
- 14) Wiles, P. J. D. (1963), *Price, Cost and Output*, Praeger, New York.
- 15) Harndeen, J. B. (1975), *The Economics of Corporate Economy*, Dunellen Publishers, New York.
- 16) Kirkpatrick, C. M., N. Lee and E. I. Nixon (1984), *Industrial Structure and Policy in Less Developed Countries*, ELBS/George Allen and Unwin, London.
- 17) Menon, K. S. V. (1979), *Development of Backward Areas through Incentives*, Asia Publishing House, Bombay.
- 18) Smith, D. M. (1971), *Industrial Location: An Economic and Geographic Analysis*, John Wiley, New York.
- 19) Bagchi, A. and M. Banerjee (Eds.) (1979), *Change and Choice in Indian Industry*, Bagchi Publications, Calcutta.
- 20) Kelkar, V. L. and V. V. Bhanaji Rao (Eds.) (1996), *India Development Policy Imperatives*, Tata McGraw Hill, New Delhi.
- 21) Bhagwati J. and P. Desai (1972), *India: Planning for Industrialization*, Oxford University Press, London.
- 22) Brahmananda, P. R and V. R. Panchmukhi (Eds.) (1987), *The Development Process of the Indian Economy*, Himalaya Publishing House, Bombay.
- 23) Chakravarty, S. (1987), *Development Planning: The Indian Experience*, Oxford University Press, New Delhi.
- 24) Datta, B. (1992), *Indian Planning at the Crossroads*, Oxford University Press, New Delhi.
- 25) Ghosh, P. K. (1977), *Government and Industry*, Oxford University Press, New Delhi.
- 26) Joshi, V. and I. M. D. Little (1999), *India: Macro Economics and Political Economy: 1964- 1991*, Oxford University Press, New Delhi.
- 27) Dhameeja, N. and K. S. Sastry (1998), *Privatization: Theory and Practice*, A. H. Wheeler, New Delhi.
- 28) Jalan, B. (1996), *India's Economic Policy*, Viking, New Delhi.
- 29) Joshi, V. and I. M. D. Little (1999), *India: Macro Economics and Political Economy: 1964- 1991*, Oxford University Press, New Delhi.
- 30) Kelkar, V. L. and V. V. Bhanaji Rao (Eds.) (1996), *India Development Policy Imperatives*, Tata McGraw Hill, New Delhi.
- 31) Rama Murti, R. and R. Vernan (Eds.) (1991), *Privatization and Control of State- owned Enterprises*, The World Bank, Washington.
- 32) Sandesara, J. C. (1992), *Industrial Policy and Planning – 1947-1991: Tendencies, Interpretations and Issues*, Sage Publications, India Pvt. Ltd., New Delhi.
- 33) Gupta, L. C. (1969), *the Changing Structure of Industrial Finance in India*, Oxford University Press, New Delhi.
- 34) Khan, M. Y. (1981), *Indian Financial systems*, Allied Publishers, New Delhi.
- 35) Sen, R. and B. Chatterjee (2001), *Indian Economy: Agenda for the 21st Century (Essays in honour of Professor P. R. Brahmananda)* Deep and Deep Publications Pvt. Ltd., New Delhi.
- 36) Dasgupta, P. S., Marglin and A. Sen (1972), *Guideline for Project Evaluation*, Unido Publications, New York.
- 37) Fog, B. (1959), *Industrial Pricing Policies*, North Holland, Amsterdam.
- 38) Koutsoyiannis, A. (1979), *Modern Microeconomics*, Macmillan, New York

**ECONOMICS OF RURAL DEVELOPMENT
EO-13 (ELECTIVE PAPER)**

PREAMBLE:

India is dominated by the rural economy. Hence it is rural development is the development of the Indian economy. This demands to study the problems and issues relating to rural development. In this backdrop the present course is introduced. This paper enable to understand the economic problems of rural societies, along with equips the students with the different agencies involved in rural development and their role in development of rural area. It also enables to study programs and policies of rural development.

Unit 1: Introduction to Rural Development and Development Theories (15 Periods)

- 1.1. Rural Development: meaning, nature, scope and importance
- 1.2. Measures of Development: level of Rural Development, Distribution of Income and Rural Poverty.
- 1.3 Development Theories: The Modernization Theory - Theory of the 'Big Push' - Leibenstein's critical minimum Effort Thesis
- 1.4. Lewis Model of Economic Development - Gunnar Myrdal Thesis.

Unit 2: Rural Economy (15 Periods)

- 2.1. Rural Economy: Characteristics and problems - i. Agriculture- Productivity, prices, marketing, and irrigation, ii. Rural industries -Small scale and cottage industries.
- 2.2. Rural credit - Institutional and non-institutional; Reorganization of rural credit – Co-operatives- Commercial banks- Regional rural banks- Role of NABARD.
- 2.3. Basic Needs of Rural Economy; Housing, Health, Education, Training, Drinking Water Supply, Electricity, Sanitation, Rural Roads, Transport and Communication
- 2.4. Utilization of Human & Natural Resources.

Unit 3: Rural Development Agencies (15 Periods)

- 3.1. Rural Administration-Structure and Functions
- 3.2. Panchayati Raj Institutions (PRI's), Panchayati Raj Before and after 73rd Constitutional Amendment Act
- 3.3. NGOs: Role, Functions and Problems.
- 3.4. Ministry of Rural Development (India and States): Structure and Functions.

Unit 4: Rural Development Programs (15 Periods)

- 4.1. Programs and policies regarding rural unemployment and poverty: NREGP; NRHM, ICDS, MDM, SSA, SGSRY.
- 4.2. Rural water supply, Sanitation, housing programme.
- 4.3. Food Security- Public Distribution System, Buffer Stock and Food Security Act.
- 4.4. Microfinance, Self-Help Group (SHG) and Women Empowerment.

READING LIST:

1. B.S. Khanna: Rural Development in India, New Delhi: Deep & Deep Publications, 1982.
2. Bhalla. G. S. (1994) "Economic Liberalization and Indian Agriculture" (Ed) Institute for Studies in Industrial Development, New Delhi.
3. Bhatnagar: Rural Development in India, New Delhi: Light and Life Publishers, 1978.
4. Brahrnananda, P. R., Narayan, B. K. and Kalappa, A. (Eds.) 1987, Dimensions of Rural Development in India, Bombay: Himalaya Publishing House.
5. Hoshiar Singh: Administration of Rural Development in India, New Delhi, Sterling Publishers, 1995.
6. Hoshiar Singh: Rural Development in India, Jaipur: Printwell Publishers, 1985.

7. John Mellor and Gunvant Desai (1986) "Agricultural Change and Rural Poverty", Oxford University Press, Bombay.
8. Journal of Rural Development, National Institute of Rural Development, Hyderabad.
9. Katar Singh (1999), "Rural Development - principles policies and Management" Sage Publications, New Delhi.
10. Kurukshetra: A journal of Rural Development, Government of India.
11. Mahajan, V. S, (Ed.) 1993, Employment through Rural Development - Towards Sustainability, New Delhi: Deep & Deep Publications.
12. Ministry of Rural area and Employment "Programs for Change" GoI, New Delhi.
13. Mohinder Singh: Rural Development in India – Current Perspectives, New Delhi: Intellectual Publishing House, 1992.
14. NABARD (1999) "Review of working of Regional Rural Banks", Mumbai.
15. Plan Documents, GoI, New Delhi.
16. S.N. Mishra: New Horizons in Rural Development Administration, New Delhi: Mittal Publications, 1989.
17. S.R. Maheswari: Rural Development in India, A Public Policy Approach, New Delhi: Sage Publications, 1985.
18. Satyasundaram (1999) "Rural Development" Himalaya Publishing House, New Delhi.
19. Singh, K. 1986, Rural Development: Principles, Policies and Management, New Delhi: Sage Publications
20. Vasant Desai: A Study of Rural Economics, H.P.H., Bombay

MANAGERIAL AND BUSINESS ECONOMICS
EO – 14 (Elective / Optional paper)

PREAMBLE:

Managerial economics bridges economic theory and economics in practice. It serves several purposes in business decision making. It provides the framework for applying various concepts such as Demand, supply, Market segmentation, Competition and so on. It guides for how much should be produced? What price should be charged? How to become successful business men? Business economics helps to take business decisions in the framework of risk and uncertainty. Under this backdrop the syllabus includes Demand Forecasting, Market structure, Pricing Strategies etc. which are pragmatic in nature.

UNIT I: INTRODUCTION AND DEMAND ANALYSIS **(15 Periods)**

1.1: Meaning and nature of managerial economics, Chief characteristics of managerial economics, Significance of managerial economics, Role of a managerial economist.

1.2: Elasticity of demand- Point and Arc elasticity of demand, Price elasticity of demand and its types, Income and Cross elasticity of demand, Advertising elasticity of demand. Practical Utility of Price elasticity of demand.

1.3: Demand forecasting- Steps involved in forecasting, Methods of demand forecasting, Trend Analysis,

1.4: Linear regression equations and econometric methods.

UNIT II: PRODUCTION FUNCTION AND COST OF PRODUCTION: **(15 Periods)**

2.1: Short run analysis of production function - Law of variable proportion, Long run Production Function- Returns to scale, Cobb-Douglas production function.

2.2: Isoquants, Isocost lines and choice of optimal input combination

2.3: Short run and Long run cost curves, derivation of cost equations for total cost, Average and marginal cost,

2.4: Traditional and Modern concept of costs.

UNIT III: MARKET STRUCTURE: **(15 Periods)**

3.1: Features and Price determination in Perfect Competition.

3.2: Monopoly- Characteristics, Equilibrium in short run and long run, Price discrimination.

3.3: Monopolistic Market - Features, Price and output determination in short and long run.

3.4: Oligopolistic market - Features, Price and output determination in short and long run.

UNIT IV: THEORY OF PRICING, RISK, UNCERTAINTY AND DECISION MAKING

(15 Periods)

4.1: Price practices and strategies: Cost oriented pricing, cost-plus pricing, marginal cost pricing, rate of return and competition oriented pricing, going rate pricing, profit policy, planning and forecasting,

4.2: Break-even analysis and planning for profit.

4.3: Business decision making: Risk and uncertainty, Pay of matrix, Risk Premium and Risk Adjustment, Risk and Investment proposal,

4.4: Decision under uncertainty: Maxmin and minmax strategies, Sensitivity analysis.

READING LIST:

- 1) Dean. J, Managerial Economics, Prentice Hall, Englewood cliffs, New Jersey, 1951
- 2) Baumol, W. J., What can Economic Theory contribute to Managerial Economics, American Economic Review, Papers and Proceedings, May, 1961
- 3) Hanue D. C., Managerial Economics – Analysis for Business, Delusions, longmanis, Landon, 1969
- 4) Craig Petersen H &Cris Lewis W: Managerial Economics, Prentice Hall of India Pvt. Ltd, New Delhi, 2001

- 5) Mehta P.L.: Managerial Economics: Analysis, Problems and cares, S. Chand & Sons New Delhi, 2001
- 6) Sumitra Pal: Managerial Economics, Cares and Concepts, Macmillan India Ltd. New Delhi, 2004
- 7) Dewedi D. N.: Managerial Economics, Vikas Publishing House, New Delhi, 2002
- 8) Gupta G. S.: Managerial Economics: Concepts and Cases, Tata McGraw Hill, New Delhi, 1996
- 9) Trivedi M. L. : Managerial Economics: Theory and Application, Tata McGraw Hill, New Delhi, 2002
- 10) Varshney&Maheshwari, Managerial Economics, S. Chand, New Delhi, 2002
- 11) Salvatore Domnik, Managerial Economics in a Global Economy, Thompson Asia Pvt Ltd, Singapore, 2002
- 12) Paul G. Keat& PhilipK.Y.Young, Managerial Economics, Economics Tool for Today's Decision Makers, Person Publication, New Delhi, 2004
- 13) Manseield Edwin, Managerial Economics: Theory Application and Cases, W W Norton and co Inc, USA, 1996
- 14) Mithani D. M.: Managerial Economics: Theory and Application, Himalaya Publishing House, New Delhi, 2003
- 15) Heny& Haynes: Managerial Economics: Analysis & cases, Business publications Inc, Texas, 1878.

Financial Markets and Institutions
EO- 15 (Elective/Optional Paper)

PREAMBLE

Financial institutions play a significant role in the growth and development process of the economy. In the globalization era, the international financial system provides a platform for making uniformity and shaping economies consistently. This elective course examines the Indian financial system with more focus on financial markets and financial institutions. The aim of this course is to make students attentive about domestic and international financial components and their relevance. It is also intended to provide practical experience and skill development modules in the financial sector.

Outcomes:

1. Understand financial system and its relationship with economic development
2. Explore financial market with their legal and regulatory framework
3. Identify financial institutions and their risk management
4. Analyze international financial environment

UNIT I: Financial System:

(15 Periods)

- 1.1: Nature and Structure of Financial System, Functions of Financial System,
- 1.2: Development Financial Institutions: IFCI, IDBI, ICICI, IIBI, SIDBI and EXIM Bank
- 1.3: Investment Institutions: UTI, LIC, GIC,
- 1.4: Refinance Institutions: NABARD, NHB

UNIT II: Financial Markets:

(15 Periods)

- 2.1: Money Market: Structure, Role and Submarkets
- 2.2: Financial Instruments in Money Market; Role of RBI and DHFI, Reforms in Money Market;
- 2.3: Capital Market: Structure, Role and Financial Instruments of Capital Market; Reforms in Capital Market.
- 2.4: Stock Exchange: BSE, NSE; SEBI and Multi Commodity Exchange (MCX).

UNIT III: Risk Management in Financial Markets

(15 Periods)

- 3.1: Types of Risks: Credit Risk, Liquidity risk, Market Risk, Interest rate Risk and Foreign Exchange Risk
- 3.2: Risk Assessment tools and techniques
- 3.3: Risk Management in Banks: Asset Liability management (ALM), Basel-II Approach for Operational Risk Management
- 3.4: Risk Hedging Instruments: Derivatives-Forwards, Futures, Options and Swaps

UNIT IV: International Financial Markets and Institutions:

(15 Periods)

- 4.1: International Financial system: Importance, financial integration, Reforms in International Monetary System and its impact on developing countries.
- 4.2: Foreign Exchange - Exchange Rates, Nature, Functions and Regulation of foreign Exchange Market
- 4.3: Depository Institutions: Activities and Characteristics
- 4.4: International Financial Institutions- IMF, IBRD, International Finance Corporation (IFC) & Bank for International Settlement – BIS

READING LIST

- 1) Bhole, L. M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- 2) Bhole, L. M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- 3) Edminster, R. O. (1986), Financial Institutions, Markets and Management, McGraw Hill, New York.
- 4) Goldsmith, R. W. (1969), Financial Structure and Development, Yale, London.
- 5) Hanson, J. A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty-first Century, Oxford University Press, New Delhi.
- 6) Harker, P. T. and S. A. Zenios (2000) (Ed.), Performance of Financial Institutions, Cambridge University Press, Cambridge.
- 7) Johnson, H. J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
- 8) Khan, M. Y. (1996), Indian Financial System, Tata McGraw Hill, New Delhi.
- 9) Machiraju, M. R. (1999), Indian Financial Systems, Vikas Publishing House, New Delhi.
- 10) Ohlson, J. A. (1987), The Theory of Financial Markets and Institution, North Holland, Amsterdam.
- 11) Prasad, K. N. (2001), Development of India's Financial System, Sarao & Sons, New Delhi.
- 12) Robinson, R. I. and D. Wrightman (1981), Financial Markets, McGraw Hill, London.
- 13) Smith, P. F. (1978), Money and financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cliffs, New Jersey.
- 14) Bishop, P. and D. Dixon (1992), Foreign Exchange Handbook, McGraw Hill, New York.
- 15) Chandra, P. (1997), Financial Markets (4th Edition), Tata McGraw Hill, New Delhi.
- 16) Machiraju, H. R. (1997), International financial Markets in India, Wheeler Publishing, Allahabad.
- 17) NSE (2012) Financial Markets: A Beginners' Module, Workbook from NSE
- 18) Smith, P. F. (1978), Money and Financial Intermediation: The theory and Structure of Financial System, Prentice Hall, Englewood-Cliffs, New Jersey.
- 19) Chadler, L. V., and S. M. Goldfield (1977), The Economics of Money and Banking, Harper & Row, New York.
- 20) Gupta, S. B. (1983), Monetary Economics, S. Chand & Company, New Delhi.
- 21) Rangaranjan, C. (1999), Indian Economics: Essays on Money and Finance, UBS Publication, New Delhi.
- 22) Verma, J. S. (1989), A Manual of Merchant Banking, Bharat Law House, New Delhi.
- 23) Fisher, G. E. and R. J. Jordon (1992), Security Analysis and Portfolio Management, Eastern Economy Edition, New Delhi.
- 24) Goss, B. a. and B. S. Yamey (1978), The Economics of Futures Trading, Macmillan, London. 28) R. B. I. (1985), Report of The Committee to Review the Working of the Monetary System (Chakravarty Committee), Bombay.
- 25) Weller, P. (1992), The Theory of Future Markets, Blackwell, Oxford.
- 26) Gupta, L. C. (Ed.) (1999), India's Financial Markets and Institutions, Society for Capital Research and Development, Delhi.
- 27) Brahmananda, P. R. (1982), IMF Loan and India's Economic Future, Himalaya Publishing House, Bombay.
- 28) Chamberlain, G. (1981), Trading in Options, Woodhed-Faulker, Cambridge.
- 29) Crocker, A. (1982), International Money: Issues and Analysis, The English Language Book Society, Nelson, London.
- 30) Mackinnon, R. J. (1979), Money in International Exchange, Oxford University Press, Oxford.
- 31) Niehans, J. (1984), International Monetary Economics, John Hopkins University Press, New York.
- 32) R. B. I. (1995), Report of the Working Group on Foreign Exchange Market in India (Sodhani Group), Mumbai.
- 33) Redseth, A. (2000), Open Economy Macroeconomics, Cambridge University Press, Cambridge.

REGIONAL ECONOMICS **(EO – 16 Elective/Optional Paper)**

PREAMBLE

Decentralized planning process involves region specific plan formulation. Concept of region (time and space), location analysis, regional economic policy formulation, imbalances in regional development and region specific problem analysis all assume significance. To enable the student to understand the above aspects, the present paper provides the students the opportunity to learn and understand the basics of regional economics in an inter-disciplinary framework.

UNIT I: Introduction to Regional Economics

(15 Periods)

- 1.1: Definition, Nature and scope.
- 1.2: The concept of a Region –
- 1.3: Time and space as additional variables in economic analysis,
- 1.4: Regional account

UNIT II: Spatial Micro Economics:

(15 Periods)

- 2.1: Spatial micro-economics and location theory, price equilibrium in geographically separated and inter-linked markets,
- 2.2: Spatial monopolistic competition, shape and size of market areas in space economy,
- 2.3: Spatial price discrimination, profit maximizing location of the firm – alternative objectives of the firm with regard to location choice –location inter-dependence
- 2.4: Hotelling formulation and its critique, economies and diseconomies of agglomeration.

UNIT III: Transport Costs and the General Theory of Location:

(15 Periods)

- 3.1: Transport costs in Locational decisions –
- 3.2: Weber and Isard's theory.
- 3.3: General equilibrium approach of Losch and Lefebver to location,
- 3.4: Obstacles to a General Theory.

UNIT IV: Regional economic Policy, Formulation and Regional Development

(15 Periods)

- 4.1: Inter-regional objective function-consistence of national and regional objectives–Approach towards depressed and backward regions Canalization of inter regional migration regional income stabilization –
- 4.2: Leveling of regional disparities, role of regional financial allocation by the Finance Commission. Development from above versus grassroots level approach.
- 4.3: Western Maharashtra as a Region: its special structure, industrial, agricultural, demographic aspects, intra-regional variations in Maharashtra, intra-regional variations – in district and taluka,
- 4.4: Remedial measures, policies and programme for regional development implemented in Maharashtra.

READING LIST

1. Isard, W. (Ed.) (1960), Methods of Regional Analysis, John Wiley, New York.
2. Friedrich, S. (1929), Weher's Theory of Location of Industry, Chicago University Press, Chicago.
3. Richardson: Regional Economics, Redwood Press Limited, Wiltshire.
4. Godbole, M. D. (1978), Industrial Dispersal Policies, Allied Publication, Bombay.
5. Isard W. (1956), Location and space Economy, John Wiley, New York.
6. Menon, K. S. V. (1979), Development of Backward Areas through Incentives, Asia Publishing House, Bombay.
7. Smith, D. M. (1971), Industrial Location: An Economic and Geographic Analysis, John Wiley, New York.

8. Barthwal, R. (1984), *Industrial Economics*, Wiley Eastern Limited, Delhi.
9. Mayer, J. R. (1953), *Regional Economics: A Survey*, American Economic Review, Vols. I & II.
10. NCAEF (1963), *Techno Economic Survey of Maharashtra*.
11. BrahmeSulabha, Kumud Pore and S. H. Pore (1975), *Regional Planning: A Case Study of Maharashtra Region*, Arth, Vidnyan Vol. XVII.
12. GOI (1969), *Report of the Working Committee for Identification of Backward Areas*, Planning Commission, New Delhi.
13. Geoffrey, J. D. (1972), *Regional Industrial Analysis and Development* Methuen, London.
14. Govt. of Maharashtra (1984), *Report of the Fact-Finding Committee on Regional Imbalances in Maharashtra*.
15. Govt of Maharashtra: District level Reports

CONTRIBUTION OF NOBEL LAUREATES TO ECONOMICS
EO 17– (Elective / Optional Paper)

PREAMBLE

The paper "Contribution of Nobel Laureates to Economics" aims to acquaint the students of economics with the ideas and works of economists and thinkers who received Nobel Memorial Prize in Economics. The development of ideas by the Nobel Laureates in Economics is breath taking and covers almost all areas of economic analysis, a relatively new branch.

UNIT I: Theory of Value, General Equilibrium, Game Theory, Welfare **(15 Periods)**

- 1.1: Kenneth J Arrow, Gerard G. Debreu.
- 1.2: Maurice Allais, Ronald H. Coase, John F. Nash,
- 1.3: John. C. Harsanyi, Reinhard Selten,,
- 1.4: Amartya K. Sen, Angus Deaton.

UNIT II: Static and Dynamic Models, Econometrics and Markets **(15 Periods)**

- 2.1: Ragner Frisch, Jan Tinbergen, Paul A. Samuelson
- 2.2: Lawrence R. Klein, Trygve Haavelmo
- 2.3: George A. Akerlof, A. Michael Spence
- 2.4: Joseph E. Stiglitz

UNIT III: Macro, Monetary and Financial Economics **(15 Periods)**

- 3.1: Milton Friedman, James Tobin, Franco Modigliani
- 3.2: Harry M. Markowitz, William F. Sharpe, Merton H. Miller
- 3.3: Myron S. Scholes, Robert C. Merton,
- 3.4: Paul Krugman, Robert A. Mundell

UNIT IV: Economic Development and Economic Growth **(15 Periods)**

- 4.1: Simon Kuznets, Wassily Leontief
- 4.2: Arthur W. Lewis,
- 4.3: Theodore W. Schultz
- 4.4: Robert M. Solow

READING LIST

- 1) Allais, M. (1943), In Quest of Economic Discipline.
- 2) Allais, M. (1945), Pure Economics and Social Efficiency.
- 3) Allais, M. (1978), Contributions to Economic Science.
- 4) Arrow, K. J. (1983), Collected Papers of Kenneth J. Arrow, Vols. I & II, MIT Press, Cambridge.
- 5) Arrow, K. J. (1951), Social Choice and Individual Values, Wiley, New York.
- 6) Arrow, K. J. (1971), Essays in the Theory of Risk Bearing, Markham, Chicago.
- 7) Brunner, K. (1992), Ronald Coase – Old Fashioned Scholar, Scandinavian Journal of Economics, Vol. 94.
- 8) Coase, R. (1937), The Nature of the Firm, *Economica*, Vol. IV.
- 9) Coase, R. (1946), The Marginalist Controversy, *Economics*, Vol. XIII.
- 10) Coase, R. (1959), The Problem of Social Cost, *Journal of Law and Economics*, Vol. 2.
- 11) Coase, R. (1968), Consumer's Surplus in *International Encyclopedia of the Social Sciences*.
- 12) Coase, R. (1988), *The Firm, the Market and the Law*, Chicago University Press, Chicago.
- 13) Debreau, G. G. (1959) *Theory of Value: An Axiomatic Analysis of Economic Equilibrium*, John Wiley, New York.

- 14) Debreau, G. G., Existence of Competitive Equilibrium in Handbook of Mathematical Economics, Vol. II, Edited by K. J. Arrow and M. D. Intriligator, North Holland, Amsterdam.
- 15) Debreu, G. G. (1981), Mathematical Economics : Twenty Papers of Gerard G. Debreu, ed. W. Hildembrand, MIT Press, Cambridge, Mass.
- 16) Debreu, G. G. (1983), Economic Theory in Mathematical Mode, Nobel Lecture.
- 17) Harsanyi, C. J. (1982), Papers in Game Theory, Dordrecht.
- 18) Harsanyi, C. J. (1977), Rational Behaviour and Bargaining Equilibrium in Games and Social Situations, MIT Press, Cambridge, Mass.
- 19) Harsanyi, C. J. (1995), Games with Incomplete Information, The American Economic Review, Vol. 85.
- 20) Harsanyi, C. J. (1977), Rational Behaviour and Bargaining Equilibrium in Games and social Situations, MIT Press, Cambridge, Mass.
- 21) Harsanyi, C. J. (1995), Games with Incomplete Information, The American Economic Review, Vol. 85.
- 22) Hicks, J. R., collected Essays on Economic Theory, Vols. I, II and III, Basil Blackwell, Oxford, 1981, 82, 83.
- 23) Hicks, J. R. (1946), Value and Capital, Clarendon Press, Oxford.
- 24) Hicks, J. R. (1965), Capital and Growth, Clarendon Press, Oxford.
- 25) Hicks, J. R. (1973), Capital and Time : A Neo Austrian Theory, Clarendon Press, Oxford.
- 26) Nash, J. F. (1950), Equilibrium Points in n-person Games, Proceedings of the National Academy of Science of the U. S. A.
- 27) Nash, J. F. (1951), Non-Cooperative Games, Annals of Mathematics.
- 28) Nash, J. F. (1953), Two-Person Cooperative Games, Econometrica, Vol. XXI.
- 29) Rubinstein, A. (1995), John Nash: the Master of Economic Modeling, Scandinavian Journal of Economics, Vol. 97.
- 30) Samuelson, P. A., The Collected Scientific Papers of P. A. Samuelson, Vols. I to V, 1966, 1972, 1977 and 1986, MIT Press, Cambridge, Mass.
- 31) Samuelson, P. A. (1947), Foundations of Economic Analysis, Harvard University Press, Cambridge, Mass.
- 32) Selten, R. A. and C. J. Harsanyi (1988), Models of Strategic Rationality : Theory and decision Library, Series C. Game Theory, Mathematical Programming and Operations Research, Wiley, New York.
- 33) Yoram, B. and L. A. Kochin (1992), Ronald Coase on the Nature of Social Cost: A Key to the Problem of the Firm, Scandinavian Journal of Economics, Vol. 94.
- 34) Ball, R. J. (1981), On Lawrence R. Klein's Contributions to Economics, Scandinavian Journal of Economics, Vol. 83.
- 35) Frisch, R. (1933), Propagation Problems and Impulse Problems in Dynamic Economics, Longman, London.
- 36) Frisch, R. (1960), Planning in India: Selected Exploration in Methodology, Indian Statistical Institute, Calcutta.
- 37) Frisch, R. (1970), From Utopian Theory to Practical Application: The Case of Econometrics, Nobel Memorial Lecture.
- 38) Haavelmo, T. (1943), Statistical Testing of Business Cycle Theories, Review of Economics and Statistics, Vol. 30.
- 39) Haavelmo, T. (1944), the Probability Approach in Econometrics, Econometrica: Supplement, Vol. XII.
- 40) Haavelmo, T. (1960), A Study of the Theory of Investment, Chicago University Press, Chicago.
- 41) Haavelmo, T. (1989), Econometrics and the Welfare State, Nobel Lecture.
- 42) Klein, L. R. (1947), The Keynesian Revolution, Macmillan, New York.
- 43) Klein, L. R. (1950), Economic Fluctuations in the United States, 1921-41, Macmillan, New York.

- 44) Klein, L. R. (1965), With J. Duesenberry, G. Fromm and E. Kuh, *Econometric Model of the United States*, The Brookings Quarterly, Rand McNally, Chicago.
- 45) Klein, L. R. (1969), *An Essay on the Theory of Economic Predictions*, Yrjo Johnson Lectures, Helsinki.
- 46) Klein, L. R. (1979), With A. Tishler, *Long-run Projections of the LINK World Trade Model*, North Holland, Amsterdam.
- 47) Klein, L. R. (1980), *Use of Econometric Models in Policy Process*, Economic Modeling, Ed., P. Ormerod, Oxford, London.
- 48) Nerlove, M. (1990), *Trygve Haavelmo: A Critical Appreciation*, Scandinavian Journal of Economics, Vol. 92.
- 49) Tinbergen, J. (1939), *Business Cycles in the United States of America, 1919-32*, ILO, Geneva.
- 50) Tinbergen, J. (1950), *The Dynamics of Business Cycles – A Study in Economic Fluctuations*, Chicago University Press, Chicago.
- 51) Tinbergen, J. (1959), *Selected Papers*, North Holland, Amsterdam.
- 52) Tinbergen, J. (1952), *On the Theory of Economic Policy*, North Holland, Amsterdam.
- 53) Friedman, M. (1957), *A Theory of the Consumption Function*, Princeton University Press, Princeton, New Jersey.
- 54) Friedman, M. (1959), *The Demand for Money: Some Theoretical and Empirical Results*, Journal of Political Economy, Vol. 67.
- 55) Friedman, M. with A. J. Schwartz (1963), *A Monetary History of the United States*, University Press, Princeton, New Jersey.
- 56) Friedman, (1968), *Quantity theory in the International Encyclopedia of the Social Sciences*.
- 57) Friedman, M. (1969), *The Optimum Quantity of Money and other Essays*, Aldine Publishers, Chicago.
- 58) Friedman, M. (1974), *Money in Encyclopedia Britannica*.
- 59) Friedman, M. (1977), *Inflation and Unemployment: Nobel Lecture*, Journal of Political Economy, Vol. 85.
- 60) Kouri, P. J. K. (1986), *Scandinavian Journal of Economics*, Vol. 88.
- 61) Litzenberger, B. H. (1991), *William F. Sharpe's Contribution to Financial Economics*, Scandinavian Journal of Economics, Vol. 93.
- 62) Markowitz, H. M. (1952), *The Portfolio Selection*, The Journal of Finance, Vol. 7.
- 63) Markowitz, H. M. (1991), *Portfolio Selection – Efficient Diversification of Investments* (2nd Edition), Basil Blackwell, Cambridge, Mass.
- 64) Markowitz, H. M. (1976), *Investment for the Long Run: New Evidence for an old rule*, Journal of Finance, Vol. 31.
- 65) Markowitz, H. M. (1990), *Foundations of Portfolio Theory: Nobel Lecture*.
- 66) Merton, R. C. (1990), *Continuous – Time Finance*, Oxford University Press, New York.
- 67) Miller, M. H. (1972), *Rates of Return in Relation to Risk: A Reexamination of Some Recent Findings with Myron Scholes in Studies in the Theory of Capital Markets* (Ed. M. Jensen), Wiley, New York.
- 68) Miller, M. H. (1988), *The Modigliani – Miller Propositions after Thirty Years*, Journal of Economic Perspectives, Vol. 6.
- 69) Miller, M. H. (1991), *Financial Innovations and Market Volatility*, Oxford, New York.
- 70) Miller, M. H. (1990), *Leverage: Nobel Lecture*.
- 71) Modigliani, F. (1980), *The Collected Papers of Franco Modigliani*, Vol. 1, 2 and 3 (Edited by A. Abel), MIT Press, Cambridge, Mass.
- 72) Modigliani, F. (1949), *Fluctuations in the Saving – Income Ratio : A Problem in Economic Forecasting*, Studies in Income and Wealth, NBER, New York.
- 73) Modigliani, F. (1985), *Life Cycle, Individual Thrift and the Wealth of Nations : Nobel Lecture*.
- 74) Mythman, J. (1982), *James Tobin's Contribution to Economics*, Scandinavian Journal of Economics, Vol. 84.

- 75) Scholes, M. with Fischer Black (1972), The Valuation of Option Contracts and a Test of Market Efficiency, *The Journal of Finance*, Vol. 27.
- 76) Scholes, M. with Fischer Black (1973), The Pricing of Options and Corporate Liabilities, *Journal of Political Economy*, Vol. 81.
- 77) Scholes, M. with Fischer Black and M. Jensen (1972), The Capital Asset Pricing Model: Some Empirical Tests in M. Jensen (Ed.) *Studies in the Theory of Capital Markets*.
- 78) Sharpe, W. F. (1963), A Simplified Model for Portfolio Analysis, *Management Science*, Vol. 9.
- 79) Sharpe, W. F. (1964), Capital Asset Prices – A Theory of Market Equilibrium under Conditions of Risk, *The Journal of Finance*, Vol. 19.
- 80) Sharpe, W. F. (1965), Risk aversion in the Stock Market: Some Empirical Evidence, *The Journal of Finance*, Vol. 20.
- 81) Sharpe, W. F. (1970), *Portfolio Theory and Capital Markets*, McGraw Hill, New York.
- 82) Sharpe, W. F. (1990), Capital Asset Prices with a without Negative Holdings: Nobel Lecture.
- 83) Tobin, J. *Essays in Economics*, Vols. I to III, 1971, 75, 82, North Holland, Amsterdam.
- 84) Tobin, J. (1980), *Asset Accumulation and Economic Activity*, Oxford University Press, Oxford.
- 85) Tobin, J. and D. Hester (Eds.) (1967), *Financial Markets and Economic Activity*, John Wiley, New York.
- 86) Tobin, J. (1967), *Studies of Portfolio Behaviour*, John Wiley, New York.
- 87) Tobin, J. (1981), *Money and Finance in the Macroeconomic Process: Nobel Lecture*.
- 88) Thygesen, N. (1977), The Scientific Contributions of Milton Friedman, *Scandinavian Journal of Economics*, Vol. 79.
- 89) Bowman, M. J. (1980), On Theodore w. Schultz's Contributions to Economics, *Scandinavian Journal of Economics*, Vol. 82.
- 90) Findlay, R. (1980), On W. Arthur Lewis's Contribution to Economics, *Scandinavian Journal of Economics*, Vol. 82.
- 91) Kuznets, S. (1937), *National Income 1919-35*, W. W. Norton, New York 82) Kuznets, S. (1933), *National Income in Encyclopedia of the Social Sciences*.
- 92) Kuznets, S. (1953), *Economic Change: Selected Essays in Business Cycles, National Income and Economic Growth*, W. W. Norton, New York.
- 93) Kuznets, S. (1959), *Six Lectures on Economic Growth*, NBER, New York.
- 94) Kuznets, S. (1965), *Economic Growth and Structure: Selected Eassays*, W. W. Norton, New York.
- 95) Kuznets, S., *Modern Economic Growth: Rate, Structure and Spread*, Yale University Press, New Haven.
- 96) Kuznets, S. (1979), *Growth, Population, and Income Distribution: Selected Essays*, W. W. Norton, New York.
- 97) Kuznets, S., (1971), *Modern Economic Growth: Findings and Reflections*, Nobel Lecture.
- 98) Lewis, W. A. (1954), *Economic Development with Unlimited Supplies of Labour*, Manchester School, Vol. 22.
- 99) Lewis, W. A. (1954), *Unlimited Labour: Further Notes*, Manchester School, Vol. 22.
- 100) Lewis, W. A. (1949), *Overhead Costs – Some Eassays in Economic Analysis*, George Allen and Unwin, London.
- 101) Lewis, W. A. (1955), *The Theory of Economic Growth*, Macmillan, London.
- 102) Lewis, W. A. (1973), *Reflection on Unlimited Labour in International Economics and Development – Essays in Honour of Raul Prebisch*, (Ed.) V. Di Marco, W. W. Norton, New York.
- 103) Lewis, W. A. (1979), *The Slowing Down of the Engine of Growth: Nobel Lecture*.
- 104) Schultz, T. W. (1961), *Investment in Human Capital*, *American Economic Review*, Vol. 51.
- 105) Schultz, T. W. (1963), *The Economic Value of Education*, Columbia University Press, New York.
- 106) Schultz, T. W. (1968), *Human Capital in International Encyclopedia of the Social Sciences*.
- 107) Schultz, T. W. (1972), *Investment in Education: The Equity – Efficiency Quandary*, *Journal of Political Economy: Supplement*, Vol. 80
- 108) Schultz, T. W. (1979), *The Economics of Being Poor: Noble Lecture*.

- 109) Solow, R. M. (1955-56), The Production of Function and the Theory of Capital, Review of Economic Studies, Vol. 23.
- 110) Solow, R. M. (195-56), A contribution to the Theory fo Economic Growth, Quarterly Journal of Economics, Vol. 70.
- 111) Solow, R. M. (1957), Technical Change and the Aggregate Production Function, Review of Economics and Statistics, Vol. 39.
- 112) Solow, R. M. (1963), Capital Theory and the Rate of Return, North Holland, Amsterdam.
- 113) Solow, R. M. (1970), Growth Theory: An Exposition, Oxford University Press, Oxford.
- 114) Solow, R. M. (1987), Growth Theory and After: Nobel Lecture.
- 115) Dorfman, R. (1973), Wassily Leontief's contribution to Economics, Swedish Journal of Economics, Vol. 75.
- 116) Hayek, F. (1933), Monetary Theory and the Trade Cycle, Duckworth, London.
- 117) Hayek, F. (1941), The Pure Theory of Capital, Duckworth, London.
- 118) Hayek, F. (1944), The Road to Serfdom, University of Chicago Press, Chicago.
- 119) Hayek, F. (1967), Studies in Philosophy, Politics and Economics, University of Chicago Press, Chicago.
- 120) Hayek, F. (1944), The Collected works of F. A. Hayek, George Allen and Unwin, London.
- 121) Ungenfelt, G. K. (1976), Koopmans and the Recent Development of Growth Theory, Scandinavian Journal of Economics, Vol. 78.
- 122) Kantorovich, L., Mathematical Methods of Production Planning and Organisation, (ed.) by A. Nove, Oliver and Boyd, Edinburgh and London.
- 123) Kantorovich, L. (1965), Economic Calculations of the Best Use of Resources, Wiley, New York.
- 124) Kantorovich, L. (1976), Economic Problems of Scientific and Technical Progress, Scandinavian Journal of Economics, Vol. 78.
- 125) Koopmans, T. C. (Ed.) (1951), Activity analysis of Production and Allocation, Wiley, New York.
- 126) Koopmans, T. C. (1957), Three Eassays on the State of Economic Science, Wiley, New York.
- 127) Koopmans, T. C., Scientific Papers of T. c. Koopmans, Vol. I & II, 1970, 1985, MIT Press, Cambridge.
- 128) Koopmans, T. C. 91975), Concept of Optimality and their Uses: Nobel Lecture.
- 129) Leontief, W. W. (19512), The structure of the American Economy: 1919-39,Second Edition, Oxford University Press, New York.
- 130) Leontief, W. W. (Ed. (1953), Studies in the Structure of American Economy, Oxford University Press, New York.
- 131) Leontief, W.W. (166), Input-Output Economics, Oxford, New York.
- 132) Leontief, W. W. (1966), Essays in Economics: Theories and Theorizing, Vols. I & II, 1966, 1977, Oxford, New York and London.
- 133) Sen, Amartya (1982). Poverty and Famines: An Essay on Entitlement and Deprivation. Oxford New York: Clarendon Press Oxford University Press. ISBN 9780198284635.
- 134) Sen, Amartya; Williams, Bernard (1982). Utilitarianism and beyond. Cambridge: Cambridge University Press. ISBN 9780511611964.
- 135) Sen, Amartya (1983). Choice, Welfare, and Measurement. Oxford: Basil Blackwell. ISBN 9780631137962.
- 136) Sen, Amartya (1970). Collective Choice and Social Welfare (1st ed.). San Francisco, California: Holden-Day. ISBN 9780816277650.
- 137) George A. Akerlof and Robert J. Shiller. 2015. Phishing for Phools: The Economics of Manipulation and Deception, Princeton University Press. ISBN 978-0-691-16831-9.
- 138) Akerlof, George A., and Rachel E. Kranton. 2010. Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being, Princeton, New Jersey: Princeton University Press. ISBN 978-0-691-14648-5.

- 139) Akerlof, George A. and Robert J. Shiller. 2009. *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*. Princeton, New Jersey: Princeton University Press. ISBN 978-0-691-14233-3.
- 140) Akerlof, George A. "Thoughts on global warming." *chinadialogue* (2006). 14 July 2008.
- 141) Akerlof, George A. 2005. *Explorations in Pragmatic Economics*, Oxford University Press. ISBN 978-0-19-925390-6.
- 142) Akerlof, George A., and Janet Yellen. 1986. *Efficiency Wage Models of the Labor Market*. Orlando, Fla.: Academic Press.
- 143) Akerlof, George A. 1984. *An Economic Theorist's Book of Tales*, Cambridge University Press.
- 144) Akerlof, George A., Romer, Paul M., *Brookings Papers on Economic Activity*, "Looting: The Economic Underworld of Bankruptcy for Profit" Vol. 1993, No. 2 (1993), pp. 1–73 [24]
- 145) Mundell, R. A. (1971), *Monetary Theory*, W. W. Norton, New York.
- 146) Mundell, R. A. (1960), *The Public Debt, Corporate Income Taxes and the Rate of Interest*, *Journal of Political Economy*, Vol. 68.
- 147) Mundell, R.A. (1962), *The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability*, *IMF Staff Papers*, Vol.9.
- 148) Mundell, R. A. (1960), *The Monetary Dynamics of International Adjustments Under Fixed and floating Exchange Rates*, *Quarterly Journal of Economics*, Vol. 74.
- 149) Sen, A. K. (1999), *Microeconomics Theory and Application*, Oxford University Press, New Delhi.
- 150) Stiglitz, Joseph E.; Uzawa, Hirofumi (1969). *Readings in the modern theory of economic growth*. Cambridge, Massachusetts: The M.I.T. Press. ISBN 9780262190558.
- 151) Stiglitz, Joseph E.; Atkinson, Anthony B. (1980). *Lectures on public economics*. London New York: McGraw-Hill Book Co. ISBN 9780070841055.
- 152) Stiglitz, Joseph E.; Newbery, David M.G. (1981). *The theory of commodity price stabilization: a study in the economics of risk*. Oxford Oxford New York: Clarendon Press Oxford University Press. ISBN 9780198284178.
- 153) Stiglitz, Joseph E. (2002). *Globalization and its discontents*. New York: W.W. Norton & Company. ISBN 9780393051247.
- 154) Stiglitz, Joseph E.; Walsh, Carl E. (2006). *Economics* (4th ed.). New York: W.W. Norton & Company. ISBN 9780393926224.
- 155) Stiglitz, Joseph E.; Walsh, Carl E. (2006). *Principles of macroeconomics* (4th ed.). New York: W. W. Norton & Company. ISBN 9780393926248.
- 156) Deaton, Angus; Muellbauer, John (1980). *Economics and Consumer Behavior*. New York: Cambridge University Press. ISBN 0521228506.
- 157) Deaton, Angus (1992). *Understanding Consumption*. Clarendon Lectures in Economics. Oxford: Clarendon Press. ISBN 0198287593.
- 158) Deaton, Angus (1997). *The Analysis of Household Surveys: A Micro econometric Approach to Development Policy*. Baltimore: Johns Hopkins University Press for the World Bank. ISBN 0801852544.
- 159) Deaton, Angus (2001). *Health, inequality and economic development*. Cambridge.
- 160) Deaton, Angus; Kozel, Valerie, eds. (2005). *The Great Indian Poverty Debate*. New Delhi: Macmillan India Ltd. ISBN 9781403926449.
- 161) Deaton, Angus (2013). *The Great Escape: Health, Wealth, and the Origins of Inequality*. Princeton: Princeton University Press. ISBN 9780691153544.

M A Part I Semester II
ECONOMIC THOUGHTS OF DR. B. R. AMBEDKAR
EO- 18 (Elective / Optional Paper)
Introduced From June 2022

PREAMBLE:

The history of economic thoughts has a special importance in economics literature. It is the history economic thoughts as a branch of mainstream economics takes the due care of economic thoughts of Foreigners as well as Indians. This course deals with the economic thoughts and views of the very great, internationally reputed and well-known economist Dr. B.R. Ambedkar and their policy implications. He was a highly educated and trained economist and policy maker. His economic thoughts have a special importance in both the theoretical as well as applied perspectives not only for India but across the globe. His role as water, power and labour policy, planning and development in the pre independence India is widely appreciated and recognized. In this backdrop, the present course / paper elucidates the economic thoughts of Dr. B R Ambedkar in theoretical as well as applied perspectives and role in policy making of India.

COURSE OUTCOMES:

- 1) Students understand Public economics of Dr. B. R. Ambedkar and its policy implications.
- 2) Equip with the monetary system of India and developments there in.
- 3) Analyse the role of Dr B R Ambedkar in development, water, power and labour polices of India.
- 4) Elucidate the contribution of Dr B R Ambedkar in agriculture development, labour welfare and population control.

UNIT I: DR. B. R. AMBEDKAR ON PUBLIC ECONOMICS (15 Periods)

- 1.1:** Administration of East India Company Government -
- 1.2:** Heads / Sources Revenue of East India Company - Heads / Items of Expenditure of East India Company - Overall budgetary position
- 1.3:** Imperial Finance - Provincial Finance
- 1.4:** Thoughts on Principles of Taxation

UNIT II: DR. B. R. AMBEDKAR ON MONETARY ECONOMICS (15 Periods)

- 2.1: Thoughts on Currency System in India : From a Double Standard to a Silver Standard - Evils of Silver Standard
- 2.2: Gold Standard - Gold Standard to a Gold Exchange Standard – Stability of Gold Exchange Standard - Return to the Gold Standard
- 2.3: Debate between J M Keynes and B R Ambedkar
- 2.4: Thoughts on Central Bank

UNIT III: DR. B. R. AMBEDKAR ON DEVELOPMENT POLICY (15 Periods)

- 3.1: Development Policy
- 3.2: Water Policy
- 3.3: Power / Electricity Policy
- 3.4: Education Policy

UNIT IV: THOUGHTS ON AGRICULTURE, LABOUR AND SOCIAL ISSUES (15 Periods)

- 4.1: Agricultural Problems and Remedies
- 4.2: Abolishment of Khoti System and Mahar Vatans
- 4.3: Labour and Labour Welfare
- 4.4: Population control and Family Welfare - Economic Analysis of Caste System

REFEERNCES:

1. Ambedkar, B. R. (1989), Writings and Speeches, States and Minorities, Government of Maharashtra, Vol 1, 1989.
2. Speech by the Hon'ble Dr. Ambedkar B R delivered in the Constituent Assembly on Thursday the 6th November, 1948 in support of the motion for consideration of the Draft Constituent as settled by the Drafting Committee.
3. Jadhav, Narendra (1991).”Dr. Ambedkar’s Economic Thought and Philosophy, Bombay Popular Prakashan, 1999.
4. Mungekar, B. L. (1998), Government Expenditure on Social Services in the post Reforms Period: An Ambedkarian Perspective, Paper presented to the National Seminar, Jawaharlal Nehru University(JNU), New Delhi on dated, 27th-29th, August.
5. Thorat Sukhdeo (1998), Ambedkar’s Role in Economic Planning and Water Policy, Shipra Publications, New Delhi.
6. Reddy, Sateesh K. & P.Ramaiah (Ed), (1994), Dr.B.R.Ambedkar’s Economic Philosophy, Delta Publishing House, New Delhi.
7. Ranga M. L. (1994), B.R.Ambedkar, Work and Relevance, Nagpur.
8. Ambirajan, S.(1999), Dr.Ambedkar’s Contributions to Indian Economics, Economic and Political Weekly (EPW), November, 20.
9. Various Reports of the Government of India, Central Water Commission, GOI.

10. Kamble, G. S. Ph.D.Thesis (2009),“Contribution of Dr.B.R.Ambedkar to the Indian Economic Thoughts and Development:-A Analytical Study”, Submitted to the Department of Economics, Shivaji Univesity, Kolhapur
11. Government of Maharashtra (1979), Writings and Speeches of Dr. B.R. Ambedkar, Volume No.1 , Ministry of Education, Mumbai.
12. Government of Maharashtra (1979), Writings and Speeches of Dr. B.R. Ambedkar, Volume No.6 , Ministry of Education , Mumbai.
13. Khairmode, C. B. (1992) Dr. Ambedkar Chartra, Vol. 7, Maharashtra Sahitya Mandal Bombay
14. Islahi, , A.A. (1994), B. R. Ambedkar’s contribution to the history of provincial decentralization of imperial finance, Online at <https://mpira.ub.uni-muenchen.de/29723/> MPRA Paper No. 29723, posted 24. March 2011 07:12 UTC
15. Ahir, D.C. (1990) “The Legacy of Dr. Ambedkar” B. R. Publishing Corporation, New Delhi. Ambedkar, B. R. (1916) „Caste in India”– Their mechanism, genesis and Development, Writings and Speeches of Dr B R Ambedkar , Volume 1, Mumbai.
16. Ambedkar, B. R. (1989) Untouchables and Untouchability (Social-Political-Religious) writing and speeches: (Vol. 5), Ed. Dept. Govt. of Maharashtra, India.
17. Ambedkar B. R. (1936) Annihilation of Caste , Government of Maharashtra , Writings and Speeches of Dr B R Ambedkar , Volume 1, Mumbai.
18. Ambedkar, B. R. (1990) “Who were Shudras?” Writing and Speeches – (Vol. 7), Ed. Department, Govt. Maharashtra, India.
19. Kamble , P. S. and Kombde , S. T. (2017), Contemporary Relevance of Contribution of Dr B R Ambedkar to Development of India, Proceedings of Two Days National Seminar, Department of Economics , Shivaji University, Kolhapur , India

Economics of Infrastructure
EO –19 (Elective Paper)

PREAMBLE:

This course is designed to acquaint the students with the role of infrastructure in economic growth. The broad view is of physical as well as social infrastructure. The main aim of this paper is to aware the students about the economic and social aspects of the infrastructural development and problems of infrastructure. The second aim of this paper is to familiarize the students with key issues in financing, governance and inter-regional disparities

Unit 1: Introduction to Economics of Infrastructure (15 Periods)

- 1.1. Concept and Components of infrastructure- Role of Infrastructure in economic development
- 1.2. Concepts and features of Social and physical infrastructure, Indicators of Infrastructure Development: Investment – Spread – Availability – Utilization
- 1.3 Infrastructure as a public good- Special characteristics of public utilities
- 1.4. The peak-load, Off-Load Problem- Methods of Pricing in Public Utilities

Unit 2: Road and Railway Connectivity (15 Periods)

- 2.1. Road Connectivity: Classification- Importance and Problems.
- 2.2. Public Private Partnership (PPP) Model: Need, Importance and issues of PPP Model in Road development
- 2.3. Railway Connectivity: Types, Progress and Problems- Pricing and Price Discrimination in Railway
- 2.4. Issues in Railway Services: Security- Punctuality- Convenience- Availability Quality- Reliability- Complexity

Unit 3: Communication and Water Supply (15 Periods)

- 3.1. Telecommunication Sector - Oligopoly Market in Cellular Service Industry Pricing-Factor Affecting
- 3.2. Nature of Urban and Rural Water Supply - Pricing of Drinking Water Supply - investments - Public Sector and Community Collaboration
- 3.3. Power and Energy: Power Generation- Methods and Principles of Energy Pricing- Privatization of Electricity. 3.4. Renewable Energy Sources

Unit 4: Infrastructure Financing (15 Periods)

- 4.1. Role of government in building and maintaining infrastructure assets
- 4.2. Project viability and evaluation- Criterion of Investment in infrastructure projects
- 4.3. Risk Management of Infrastructure Projects- Risk analysis techniques- Credit Rating of Infrastructure Projects
- 4.4. Sources of finance for infrastructure projects- Financial and Economic Appraisal of BOT Projects

READING LIST:

1. Akintoye, A., Beck, M., & Hardcastle, C. (Eds.). (2003). *Public-Private Partnerships - Managing risks and opportunities*. Oxford: Blackwell Science Limited.
2. Crew, M. A. and P. R. Kleindorfer (1979), *Public Utility Economics*, Macmillan, London.
3. Das, K. (2010), 'Lopsided Infrastructure', in Alternative Survey Group (Ed.), *Alternative Economic Survey, India: Two Decades of Neoliberalism*, Daanish Books, Delhi, pp. 195-209.
4. Elena S. Prassas, Roger P. Roess (2013). *Engineering Economics and Finance for Transportation Infrastructure, Volume 3*, Springer Science & Business Media, 2013
5. Finnerty, J. D. (1996). *Project financing - Asset-based financial engineering*. New York: John Wiley & Sons, Inc.
6. Goel, M.M. (2011), *Economics of Human Resource Management in India*, VK Global Publications, New Delhi.
7. Government of India (1997), *The India Infrastructure Report, Vols. I, II and III*, NCAER and Government of India, New Delhi. (Chairman: Rakesh Mohan).
8. Merna, T., & Njiru, C. (2002). *Financing infrastructure projects (First ed.)*. London: Thomas Telford.
9. Morris, S. (2007), 'Infrastructure', in Kaushik Basu (Ed.), *The Oxford Companion to Economics in India*, Oxford University Press, New Delhi.
10. Nevitt, P. K., & Fabozzi, F. J. (2000). *Project financing (7 ed.)*. London, UK: Euromoney Books.
11. Panchamukhi, P R (1980): *Economics of Health: A Trend Report in ICSSR, A Survey of Research in Economics, Vol. VI, Infrastructure*, Allied Publishers, Delhi
12. Raghuram, G., Jain, R., Sinha, S., Pangotra, P., & Morris, S. (2000). *Infrastructure Development and Financing: Towards a Public-Private Partnership*: MacMillan.
13. Raghuram, G., R. Jain, S. Morris, P. Pangotra and S. Sinha (Eds.) (1999), *Infrastructure Development and Financing: Public Private Partnership*, Macmillan India Ltd, New Delhi.
14. Tinsley, R. (2002). *Project Finance in Asia Pacific: Practical Case Studies*. London, UK: Euromoney Books.
15. UNIDO. (1996). *Guidelines for infrastructure development through Build-Operate- Transfer (BOT) projects*. Vienna: UNIDO.
16. Walker, C., & Smith, A. J. (1995). *Privatized infrastructure: the Build Operate Transfer approach*. London: Thomas Telford.
17. World Bank. 1968. *The economics of road user charges* (). Washington, DC: World Bank.
<http://documents.worldbank.org/curated/en/471811468342846847/The-economics-of-road-usercharges>

MATHEMATICAL ECONOMICS-I
EO – 20 (Elective paper)

PREAMBLE:

Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships. This course has been accordingly designed to include various mathematical techniques/methods/models related to the different parts of economic theory like consumer theory, theory of production, pricing etc. Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships. The paper covers important aspects of micro economics; macroeconomics and the various modules have been accordingly designed.

Unit 1: Simple calculus and its Applications

(15 Periods)

- 1.1. Function: Meaning, Concept and Types
- 1.2. Derivatives: Meaning, Concept, Rules of differentiation, partial derivatives, Rules of partial differentiation. Maxima and Minima in single and multivariable functions.
- 1.3 Integration: Meaning, Concept, Rules of integration
- 1.4. Matrix: Meaning, Concept, Types, Algebraic Operations, Determinant of Matrix, Solution of Simultaneous equations using matrix

Unit 2: Theory of Consumer Behaviour

(15 Periods)

- 2.1. Utility: Cardinal and ordinal utility, Demand function, Ordinal utility maximization, Slutsky equation, income, substitution and price effects
- 2.2. Elasticity: Meaning, Concept and its applications
- 2.3. Consumer's surplus Producer's Surplus: Meaning, Concept and its applications,

2.4. Additive utility function, indirect utility function, linear expenditure system.

Unit 3: Theory of Production

(15 Periods)

- 3.1. Production function: Short Run and Long Run, Homogeneous and Nonhomogeneous
- 3.2. Cobb-Douglas production function, CES production function and its properties
- 3.3. Producer's equilibrium: Constrained optimization of a producer
- 3.4. Multi-product firm and Production possibility curve, Empirical uses of production function analysis.

Unit 4: Theory of Cost and Market Structure

(15 Periods)

- 4.1. Cost function, simple derivation of short run cost function, modern theory of cost, relation between AC and MC in short period.
- 4.2. Market Structure- Types of various markets
- 4.3. Price and output determination in perfect competition, monopoly, monopolistic competition, duopoly, oligopoly
- 4.4. Market Equilibrium- Single and two-commodity market model, multi-market equilibrium, general equilibrium

READING LIST

1. Abel, A., B. S. Bernanke and B. Mcnabb (1998), *Macroeconomics*, Addison Wesley, Massachusetts.
2. Allen, R. G. D. (1974), *Mathematical Analysis for Economics*, Macmillan Press and ELBS, London.
3. Allen, R. G. D. (1976), *Mathematical Economics*, Macmillan, London.
4. Arrow, K. J. and M. Intrilligator (Eds.) (1982), *Handbook of Mathematical Economics*, Volumes I, II and III, North Holland, Amsterdam.
5. Barro, R. J. and H. Grossman (1976), *Money, Employment and Inflation*, Oxford University Press, Oxford.
6. Chiang, A. C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
7. Chung, J. W. (1993), *Utility and Production: Theory and Applications*, Basil Blackwell, London.
8. Ferguson, C. E. (1976), *Neo-classical Theory of Production and Distribution*.
9. Hadley, G. (1962), *Linear Programming*, Addison Wesley Publishing Co., Massachusetts.
10. Henderson, J. M. and R. E. Quandt (2003), *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi.
11. Hiller, F. S. and G. J. Lieberman (1985), *Operations Research*, C. B. S., New Delhi.
12. Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
13. Jones, H. G. (1976), *An Introduction to the Modern Theory of Economic Growth*, McGraw Hill Kogakusha, Tokyo.
14. Kothari, C. R. (1992), *An Introduction to Operations Research*, Vikas Pub. House, New Delhi.
15. Kuhn, Harold W. (Ed.) (1997), *Classics in Game Theory*, Princeton, University Press, Princeton.
16. Mankiw, N. G. and D. Romer (Eds.) (1991), *New Keynesian Economics (2 Vols.)*, MIT Press, Cambridge, Mass.
17. Mustafi, C. K. (1992), *Operations Research: Methods and Practice*, Wiley Eastern, New Delhi.
18. Nash, J. F. (1996), *Essays on Game Theory*, Cheltenham, U. K.

NATURE OF QUESTION PAPER AND SCHEME OF MARKING :-

There will be four questions in the question paper each carrying 20 marks. All questions shall be compulsory,

NATURE OF QUESTION PAPER AND SCHEME OF MARKING

[UNDER ACADEMIC FLEXIBILITY]

SHIVAJI UNIVERSITY, KOLHAPUR

M.A. (ECONOMICS) SEMESTER-I/II/III/IV EXAMINATION, -----

PAPER No.---- - Paper Title-----

Day and Date :

Total Marks: 80

Duration :03 Hours

Instructions: 1) All questions are compulsory.

2) All questions carry equal marks.

Q. No. 1: (A) Multiple Choice Questions (Five) (2 Marks Each)	10
(B) Answer in One or Two Sentences (Five) (2 Marks Each)	10
Q. No. 2: Descriptive Type Questions with internal choice	20
Q. No. 3: Descriptive Type Question with internal choice.	20
Q. No. 4: Short Notes (Any Four out of Six)	20