

SHIVAJI UNIVERSITY, KOLHAPUR

Department of Economics-Autonomous



A++

**Accredited By NAAC
Syllabus For**

M.A. Economics

Faculty of Humanities

**M.A. First Year Semester I and II
As per National Education Policy 2022 and
Maharashtra Government Resolution
(Subject to the modifications to be made from time to time)**

To be introduced from July 2023.

A] Ordinance and Regulations: As applicable to M. A. Economics Degree

B]

Shivaji University, Kolhapur
Department of Economics – Autonomous
Syllabus For
Master of Arts in Economics

Syllabus Structure as per Government Resolution 2022.

(As per National Education Policy 2020 and Maharashtra G.R.)
Semester with Credits and CIE System of Examination
[Faculty of Humanities]

1. TITLE: ECONOMICS: (Under the Faculty of Humanities)

2. YEAR OF IMPLEMENTATION: To be introduced from June 2023.

3. PREAMBLE:

In the era of globalization, the study of Economics has gained importance because of sustained interest of the developing countries in uplifting their economic condition by restructuring their economies to greater diversity, efficiency and equity in consonance with their priorities. Accordingly, syllabus has been revised in view to understand recent trends in economics and interdisciplinary subjects along with the introduction of semester and credit system.

4. GENERAL OBJECTIVES OF THE COURSE:

- (i) To Impart high quality of education to the students,**
- (ii) To prepare the students for variety of challenging careers through innovation in teaching and research, and**
- (iii) To develop comprehensive understanding of interdisciplinary issues of society.**

Programme Education Outcomes (PEO's)

- 1) Critically understand the economic system, ideologies, methodologies, and policies of economic development, along with values, ethical principles, and normative aspects of economic theory and the development practices.
- 2) To strengthen the theoretical understanding with contemporary contribution so as to expand the knowledge-base that will enhance the overall understanding and employability under the competitive nature of resource market.

3) Enabling the stakeholders to apply a sophisticated mathematical, econometric and computer tools in learning a traditional economic theory so as to enhancing its applicability to the practical social problems and research.

4) Understanding the development theory in the context of an equitable and balanced economic development from the view point of rural and urban, agriculture, environment, gender, social etc. in the local, national and international perspective.

5) Acquiring the skills required for the applicability of education in launching, maintaining and strengthening the base of economic sectors such as the primary, secondary and tertiary, that are instrumental in the national and international growth perspective.

Programme Outcomes (PO's)

On successful completion of the Master of Arts (Economics) programme, the student will be able to:

1) Get insights into the socio-economic issues at local to global.

2) Equip with the necessary skills to make socio-economic diagnosis, write a project proposal, apply statistical tools to monitor and evaluate policy projects.

3) Applying their knowledge to analyze and assess issues in fields of agriculture, industry, banking and finance, environmental, ecological, societal issues to provide pragmatic solutions.

4) Capable for addressing complex social and environmental issues from a problem-oriented, interdisciplinary perspective and also assess its impact on environment and society.

5) Formulate and execution of project work, field study, industrial visit to get practical exposure to current issues.

Program Specific Outcomes (PSOs)

1) Apply different scientific tools and techniques of statistics and computer for research.

2) Develop, analyze and appraise developmental plan for sustainable development.

3) Ability to design and manage the agricultural, industrial and financial firms using different tools, techniques and models for strategic business development.

4) Equip with the ability to identify the issues and challenges of sustaining the development paradigm and the institutional mechanism.

5) Develop professional entrepreneurial ability and skills.

5) DURATION:

- The course shall be a full-time course.
- The duration of course shall be of Two years /Four Semesters.

6) PATTERN:

The pattern of examination will be Semester with Credit and Continuous Internal Evaluation [CIE].

7. FEE STRUCTURE: - As applicable to the regular course.

i) Entrance Examination Fee: Not Applicable.

ii) Course Fee-As per the University rules/norms.

Particulars	Rupees
Tuition Fee	Rs.
Laboratory Fee	Rs.
Computer Fee	Rs.
Annual/Semester fee- Per student	Total Rs.

Other fee will be applicable as per university rules/norms.

8. IMPLEMENTATION OF FEE STRUCTURE:

In case of revision of fee structure, this revision will be implemented in phase wise manner and as per the University decision in this regard.

9. ELIGIBILITY FOR ADMISSION:

As per the eligibility criteria prescribed by the University for each course and the merit list will be prepared on the basis of graduate level performance along with reservation norms.

10. MEDIUM OF INSTRUCTION:

The medium of instruction shall be English. However, the students will have option to write answer-scripts in Marathi.

11. STRUCTURE OF COURSE:

Shivaji University, Kolhapur
Department of Economics-Autonomous
Structure of Level 6 and 6.5 of M. A. Programme

SHIVAJI UNIVERSITY KOLHAPUR
Department of Economics – Autonomous

Syllabus Structure as per Government Resolution 2022.

National Education Policy 2020

2 Year Post Graduate Programme

M. A. Economics

Level 6

(Introduced from Academic Year 2023-24)

Year	Level	Semester	Major		Research Methodology (Credit-4)	OJT/FP (Credit-4)	Research Project (RP) (Credit-4/6)	CUM CRE DIT	Degree
			Mandatory Credit: 14)	Elective (Credit- 4)		-			
1	6.0	SEM I	1. Micro Economic Analysis (Credit-4) 2. Monetary Economics (Credit-4) 3. Statistics for Economics (Credit-4) 4. Computer Application in Economics-I* (Credit-2)	1. Economics of Environment	Research Methodology (Credit-4)	-	-	22	P. G. Diploma After 3 Year Degree
				2. Economics of Insurance					
				3. Principles and Practice of Co-operation					
				4. Mathematical Economics I					
				5. Human Resource Development					
				6. Economics of Gender and Development					
				7. Financial Markets and Institutions					
				8. Economics of Livestock					
				9. Economy of Maharashtra					
		SEM II	5. Public Economics 6. Ecological and Resource Economics (Credit-4)	10. Agricultural Economics	-	OJT/FP (Credit 04)	-	22	
				11. Economics of Rural Development					
				12. Co-operative Thoughts and Administration					
				13. Indian Capital Market					
				14. Regional Economics					

			7. Macro-Economic Analysis (Credit-4)	15. Contribution of Nobel Laureates to Economics										
			8. Computer Application in Economics-II* (Credit-2)	16. Economic Thoughts of Dr. B. R. Ambedkar										
				17. Health Economics										
				18. Mathematical Economics-II										
Cumulative Credit For P.G Diploma			28	08	04	04	-	44						
Exit Option: P. G. Diploma (44 Credits) After 3 Year UG Degree														
Year	Level	Semester	Major		Research Methodology (Credit-4)	OJT/FP (Credit-4)	Research Project (RP) (Credit-4/6)	CUM CRE DIT	Degree					
			Mandatory Credit: 14)	Elective (Credit- 4)										
2	6.5	SEM III	9. Statistics in Economic Analysis (Credit-4)	19. Indian Public Finance	-----	-----	4	22	PG Degree after 3 Year UG Or PG Degree after 4 year UG					
			10. Economics of Growth and Development (Credit-4)	20. Economics of Transport and Communications										
			11. Economics of Labour (Credit-4)	21. Indian Economic Policy										
			12. Computer Application in Economics III* (Credit-2)	22. Demography										
				23. Urban Economics										
				24. Economics of Energy										
				25. Economics of Education										
				26. Econometrics I										
		SEM IV	13. International Economics (Credit-4)	28. Managerial and Business Economics						-----	-----	6	22	
			14. Industrial Economics (Credit-4)	29. Agricultural Development in India										
				30. Global Business Logistics										
				31. Advanced Banking										
				32. Economic Thoughts of Chh. Shahu Maharaj										
			15. Welfare Economics (Credit-4)											

				33. Economics and Law					
				34. Econometrics II					
				35. Economics of Infrastructure					
Cumulative Credit For 2nd year P.G	26	8	--	--	10	44			
Cumulative Credit For 1st year P.G Degree	28	8	4	4	--	44			
Cumulative Credit For 2 year P.G Degree	54	16	4	4	10	88			

1. **2 Years Four Semester P.G. Degree 88 Credits**
2. **1 Year PG Diploma After 3 Year UG Degree 44 Credits**
3. **1 Year PG Degree after Four Year UG Degree 44 credits.**

Major Mandatory: All Courses in Mandatory group are compulsory.

Major Elective Course: Student have to opt one course for each Semester from the Elective Papers Group

Research Methodology is a compulsory course for First Semester.

On Job Training/ Field Project/Internship/Apprenticeship is Compulsory for Second Semester.

Research Project: It is compulsory for semester III and VI

*: Each Batch of 20 students will have 2 Practical hours per week (3 Batch x 2 Hrs. = 6)

12. SCHEME OF TEACHING:

SHIVAJI UNIVERSITY, KOLHAPUR
DEPARTMENT OF ECONOMICS-AUTONOMOUS
M.A. Economics Part-I Semester-I

Teaching Scheme for Semester-I				
Course Type	Course title	No of Lectures	Hours	Credits
Major (Mandatory)	1. Micro Economic Analysis	4	4	4
	2. Monetary Economics	4	4	4
	3. Statistics for Economics	4	4	4
	4. Computer Application in Economics-I	1	1	2
Major (Elective)	1. Economics of Environment	4	4	4
	2. Economics of Insurance			
	3. Principles and Practice of Co-operation			
	4. Mathematical Economics I			
	5. Human Resource Development			
	6. Economics of Gender and Development			
	7. Financial Markets and Institutions			
	8. Economics of Livestock			
	9. Economy of Maharashtra			
Research Methodology				4
OJT/FP	-			4
Research Project (RP)	-			4/6
Total				22

13. SCHEME OF EXAMINATION:

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	Major (Mandatory)	4	4	4		3	70	28		30	12
		4	4	4		3	70	28		30	12
		4	4	4		3	70	28		30	12
		1	1+2=3	2	2x3=6*	1	25	10		25**	10
2	Major (Elective)	4	4	4		3	70	28		30	12
3	Research Methodology	4	4	4		3	70	28		30	12
Total		21	23	22			375	150		175	70
										SEE+IA=375+175=550	

*: Each Batch of 20 students will have 2 Practical hours per week (3 Batch x 2 Hrs. = 6)

** : CIE 25 Marks (15 Marks for Practical Examination and 10 Marks for Journal)

M. A. Part I Economics											
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	Major (Mandatory)	4	4	4		3	70	28		30	12
		4	4	4		3	70	28		30	12
		4	4	4		3	70	28		30	12
		1	1(lecture) +2(practical)= 3	2	3x2=6*	1	25	10		25**	10
2	Major (Elective)	4	4	4		3	70	28		30	12
3	OJT/FP	--	--	4		--	70	28		30	12
Total		17	19	22			375	150		175	70
										SEE+IA=375+175=550	

*: Each Batch of 20 students will have 2 Practical hours per week (3 Batch x 2 Hrs. = 6)

** : CIE 25 Marks (15 Marks for Practical Examination and 10 Marks for Journal)

14. QUESTION PAPER PATTERN FOR SEMESTER-END EXAMINATION AND INTERNAL ASSESMENT.

Question Paper Pattern for Semester-End Examination (4 credit papers)

M. A. Economics Semester I, II, III and IV Subject Code & Paper Title:		
Day and Date:		Total Marks: 70
Time: 3 Hours		
Instructions: 1. All question are compulsory. 2. Figures to right indicated Full Marks. 3. Use of Calculator is Permitted.		
Q. No.	Type of Question	Marks
1	Objective Type Questions (Each Question carry two marks) A. Objective Type questions. B. Answer in one or two sentences	20 10 10
2	Write short notes (Any three out of five Questions)	15
3	Answer in brief (Any Two out of Three Questions)	20
4	Descriptive type question (Internal Choice)	15

**Question Paper Pattern for Semester-End Examination
Computer Application in Economics (2 Credit)**

M. A. Economics Semester I, II, and III Subject Code & Paper Title:		
Day and Date:		Total Marks: 25
Time: 1 Hour		
Instructions: 1. All question are compulsory. 2. Figures to right indicated Full Marks. 3. Use of Calculator is Permitted.		
Q. No.	Type of Question	Marks
1	Objective Type questions. (Each Question carry one mark)	05
2	Write short notes (Any two out of four Questions)	10
3	Answer any two from three (Numerical Problems)	10

An Internal Assessment

Sr. No.	Semester	Type of internal Assessment	
		For 20 Marks	For 10 Marks
1	I	Unit test	Home Assignment
2	II	Unit Test	Seminar presentation
3	III	Unit Test	Seminar Presentation
4	IV	Unit Test	Review of Article/Academic Writing
5	I, II & III	Computer Practical for 15 marks	Journal/Internal Test for 10 marks

Major (Mandatory)-1

MICRO ECONOMIC ANALYSIS (Credit-4)

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.

COURSE OUTCOME: By the end of this course student will be able to:

1. Understand the economic behavior of individuals, firms and markets.
2. Equipping the students in a rigorous and comprehensive manner
3. Elaborate the micro and macro theories

Unit-I	THEORY OF DEMAND	(15 Periods)
	1.1 Theory of Consumer Behavior- Cardinal Utility Theory, Indifference Curves Theory-Hicks and Slutsky Approach, Revealed Preference Hypothesis, Consumers' Surplus	
	1.2 Applications of Indifference Curves Analysis	
	1.3 Market Demand-Derivation and Determinants, Elasticities of Demand, Relation between Market Demand, Total Revenue, and Marginal Revenue	
	1.4 Recent Developments in the Theory of Market Demand-Pragmatic Approach to Demand Analysis, Linear Expenditure Systems	
Unit-II	THEORY OF PRODUCTION	(15 Periods)
	2.1 Production Function for a Single Product, Laws of Production- Laws of Returns to Scale, Law of Variable Proportions	
	2.2 Technological Progress and the Production Function, Equilibrium of the Firm: Choice of Optimal Combination of Factors of Production	
	2.3 Derivation of Cost Functions from Production Functions	
	2.4 Production Function of a Multiproduct Firm	
Unit-III	THEORY OF COSTS AND THEORY OF THE FIRM	(15 Periods)
	3.1 Traditional Theory of Cost- Short-Run Costs, Long-Run Costs: The 'Envelope Curve'	
	3.2 Modern Theory of Costs- Short-Run Costs, Long-Run Costs: The 'L-Shaped' Scale Curve, Engineering Cost Curves	
	3.3 Oligopoly: Non-Collusive Oligopoly- Cournot's, Bertrand's Duopoly Model, Chamberlin's Oligopoly Model, Kinked-Demand Model, Stackelberg's Duopoly Model;	
	3.4 Oligopoly: Collusive Oligopoly- Cartels, Price Leadership, Basing-Point Price System	

Unit-IV **THEORY OF PRICING AND MANAGERIAL THEORIES OF THE FIRM** (15 Periods)

- 4.1 Average-Cost Pricing- Hall and Hitch Report and the 'Full-Cost' Pricing Principle, 'Mark-Up' Rule
- 4.2 Limit-Pricing-Bain's Limit-Pricing Theory
- 4.3 Recent Developments in the Theory of Limit-Pricing
- 4.4 Managerial Theories of Firm- Baumol's Theory of Sales Revenue Maximisation, Marris's Model of Managerial Enterprise, Williamson's Model of Managerial Discretion

References/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.

Major (Mandatory)-2

MONETARY ECONOMICS (Credit-4)

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.

COURSE OUTCOME:

1. Explain the evolution of money and to get acquainted with the concept of money and its functions.
2. Knowing about the supply of money and high powered money.
3. Evaluating the working and effects of monetary and fiscal policy.

UNIT I: Monetary Economics

(15 Periods)

- 1.1: Keynesian Vs Monetarists
- 1.2: Monetary Economics as an Applied Branch of Macro Economics
- 1.3: Exchange Rates Vs Interest Rates
- 1.4: Financial Assets and Institutions- Central Banking- International Financial Institutions- IBRD, IMF and ADB

UNIT II: Money, Evolution and Money Multiplier:

(15 Periods)

- 2.1: Evolution of Money-Money and Near Money - Stock & Flow concept of money
Functions of Money– Circular Flow of Money
- 2.2: Money Supply- Determinants of Money Supply – Money, Interest and Inflation-
Approaches to Money Supply – Money Supply & Liquidity
- 2.3: H theory of Money Supply – Factors affecting H – Adjusted H--Is H autonomous
policy variable?
- 2.4: Money Multiplier: Determinants – 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
- 3.2: Post Keynesian (Baumol-Tobin and Friedman's approach).
- 3.3: Money & Prices: Fisher's Cash Transaction Vs Cambridge Cash Balance Approach
- 3.4: Theories of Interest Rates: Classical Theory – Loanable Fund Theory

UNIT IV: Monetary, Fiscal and Policies:

(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, Actions and Reactions of Monetary and Fiscal Policies
- 4.4: Monetary and Fiscal Policies and Employment, Inflation and Growth. Recent trends of Growth, Employment and 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

Major (Mandatory)-3
STATISTICS FOR ECONOMICS (Credit-4)

PREAMBLE:

The main objective of this paper is to train the students to use the advanced techniques of statistical analysis, which are commonly applied to understand and analyze economic problems. The emphasis of this paper is on understanding economics with the help of statistical tools. Hence, in this paper a student will be initiated into various economic concepts, which are amenable to statistical treatment.

COURSE OUTCOME:

1. Train the students to use the techniques of mathematical and statistical analysis, which are commonly applied to understand and analyze economic problems.
2. Understand economics with the help of quantitative techniques.
3. Develop the skills of using more quantitative techniques for economic analysis, research and forecasting.

Unit-I Descriptive Analysis (15 Periods)

- 1.1 Central Tendency: Meaning, Concept, Objectives of Averaging, Requisites of a Good Average
- 1.2 Measures of Central Tendency: Mean, Median, Mode, Harmonic Mean, Geometric Mean
- 1.3 Dispersion: Meaning, Concept, Objectives of Measuring Dispersion, Properties of a Good Measure of Dispersion
- 1.4 Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation and its relative measures

Unit-II Skewness Moments and Kurtosis (15 Periods)

- 2.1 Skewness: Meaning, Concept, Test of Skewness
- 2.2 Measures of Skewness: Absolute Measures and Relative Measures: Karl:Pearson's Coefficient of Skewness, Bowley's Coefficient of Skewness, Kelly 's Coefficient of Skewness.
- 2.3 Moments: Meaning, Concept, Objectives, Moments about the Mean, Moments about the arbitrary origin
- 2.4 Kurtosis: Meaning, Concept, Measures of Kurtosis

Unit-III Correlation Analysis: (15 Periods)

- 3.1 Correlation: Meaning, Concept, and Importance
- 3.2 Type of Correlation: Positive and Negative: Simple, Partial, and Multiple Correlation: Linear and Non-linear
- 3.3 Methods of studying correlation: Scatter Diagram Method, Graphical Method, Karl Pearson's coefficient of correlation, Spearman's rank coefficient of correlation and Concurrent Deviation Method
- 3.4 Probable Error of the Coefficient of Correlation and its Interpretation, Coefficient of Determination

Unit-IV Regression Analysis: (15 Periods)

- 4.1 Regression: Meaning, Concept, and Importance –Comparison of Correlation and Regression

- 4.2 Methods of estimating regression: Graphic Study of Regression, Freehand Curve Method, Method of Least Squares
- 4.3 Regression Equations: Properties of Regression Coefficients, Properties of Regression Lines
- 4.4 Standard Error of estimate.

References/Reading List

1. Allen, R. G. D. (1974), *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.
2. Baumol, W. J. (1984), *Economic Theory and Operations Analysis*, Prentice Hall, Englewood Cliffs, New Jersey.
3. Chiang, A. C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
4. Croxton, Crowden and Klein (1971), *Applied General Statistics*, Prentice Hall of India, New Delhi.
5. Elhance, D.N., Elhance, Veena and Aggarwal, B. M. (2015) *Fundamentals of Statistics*, KitabMahal, Allahabad
6. Goon, A. M., M. K. Gupta and B. Dasgupta (1993), *Fundamentals of Statistics*, Vol. 1, The World Press Ltd., Calcutta.
7. Gupta, S. C. (1993), *Fundamentals of Applied Statistics*, S. Chand&Sons., New Delhi.
8. Gupta, S.P. (2016) *Statistical Methods*, Sultan Chand & Sons, New Delhi
9. Handry, A. T. (1999), *Operations Research*, Prentice Hall of India, New Delhi.
10. Hogg, R. V. and A. T. Craig (1970), *Introduction to Mathematical Statistics (3rd Edition)*, Macmillan Publishing Co., New York.
11. Millar, J. (1996), *Statistics for Advanced Level*, Cambridge University Press, Cambridge.
12. Monga, G. S. (1972), *Mathematics and Statistics for Economists*, Vikas Publishing House, New Delhi.
13. Nagar, A. L. and R. K. Das (1993), *Basic Statistics*, Oxford University Press, New Delhi.
14. Reddy, C. R. (1990) : *Quantitative Methods for Management Decision*, Himalaya Publishing House, Mumbai.
15. Singhal Mohan (2005:06) : *Elements of Statistics*, Lakshmi Narain Agrawal, Agra.
16. Speigal, M. R. (1992), *Theory and Problems of Statistics*, McGraw Hill Book Co., London.
17. Sukhatme, P. V. and B. V. Sukhatme (1970), *Sampling Theory of Survey with Applications*, Iowa State University Press, Ames.
18. Taha, H. A., (1997), *Operations Research: An Introduction (6th Edition)*, Prentice Hall of India Pvt. Ltd., New Delhi.
19. Yamane, Taro (1975), *Mathematics for Economists*, Prentice Hall of India, New Delhi.

Major (Mandatory)-4
COMPUTER APPLICATION IN ECONOMICS – I (Credit-2)

PREAMBLE:

Economics being an empirical science, computers have emerged as the pivotal instruments of economic analysis, research and forecasting. Therefore, the students must be equipped with skills and tools based on computers, which, this course shall provide to them. This will not only enhance their employability but also prepare them for the challenges of the future.

COURSE OUTCOME:

- 1: Acquire the basic knowledge of Computer and its parts.
- 2: Illustrate Storage Devices of Computers and Computer Language
- 3: Handle real data with confidence by applying econometric methods of analysis to new circumstances and to develop the skills of using more scientific tools based on computers for economic analysis

Unit I: Computer Fundamentals (Periods: Theory-8 and Practical-15)

- 1.1. Computer: Meaning, concepts and Characteristics
- 1.2. Types of computers and their applications
- 1.3 Basic components of computer – CPU, Input Devices, Output Devices, Graphic User Interface and Computer Language - Binary, Assembly and High-Level Languages;
- 1.4 Hardware, Software, Memory and Storage Devices-Internal and External- RAM and ROM

Unit II: Descriptive Statistics (Periods: Theory-7 and Practical-15)

- 2.1. Central Tendency: Meaning, concept and objectives
- 2.2. Measures of Central Tendency: Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean
- 2.3. Growth Rates: Simple Growth Rate and Compound Growth Rate
- 2.4. Diagrammatic Presentation of Data: Line Graph, Bar Diagram, Frequency and Polygon, Histogram, Pie Chart, and Ogive Curve

READINGLIST LIST:

1. Dhanasekaran. K (2013) Computer applications in Economics, Vrinda Publications Pvt. Ltd.
2. Elhance, D. N. (1962), Fundamentals of Statistics, KitabMahal, Allahabad.
3. Gupta, S. C. (1981), Fundamentals of Statistics, Himalaya Publishing House, Bombay.
4. N. M. Downie and R. W. Heath (1970), Basic Statistical Methods, Harper and Row, New York.
5. Rajaram, V, (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.
6. Sanders, D. H. (1988), Computer Today, McGraw Hill, New York.
7. Sinha, P. K. (1992), Computer Fundamentals, BPB Publications, New Delhi.
8. Yamane, Taro (1973), Statistics, An Introductory Analysis, Harper and Row (India) and John Weatherhill Inc., Tokyo

Major (Elective)-1

ECONOMICS OF ENVIRONMENT (Credit-4)

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 OUTCOME:

1. Get acquainted with the concept of environment and its spheres.
2. Equip with the types, causes, effects of environmental pollution and their remedies.
3. Understand the role of various sectors in environmental protection and tools of environmental management.

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.

UNIT III: ENVIRONMENTAL THEORY OF DEVELOPMENT (15 Periods)

- 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, Kula 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 Journal Down to Earth, New Delhi.

Major (Elective)-2

ECONOMICS OF INSURANCE (Credit-4)

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.

COURSE OUTCOME:

1. Get acquainted with the various concepts of insurance
2. Describe the working of life and health insurance.
3. Understand the fundamental principles of insurance.

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, Ill.
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.
1. Skipper, Jr. H. D. (Ed.) (1998), International Risk and Insurance: An Environmental Managerial Approach, Irwin McGraw Hill, Boston.
2. Tacchino, K. B. and D. A. Little (1993), Planning for Retirement Needs, The American College, Bryn Mawr, Pa.
3. Dionne, G. and S. E. Harrington (Eds.) (1997), Foundations of Insurance Economics, Kluwer Academic Publishers,
4. Boston Pfeffer, 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

Major (Elective)-3

PRINCIPLES AND PRACTICE OF CO-OPERATION (Credit-4)

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.

COURSE OUTCOME:

- 1: Understand the principles of cooperation and the values of cooperative institutions
- 2: Create awareness about the working of cooperative organizations in rural and urban areas.
- 3: Demonstrate the knowledge about the working of various cooperative institutions in India
- 4: Get familiar with the issues with the Cooperative organizations in the present scenario

UNIT I **Meaning, Principles of Co-operation:**

- 1.1: Meaning of Cooperation – Main Principles of Cooperation, Reformulation Significance of cooperation.
- 1.2: Important Committees on Co-operation: AIRCSC, AIRCRC, ACRC, CRAFTICARD and Vaithiyanthan Committee
- 1.3: Growth of Cooperation in India after Independence.
- 1.4: Cooperative Credit Structure –Short Term and Long term Rural Credit Structure

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

- 3.1: Cooperative Consumers Societies,
- 3.2: Cooperative Housing Societies,
- 3.3: Cooperative Labour Societies
- 3.4: Industrial Cooperatives

UNIT III **Agro Based Cooperatives:** (15 Periods)

- 3.1: Agricultural Cooperative Marketing,
- 3.2: Dairy Cooperatives,
- 3.3: Sugar Cooperatives,
- 3.4: Processing Cooperatives,

UNIT IV **Cooperative Development Agencies:** (15 Periods)

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

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. Krishnaswamy O.R, Fundamental of Cooperation, S.Chand & Company Ltd, New Delhi 1978.
 5. NABARD – Statistical Statement Relating to the Cooperative Movement in India– Part I&II.
 6. 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
 10. Patil, J. F. &Patil, V. S., (2006) Problems and Prospects of Co-operative Movement, Shivaji University, Kolhapur
- Committee Reports: 1. Committees & Commissions on Cooperation by Pranajothi 2. Kushroo's Committee Report 3. Vaithyanathan Committee Report 4. Dr. Mirithjan Sarangi et.al 6 books

Major (Elective)-4

MATHEMATICAL ECONOMICS-I (Credit-4)

PREAMBLE:

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

COURSE OUTCOME:

1. The student will be able to understand basic concepts of Mathematics.
2. The student will be able to do the application of Mathematics to consumer behavior.
3. The student will be able to do the application of Mathematics in producer behavior.
4. The student will be able to do the application of Mathematics in the market.

Unit-I	Simple calculus and its Applications	(15 Periods)
	1.1 Function: Meaning, Concept, and Types of functions: quadratic, polynomial, power, exponential, logarithmic	
	1.2 Differential Calculus: Meaning, Concept of Differentiation, Rules of Differentiation, Partial Differentiation, Rules of Partial Differentiation. Maxima and Minima in single and multi-variable functions.	
	1.3 Integral Calculus: Meaning, Concept of Integration, Rules of Integration	
	1.4 Matrix Algebra: Meaning, Concept, Types, Algebraic Operations, Determinant of Matrix, Solution of Simultaneous equations using matrix	
Unit-II	Consumer Behavior	(15 Periods)
	2.1 Utility: Cardinal and Ordinal utility, Demand function, Ordinal utility maximization, Compensated Demand function, Slutsky equation, income, substitution, and price effects	
	2.2 Elasticity: Meaning, Concept, Types, and its applications	
	2.3 Consumer's Surplus: Meaning, Concept, and its Applications	
	2.4 Producer's Surplus: Meaning, Concept, and its Applications	
Unit-III	Producer Behaviour	(15 Periods)
	3.1 Production function: Short Run and Long Run, Homogeneous and Non-homogeneous	
	3.2 Cobb-Douglas production function, and its properties	
	3.3 CES production function, and its properties	
	3.4 Producer's equilibrium: Constrained optimization of a producer-Output maximization and Cost minimization	
Unit-IV	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 a short period.	
	4.2 Market Structure- Types of various markets	
	4.3 Price and output determination in Perfect Competition, Monopoly	
	4.4 Price and output determination in Monopolistic Competition, duopoly, oligopoly	

References/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.

Major (Elective)-5

HUMAN RESOURCE DEVELOPMENT (Credit-4)

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.

COURSE OUTCOME:

1. Enrich the knowledge of the principles, laws and theories in economics that will be useful for a manager at firm level in decision making process.
2. Identify and deals with the resource utilization problem and the choice of optimal resource at the firm or an industry.
3. Provide the bases of the HRD to students

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: Concepts, Measures and Policies for a Development Paradigm*, Oxford University Press, New Delhi.
- 31) Streeten Paul, 1972, *The Frontiers of Development Studies*, Macmillan, London.
- 32) Todaro, Michael, P., 1997, *Economic Development*, 6th edition, Longman, New York.
- 33) United Nations Development Programme, 1990, *Human Development Report, 1990*, Oxford University Press, New York.
- 34) United Nations Development Programme, 2001, *Human Development Report, 2001*, Oxford University Press, New York.
- 35) World Bank, 1992, *Governance and Development*, Washington, D.C.,
- 36) World Bank, 1997, *The State in a Changing World: World Development Report, 1997*, Oxford University Press, Oxford.
- 37) Alkire, S., 2002, 'Dimensions of Human Development', *World Development*, 30(2)
- 38) 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.
- 39) 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

Major (Elective)-6

ECONOMICS OF GENDER AND DEVELOPMENT (Credit-4)

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.

COURSE OUTCOME:

- 1 Students are able to understand the nature of the economic role of women and their contribution to the national economy.
- 2 Students are able to examine the role of women in labour markets and structures of wages across the regions.
- 3 Students are able to evaluate the social security and social protection for women.

UNIT I: Introduction to Gender Studies

(15 Periods)

- 1.1 Importance and concepts of gender studies: Difference between Gender and Sex – Patriarchy - Feminism - Schools of feminism – Gender Division of Work – Invisibility of Women's work
- 1.2 Gender Economics - Institutionalization of Gender Economics - Methods of Gender Economics - Inter-Disciplinary Approach in Gender Studies - Macro and Micro Level of Studies
- 1.3 Gender Statistics and System of Sources of Data on the Population
- 1.4 Gender Inequality Factors: Development Factor - Discrimination and Behavioural Factors - Gender Gap in access to Resources and Control over Economic Resources

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 Budget and Gender Audit

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

Major (Elective)-7

FINANCIAL MARKETS AND INSTITUTIONS (Credit-4)

PREAMBLE:

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

COURSE OUTCOME:

- 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:

- 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 Regulatory Institutions in India: RBI, SEBI, IRDA, PFRDA
- 1.4 Non-Banking Financial Institutions: Mutual Fund, Merchant Bank

UNIT II Financial Markets:

- 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 Market: BSE, NSE; and Multi Commodity Exchange (MCX).

UNIT III Commercial Banking:

- 3.1 Role of Commercial Banks, Credit Creation and Profitability and efficiency of banks
- 3.2 NPA and Basel Norms
- 3.3 Risk Management in Banks, CAMELS rating system
- 3.4 Derivatives

UNIT IV International Financial Markets and Institutions:

- 4.1 International Financial Institutions and Their Role: IMF, IBRD, International Finance Corporation (IFC) & Bank for International Settlement – BIS
- 4.2 Foreign Exchange - Exchange Rates, Nature, Functions
- 4.3 Regulation of foreign Exchange Market: FEMA
- 4.4: Foreign Trade Finance, External Commercial Borrowings, GDR's and ADR's

READING LIST

- 1) Khan, M. Y. (2019), Indian Financial System, Tata McGraw Hill, New Delhi.
- 2) Bhole, L. M. and Jitendra Mahakud(2017), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- 3) Bhole, L. M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- 4) Bishop, P. and D. Dixon (1992), Foreign Exchange Handbook, McGraw Hill, New York.
- 5) Verma JC, Guide to Mutual Funds and Investment Portfolio, Bharat Publishing House, New Delhi.
- 6) Chadler, L. V., and S. M. Goldfield (1977), The Economics of Money and Banking, Harper & Row, New York.
- 7) Chamberlain, G. (1981), Trading in Options, Woodhed-Faulker, Cambridge.
- 8) Chandra, P. (1997), Financial Markets (4th Edition), Tata McGraw Hill, New Delhi.
- 9) Crocker, A. (1982), International Money: Issues and Analysis, The English Language Book Society, Nelson, London.
- 10) Howells, Peter, Bain, Keith (2007), Financial Markets and Institutions, 5th Edition.
- 11) Madura, Jeff (2008), Financial Markets and Institutions, 8th edition, Thomson Publications.
- 12) Gupta, S. B. (1983), Monetary Economics, S. Chand & Company, New Delhi.
- 13) Gupta, L. C. (Ed.) (1999), India's Financial Markets and Institutions, Society for Capital Research and Development, Delhi.
- 14) Hanson, J. A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty-first Century, Oxford University Press, New Delhi.
- 15) Harker, P. T. and S. A. Zenios (2000) (Ed.), Performance of Financial Institutions, Cambridge University Press, Cambridge.
- 16) Johnson, H. J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
- 17) Machiraju, M. R. (2013), Indian Financial Systems, Vikas Publishing House, New Delhi.
- 18) Machiraju, H. R. (1997), International financial Markets in India, Wheeler Publishing, Allahabad.
- 19) Mackinnon, R. J. (1979), Money in International Exchange, Oxford University Press, Oxford.
- 20) Niehans, J. (1984), International Monetary Economics, John Hopkins University Press, New York.
- 21) NSE (2012) Financial Markets: A Beginners' Module, Workbook from NSE
- 22) Ohlson, J. A. (1987), The Theory of Financial Markets and Institution, North Holland, Amsterdam.
- 23) Prasad, K. N. (2001), Development of India's Financial System, Saruo & Sons, New Delhi.
- 24) Rangaranjan, C. (1999), Indian Economics: Essays on Money and Finance, UBS Publication, New Delhi
- 25) Redseth, A. (2000), Open Economy Macroeconomics, Cambridge University Press, Cambridge.
- 26) Robinson, R. I. and D. Wrightman (1981), Financial Markets, McGraw Hill, London.
- 29) Verma, J. S. (1989), A Manual of Merchant Banking, Bharat Law House, New Delhi.
- 30) Varshney, P.N: Indian Financial System, Sultan Chand & Sons, New Delhi.
- 31) Reserve Bank of India, Various Reports, RBI Publication, Mumbai.
- 32) Bombay Stock Exchange website
- 33) National Stock Exchange and Bombay Stock Exchange website. FAQs on margins as applicable for transactions on Cash and Derivatives segments:
https://www.nseindia.com/content/assist/asst_Margins_faq.pdf
- 34) National Stock Exchange website on listing of Securities:
https://www.nseindia.com/corporates/content/eligibility_criteria.htm
- 35) SEBI guidelines. Delisting of securities: https://www.sebi.gov.in/legal/regulations/jun-2009/sebi-delisting-of-equity-shares-regulations-2009-last-amended-on-november-14-2018-_34625.html

Major (Elective)-8

ECONOMICS OF LIVESTOCK (Credit-4)

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.

COURSE OUTCOME:

1. Acquiring the knowledge about the structure and functioning of livestock economy
2. Examine the impact of livestock on the economics conditions of farmers
3. Identify the trends in compositions of livestock and its impact

Unit 1: Economics of Livestock Production (15 Periods)

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 (15 Periods)

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 (15 Periods)

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 (15 Periods)

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, Governmet 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 Institue, 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.

Major (Elective)-9

ECONOMY OF MAHARASHTRA (Credit-4)

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.

COURSE OUTCOME:

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 and 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

RESEARCH METHODOLOGY (Credit-4)

PREAMBLE:

Research has a special relevance in any faculty, stream and area. It is a source of policy inputs for the policy maker and the government also. It is therefore in massive scale research is being carried out in a variety of forms at academic as well as policy level. This necessitates in understanding concepts and theoretical issues and aspects of research methodology. It is against this over all backdrops, the course / paper of Research Methodology has been introduced at post graduate level. The present course will equip the students with concepts, theoretical issues and framework relating to research methodology.

COURSE OUTCOME:

1. Students will get equipped with computational skills
2. Students will get the skills of drafting research design
3. Students will be able to test the research hypothesis

Unit 1: INTRODUCTION TO RESEARCH METHODOLOGY (10 Periods)

- 1.1. Research: Meaning – Objectives - Motivation - Types - Approaches - Significance
- 1.2. Research Methods versus Methodology
- 1.3 Research Process and basic research concepts (facts, concepts, hypothesis, and theory/paradigm/model)
- 1.4. Criteria of Good Research

Unit 2: RESEARCH PROBLEM AND RESEARCH DESIGN (10 Periods)

- 2.1. Research Problem: Meaning- Selection – Necessity - Technique Involved
- 2.2. Research Proposal and Design: Meaning - Need
- 2.3. Features of a Good Design - Important Concepts Relating to Research Design
- 2.4. Different Research Designs

Unit 3: SAMPLING AND DATA COLLECTION (20 Periods)

- 3.1. Census and Sample Survey - Steps in Sampling Design - Criteria of Selecting a Sampling Procedure, Concept of sample size.
- 3.2. Characteristics of a Good Sample Design - Types of Sample Designs- How to Select a Random Sample?
- 3.3. Collection of Primary Data: Observation Method, Interview Method, Questionnaires, Schedules - Difference between Questionnaires and Schedules - Other Methods of Data Collection
- 3.4. Collection of Secondary Data - Selection of Appropriate Method for Data Collection - Case Study Method

Unit 4: PROCESSING & ANALYSIS OF DATA, TESTING OF HYPOTHESES AND INTERPRETATION & REPORT WRITING (20 Periods)

- 4.1. Data Processing- Scrutiny, Classification, Editing and Tabulation – Problems
- 4.2. Elements /Types of Analysis - Statistics in Research: Basic Concept of Measures of Central Tendency- Dispersion - Regression and Correlation Analysis.
- 4.3. Hypothesis: Meaning - Basic Concepts Concerning Testing -Procedure - Measuring the Power of a Hypothesis Test - Tests of Hypotheses: Important Parametric and Non Parametric Tests
- 4.4. Interpretation: Meaning - Why- Technique- Precaution -Report Writing: Significance - Steps- Layout - Types - Mechanics –Precautions

READING LIST:

1. Ackoff, Russell L., (1961) The Design of Social Research, Chicago: University of Chicago Press .
2. Ackoff, Russell L., (1962) Scientific Method, New York: John Wiley & Sons.
3. Allen, T. Harrell, (1978) New Methods in Social Science Research, New York: Praeger Publishers.
4. Anderson, H.H., and Anderson, G.L., (1951) An Introduction to Projective Techniques and Other Devices for Understanding the Dynamics of Human Behaviour, New York: Prentice Hall .
5. Anderson, T.W., (1958) An Introduction to Multivariate Analysis, New York: John Wiley & Sons.
6. Bailey, Kenneth D.,(1978) "Methods of Social Research," New York, 1978.
7. Baker, R.P., and Howell, A.C., (1938) The Preparation of Reports, New York: Ronald Press.
8. Berdie, Douglas R., and Anderson, John F., (1974) Questionnaires: Design and Use, Metuchen N.J.: The Scarecrow Press, Inc.
9. Berenson, Conard, and Colton, Raymond, (1971) Research and Report Writing for Business and Economics, New York: Random House.
10. Best, John W., and Kahn, James V., (1986) "Research in Education," 5th Ed., New Delhi: Prentice-Hall of India Pvt. Ltd.
11. Bhandarkar and Wilkinson (2010) Methodology and Techniques of Social Science Research , Himalaya Publishing House, New Delhi
12. Bowley, A.L., (1937) Elements of Statistics, 6th ed. London: P.S. King and Staples Ltd..
13. Ghosh, B.N., (1982) Scientific Methods and Social Research, New Delhi: Sterling Publishers Pvt. Ltd.,.
14. Goode, William J., and Hatt, Paul K., (1952) Methods in Social Research, New York: McGraw-Hill.
15. Gopal, M.H., (1965) Research Reporting in Social Sciences, Karnatak University. Dharwad
16. Gopal, M.H.,(1964) An Introduction to Research Procedure in Social Sciences, Bombay: Asia Publishing House.
17. Gupta , S. C. (2016) Fundamentals of Statistics, Himalaya Publishing House, New Delhi
18. Gupta, S. P. (2017) Statistical Methods, S Chand and Sons , New Delhi
19. Hans Raj (2000) Theory and Practice in Social Science Research, Surjeet Publications,
20. Kothari, C. R. (2004) Research Methodology: Methods and Techniques , New Age International (P) Ltd., New Delhi.

M. A. ECONOMICS Part I Semester II

Course Type	Course title	Credits
Major (Mandatory)	5. Public Economics	4
	6. Ecological and Resource Economics	4
	7. Macro-Economic Analysis	4
	8. Computer Application in Economics- II	2
Major (Elective)	10. Agricultural Economics	4
	11. Economics of Rural Development	
	12. Co-operative Thoughts and Administration	
	13. Indian Capital Market	
	14. Regional Economics	
	15. Contribution of Nobel Laureates to Economics	
	16. Economic Thoughts of Dr. B. R. Ambedkar	
	17. Health Economics	
18. Mathematical Economics-II		
Research Methodology	-	-
OJT/FP (Credit-4)	OJT/FP	4
Research Project (RP) (Credit-4/6)	-	-
Total		22

Major (Mandatory)-5

PUBLIC ECONOMICS

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.

COURSE OUTCOME:

1. Understand the role of government in economic planning and development.
2. Examine the theory of public choice and public policy.
3. Equip with theory of public expenditure and project evaluation.
4. Analyse the theories of taxation and public budget.

UNIT I: ROLE OF GOVERNMENT IN DEVELOPMENT (15 Periods)

- 1.1: Role of Government in a mixed economy: Government as an agent for economic planning and development
- 1.2: 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: Samuelsson'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: Tax Incidence: Meaning- Alternative Concepts – Measurement- Theories

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: Public Debt: Sources- Classification- Importance- Burden - 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. Cutt, J. (1969), Taxation and Economic Development in India, Frederick A Praegar Publishers, New York.
30. Kaldor, N. (1955), An Expenditure Tax, George Allen and Unwin, London.
31. Musgrave, R. A. and C. Shoup (Eds.) (1970), Readings in the Economics of Taxation, George Allen and Unwin, London.
32. Barman, K. (1986), Public Debt Management in India, Uppal Publishing House, New Delhi.

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

Major (Mandatory)-6

ECOLOGICAL AND RESOURCE ECONOMICS

PREAMBLE:

Since 1972 onwards, the new branches of Economics such as Resource Economics, Environmental Economics, Ecological Economics have been emerged out. The efforts being undertaken for rapid and all round development, which is contributing to rapid deterioration in 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 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 maintain and improve the quantity and quality of natural resources.

COURSE OUTCOME:

1. Equip with the natural resources and the related issues.
2. Analyse the sustainable development in different perspectives.
3. Assess the exploitation of renewable and non-renewable natural resources.
4. Discuss on the externalities and policy thereon.

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 –
- 2.2: Steady State School
Sustainable development : Concept and Indicators- Strong and Weak Sustainability - Possible Sustainability Rules
- 2.3: Bio-sphere and Economic growth - Intellectual Property Rights (IPRs) and Natural resources - Recycling of Natural Resources
- 2.4: Optimal Extraction of Non Renewable Natural Resources: Gray Model – Hotelling Model

UNIT III: BIOECONOMICS (15 Periods)

- 3.1: Bionomic Equilibrium
- 3.2: Market Structure and Exploitation of Non-renewable Natural
- 3.3: resources Population growth models – Static economic models of Renewable Natural Resources with references to Fisheries
- 3.4: Regulation of Harvesting of Natural Resources: 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
Schlger & 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, Amrtya (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.

Major (Mandatory)-7

MACRO ECONOMIC ANALYSIS

PREAMBLE:

Macroeconomics or aggregative economics analyses establishes the functional relationship between the large aggregates. The aggregate analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of the different issues and policies. Macroeconomics now is not only a scientific method of analysis; but also a body of empirical economic knowledge. The paper entitled "Macro Economic Analysis" equips the students at the postgraduate level to understand systemic facts and latest theoretical developments for empirical analysis.

COURSE OUTCOME:

1. Demonstrate the systemic facts and latest theoretical developments at macro level studies for empirical analysis.
2. Acquire the prior knowledge of macroeconomic theoretical structure this is essential for the proper comprehension of the different issues and policies
3. Establish the functional relationship between the large aggregates

Unit 1: National Income and Accounts

(15 Periods)

- 1.1. National Income: Meaning and Associated Concepts
- 1.2. Circular Flow of Income in –two, three and four sector economy;
- 1.3. Different forms of national income accounting–social accounting, input-output accounting,
- 1.4. Flow of funds accounting and balance of payments accounting.

Unit 2: Keynesian synthesis, New Classical and New Keynesian Macroeconomics

(15 Periods)

- 2.1. Keynesian views on interest; The IS-LM model;
- 2.2. Extension of IS-LM model with government sector- Extension of IS-LM models with Labour market and flexible prices. Relative effectiveness of Monetary and Fiscal policies
- 2.3. The new classical critique of micro foundation -The Concept of Rational Expectations – Basic approach and policy implications
- 2.4. New Keynesian Economics - Sticky Nominal prices (Mankiw Model); Supply Side Economics

Unit 3: Theories of Inflation

(15 Periods)

- 3.1. Classical, Keynesian and Monetarist approaches to inflation-
- 3.2. Structuralist theory of inflation- Policies to control inflation
- 3.3. Inflation Unemployment Trade off and Philips curve –
- 3.4. Short run and long run Phillips curve-Approaches to Phillips Curve

Unit 4: Theories of Business Cycles

(15 Periods)

- 4.1. Business Cycles and Structural Changes in Economy
- 4.2. Business Cycles and General Equilibrium
- 4.3. Theories of Business Cycles: Samuelson, Hicks, Kaldor and Goodwin model-
- 4.4. Control of business cycles

READING LIST

1. Ackley, G. (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
2. Blackhouse, R. and A. Salansi (Eds.) (2000), *Macroeconomics and the Real World* (2 Vols.), Oxford University Press, London.
3. Branson, W. a. (1989), *Macroeconomic Theory and Policy*, (3rd Edition), Harper and Row, New York.
4. Culbertson, J. M. (1968), *Macroeconomic Theory and Stabilization Policy*, McGraw Hill, Kogekosh, Tokyo.
5. Dornbusch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.
6. Duesenberry, J. S. (1949), *Income, Saving and the Theory of consumer Behaviour*, Harvard University Press, Harvard.
7. Edey, M. and A. T. Peacock (1967), *National Income and Social Accounts*, Hutchinson University Library, London.
8. Frisch, H. (1983), *Theories of Inflation*, Cambridge University Press, Cambridge.
9. Gordon, R. A. (1961), *Business Fluctuations*, Harper and Row.
10. Gordon, R. and S. G. Harris (1998), *Macroeconomics*, Addison Wesley.
11. Gordon, R. and S. G. Harris (1998), *Macroeconomics*, Addison Wesley, Massachusetts.
12. Hall, R. E. and J. B. Taylor (1986), *Macroeconomics*, W. W. Norton, New York.
13. Heijdra, B. J. and V. Frederick (2001), *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.
14. Hicks, J. R. (1950), *A contribution to the Theory of Trade Cycles*, Clarendon Press, Oxford.
15. Jha, R. (1991), *contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
16. Jha, R. (1999), *Contemporary Macroeconomic Theory and Policy*, New Age International (P) Ltd., New Delhi.
17. Keynes, J. M. (1936), *The General Theory of Employment, Interest and Money*, Macmillan, London.
18. Levacic, R. and A. Rebman (1986), *Macroeconomics: An Introduction to Keynesian and Neo-classical Controversies*, Macmillan, London.
19. Lucas, R. (1981), *Studies in Business Cycle Theory*, M. I. T. Press, Cambridge, Massachusetts.
20. Mankiw, N. G. and D. Romer (Eds.) (1991), *New Keynesian Economics*, (2 Vols.), MIT Press, Cambridge.
21. Mankiw, N. G. and D. Romer (Eds.) (1991), *New Keynesian Economics*, (2 Vols.) MIT Press, Cambridge.
22. Mueller, M. G. (1966), *Readings in Macroeconomics*, Holt Rinehart and Winston, New York.
23. Patinkin, D. (1965), *Money, Interest and Prices*, Harper and Row, New York.
24. Powelson, J. P. (1960), *National Income And Flow of Funds Analysis*, McGraw Hill, New York.
25. Rakshit, M. (1998), *Studies in the Macroeconomics of Developing Countries*, Oxford University Press, New Delhi.
26. Rao, V. K. R. V. (1983), *India's National Income: 1950 to 1980*, Sage Publications, New Delhi.
27. Romer, D. L. (1996), *Advanced Macroeconomics*, McGraw Hill Company Ltd., New York.
28. Ruggles, R. and N. Ruggles (1956), *National Income Accounts and Income Analysis*, McGraw Hill, New York.
29. Scarfe, B. L. (1977), *Cycles, Growth and Inflation*, McGraw Hill, New York.
30. Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
31. Sheffrin, S. M. (1996), *Rational Expectations*, Cambridge University Press, Cambridge.
32. Taylor, L. (1983), *Structuralist Macroeconomics*, Basic Books, New Longman.
33. United Nations (1974), *Year Book of National Account Statistics*.

Major (Mandatory)-8 (2 Credits)

8. COMPUTER APPLICATION IN ECONOMICS – II

PREAMBLE:

Economics being an empirical science, computers have emerged as the pivotal instruments of economic analysis, research and forecasting. Therefore, the students must be equipped with skills and tools based on computers, which, this course shall provide to them. This will not only enhance their employability but also prepare them for the challenges of the future.

COURSE OUTCOME:

1. Acquire the basic knowledge of Computer and Data Information.
2. Enable the students to acquaint the soft wares like Excel and SPSS which are essential for research.
3. Make the students more able to handle real data with confidence by applying econometric methods of analysis to new circumstances and to develop the skills of using more scientific tools based on computers for economic analysis, research and forecasting.

Unit I: Text Processing, Spreadsheet Software and and Internet

(Periods: Theory-8 and Practical-16)

- 1.1 Introduction to Text Processing-Word Processor: Meaning, Uses and Advantages; Popular Word Processing Packages; Features of; MS-Word: Getting Started, Creating and Saving a document, Editing, Page Setting and Formatting the text and Printing the Document.
- 1.2 Spreadsheet Software: Meaning, Advantages and application areas; Features of MS-Excel: Entering Information; saving workbooks, Commands like creating deleting and copying rows and columns, Create store
- 1.3 SPSS: Data Entry, Define variable, Frequency Distribution, Cross tabulation
- 1.4 Information Technology in Business: Internet-Intranet-Extranet, LAN- MAN, WAN, WWW and E-Mail

UNIT II: Descriptive Statistics

(Periods: Theory-7 and Practical-14)

- 2.1. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation
- 2.2. Standard Deviation and Coefficient of Variation
- 2 3. Correlation Analysis: Meaning, Concept and Types
- 2.4. Measurement of Correlation: (i) Karl Pearson's Coefficient of Correlation (ii) Spearman's Rank Coefficient of Correlation

READINGLIST LIST:

1. Dhanasekaran. K (2013) Computer applications in Economics, Vrinda Publications Pvt. Ltd.
2. Elhance, D. N. (1962), Fundamentals of Statistics, KitabMahal, Allahabad.
3. Gupta, S. C. (1981), Fundamentals of Statistics, Himalaya Publishing House, Bombay.
4. N. M. Downie and R. W. Heath (1970), Basic Statistical Methods, Harper and Row, New York.
5. Rajaram, V, (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.
6. Sanders, D. H. (1988), Computer Today, McGraw Hill, New York.
7. Sinha, P. K. (1992), Computer Fundamentals, BPB Publications, New Delhi.
8. Yamane, Taro (1973), Statistics, An Introductory Analysis, Harper and Row (India) and John Weatherhill Inc., Tokyo

Major (Elective)-10

AGRICULTURAL ECONOMICS

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.

COURSE OUTCOME:

1. Describe the scope and subject matter of agricultural economics.
2. Familiarize students to analyze the issues related with agricultural and economic development, agricultural production function, agricultural demand and supply.
3. Deals with the farm management and types of agricultural risk

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 vis-à-vis industrial production – Features of modern agricultural production.
- 2.2: Factor- Product Relationship: Meaning & uses of agricultural production function- Agro-technology & production function production 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 decisions Types of Farming- Farm Size and Productivity – Farm Efficiency Measures.
- 3.2: Principles of farm management: Principles of Factor Substitution Principles 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 :

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

Major (Elective)-11

ECONOMICS OF RURAL DEVELOPMENT

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.

COURSE OUTCOME:

1. Students are able to examine the economic problems of rural societies.
2. Students become able to equip the different agencies involved in rural development and Their role in development of rural area.
3. Students get acquainted with the various programs and policies of rural development.

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

- 1.1. Rural Development: nature, scope and objectives
- 1.2. Approaches of Rural Development
- 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 - Gandhian Model of Rural Development.

Unit 2: Rural Economy (15 Periods)

- 2.1 Natural Resources: Land, Water, Minerals and Forest Resources - Utilization of Human & Natural Resources.
- 2.2 Rural Economy: Characteristics and problems - i. Agriculture- Productivity, prices, marketing, and irrigation, ii. Rural industries -Small scale and cottage industries.
- 2.3 Rural credit - Institutional and non-institutional; Magnitude of Rural Credit - Multi-Agency Approach to Rural Credit
- 2.4 Rural Indebtedness: Extent of Rural Indebtedness - Nature of Indebtedness - Causes of Rural Indebtedness - Effects of Indebtedness - Government Measures to review Rural Indebtedness.

Unit 3: Rural Development Planning and Programs (15 Periods)

- 3.1 Economic Planning: Meaning and Significance; Planning: Types, Objectives
- 3.2 Planning at Different Levels: National, State, District, Block and Village - Planning in Practice
- 3.3 Programs and policies regarding rural unemployment and poverty: NREGP; NRHM, ICDS, MDM, SSA, SGSRY;
- 3.4 Infrastructure Programmes for Rural Development: Transport and Communication, Education, Health Care Facilities

Unit 4: Rural Development Institutions (15 Periods)

- 4.1 Panchayati Raj Institutions (PRI's), Panchayati Raj Before and after 73rd Constitutional Amendment Act
- 4.2 Cooperatives and Rural Development

- 4.3 World Bank Lending to Rural Development - Associations and Rural Development - Self Help Groups (SHGs) - Micro-Financial Institutions (MFIs) - Role of Third Sector - NGOs and Rural Development
- 4.4 Ministry of Rural Development (India and States): Structure and Functions.

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

Major (Elective)-12

CO-OPERATIVE THOUGHTS AND ADMINISTRATION

PREAMBLE:

Co-operative movement, now-a-days has become a part of total economic activities. It is not only an economic movement, but also social, political and ethical movement, enriching total human life. Proper understanding of co-operative thoughts and administration is a prerequisite for study of co-operative movement.

COURSE OUTCOME:

1. Get acquainted with the western thoughts and ideas about the cooperation.
2. Understand the principle of management and its application in cooperative organization.
3. Elaborate the role of leadership and the role of government in development of cooperation organization.

Unit 1: Co-operative Thoughts (15 Periods)

- 1.1. Robert Owen - Rochadale Pioneers-, Charles Fourier - Paul Lambert
- 1.2. Scheultze Delitsche Raiffeisen - Frederick Nicholson
- 1.3 D. R. Gadgil- Vaikunthbhai Mehta.
- 1.4. International Co-operative Alliance: Organization and functions. I.C.A. and Co-operative Principles

Unit 2: Co-operative Administration (15 Periods)

- 2.1. Co-operative Management- Concept and Unique Features
- 2.2. Henry Fayol's general principles of management.
- 2.3. Management Structure: Types and procedure of general body meetings- Duties of Board of Directors - & role of Secretary/ Managing Director.
- 2.4. Concept of Corporate Governance.

Unit 3: Leadership and Human Resource Development (15 Periods)

- 3.1. Role of leadership – Leadership qualities – Leadership Development Programme.
- 3.2. Contribution of Co-operative Leaders: Vasantdada Patil, Padamshri Vilke Patil, Tatyasaheb Kore
- 3.3. HRD and Education and training Facilities in India- Need and Problems of HRD
- 3.4. Recent Trends in Co-operative Management

Unit 4: Role of State and Co-operative Audit (15 Periods)

- 4.1. Role of state in co-operative movement: State aid and State control- Cooperative Legislations and need for reforms.
- 4.2. Co-operative Audit: Concept and Salient Features-Types
- 4.3. Co-operative Supervision: BASEL Norms
- 4.4. Auditor: Duties, rights & responsibilities

BASIC READING LIST:

1. Chinchankar, P. Y. and Namjoshi, M. V., Co-operation and dynamics of Change, Somaiya, Bombay.
2. Cole, G. D. H., A Century of co-operation, George Allen and Unwin Ltd., London.

3. Dwivedi, Co-operatives – Values and Identity.
4. E. Paul Roy, Co-operation Today and Tomorrow, Interstate Printers and Publications, U.S.A.
5. Goel, S. L. & Goel, B. B., Co-operative Administration, Sterling Publications, New Delhi.
6. Gokhale Institute of Politics and Economics, Speeches and Writings of Professor D. R. Gadgil on Co-operation.
7. Govatia, B. S., Verma, H. L. and Others (1994), Co-operatives and Human Resource Development, Vol. 1 to 5, Deep and Deep Publications.
8. I. L. O., Geneva, (1959), Some Trends within the World Co-operative Movement.
9. International Co-operative Alliance: Review of International Cooperation.
10. Kamat, G. S. (1978), New Dimension in Co-operatives, Himalaya Publishing House.
11. Mehta Vaikunthbhai, Towards a Co-operative Socialist Commonwealth.
12. Patnaik and Roy, Co-operation and Co-operative Management, Kalyani Publishers, New Delhi.
13. Saxena, R. K., Evolution of Co-operative Thought, Somaiya Publications, Bombay. 54
14. Stephenson (1978), Management in Co-operatives, Himalaya Publishing House.
15. Taimani, K. K., Co-operative Organisation and Management.
16. Taimani, K. K., Training and Development of Human Resources in Co-operatives, Savin Brothers, New Delhi.

Major (Elective)-13

INDIAN CAPITAL MARKET

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:

1. Understand the structure and functioning of capital market.
2. Analyze the impact of trends in capital market and study policy changes.
3. Equip the students with investment methods in capital market.

UNIT I Indian Financial System (15 Periods)

- 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

UNIT II Primary Market (15 Periods)

- 2.1 Capital Market : Meaning and Structure
- 2.2 Primary Market: Concept, Role, advantages and dvantages
- 2.3 Types of Primary Market issues
- 2.4 Initial Public Offering(IPO) and Book building process

UNIT III Secondary Market (15 Periods)

- 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

UNIT IV Accessing Capital Market (15 Periods)

- 4.1 Methods of Accessing Capital Market- Direct Vs Indirect 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

References :

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

Major (Elective)-14

REGIONAL ECONOMICS

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.

COURSE OUTCOME:

1. Strengthening the basic understanding of the theories of economic development.
2. Learning to understand to relate the development theory to the sub-national development.
3. Understand the theories of regional of sub-national development.

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), *Weber'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

Major (Elective)-15

CONTRIBUTION OF NOBEL LAUREATES TO ECONOMICS

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.

COURSE OUTCOME:

1. Acquaint the students of economics with the ideas and work of Nobel laureates.
2. Describe the development of ideas by the Nobel Laureates in Economics.
3. Critically assess the ideas of growth and financial economics by the Nobel Laureates in Economics.

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) Myrthman, 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. (1975), *Concept of Optimality and their Uses: Nobel Lecture*.
- 129) Leontief, W. W. (1951), *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. (1966), *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.

Major (Elective)-16

ECONOMIC THOUGHTS OF DR. B. R. AMBEDKAR

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 OUTCOME:

1. Equip with the thoughts of Dr B R Ambedkar on Public Economics.
2. Analyse the contribution to Monetary Economics.
3. Examine the development policy suggested for India.
4. Assess the problems and remedies on Indian agriculture and related issues.

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

- 1.1: Administration of East India Company
- 1.2: East India Company Finance: Sources of Revenue - Heads of Expenditure - Overall Budgetary Position
- 1.3: Imperial Finance - Provincial Finance
- 1.4: Thoughts on 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 -
- 2.2: Silver standard to Gold Standard - Gold Standard to a 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
- 4.3: Labour and Labour Welfare
- 4.4: Population Policy - 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://mpr.aub.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

Major (Elective)-17

HEALTH ECONOMICS

PREAMBLE:

Health status of the population forms a major variable in measuring the Human Development Index. Health infrastructure provisions both public and private sector assumes significance in the overall health policy of a country. The present paper analyses the national health scene, correlation of health output and input indicators with level of economic development. Resource allocation in the health sector both public and private sector, evaluation of benefits and costs of health services, financing of health services and role of government and institutions also is examined.

COURSE OUTCOME:

1. Equip the students with the role of the health in the economic development of the economy.
2. Get familiar with the problems in supply of and demand for health care services.
3. Trained in carrying out cost –benefit analysis of health services.

Unit 1: Introduction to Health Economics (15 Periods)

- 1.1: Role of Health in Economic Development- Role of Health Input and Output Indicators in Economic Development.
- 1.2: Health Dimensions of Development- Determinants of Health- Poverty, Malnutrition and Environmental Issues.
- 1.3: Inequalities in Health: class and gender perspectives with reference to India.
- 1.4: Health Infrastructure: Government and Private.

Unit 2: Demand and Supply of Health Care Services (15 Periods)

- 2.1: Nature and Determinants of Demand for Health Care Services.
- 2.2: Elasticity of Demand for Health Care Services.
- 2.3: Nature of Supply of Health Care Services- Health Production Function.
- 2.4: Pricing of health care services.

Unit 3: Cost -Benefit Analysis of Health Services (15 Periods)

- 3.1: Private costs and benefits of providing health services- Application of cost-benefit analysis to public health projects.
- 3.2: Provision of Health Services by Government- Market failure in health services
- 3.3: Health Insurance: Need for a special health insurance for the poor, disabled, and the aged.
- 3.4: Health Insurance Policy of government.

Unit 4: Financing and Planning of Health Services (15 Periods)

- 4.1: Public expenditure on health care services in India.
- 4.2: Financing health care services - Government, Financial Institutions and Development Finance Institutions.
- 4.3: Delivery of health care services- decentralization and the role of the private public mix- Health system reforms.
- 4.4: Fourth National Family Health Survey, A review of the Indian National Health Policy since 1991.

READING LIST:

1. A. J. Culyer and J. Newhouse (2000), Handbook of Health Economics, North-Holland, Amsterdam, (edited volume).
2. Banerjee, D. (1975), Social and Cultural Foundations of Health Service Systems of India, Inquiry, Supplement to Vol. XII, June.
3. Banerjee, D. (1982), Poverty, Class and Health Culture in India, Vol. I Prachi Prakashan, New Delhi.
4. Feldstein, M. S. (1977), Economic Analysis of Health Service Efficiency, North Holland, Amsterdam.
5. Feldstein, P. J. (1993): Health Care Economics, Wiley (Unit 3)
6. Gandhian Institute for rural and Family Planning (1972), Studies on Mortality in India, Monograph Series No. 5.
7. Government of India (1983), National Health Policy, New Delhi.
8. Henderson, J.W.(2001): Health Economics and Policy, South –Western, Thomson(Unit 3)
9. Indian Council of Social Science Research and Indian Council of Medical Research (1981), Health for All 2000 a. D. ICSSR, Delhi.
10. Jimenez E. (1987), Pricing Policy in the Social Sectors, The Johns Hopkins University Press, New York.
11. Madan, T. N. (1969), Who Chooses Modern Medicine and Why? Economic and Political Weekly, pp. 1475-84.
12. Madan, T. N. (1980), Doctors and Society –Three Asian Case Studies, Vikas Publishing House, Delhi.
13. Naik, J. P. (1977), An alternative System of Health Care Services in India – Some Proposals, ICSSR, Delhi.
14. Panchamukhi P.R., Economics of Health.
15. Tim Ensor and Sophie Witter (2001), Health economics in low income countries: adapting to the reality of the unofficial economy, Health Policy, Vol. 57, pp. 1-13.
16. Victor Fuchs (1982), Economic Aspects of Health, The University of Chicago Press, Chicago (edited volume)

Major (Elective)-18

MATHEMATICAL ECONOMICS-II

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.

COURSE OUTCOME:

1. Acquire the importance of social services in promoting the level of social welfare.
2. Understand economic valuation of the environment and its role in development as well as social welfare maximization.
3. Provide knowledge of the important aspects such as welfare and environment, economic valuation of the environment, optimal use of natural resources and social services like education and health to the students.

Unit-I **Game Theory and Input-Output Analysis** (15 Periods)

- 1.1 Concept of the game– Terminology of Game Theory, Two-person zero-sum game, Pay-off matrix, pure and mixed strategies
- 1.2 Maxi-min and mini-max solutions, Saddle point solution, Non-constant sum game
- 1.3 Input-output analysis: Open and closed systems
- 1.4 Hawkins-Simon conditions; Leontief's dynamic model and static model

Unit-II **Linear Programming** (15 Periods)

- 2.1 Linear programming – Basic concept of linear programming problem (LPP), Assumptions, Applications
- 2.2 Properties of Linear Programming Solution
- 2.3 Solution of LPP by graphical and simplex method
- 2.4 Primal and dual problem, application LP in economics

Unit-III **National Income Determination** (15 Periods)

- 3.1 National Income: Meaning, Concepts
- 3.2 National Income Determination in two sector economy
- 3.3 National Income Determination in three sector economy, Balanced Budget Multiplier
- 3.4 National Income Determination in four sector economy

Unit-IV **Theory of Consumption, Investment, Multiplier and Accelerator** (15 Periods)

- 4.1 Consumption Function, Investment and Saving Functions
- 4.2 Multiplier-Investment Multiplier, Employment Multiplier, Static and Dynamic Multiplier, Foreign Trade Multiplier-Back-Wash Effect, Multiplier Effects in Economies
- 4.3 Acceleration Principle
- 4.4 Interaction of Multiplier and Accelerator

References/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.