

**DEPARTMENT OF ECONOMICS  
ANDHRA UNIVERSITY**



**VISAKHAPATNAM.**

**M.A. ECONOMICS AND M.A. APPLIED ECONOMICS  
REVISED AND INTEGRATED SYLLABUS**

<b>M.A. Economics</b>		<b>M.A. Applied Economics</b>	
<b>Paper No</b>	<b>Compulsory Papers</b>	<b>Paper No</b>	<b>Compulsory Papers</b>
	<b>Title of the Paper</b>		<b>Title of the Paper</b>
<b>Semester- I</b>			
Paper I	Micro Economic Analysis-I	Paper I	Micro Economic Analysis-I
Paper II	Macro Economic Analysis-I	Paper II	Macro Economic Analysis-I
Paper III	Quantitative Methods-I	Paper III	Quantitative Methods-I
Paper IV	Public Economics-I	Paper IV	Public Economics-I
Paper V	Indian Economic Policy-I	Paper V	Indian Economic Policy-I
<b>Semester- II</b>			
Paper I	Micro Economic Analysis-II	Paper I	Micro Economic Analysis-II
Paper II	Macro Economic Analysis-II	Paper II	Macro Economic Analysis-II
Paper III	Quantitative Methods-II	Paper III	Quantitative Methods-II
Paper IV	Public Economics-II	Paper IV	Public Economics-II
Paper V	Indian Economic Policy-II	Paper V	Indian Economic Policy-II
	<b>1<sup>st</sup> VIVA VOICE</b>		<b>1<sup>st</sup> VIVA VOICE</b>
<b>Semester- III</b>			
Paper I	Evolution of Economic Doctrines.	Paper I	Participatory Rural Appraisal
Paper II	International Trade	Paper II	International Trade & Finance
Paper III	Economics of Education & Health	Paper III	Economics of Education & Health
<b>Paper IV</b>	<b>OPTIONAL</b>	<b>Paper IV</b>	<b>OPTIONAL</b>
<b>Paper V</b>	<b>OPTIONAL</b>	<b>Paper V</b>	<b>OPTIONAL</b>
<b>Semester- IV</b>			
Paper I	Economics of Growth and Development	Paper I	Economics of Growth and Development
Paper II	International Finance	Paper II	Theory and Practice of Co-operation
Paper III	Environmental Economics	Paper III	Environmental Economics
<b>Paper IV</b>	<b>OPTIONAL</b>	<b>Paper IV</b>	<b>OPTIONAL</b>
<b>Paper V</b>	<b>OPTIONAL</b>	<b>Paper V</b>	<b>OPTIONAL</b>
	<b>2<sup>nd</sup> VIVA VOICE</b>		<b>2<sup>nd</sup> VIVA VOICE</b>

Note: All the papers with same titles shall have the same syllabus and Question papers

**The Following Specializations are offered For the Students Of both  
M.A. Economics and M.A. Applied economics**

<b>Paper No</b>	<b>Optional Papers for Semester III Chose any combination from A to G</b>	<b>Paper No</b>	<b>Optional Papers for Semester IV</b>
<b>Combination- A</b> Paper IV Industrial Economics Paper V Labour Economics		<b>Paper IV Select one of the following Electives</b>	
		A	Indian Industrial Economics
		B	Welfare Economics
<b>Combination- B</b> Paper IV Demography Paper V Economics of Gender & Development		C	Economics of insurance
		D	Computer Programming and Applications
		E	Economics of infrastructure
<b>Combination- C</b> Paper IV Agricultural Production Economics and farm management Paper V Agricultural Marketing and Finance		F	Economics of information Technology
		G	Economics of Human development
		H	Regional Economics
		<b>Paper V Select one of the following Electives</b>	
<b>Combination- D*</b> Paper IV Mathematical Economics Paper V Basic Econometrics		A	Economics and law
		B	Poverty and income Distribution
		C	Project Appraisal and Cost Benefit Analysis
<b>Combination- E</b> Paper IV Financial Institutions Paper V Financial Markets		D	Applied Econometrics**
		E	Economics of Services
		F	Security Analysis and Portfolio Management
		G	Micro Finance
<b>Combination- G</b> Paper IV Urban Economics Paper V Rural Economics and Social Change		H	Andhra Pradesh Economy

\*Candidates having mathematics as one of the optional at the undergraduate alone are eligible for this specialization.

\*\* Candidates opting for Mathematical Economics and Basic Econometrics as the specialization in the third semester alone are eligible

**Note: For all papers with practical component, the practical component will have two additional periods of instruction per week.**

**SEMESTER – I**  
**PAPER-1**  
**MICRO ECONOMIC ANALYSIS – I**

**Module 1: Introduction and Basic Concepts:**

Basic Economic Problem-Choice and Scarcity; Deductive and Inductive Methods of Analysis; Positive and Normative Economics; Economic Models; Characteristics of Equilibrium and Dis - equilibrium Systems. Elasticities (price, cross, and income) of demand-theoretical aspects and empirical estimation; elasticity of supply; Theories of demand.

**Module 2: Theory of Consumption:**

Utility; Indifference curve (income and substitution effects, Slutsky theorem, compensated demand curve) and their applications; Revealed preference theory; Revision of demand theory by Hicks. Consumer's choice involving risk; indirect utility functions (duality theory); Recent development in demand analysis (pragmatic approach and linear expenditure systems); Consumer's surplus; Inter-temporal consumption; Recent developments in demand; Elementary theory of price formation-demand and supply equilibrium; Cobweb theorem; lagged adjustment in interrelated markets.

**Module 3: Theory of Production:**

Production function-short period and long period; law of variable proportions and returns to scale; Isoquants-Least cost combination of inputs; Returns to factors; Economies of scale; Multi-production firm; Elasticity of substitution.

Euler's theorem ; Technical progress and production function; Cobb-Douglas CES, and VES production functions and their properties; Empirical work on production functions;

**Module 4: Theory of Costs and Price and Output Determination in Perfect Competition:**

Traditional and modern theories of costs-Empirical evidence; Marginal analysis as an approach to price and output determination; perfect competition-short run and long run equilibrium of the firm and industry, price and output determination, supply curve.

**Module 5: Monopoly and Monopolistic Competition:**

Monopoly-short run and long run equilibrium, price discrimination, welfare aspects, monopoly control and regulation.Monopolistic competition–general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group with product differentiation and selling costs, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition.

**Basic Reading list:**

Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.

Koutsoyiannis, A. (1979), Modern Microeconomics, (2<sup>nd</sup> Edition), Macmillan press, London.

Layard, P.R.G and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.

Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.

Stigler, G. (1996), Theory of Price, (4<sup>th</sup> Edition), Prentice hall of India, New Delhi.

Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.

**PAPER-II**  
**MACRO ECONOMIC ANALYSIS-I**

**Module-1: National Income and Accounts & Classical Macro Economic Models:**

Circular Flow of Income in two, three and four-sector economy; different forms of national income accounting-social accounting, input-output accounting flow of funds accounting and balance of payments accounting. Classical Macro Economic Model,

**Module 2: Keynesian Model of Income determination & Consumption Function:  
Keynesian Model of Income determination**

Keynes psychological law of consumption-implications of the law; short-run and long-run consumption function; Empirical evidence on consumption function; Income-consumption relationship-absolute income, relative income, life cycle and permanent income hypotheses.

**Module 3: Investment Function:**

Marginal efficiency of investment and level of investment; marginal efficiency of capital and investment-long run and short run; The accelerator and investment behavior-impact of inflation; Influence of policy measures on investment-empirical evidence.

**Module 4: Demand for Money:**

Classical approach to demand for money-Quantity theory approach, Fisher's equation, Cambridge quantity theory, Keynes's liquidity preference approach, transaction, precautionary and speculative demand for money-aggregate demand for money;

**Module 5: Neo-classical and Keynesian Synthesis:**

Neo-classical and Keynesian views on interest: The IS-LM model; Extension of IS-LM model with government sector; Relative effectiveness of monetary and fiscal policies: Extension of IS-LM models with labour market and flexible prices.

**Basic Reading List:**

- Ackley, G. (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
- Blackhouse, R. and A.Salansi (Eds.) (2000), *Macroeconomics and the Real World* (2Vols.), Oxford University Press, London.
- Branson, W.A., (1989), *Macroeconomic Theory and Policy*, (3<sup>rd</sup> Edition), Harper and Row, New York.
- Dornbusch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.
- Hall, R.E., and J.B.Taylor (1986), *Macroeconomics*. W.WNorton, New York.
- Heijdra, B.J. and V.P. Fredericck (2001), *Foundations of Modern macroeconomics*, Oxford University Press, New Delhi.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.

**PAPER – III**  
**QUANTITATIVE METHOD-I**

**Module 1: Mathematical Methods-1:**

Concept of function and types of functions; Limit, continuity and derivative: Rules of differentiation; Interpretation of revenue, cost, demand, supply function; Elasticities and their types; Multivariable functions; Concept and types of production functions; Problems of Maxima and Minima in single Variable Case.

**Module 2: Mathematical Methods 2:**

Rules of partial differentiation and interpretation of partial derivatives; Problems of maxima and minima in single and multivariable functions; Unconstrained and constrained optimization in simple economic problems; Simple problems in market equilibrium;

Concept of integration; Simple rules of integration; Application to consumer's surplus and producer's surplus; Growth rates and simple properties of time path of continuous variables.

**Module 3: Mathematical Methods-3:**

Determinants and their basic properties; Solution of simultaneous equations through Cramer's rule; Concept of matrix-their types, simple operations on matrices, matrix inversion and rank of a matrix; Concept of vector-its properties.

**Module 4: Mathematical Methods-4:**

Introduction to input-output analysis-Difference equations – solution of first order and second order difference equations; Applications in trade cycle models; Growth models and lagged market equilibrium models.

**Module 5: Mathematical Methods-5:**

Linear programming – Basic concept; Formulation of a linear programming problem-its structure and variables; Nature of feasible, basic and optimal solution; Solution of linear programming through graphical approach.

Concept of a game; Strategies-simple and mixed; Value of a game; Saddle point solution; Simple applications.

**Basic Reading List:**

Alien, R.G.D. (1974), *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.

Chiang, A.C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.

Handry, A.T. (1999), *Operations Research*, Prentice Hall of India, New Delhi.

Taha, H.A. (1997), *Operations Research : An Introduction (6<sup>th</sup> Edition)*, Prentice Hall of India Pvt. Ltd., New Delhi.

Yamane, Taro (1975), *Mathematics for Economists*, Prentice Hall of India New Delhi.

Heijdra, B.J. and V.P. Fredericck (2001), *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.

Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.

## PAPER – IV PUBLIC ECONOMICS – I

### **Module 1: Introduction:**

Role of Government in organized society: Changing perspective government in a mixed economy: public and private sector, cooperation or competition; Government as an agent for economic planning and development; Government as a tool for operationalizing the planning process; private goods, public goods, and merit goods; Market failure- imperfections, decreasing costs, externalities, public goods; Uncertainty and non-existence of future markets; informational asymmetry-Theory of second best.

### **Module 2: Public Choice:**

Private and public mechanism for allocating resources; Problems for allocating resources; problems of preference revelation and aggregation of preferences; Voting systems; Arrow impossibility theorem; An economic theory of democracy; Politico-economic bureaucracy; Rent seeking and directly unproductive profit seeking (DUP) activities.

### **Module 3: Rationale for Public Policy:**

Allocation of resources-provision of public goods; Voluntary exchange models; Impossibility of decentralized provision of public goods (contributions of Samuelson and Musgrave); Demand-revealing schemes for public goods-Contributions of Clarks, groves and Leyard, Tiebout model, theory of club goods; Stabilization Policy – Keynesian case for stabilization policy; Uncertainty and expectations; Failure of inter-temporal markets; Liquidity preference; Social goals; Poverty alleviation: Provision of infrastructural facilities, removing distributional inequalities-and regional imbalances.

### **Module 4: Taxation:**

Theory of incidence; Alternative concepts of incidence-Allocative and equity aspects of individual taxes; Benefit and ability to pay approaches; Theory of optimal taxation; Excess burden of taxes;

Trade off between equity and efficiency; Theory of measurement of dead weight losses; The problem of double taxation.

### **Module 5: Public Expenditure:**

Wagner's law of increasing state activities; Wiesman-Peacock hypothesis; Pure theory of public expenditure; Structure and growth of public expenditure; Criteria for public investment; Social cost-benefit analysis-Project evaluation, Estimation of costs, discount rate: Reforms in expenditure budgeting; Programme budgeting and zero base budgeting.

### **Basic Reading List:**

Atkinson, A.B. and J.E. Siglitz (1980), lectures on Public Economics, tata McGraw Hill, New York.

Auerbach, A.J.and M.Feldstern (Eds.) (1985), Handbook of Public economics, Vol.I, North Holland, Amsterdam.

Buchanan, J.M. (1970), The Public Finances, Richard D. Irwin, Homewood.

Goode, R.(1986), Government Finance in Developing Countries. Tata McGraw Hill, New Delhi.

Moagmon, J.M. (1970), The public Finance; Selected Readings, Penguin, Harmondsworth.

- Jha, r. (1998), *Modern Public economics*, Routledge, London.
- Menutt, P.(1996), *The Economics of Public Choice*, Edward Elgar, U.K.
- Musgrave, R.A. (1959), *The Theory of Public Finance*, McGraw Hill, Kogakhusa, Tokyo.
- Musgrave, R.A. and P.B. and Musgrave (1976), *Public Finance in Theory and Practice*, McGraw Hill, Kogakusha, Tokyo.
- Shoup, C.S. (1970), *Public Finance*, Aldine, Chicago.
- Shome, P. (Ed.) (1995), *Tax Policy: Handbook*, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D.C.

**PAPER – V**  
**INDIAN ECONOMIC POLICY – I**

**Module 1: Basic Structure of the Indian Economy:**

Approaches to Economic Development and its measurement - Indicators of Development-Basic features of the Indian Economy-Need for Structural Change-Growth and Structural Change in the Indian Economy.

**Module 2: Planning in India:**

Objectives and strategy of planning; Failures and achievements of Plans; Developing grass-root organizations for development-Panchayats, NGOs and pressure groups.

**Module 3: Demographic Features, Poverty and Inequality:**

Broad demographic features of Indian population; Rural-urban migration; Urbanization and civic amenities; Poverty and Inequality.

**Module 4: Public Finances:**

Fiscal federalism-Centre state financial relations; Finances of central government; Finances of state governments; Parallel economy; Problems relating to fiscal policy; Fiscal sector reforms in India.

**Module 5: Money, Banking and Prices:**

Analysis of price behavior in India; Financial sector reforms; Interest rate policy; Review of monetary policy of RBI; Money and capital markets; Working of SEBI in India.

**Basic Reading List:**

Ahluwalia, I.J. and I.M.D. Little (Eds) (1999), India's Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.

Bardhan, P.K. (9<sup>th</sup> edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.

Bawa, R.S. and P.S. Raikhy (Ed.) (1997), Structural Changes in Indian Economy, Guru Nanak Dev University Press, Amritsar.

Brahmananda, P.R. And V.R.Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-state Perspectives, Book well, Delhi.

Chakravarty, S.(1987), Development Planning: The Indian Experience. Oxford University Press, New Delhi.

Dantwala, M.L. (1996), Dilemmas of Growth: The Indian Experience, Sage Publications, New Delhi.

Datt, R. (Ed.) (2001), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.

Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.

Jain, A.K.(1986), Economic Planning in India, Ashish Publishing House, New Delhi.

Jalan, B. (1992), The Indian Economy-Problems and Prospects, Viking, New Delhi.

Jalan, B. (1996), India's Economic Policy^^ Preparing for the Twenty First Century, Viking, New Delhi.

Joshi, V.and i.M.D. Little (1999), India: Macro Economics and Political Economy, 1964-1991, Oxford University Press, New Delhi.



Pariikh, K.S. (1999), India Development Report,1999-2000, Oxford University Press, New Delhi.

Reserve Bank of India, Report on Currency and Finance, (Annual).

Sandesara, J.C. (1992), Industrial Policy and Planning, 1947-1991: Tendencies, Interpretations and Issues, Sage Publications, New Delhi.

Sen, R.K. and B.Chatterjee (2001), Indian Economy: Agenda for 21<sup>st</sup> Century (Essays in honour of Prof.P.P.Brahmananda), Deep & Deep Publications, New Delhi.

Chakravarty, S.V.Khonoy, Logic of Investment Planning.

Weoates, (1972), Fiscal Federalism, Harcourt Brace, Johanowich, New york.

Chaubey, P.K. (1995), Poverty Measurement Issues, Approaches and indices, New age international (P)Ltd., New Delhi.

Tinbergen, J. (1956), Economic Policy Principle and Design, Amsterdam, North Holland Publishing Co.

C.Rangarajan, (2000), Perspectives on Indian Economy -A Collection of Essays, UBSPD publishers Distributors Ltd., New Delhi.

Misra S.K. & Puri, V.K.(2001), Indian Economy, Himalaya Publication House, Mumbai.

**SEMESTER – 2**  
**PAPER – 1**  
**MICRO ECONOMIC ANALYSIS-II**

**Module 1: Oligopoly:**

Oligopoly-Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, kinked demand curve and Strackelberg's solution) and collusive (Cartels and mergers, price leadership and basing point price system) models.

Price and output determination under monopsony and bilateral monopoly; workable competition- Structure, conduct and performance norms.

**Module 2: Alternative Theories of the Firm:**

Critical evaluation of marginal analysis; Baumol's sales revenue maximization model; Williamson's model of managerial discretion; Marris model of managerial enterprise. Full cost pricing rule; Bain's limit pricing theory and its recent developments including Sylos-Labini's model; Behavioural model of the firm.

**Module 3: Distribution:**

Neo-classical approach- Marginal productivity theory; Product exhaustion theorem; elasticity of technical substitution, technical progress and factor shares; Theory of distribution in imperfect product and factor markets.

**Module 4: Welfare Economics:**

Pigovian welfare economics; Pareto optimal conditions; Value judgement; social welfare function; Compensation principle - Inability to obtain optimum welfare- Imperfections, market failure, decreasing costs, uncertainty and non-existent and incomplete markets; Theory of Second Best-Arrow's impossibility theorem; Pawl's theory of justice, equality- efficiency trade off.

**Module 5: General Equilibrium:**

Partial and general equilibrium, Walrasian excess demand and input-output approaches to general equilibrium, existence, stability and uniqueness of equilibrium and general equilibrium.

A Graphical Treatment of the Two-Factor, Two commodity two Consumer general equilibrium System (2\*2\*2 Model), Money and General equilibrium.

**Basic Reading List:**

- Allen, R.G.D; Mathematical Analysis for Economists  
Kreps, David M.(1990), A Course in Microeconomic theory, Princeton University Press, Princeton.  
Koutsoyinnanis, A. (1979), Modern Microeconomics, (2<sup>nd</sup> edition), Macmillan Press, London.  
Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.  
Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.  
Stigler, G. (1996), Theory of Price, (4<sup>th</sup> Edition), Prentice Hall of India, New Delhi.  
Mohan, H. (2000), Microeconomic Analysis, W.W.Norton, New York.

**PAPER – 2**  
**MACRO ECONOMIC ANALYSIS-II**

**Module 1: Supply of Money:**

Financial intermediation- a mechanistic model of bank deposit determination; A behavioral model of money supply determination, a demand determined money supply process; RBI approach to money supply; High power money and money multiplier; budget deficits and money supply; money supply and open economy; control of money supply.

**Module 2: Post – Keynesian Demand for Money:**

Post-Keynesian approaches to demand for money-Patinkin and the Real balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory; Crisis in Keynesian economics and the revival of monetarism.

**Module 3: Macroeconomics in an Open Economy:**

Mundell-Felming model- Asset markets, expectations and exchange rates; Monetary approach to balance of payments.

**Module 4: Theory of Inflation:**

Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation; Philips curve analysis-short run and long run Philips curve; Samuelson and Solow-the natural rate of unemployment hypothesis; Tobin's modified Philips curve; Adaptive expectations and rational expectations; Policies to control inflation.

**Module 5: Business Cycles and New Classical Macro Economics:**

Theories of Schumpeter, Kaldor, Samuelson and Hicks, Goodwin's model; Control of business cycles-relative efficacy of monetary and fiscal policies- Nature of International Business Cycles

The new classical critique of micro foundations, the new classical approach; Policy implications of new classical approach-empirical evidence.

**Basic Reading List:**

- Ackley, G. (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
- Blackhouse, R. and A.Salansi (Eds.) (2000), *Macroeconomics and the Real World* (2Vols.), Oxford University Press, London.
- Branson, W.A. (1989), *Macroeconomic Theory and Policy*, (3<sup>rd</sup> Edition), Harper and Row, New York.
- Dornbusch, R. and F.Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.
- Hall, R.E. and J.B. Taylor (1986), *Macroeconomics* W.W.Norton, New York.

**PAPER-3**  
**QUANTITATIVE METHOD-II**

**Module 1: Statistical Methods-1:**

Meaning, assumptions and limitations of simple correlation and regression analysis; Pearson's product moment and Spearman's rank correlations coefficients and their properties; Concept of the least squares and the lines of regression; Standard error of estimate.

**Module 2: Statistical Methods-2:**

Partial and multiple correlations and regression (applications only): Methods of estimation of non-linear equations-parabolic, exponential geometric, modified exponential, Gompertz and logistic relationships.

**Module3: Statistical Methods-3:**

Deterministic and non-*deterministic* experiments; various types of events-classical and empirical definitions of probability; laws of addition and multiplication; Conditional probability and concept of interdependence; Baye's theorem and its applications; Elementary concept of random variable; Probability mass and density functions; Expectations, moments and moment generating functions; Properties (without derivations) of Binomial, Poisson and Normal distributions.

**Module 4: Statistical Methods-4:**

Basic concept of sampling- random and non-random sampling; simple random; stratified random and P.P.S. Sampling; Concept of an estimator and its sampling distribution; Desirable properties of an estimator.

**Module 5: Statistical Methods-5:**

Formulation of statistical hypotheses- Null and alternative; Goodness fit; Confidence intervals and level of significance; Hypothesis testing based of Z, t,  $\chi^2$  (Chi-square) and F-tests; Type 1 and Type 2 errors.

**Basic Reading List:**

Gupta, S.C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons New Delhi.

Gupta, S.P. (1993), Introduction to Statistical Methods., S.Chand & Sons New Delhi.

Wonnacott & Wonnacott; Introduction to statistical Methods.

Speigal, M.R. 91992), Theory and Problems of Statistics, Mcgraw hill Book Co., London.

**PAPER-4**  
**PUBLIC ECONOMICS-II**

**Module 1: Public Debt:**

Classical view of public debt; Compensatory aspect of debt policy; Burden of public debts; Sources of public debt; Debt through created money; Public borrowings and price level; Crowding out of private investment and activity; principles of debt management and repayment.

**Module 2: Fiscal Policy:**

Objectives of fiscal policy-full employment, anti-inflation, economic growth, redistribution of income and wealth; Interdependence of fiscal and monetary policies; Budgetary deficits and its implications; Fiscal policy for stabilization-automatic vs. discretionary stabilization; Alternative measures of resource mobilization and their impact on growth, distribution and prices; Balanced budget multiplier.

**Module 3: Fiscal Federalism:**

Principles of Multi Unit Finance: Vertical and Horizontal imbalances, fiscal Adjustment.

Methods of Fiscal Adjustment, Theory of Grants – Fiscal Federalism in India - Constitutional Provisions - Assignment of functions and sources of Revenue - Finance Commission and Planning Commission.

**Module 4: Centre - State Financial Relations:**

Centre State financial relations in India - Recommendations of the successive Finance Commissions-Resource Transfer from Union to States; Planning Commission, Devolution of Resources and Grants ; Criteria for transfer of resources-Problems of States resources and indebtedness - transfer of resources from Union and States to Local Bodies.

**Module 5: Indian Public Finance:**

Indian tax system; Revenue of the Union, states and local bodies; Major taxes in India: base of taxes, direct and indirect taxes. Taxation of agriculture expenditure tax, reforms in indirect and indirect taxes, taxes on services; non-tax revenue of Centre, State and local bodies; Analysis of Central and State government budgets: lack of flexibility in Central and State budgets, shrinking size of development finance through budgets; Trends in public expenditure and public debt; fiscal crisis and fiscal sector reforms in India.

**Basic Reading List:**

Atkinson, A.B. and J.E. Siglitz (1980), Lectures on Public economics, Tata McGraw Hill, New York.

Auerbach, A.J. and M.Feldstern (Eds) (1985), Handbook of Public Economics, Vol.I, North Holland, Amsterdam.

Buchanan, J.M. (1970), the public Finances, Richard D.li-win, Homewood.

Goode, R. (1986), Government Finance in Developing Countries. Tata McGraw hill, New Delhi.

Houghton, J.M. (1970), The Public Finance: Selected Readings, Penguin, Harmondsworth.

Jha, R. (1998), Modern Public Economics, Routledge, London.

Menutt, P. (1996), The Economics of Public Choice, Edward Elgar, U.K.

Musgrave, R.A. (1959), The theory of Public Finance, McGraw Hill, Kogakhusa, Tokyo.

Musgrave, R.A. and P.B. Musgrae (1976), *Public Finance in Theory and Practice*, McGraw Hill, Kogakusha, Tokyo.

Shoup, C.S. (1970), *Public Finance*, Aldine, Chicago.

Shome, p. (Ed.) (1995), *Tax Policy: Handbook*, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D.C.

**PAPER-5**  
**INDIAN ECONOMIC POLICY-II**

**Module 1: Resource Base and Infrastructure:**

Energy Social infrastructure-education and health; Environment; Regional imbalance; Issues and policies in financing infrastructure development.

**Module 2: The Agricultural Sector:**

Institutional structure- land reforms in India: technological change in agriculture- pricing of agricultural inputs and output; Terms of trade between agriculture and industry; Agricultural finance policy; Agricultural Marketing and Warehousing; Issues in food security-policies for sustainable agriculture.

**Module 3 : The Industrial Sector:**

Industrial policy; Public Sector enterprises and their performance; Problems of sick units in India; Privatisation and disinvestment debate; Growth and pattern of industrialization; Small-scale sector; Productivity in industrial sector; Exit policy-issues in labour market reforms; Approaches for employment generation.

**Module 4: External Sector:**

Structure and direction of foreign trade; Balance of payments; issues in export-Import policy and FEMA; Exchange rate policy; Foreign capital and MNCs in India; The progress of trade reforms in India.

**Module 5: Economic Reforms**

Rationale of internal and extent reforms; Globalisation of Indian economy; W.T.O. and its impact on the different sectors of the economy; Need for and issues in good governance; Issues in competition and safety nets in Indian economy.

**Basic Reading List:**

Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), India's Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.

Bardhan, P.K. (9<sup>th</sup> Edition) (1999), The Political economy of Development in India. Oxford University Press, New Delhi.

Bawa, R.S. and P.S. Raikhy (Ed) (1997), Structural Changes in Indian Economy, Guru Nanak Dev University Press, Amritsar.

Brahmananda, PR. And V.R. Panchmukhi (Eds) (2001), Development Experience in the Indian Economy; Inter-State Perspectives, Bookwell, Delhi.

Chakravarly, S. (1987), Development Planning; The Indian Experience, Sage Publications, New Delhi.

Dantwala, M.L.(1996), Dilemmas of Growth; the Indian Experience Sage Publications, New Delhi.

Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.

Jain, A.K. (1986), Economic Planning in India, Ashish Publishing House, New Delhi.

Jalan, B. (1996), India's Economic Policy^^ Preparing for the Twenty First Century, Viking, New Delhi.

Joshi,V. and I.M.D. Little (1999), India: Macro Economics and Political Economy, 1964-1991, Oxford university Press, New Delhi.

Parikh, K.S. (1999), India Development Report, 1999-2000, Oxford University Press, New Delhi.

Reserve Bank of India, Report on Currency and Finance, (Annual).

Sandesara, J.C. (1992), Industrial Policy and Planning, 1947-1991; Tendencies, Interpretations and Issues, Sage Publications; New Delhi.

Sen, R.K. and B.Chatterjee (2001), Indian Economy : Agenda for 21<sup>st</sup> Century (Essays in honour of Prof.P.P.Brahmananda), Deep & Deep Publications, New Delhi.



**SEMESTER-3**  
**PAPER-I**  
**EVOLUTION OF ECONOMIC DOCTRINES**

**Unit 1: Foundation to Classical School**

Adam Smith- Theory of Economics Development – Value and Distribution – Naturalism and Optimism Laissez faire-J.B.Say-theory of Value-Law of Markets.

**Unit II: Classical School of Thought**

David Ricardo-Theory of Value –Sraffa's Discovery of the Average commodities and theory of comparative cost –T.R. Malthus-Theories of populations, value rent and gluts. Senior N.W. –Theory of value Distribution –J.S. Mill –Value Theory –Comparative Advantage-Individual socialist programme.

**Unit III: Critical School**

List, F.-Theory of Productive Powers and policy of protection, Sismondi-Theory of gluts-Historical School-Critical and positive ideas, Karl Marks-Labour Theory of Value-Theory of Capitalist Competition Theory of Economics Development and Crisis.

**Unit IV : Neo-Classical and Modern Schools**

Marginal Revolution –Jevons-Menger-Walras-Marshall- Value-consumer's surplus-Keynes-consumption economics-Depression Economics.

**Unit – V : Indian Economic Thought**

a) Naoraoji, b) R.C.Dutt, c) M.N.Roy and d) Gandhiji- Wants and Austerity Self sufficiency, trusteeship, Nehruvian economic thought -Ambedkar's economics ideas - Sen's ideas on economic welfare.

**Text Books**

1. Gide and Rist : History of Economic Doctrines.
2. Eric Roll : History of Economic Thought.
3. Mark Blaug : Economic Theory in Retrospect.
4. Haney, L.H. : History of Economic Thought.
5. R.R. Paul : History of Economic Thought.
6. Harry Landreth : History of Economic Theory, Houghton Mifflin Co.
7. P.Ramaiah and K.Sateesh Reddy : Dr. B.R. Ambedkar's Economic Philosophy – Delta Publishing House, Delhi. (1994).
8. GHOSH B.N. and GHOSH ROMA.A. short History of Economic Doctrines.

**References**

1. Back Louse. R. (1985) A History of Modern Economic Analysis Basil, Black well. Oxford.
2. Dasgupta A.K.(1985):Epochs of Economic Theory, Oxford University Press, Delhi.
3. Exclude. R.B. and R. Hebert (1983) : A history of Economic Theory and Method, 2e McGraw Hill, Condon.
4. Gray and A.E.Thompson (1980) : The Development of Economic Doctrine.2e Longman. Group.London.
5. Rima I (1978) : Development of Economic Analysis, Be RD Irwin Homewood.
6. Roll. E. (1973) : A history of Economic Thoughts, Father, London.
7. Schumpeter, J.A. (1954) : History of Economic Analysis, Oxford university Press, New York.

8. Schumpeter, J.A. (1954) : History of Economic Analysis, Oxford university Press, New York.
9. Schumpeter, J.A. (1951) : Ten Great Economists Oxford University Press, New York .
10. Gandhi, M.K. (1938): Economics of Village Industries Navjivan publishing House, Ahmedabad.
11. Gandhi U.K. (1974) : India of my Dreram Navijian Publishing House, Ahmedabad.
12. Gandhi, B.N. (1977) : Indian Economic Thought A 19<sup>th</sup> Century Perspective, Tata-McGraw Hill Co., 1 New Delhi.
13. Gupta, J. N. ed. (1971), R.C. Dult : Lite and Works Lonkon.
14. Roy, M.N. (1964) ; Memories, Allied Publish Bombay.
15. O.P. Mishra "Economics Thought of Gandhi and Nehru".
16. Dr.Pumina, P.Kapoar, "Economic Thought of Jawaharlal Nehru.
17. A.K. Sen " India's Economic Development and Social Opportunity".
18. A.K. Sen, " Choice Welfare and Measurement".
19. K.S. Chalam, "Modernization and Dalit Education-Ambedkar's Vision"-Rawat Publication (2008).

## Paper – II INTERNATIONAL TRADE

### **Module 1: Theory of International Trade**

The pure theory of international Trade – Theories of absolute advantage comparative advantage and opportunity costs; Factor endowments and Heckscher-Ohlin theory of trade – Factor-price equalization theorem - Empirical testing of H.O. Model - The Leontief paradox; Kravis and Linder's theory of Trade.

### **Module 2: Terms of Trade and Gains from Trade**

Concepts of terms of trade, their uses and limitations - Measurement of gains from trade and their distribution; Terms of trade and economic growth.

### **Module 3 : Theory of Interventions**

Free Trade Vs. Protection, Trade restrictions-tariffs, Quotas and non-tariff barriers; Stolper-Samuelson theorem; The political economy of non-tariff barriers and their implications; Trade under imperfectly competitive markets.

### **Module 4: Trade and Development**

Trade as an Engine Growth - Secular Deterioration hypothesis - Rybezynski Theorem; Immersing Growth.

Forms of economic cooperation-Free Trade Area, Customs Union and Common Market; Region Groups-European Union, NAFTA, ASEAN and SAARC, Problems and prospects of forming a customs union in the Asian Region; UNCTAD; Regionalization, Multilateralism and WTO.

### **Basic Reading List:**

Bhagwati, J. (Ed) (1998), International Trade, Selected Readings Cambridge, University Presses Massachusetts.

Carbough, R.J. (1999), International Economics, International Thomson Publishing, New York.

Chachliadas, M. (1990), International Trade : Theory and Policy, McGraw Hill, Kogakusha, Japan.

Dana, M.S. (2000), International Economics; Study Guide and Work Book (5<sup>th</sup> Edition), Routledge Publishers, London.

Dunn, R.M. and J.H.M and (2000), International Economics, Routledge, London.

Kenen, P.B. (1994), The Internal Economy, Cambridge University Press, London.

Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.

King, P.G. (1995), International Economics and International Economics Policy: A Reader, McGraw and International, Singapore.

Krugman, P.R. and M.C. bet fled (1994), International Economics; Theory and Policy, Glenview, Foresman.

Salvalore, D. (1997), International Economics, prentice hall, Upper Saddle River, N.J. New York.

Soderston B.O. (1991), International Economics, The Macmillan Press Ltd., London.]

**PAPER – I**  
**PARTICIPATORY RURAL APPRAISAL**

**Module 1: Traditional approaches to Social Science Research:**

- a) Conventional research methods: Surveys, Case studies, observation and experimental methods.
- b) Tools and techniques in conventional research methods: interviews, schedules, and questionnaires.
- c) Limitations of the traditional approaches.

**Module 2: Participatory rural Appraisal (PRA):**

- a) Meaning of P.R.A.
- b) Philosophy, principles, objectives and scope.
- c) PRA-type inquiry as an alternative to questionnaire survey.

**Module 3: P.R.A methods and techniques:**

- a) Methods supportive of P.R.A. , Participatory Learning Method.
- b) Methods with direct participation-Semi-structured interview maps, ranking and scoring, wealth ranking and grouping, routine diagram, livelihood analysis, flow diagrams.

**Module 4: Application and limitations of PRA methods:**

- a) Areas of PRA applications-Poverty and well-being, understanding discrimination across gender, PRA and health.
- b) Limitations of PRA as a methodology.

**Module 5 : Developing PRA:**

Developing PRA Methodology and necessary supportive methods of PRA to Understand and solve a problem faced in a region/village.

**Note:** The student will be awarded 70% of the marks of the basis of Written examination, in which questions will be asked from the above 5 modules.. The remaining 30% of the marks will be awarded on the basis of Project report .The topic for which will be decided by the student in consultation with the in charge teacher.

**Basic Reading List:**

Neela Mukharjee, Participatory Rural Appraisal; Methodology and Applications, Concept publishing company, New Delhi, 1978.

**PAPER - II**  
**INTERNATIONAL TRADE AND FINANCE**

**Module 1:** Theory of International Trade the pure theory of international trade-theories of absolute advantage, comparative advantage and opportunity-costs; Modern theory of international trade; Theorem of factor price equalization, Empirical resting of theory of absolute cost and comparative cost Heckscher-Ohlin theory of trade; role of dynamic factors in Trade; Tata Rybczynski theorem.

**Module 2 :** Measurement of gains and Theory of International and instrument of gains from trade and their distribution; concepts of terms of trade; their uses and limitation; Hypothesis of secular deterioration of terms of trade.

Trade as an engine of economic growth the theory of interventions (Tariff, Quotas and non-tariff barriers), Economic effects of tariffs and Quotas, non tariff barriers their measurement, and welfare implications.

**Module 3:** Balance of Payments Meaning and components of balance, of payments, Equilibrium and disequilibrium in the balance of payments; The process of adjustment under systems of gold standard, fixed exchange (and flexible exchange rates); Expenditure reducing and expenditure- Switch.

Policies and direct contorts for adjustment; Monetary approach to the theory' balance of payments adjustment: foreign trade multiplier, Relative mutative cements of fixed and flexible exchange rates.

**Module 4 :** The Theory of Regional Blocks and international Trade and illatively system; Forms of economic cooperation, static and Dynamic of states of a customs union and free trade areas, Rationale and economic progress SAARC and ASEAN, Rise and fall of gold standard and Brettonwood system. IMF, IBRD and UNCTAD Reforms of the International Monetary System theory of non-term capital movements; Functions of GATT, WTO Agreements.

**Module 5 :** Trade Policies of India; trade problems and trade policies of India since independence, recent changes in the direction and composition of India; Rationale and impact of trade reforms since 1991; problems of India's; International debt; working and regulations of MNCs in India.

### **Basic Reading List**

Bhagwati, J. (Ed) (1981), International Trade: Selected Readings, Cambridge University Press, Massachusetts.

Carbough, R.J. (1992), International Economics, International Thompson Publishing, New York.

Chancnolides, M,(1990), International Trade: Theory and Policy, McGraw are Kogakisha, Japan.

Dene, M.S. (2000), International Economics ; Study, Guide and Work for (5<sup>th</sup> Edition), Routtedga publishers, London.

Kenen, P.B. (1994), The International Economy, Cambridge University Press, London.

Kindleberger, C.P. (1973), International economics, Irwin, Komewood.

King, P.G. (1995), International Economics and International Economic century A Reader, McGraw Hill International, Singapore.

Kruman P.G. and & Obsetted (1994), International Economics; Theory the policy, Green New Foresman.

Goldstein, M. (1995), The Asian Financial Crisis; causes, Cure and schematic implication institute for-International Economics, Washington, D.C

Crackett, A. (1987), International Money Issues and Analysis, The BS and Nelson.

Heller, h,. Robert (1968), International Monetary Economics, Frantic hall, India.

Agarwal, M.R. (1979), Regional Economic Cooperation in South Asia, Chang and Co., New Delhi.

Branmanada, P.R. (1982), The IMF Loan and India's Economic Fuine, Himalaya Publishing House, Bombay.

Grable, J.O. (1996), International Financial Markets, Prentice Hall, Singlewood, Chiffs, New York.

Miehkin, S.F. (1996), The Economic of Money, Banking and Financial Jokets, (5<sup>th</sup> Edition), Harper Colins Publishers, New York.

Bhagwati, J, and P. Desai (1970), India Planning for Industrialization, word University Press, London.

**Paper – III**  
**ECONOMICS OF EDUCATION AND HEALTH**

**Module 1:** Education as an instrument for economic growth, Human Capital human Capital Vs Physical Capital, Components of human capital Education as consumption or investment - Demand for Education-private and social demand, Determinants of demand.

**Module 2:** Cost of Education - Expenditure on education, Private costs and social costs and wastage and stagnation; Benefits of education-Direct and Indirect benefits, Private and social benefits; Problems involved in measuring returns from investment in education; Educational financing-Resource mobilization and Utilization.

**Module 3:** Education and Labour Market - Effects of educational financing on income distribution; Effects of education, Ability and family background on earnings, Poverty and income distribution, Education and employment; economics of educational planning in developing countries with special emphasis on India-Manpower requirements approach.

**Module 4:** Health dimensions of development; Determinants of health Poverty, Malnutrition and environmental issues; Economic dimensions of health care-Demand and supply of health care; Institutional issues in health care delivery - Health Care Delivery system in India.

**Module 5:** Financing of health care and resource constraints – Health Status Indicators and measurement Global burden of disease-Inequalities in health class and gender perspectives; Health Policy in India.

**Basic reading List:**

Baumol, W.J. and W.E.Oates (1988), *The Theory of Environmental Policy*, (2<sup>nd</sup> Edition), Cambridge University Press, Cambridge.

Berman, R.(Ed) (1995), *Health Sector Reform in Developing Countries: Making Health Development Sustainable*, Boston: Harvard Series on Population and International Health.

Blaug, m.(1972), *Introduction to Economics of Education*, Penguin, London.

Bromely, D.W. (Ed) (1995), *Handbook of Environment Economics*, Blackwell, London.

Cohn, E. and T.Gaske (1989), *Economics of Education*, Pergamon Press, London.

Fisher , A.C. (1981), *Resource and Environmental Economics*, Cambridge University Press, Cambridge

Hanley, N., J.F.Shogern and B. white (1997), *Environmental Economics in Theory and Practice*, Macmillan.

Jeroen, C.J.M: Vanden Bergh (1999), *Handbook of Environmental and Resource Economics*, Edward Elgar publishing Ltd., U.K.

Mehta, S., S.Mundle and U.Sankar (1995), *Controlling Pollution: Incentives and Regulation*, SAGE Publications, New Delhi.

Murthy M.N.,A.James ; and S.Misra (1990), *The Economics of water Pollution in India*,Oxford University Press, new Delhi.

- Sengupta R.P, (2001), Ecology and Economics: An approach to Sustainable Development, Oxford University Press, New Delhi.
- Becker, G.S. (1974), Human Capital (2<sup>nd</sup> Edition), National Bureau of Economic Research, New York.
- McMohan, W.W. (1999), Education and Development; Measuring the Social Benefits, Oxford University Press, Oxford.
- Padmanabhan, C.B. (1984), Financial Management in Education, Select Books, New Delhi.
- Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi.
- Vaizey, J. (1962), Economics of Education, Faber and Faber, London.
- Woodhall, M.(1992), Cost Benefit Analysis in Educational Planning, UNESCO, Paris.
- Baru, R.V. (1998), Private Health Care in India's Health Care Social Characteristics, Sage publications, New Delhi.
- Berman, P. and M.E Khan (1993) Paying for Indian's Health Care, Sage Publications, New Delhi.
- Panchamukhi, P.R. (1980), Economics of Health: A Trend Report in ICSSR, A Survey of Research in Economics, Vol.VI, Infrastructure, Allied, Delhi.
- World Bank (1993), The World Development Report, 1993 : Investing in Health, Oxford university Press, New York.



## SEMESTER - IV

### PAPER- I

#### ECONOMICS OF GROWTH AND DEVELOPMENT

##### **Module-1: Economic Growth and Economic Development**

Meaning and Measurement of Growth and Development - Per capita Income, Physical Quality Of Life Index (PQLI), Human Development Index (HDI) and Human Poverty Index (HPI) – Factors affecting Growth and Development-Capital, Labour and Technology; Economic Inequality and Economic Growth

##### **Module -2: Growth Models**

Classical theory- Marxian Approach, Schumpeter and Capitalist Development; Harrod-Domar model and instability in the Growth Process - Neo-Classical Growth Models-Solow and Meade-New (Endogenous) Growth Models-Human Capital and Economic Growth.

##### **Module -3: Approaches to Development**

Production Function Approach to Growth-Kaldor's model ; Linear stages approach –Roastow; Structuralist approach-Lewis model of Dualism; Neo-colonial dependence approach; Neo-classical counter-revolution-Sen's capability approach.

##### **Module - 4: Development Strategies**

Agriculture Vs Industry: Inward Looking Vs Outward Looking; Big –Push Strategy - Balanced Growth Vs Unbalanced Growth; Low level Equilibrium trap and critical minimum effort theory; Investment criteria and choice of technology; Strategy of Liberalisation, Privatization and. Globalization

##### **Module -5 : Development Policy**

Financing Development-Prior savings Vs Foreign Capital - FDI Vs Foreign trade; Neo-Classical political Economy - State Vs Market; Macro-Economic policy-Monetary Vs Fiscal Policy; Shadow prices-the issue of good governance.

##### **References:**

1. Debraj Ray (1998), Economic Development, Oxford University Press.
2. Dholakia and Dholakia (1998), Theory of Economic Growth, Macmillan, U.K.
3. Ghatak, S. (1986), An introduction to Development Economics, Allen and Unwin London.
4. Higgins, B. (1959), Economic Development, W.W. Norton, New York.
5. Kindleberger, CP.(1977) m Economic Development (3<sup>rd</sup> Edition), McGraw Hill, New York.
6. Meier, G.M. (1995), leading issues in economic Development (6<sup>th</sup> Edition), Oxford University Press, New Delhi.
7. Sen, A.K. (Ed), (1990), Growth Economic, Penguin, Harmondsworth.
8. Suman, K. Mukherjee (1994), Text Book of Economic Development, Orient Longman.
9. Thirlwal, A.P.(1999), (6<sup>th</sup> Edition), Growth and Development, Macmillan, U.K.
10. Todaro, M.P. (1996),. Economic Development, Longman, London.

##### **Basic Reading List:**

Bhagwati, J. (Ed) (1981), International Trade, selected Readings, Cambridge, University Press, Massachusetts.

Carbough, R.J. (1999), International Economics, International Thompson, Publishing, New York.

Chacholiadas, M. (1990), International Trade; Theory and Policy, McGraw Hill, Kogakusha, Japan.

Dana, M.S.(2000), International Economics: Study Guide and Work Book (5<sup>th</sup> Edition), Routledge Publishers, London.

Dunn, R.M and J.H Mutti (2000), International Economics, Routledge, London.

Kenen, P.B. (1994), The International Economy, Cambridge University Press,

Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.

King, P.G. (1995), International Economics and International Economics Policy ; A Reader, McGraw Hill International, Singapore.

Krugman, p.R. and M.Obstfeld (1994), International Economics; Theory and Policy, Glenview , Foresman.

Salvalore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J, New York.

Soderston, B.O. (1991), International Economics, The Macmillan Press Ltd., London.

## **PAPER – II**

### **INTERNATIONAL FINANCE**

#### **Module -1: Balance of Payments**

Meaning and Components of balance of payments; Measurement of Balance of Payments - Surpluses and Deficits; General Theory of Balance of Payments-the Classical Theory-Keynesian Theory-Foreign Trade Multiplier.

#### **Module 2:**

Equilibrium and Disequilibrium in Balance of Payments: Types and causes for disequilibrium; The process of adjustment under Gold Standard, Fixed exchange rates and flexible exchange rates devaluation; Marshal Lerner conditions; Expenditure-reducing and Expenditure-switching policies and direct control for adjustment.

#### **Module 3: Foreign Exchange Market**

Theories of exchange rate determination - Purchasing Power Parity theory, Monetary and Portfolio balance approaches; Equilibrium exchange rates; Stability in the exchange market and market intervention policy.

#### **Module 4: International Capital Movements**

International Capital movements; The transfer problem-The Euro currency market-International Development Agencies; Theory of Short term capital movements and East Asian crisis and lessons for developing countries.

#### **Module 5: International Monetary System**

Rise and Fall of gold standard and Bretton-Woods system; Need, adequacy and determinants of International reserves; Conditionality clause of IMF; Role of International Finance agencies (IMF, IBRD and ADB)in solving International liquidity problem; Emerging International monetary system with special reference to post Maastricht development and developing countries.

### **Basic Reading List:**

- Bhagwati. J. (Ed.) (1981), International Trade, Selected Readings, Cambridge, University Press, Massachusetts.
- Carbough, R.J. (1999), International Economics, International Thompson Publishing, New York.
- Chacholiadas, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogkusha, Japan.
- Dana, M.S. (2000), International Economics: Study Guide and Work Book (5<sup>th</sup> Edition) Toutledge Publishers, London,
- Kenen, P.B. (1994), The International economy, Cambridge University Pres, London.
- Kindleberger, C.P. (1973), International economics, R.D.Irwin, Homewoor.
- Kind, P.G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.
- Krugman, P.R and M.Obstfeld (1994), International Economics: Theory and Policy, Glenview, Foresman.
- Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J. New York..
- Soderston, BN.O (1991), International economics, the Macmillan Press Ltd., London.

**SEMESTER – IV**  
**PAPER - II**  
**THEORY AND PRACTICE OF COOPERATION**

**Module 1 : Principles of Cooperation**

Concept, Definition and Principles of Cooperation, Statement of International Cooperative Alliance ; Cooperative Identity; History and Growth of Cooperative Movement in India.

**Module 2 : Cooperative Credit**

Cooperatives and Agricultural Credit - Organizational Structure of Agricultural Credit Cooperative and Urban Banks in India - Landmarks in the Cooperative Credit Policy in India, Role of National Bank for Agriculture and Rural Development (NABARD) in Relation to Cooperative Credit Movement.

**Module 3: Cooperative Marketing's Processing**

Cooperative Marketing Role of the NAFED, Cooperative Processing Societies with Reference to the working of Sugar Factories, Producers. Cooperative societies - Milk Supply Societies, Consumers' Cooperative Stores-Role of NCDC & NCCF.

**Module 4: State and Cooperative Development**

Cooperative Education and Training Role of State in the Development of Cooperative Movement in Developing Countries with Special Reference to India, Importance of Cooperative Education and Training, Role of national Cooperative Union of India and International Cooperative Alliance.

**Module 5 : Cooperative Law**

History of Cooperative Legislation in India- Salient Features of Andhra Pradesh Cooperative Societies Act-1964- Salient Features of Andhra Pradesh Cooperative Societies Act-1995. Mutually Aided

**Books for Study & Reference:**

1. Bedi, R.D. ; Theory and Practice of Cooperation
2. Cooperative Development Forum: Andhra Pradesh Mutually Aided, Cooperative Societies Act, 1995
3. International Cooperative Alliance: International Cooperative Alliance Draft Statement on Co-operative Identity : Review of International Cooperation. Vol.88.
4. Krishna Swami, A.R. 7 Kulandai Swamuy, V: Theory of Cooperation
5. Lulandai Swamy, V. :Cooperative dairying in India.
6. Mathur, B.S. :Cooperation in India.
7. NABARD : Statistical Statements Relating to Cooperative Movement in India, part I & II.
8. Rama Reddy, P. : Andhra Pradesh Cooperative Societies Act, 1964(Latest Edition).
9. RBI :NABARD Act, 1981.

**PAPER – III**  
**ENVIRONMENTAL ECONOMICS**

**Module 1: Environmental Ecology and Economy**

Environment and Economy - Elements of Ecology-Energy Flow and Energy Systems Dynamics- Pollution and Externalities-Market Inefficiency and Externalities - Property Rights and Externalities - Non-Convexities and Externalities - Common Property Rights.

**Module 2: Measurement of Environmental Values**

Concept of Total Economic Value - Objective standard based valuation-Selective Preference based valuation- Indirect Methods of Environmental Valuation; travel Cost Method, Hedonic Price Theory - Direct Methods of Environmental Valuation; Contingent Valuation Methods.

**Module 3: The theory of Environmental policy**

Environmental externalities-Pigouvian taxes and subsidies, marketable pollution permits and mixed instruments (the charges and standards approach), Coase's bargaining solution and collective action, Environmental institutions and grass root movements, Global environmental externalities and climatic change-tradable pollution permits and international carbon tax , Trade and environment in WTO Regime.

**Module 4: Economics of Natural Resource Management and Sustainable Development.**

Theories of optimal use of exhaustible and renewable resources; Environment and development trade off and the concept of Sustainable. Development; Rules of Sustainable Development- Indicators of sustainable development-Integrated environmental and economic accounting and the measurement of environmentally corrected GDP-Macro-economic policies and environment.

**Module 5: Environmental and Natural resource Problems in India**

Mechanism for environment regulation in India; Environmental laws and their implementation-Policy instruments for controlling water and air pollution-Forestry policy; People's participation in the management of common and forest lands- The institutions of joint forest management and the joint protected area management; Social forestry and rationale and benefits.

**Basic Reading List:**

Bhattacharya, R.N. (Ed) (2001), Environmental Economics; An Indian Perspective, Oxford University Press, New Delhi.

Baumol, W.J.and W.E. Oates (1988), The Theory of Environmental Policy (2<sup>nd</sup> edition), Cambridge University Press, Cambridge.

Fisher, A.C. (1981), Resource and Environmental Economics, Cambridge University Press, Cambridge.

Hanley, N., J.F.Shogern and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.

Hussen, A.M. (1999), Principles of Environmental Economics, Routledge, London.

Jereen, C.J. M.Ven Den Bergh (1999),Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd., JK.

Kolstad C.D.(1999), Environmental Economics, Oxford University Press, New Delhi.

Pearce, D.W. and R.Turner (1991), Economic of Natural Resource Use and Environment, John Hapkins University Press, Baltimere.

Perman, R.M. and J.McGilvary (1996), Natural Resource and Environmental Economics, Longman, London.

Sankar, U.(Ed), (2001, Environmental Economics, Oxford, University Press, New Delhi.

Tietenberg, T. (1994), Environmental Economics and Policy, Harpar Collins, New York.

**SEMESTER - 3**  
**PAPER – IV (OPTIONAL PAPER)**  
**INDUSTRIAL ECONOMICS**

**Module 1: Framework and Problems of Industrial Economics:**

Concept and Organisation of Firm-Optimum Firm-Factors Influencing Optimum Firm. Ownership, Control and Objectives of the Firm-Passive and Active Behaviour of the Firm.

**Module 2: Market Structure:**

Sellers Concentration-Product Differentiation-Entry Conditions-Economics of Scale. Theories of Industrial Location-Weber and Sargent Florence-Factors Affecting Location.

**Module 3: Market Conduct:**

Product Pricing –Theories and Evidence-Marginal Cost Vs Full Cost Pricing - 'U' shaped and 'L' shaped cost curves.

**Module 4: Market Performance:**

Growth of the Firm Size and Growth of a Firm-Growth and Profitability of the firm. Constraints on Growth Productivity, Efficiency (Capacity Utilization).

**Module 5: Industrial Concentration:**

Concept Reasons for Concentration-Measures of Monopoly and Concentration-Remedial Measures.

**Basic Reading List**

- Ahluwalia I.J.(1985) : Industrial Growth in India, Oxford University Press , New Delhi.  
Barthwal, R.R. (1985): Industrial Economics, Wiley Eastern Ltd., New Delhi.  
Cherunilam, F.(1994): Industrial Economics, Indian Perspective (3<sup>rd</sup> Edition), Himalaya Publishing House, Mumbai.  
Desai, B. (1999), Industrial economy in India (3<sup>rd</sup> Edition), Himalaya Publishing House, Mumbai.  
Hay, D. and D.J. Moris (1979) : Industrial Economics, theory and Evidence; Oxford University Press, New Delhi.  
Kuchhal, S.C. (1980):Industrial Economy of India (5<sup>th</sup> Edition),Chaitanya Publishing House, Allahabad.  
Sai Singh, A. and A.N.Sadhu (1988) : Industrial Economics, Himalaya Publishing House, Bombay.

**PAPER – V (OPTIONAL PAPER)  
LABOUR ECONOMICS**

**Module 1: Labour Markets:**

Nature and characteristics of Labour Markets in developing countries like India, Demand for labour in relations to size and pattern of investment, Supply of Labour in relation to growth of Labour Force. Labour Market policies, Mobility of labour, methods of recruitment and placement; employment service organization in India.

**Module 2: Employment:**

Employment and development relationship; Unemployment-Concept, Types and Measurement, particularly in India, Impact of rationalization, public sector and employment in agricultural sector; Analysis of educated unemployment; Employment policy in Five Year Plans and its evaluation.

**Module 3: Wage Determination:**

Classical, Neo-classical and bargaining Theories of Wage Determination, Concepts of Minimum Wage, Living Wage and Fair Wage in theory and practice Discrimination in Labour Markets; Wage Determination in various sectors-Rural, Urban, Productivity and wage relationship; National Wage Policy; Wages and Wage Boards in India; Bonus System and Profit Sharing.

**Module 4: Industrial Relations:**

Growth, Pattern and Structure of Labour Unions in India, Achievement so Labour Unions; Causes of industrial disputes and their settlement and prevention mechanism. Role of tripartism; Current trends in collective bargaining; Labour Legislation in India.

**Module 5: State and Labour:**

State and Social Security of Labour –Concept of Social Security and its evolution; Social Assistance and Social Insurance- Labour Welfare in India; Special Problems of Labour; Child Labour; Female Labour; Second National Commission on Labour, ILO, Establishment of ILO, Aims and objectives of ILO, Impact of ILO on India.

**Basic Reading List:**

Datt, G. (1996), Bargaining Power Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.

Hajela, P.D. (1998), Labour Restructuring in India: A Critique of the New Economic Policies, Common Wealth Publishers, New Delhi.

Lester, R.A. (1964), Economics of Labour 92<sup>nd</sup> Edition), Macmillan, New York.

McConnell, C.R. and S.L.Brue (1986), Contemporary Labour Economics, McGraw hill, New York.

Papola, T.S., P.P.Ghosh and A.N.Sharma (Eds) (1993), Labour Employment and Industrial Relations in India, B.R Publishing Corporation., New Delhi.

Rosenberg M.R. (1988), Labour Markets in Low Income Countries in Chenery H.B.and T.N.srinivasan (Eds), The Handbook of Development Economics, North Holland, New York.

Venkata Ratnam C.S. (2001), Globalisation and Labour Management Relations; Dynamics of Change, Sage Publications, Response Books, New Delhi.



**PAPER – IV (OPTIONAL PAPER)  
DEMOGRAPHY**

**Module 1: Population and Development:**

Meaning and Scope of Demography-Source of Population data in India and world-Theories of Population-Malthus, Optimum Theory of Population. Theory of Demographic Transition-Population and Development-views of Meadows, Enke and Simon.

**Module 2: Structure of Populations:**

Population trends in India and world-population growth rates and distribution-pattern of Age and Sex structure in more developed and Less Developed Countries-Demographic effects of sex and age structure economic and social implications-Age Pyramids-Population aging.

**Module 3: Fertility and Nuptiality:**

Importance of Study of Fertility-Total Fertility Rate (TFR), Gross Reproduction Rate (GRR) and Net Reproduction Rate (NRR)-Levels and Trends of Fertility in more and Less Developed Countries-Factors affecting Fertility. Nuptiality- Concept and analysis of marital status, Single mean age at marriage.

**Module 4: Mortality:**

Mortality-Death Rates- Crude and Age-specific-Mortality at Birth and Infant Mortality Rate levels and trends of mortality in more and Less Developed Countries-Sex and Age pattern of mortality factors affecting mortality recent past. Life Table-Methods of Population Projection.

**Module 5: Indian Demography:**

Population, Economy and Environmental linkages-Growth and Structure of India's Population-Evolution of Population Policy in India-The shift in policy from Population control to Family Welfare to Women Empowerment-Family Planning Strategies and their outcomes-Reproductive Health, Maternal Nutrition and child health policies-The New Population Policy-Recent Population Census results-Migration and Urbanization in India.

**References:**

1. Aganwala S.N. (1972) India's Population Problem, Tata McGraw Hill Co.Bombay
2. Bose, A. (1996), India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi.
3. Bogue, D.J. (1971), Principles of Demography, John Wiley, New York.
4. Chenery, H. and T.N.Srinivasan (Eds) (1989), Hand Book of Development Economics, Vol.1 and 2 Elsevier, Amsterdam.
5. Coale , A.J. and E.M. Hoover (1958), Population growth and Economic Development in Low Income Countries; A case study of India's Prospects, Princeton University press, Princeton.
6. Gulati S.C. (1988), Fertility in India; An Econometric Study of a Metropolis, Sage New Delhi.

7. Simon, J.L.(1992), Population and Development in Poor Countries, Princeton, University Press.
8. Srinivasan, K. (1998), Basic Demographic Techniques and Applications, Sage New Delhi.
9. Srinivasan K. and A. Shariff (1998), India : Towards Population and Demographic Goals, Oxford University Press, New Delhi.
10. Sryrock, H.et.al.(1973), The methods and Materials of Demography, U.S. Department of Commerce, Washington, D.C.
11. United Nations (1973), The Determinants and Consequences of Populations Trends, Vol.1, UNO Publications, New York.
12. Ramachandrudu, G. (1991), Demographic Methods, AU. Press, Visakhapatnam.

**PAPER – V (OPTIONAL PAPER)**  
**ECONOMICS OF GENDER AND DEVELOPMENT**

**Module 1: Introduction to gender Studies:**

Importance and Concepts of women studies-women in patrilineal and matrilineal societies and systems and Relevance to present day society in India-Demography of female Population Age structure, Mortality rates and sex ratio-causes of declining sex ratios and fertility rates in LDCs and particularly India.

**Module 2: women in decision making and concept of Women's Work:**

Factors affecting decision making by women-Property Rights, Access to and control over Economic resources, Assets-Economics status of women and its effect on work participation rate. Income level, health and education in developing countries and India - Concept of women's work-valuation of productive and unproductive work, visible and invisible work, paid and unpaid work, participation of women in pre-industrial and industrial societies.

**Module 3 : Women and Labour Market:**

Factors affecting female entry in labour market-Supply and demand for female labour in developed and developing countries, particularly India-Studies of female work participation in Agriculture, Non-Agricultural Rural Activities. Information Sector, Cottage and Small Scale Industries, organized industry and service sector-Wage differentials in female activates.

**Module 4: Social Security and Social Protection for Women:**

Social Security of Women-Access to credit and insurance markets; role of voluntary organizations, Self Help Groups in providing social security-Effectiveness of Collective bargaining; review of legislation for women's entitlements-social security-Schemes for Safety net for women.

**Module 5: Gender Planning, Development Policies and Governance:**

Gender and Development indices-Mainstreaming gender into development policies-gender planning techniques-paradigm shifts from women's well being to women's empowerment-Women's empowerment in India.

**Basic 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, Oxford University Press, New Delhi.
5. Seth, M. (2000), Women and Development; The Indian Experience, sage publications, New Delhi.
6. Srinivasan, k. and Shroff (1998), India : Towards Population and Development Goals, oxford University 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. Ramachandrudu, G. (1991), Demographic Methods, AU. Press, Visakhaptnam.

## PAPER-IV (OPTIONAL PAPER)

### AGRICULTURAL PRODUCTION ECONOMICS AND FARM MANAGEMENT

#### **Module 1: Agricultural and Economic Development:**

Nature and scope of agricultural economics 'Traditional Agriculture and its modernization, Role of agriculture in economic development, Interdependence between agriculture and industry-Some empirical evidence; models of interaction between agriculture and the rest of the economy-, agricultural development, poverty and environment.

#### **Module 2: Agricultural Production and Productivity:**

Agricultural production - Resource use and efficiency; production function analysis in agriculture, Factor combination and resource substitution; cost and Supply curve-, size of farm and laws of returns- Theoretical and empirical findings: Farm budgeting and cost concepts; Resource Use efficiency in traditional agricultural. Technical change, labour absorption and gender issues in agricultural services.

#### **Module 3: Agricultural Growth in India:**

Recent trends in agricultural growth in India; Inter regional variations in growth of output and productivity; cropping pattern shifts; supply of inputs Irrigation, power, seed and fertilizers; Pricing of inputs and role of subsidies; Distribution of gains from technological change, Role of public investment and capital formation in Indian agriculture; sustainable agriculture – indigenous practices, Bio-technological practices and growth potential.

#### **Module 4: Land Reforms and Land Policy:**

Principles of land utilization, land distribution-structure and trends, land values and rent, land tenures and farming systems-Peasant, Capitalist, Collective and State Farming; Tenancy and Crop sharing-forms, incidence and effects; Land Reforms measures and Performance; Women and Land Reforms; Problems of marginal and small farmers.

#### **Module 5: Agriculture and External Sector**

International trade in Agricultural commodities; Commodity Agreements-Role of World Trade Organization-Issues in liberalization of domestic and international trade in agriculture-Nature and features of agri-business; Role of MNCs; Globalization of Indian Economy and problems and prospects of Indian, Agriculture: Impact of World Trade Organisation on Indian Agriculture.

#### **Basic Reading List:**

Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, MacMillan, Delhi.

Bilgrami, S.A.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.

Dantwala, M.L., et.al. (1991), Indian Agricultural Development Since Independence, Oxford & IBH,, New Delhi.

Government of India (1976), Report of the National Commission on Agriculture, New Delhi,

Government of India, Economic Survey (Annual), New Delhi.

Gulati, A. and Kelly, J. (1999), Trade Liberalization and Indian Agriculture, Oxford University Press, New Delhi.

Joshi, P.C. (1975), Land Reforms in India Trends and Prospects, Allied Publishers, Bombay.

Hanumantha Rao, C.H. (1975), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi.

Rudra A. (1982), Indian Agricultural Economics, Myths and Reality, Allied Publishers, New Delhi.

Saint, G.R. (1979), Farm Size, Resources Use Efficiency and Income Distribution, Allied Publishers, New Delhi.

E.O. Heady (1964), Economics of Agricultural Production and Resource, Use, Prentice Hall of India Pvt.Ltd., New Delhi.

**PAPER – V (OPTIONAL PAPER)**  
**AGRICULTURAL MARKETING AND FINANCE**

**Module 1: Role and Significance, structure and Problems of Agricultural Marketing in India:**

Marketable and Marketed surplus of Agricultural commodities - Role and significance of marketing -Marketing and State Policy-Types of Agricultural Markets - Structure of Agricultural Marketing in India-Marketing Efficiency-Objectives and functions of an efficient Marketing system-Problems of Agricultural Marketing in India.

**Module 2: Agricultural Marketing Institutions and Services**

Cooperative Marketing: The concept, need for the development and the structure-The Activities of National Agricultural Cooperative Marketing Federation (NAFED) - Growth and Development of Agricultural Marketing Cooperatives in India Regulated Markets; Origin, Functions, Organizational structure and Growth and Development in India-Agricultural Marketing Servicers

**Module 3: Agricultural Prices and Price Policy:**

Important terms and concepts of Agricultural Prices - Behavior of Agricultural Prices; Measurement and Analysis of Inter temporal Behavior Fluctuations and Instability-Agricultural supply-price Relationships-Terms of Trade between Agricultural and Non-agricultural Prices-Need for State Intervention-Agricultural price policy in India-Minimum Support Prices and Commission on Agricultural Costs and Prices – A Review.

**Module 4: Credit Needs of the Farmers and Demand for Credit**

Credit needs of the Farmer: Working Capital needs and Fixed Capital needs; Technical Change and Credit needs-Credit absorption capacity of the Farmers- Factors affecting the demand for Credit-Pricing of Rural Credit; Institutional and Non-Institutional Interest rates in rural Money Market : Problems and Regulation-Subsidized Interest - Rates : Arguments for and against.

**Module 5: Agricultural Finance**

Role of Capital and Rural Credit in Agriculture-organized and unorganized capital markets-Characteristics and sources of Agricultural credit; Non-Institutional and institutional, Cooperatives, Commercial Banks, Regional Rural Banks, Self Help Groups- Role of NABARD

**Basic Reading List:**

1. Gulab Nath Singh, Dal Singer Singh and Ram Iqbal Singh (1987), Agricultural Marketing in India (Analysis, Planning and Development), chugh publications, Allahabad.
2. Acharya S.S. and Agarwal N.L. (1994), Agricultural Prices-Analysis and Policy, Oxford and IBH Publishing Co., Pvt.Ltd., New Delhi.
3. Kahlan A.S., Tyagi D.S.(1983) , "Agricultural Price Policy in India, Allied Publishers, Bombay.
4. M.V.Nadkarni (1973) : Agricultural Price Policy in Economic Development Kalyan Publishers, new Delhi.
5. Kaur, R.(1975), Agricultural Price Policy in Economic Development with stability, National Publishing House, Delhi.
6. Subba Rao, K, and Ajain DeJanuary (1986), Agricultural Price Policy and Income Distribution in India, Oxford University Press, New Delhi.

7. Mitra, A. (1977), Terms of Trade and Class Relations, Frank Cass Co.Ltd., London.
8. Belshaw, H, Agricultural Credit in Economically under Developed Countries, FAO, Rome.
9. Kathuriamand, G.and Chandrasekhar, K. Elements of Agricultural Finance.
10. Bhupat M. Desai, N.V.Namboodiri (2001), "Organisation and Management of Rural Financial Sector" Text, cases and Exercise, Oxford and IBH Publishing Pvt. Ltd., New Delhi, Calcutta.



**PAPER –IV (OPTIONAL PAPER)  
MATHEMATICAL ECONOMICS**

(The candidates having mathematics as one of the optional at the under graduate level alone are eligible for this specialization)

**Module 1:** Consumer Equilibrium, Income, Substitution and Price effects, concept of elasticities, separable and additive utility functions, homogenous and homothetic utility functions, Indirect utility functions. The Cobb-Douglas and CES utility functions- Consumers surplus (Emphasis to be on functional forms, examples and sample applications).

**Module 2:** Production function, homogenous Production functions-Cobb Douglas and CES Production functions, Cost functions equilibrium of the producer-Constrained optimization of a producer. Laws of Return and return to scale. Input demand functions, Technical progress through production function.

**Module 3:** Markets: Price determination in Perfectly competitive:, monopolistic competition, oligopoly, duopoly and monopoly. Lagged market equilibrium- Cobb-Douglas model. Multi-market equilibrium and conditions of stability.

**Module 4:** Determination of Aggregate Income, growth and fluctuations in Income. Classical and Keynesian macro models, Theories of consumption and investment. Growth models a of Harred, Domar, Neoclassical models of Solow. Trade Cycle models of Schumpeter, Samuelson and Hicks.

**Module 5:** Game Theory, LP and 1.0. Two person zero sum game with, economic applications of Linear Programming-Concepts of Primal and Dual with economic application of LP.Input-output models-open and closed systems consistency checks and applications.

**Basic and Readings:**

1. Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmikllan Press, London.
2. Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics (3<sup>rd</sup> Ed), Tata McGraw Hill, New Delhi.
3. Mukherji, B. and V.P. andit (1982), Mathematical Method of Economic Analysis Allied Publishers, New Delhi.

**PAPER-V (OPTIONAL PAPER)**  
**BASIC ECONOMETRICS**

(The candidates having mathematics as one of the optional at the under graduate level alone are eligible for this specialisation)

**Module 1:** Basic Econometrics: Nature, meaning and scope of econometrics; simple and general linear regression model-Assumptions, Estimation (through OLS approach) and properties of estimators; Gauss-Markov theorem, Concepts and derivation of  $R^2$  and adjusted  $R^2$ : Concept and analysis of variance approach and its application in regression analysis; Estimation of non-linear equations-parabolic, exponential, geometric hyperbolic, modified exponential; Geometry and logistic functions.

**Module 2 :** Problems in regression Analysis: Nature, test, consequences and remedial steps of problems of Heteroscedasticity, Multicollinearity and auto-correlation;

**Module 3:** Regression with Qualitative Independent variables: dummy variable technique-Testing structural stability of regression models comparing to regressions, interaction effects, seasonal analysis, piece-wise linear regression use of dummy variables, regression with dummy dependent variables; The LPM, Logit, Probit and Tobit models-Applications.

**Module 4:** Dynamic Econometric Model: Autoregressive and distributed lag models-Koyak model, Partial adjustment model, adaptive expectations. Instrumental variables; Problem of auto-correlation-Application; Almon Approach to distributed lag models.

**Module 5 :** Simultaneous Equation Models ; Introduction and examples; the simultaneous equation bias and inconsistency of OLS estimators; the identification problems; rules of identification-order and rank conditions; Methods of estimating simultaneous equation system; recursive methods and OLS; Indirect least squares (ILS), 2SLS-Applications.

**Basic Reading List:**

1. Gujarati D.N. (1995), Basic Econometrics (2<sup>nd</sup> ed) McGraw Hill, New Delhi.
2. Dongherty C (1992), Introduction to Econometrics, oxford University Press, New York.
3. Koutsoyiannis, A. (1977), Theory of Econometrics (2<sup>nd</sup> ed), The Macmillan Press Ltd., London.
4. Maddala, G.S. (Ed) (1993), Econometric Methods and Application (2 Vols), Aldershot, U.K.
5. Theil H. (1981), Introduction to Econometrics, Prentice Hall of India, New Delhi.
6. Krishna K.L. (Ed) (1997), Econometric Applications in India, Oxford University Press, New Delhi.

## **PAPER –IV (OPTIONAL PAPER) FINANCIAL INSTITUTIONS**

### **Module 1: Nature of Financial System:**

Money and Finance-Money and near money-Financial Intermediation and financial intermediaries-The structure of the financial systems-Functions of the financial sector.

### **Module 2: The role of Financial System:**

Financial System and Economic Development-Indicators of Financial Development-Criteria to evaluate assets; Risk and financial assets, types of risk, return on assets, risk - return trade off-Valuation of securities.

### **Module 3: The Central Bank and Credit Policy:**

Function of the Central Bank, Credit Creation and its control, Profitability and efficiency of banks; Development banks-Role and functions; investment banking and merchant banking; financial sector in India - Proliferation of banking and non-banking financial intermediaries.

### **Module 4 : Structure of Interest Rates:**

Theories of Interest rate determination - level of interest rates - long period and short period rates - Term structure of Interest rates-Spread between lending and deposit rates-Administered interest rates-Appropriate interest rate policy.

### **Module 5: Monetary Policy:**

The Aims and Objectives of the Monetary Policy in developed; and developing countries-Instruments of monetary policy-Effectiveness of monetary policy.

### **Basic Reading List:**

- Bhole, L.M. (1999), Financial Institutions and Markets; Tata McGraw Hill Company Ltd., New Delhi.
- Bhol, L.M. (2000), Indian Financial Systems, Chugh Publications, Allahabad.
- Edminister, R.O. (1986), Financial Institutions, Markets and Managements, McGraw Hill, New York.
- Goldsmith, R.W.(19 (39), Financial Structure and Development, Yale, London.
- Hanson, J.A. and S.Kathuria (Eds.)(1999), India : A financial Sector for the Twenty-First Century, Oxford University, Press, New Delhi.
- Harker, P.T. and A.Tenias (2000) (Ed) Performance of Financial Institutions, Cambridge University Press, Cambridge.
- Johnson, H.S.(1993), Financial Institutions and Markets,Tata McGraw Hill, New Delhi.
- Khan, M.Y. (1996), Indian financial System, Tata McGraw Hill, New Delhi.
- Machi Raju, M.R. (1999), Indian Financial Systems, Vikas Publishing, New Delhi.
- Prasad, K.N. (2001), Development & India's Financial Systems, sarup & Sons, New Delhi.
- Avadhani, Study in Indian Financial System.

## **PAPER –V (OPTIONAL PAPER) FINANCIAL MARKETS**

### **Module 1: Financial Markets:**

Role and Structure of Money Market and Capital Market - Call Money Market, Treasury Bill Market, Commercial Bill Market including commercial paper and certificate of deposits, discount market, relation between National and International Market.

### **Module 2: Securities and Capital Market:**

Securities-Government Securities market- market for derivatives ; Futures and options and other derivatives; types, uses and pricing of derivatives-Primary and

secondary market for securities, SEBI, Its impact on the working of capital market in India; IRDA and its role in financial markets.

**Module 3: Non-bank Financial intermediaries;**

Definition and types of non-bank financial institutions: Their growth and impact on India's economic development, measures taken to control their operations.

**Module 4: International Financial Market:**

Nature, Organisation and participants - Exchange rates-Devaluation and depreciation-working of floating exchange rates since 1973-Risk hedging and futures in exchange rates-International Financial flows, forms volume-Rise and fall of Brettonwood Institutions - International Liquidity - Post Meastrcht development.

**Module 5: International Financial System**

Reforms in International Monetary System for developing countries-Lending operation of world bank and the affiliates - working of IDA and IFC. The theory of optimum currency areas-Growth of Regional financial institutions. Asian Development Bank and its lending activities. Asian Development Bank and India.

**Basic Reading List:**

Bhole, L.M. (1999), Financial Institutions and Markets; Tata McGraw Hill Company Ltd., New Delhi.

Bhol, L.M. (2000), Indian financial Systems, Chugh Publications, Allahabad.

Edminister, R.O.(1986), Financial Institutions, Markets and Managements, McGraw Hill, New York.

Goldmith, R.W.(1969), Financial Structure and Development, Yale, London.

Hanson, J.A. and S.Kathuria (Eds) (1999), India : A financial Sector for the Twenty-First Century, Oxford University Press, New Delhi.

Harker, P.T. and A. Tenias (2000)(Ed) Performance of Financial institutions, Cambridge University, Press, Cambridge.

Johnson, H.S. (1993), financial institutions and Markets, McGraw Hill, New Delhi.

Knan, M.Y. (1996), Indian Financial system, Tata McGraw Hill, New Delhi.

Machi Raju, M.R, (1999), Indian Financial Systems, Vikas Publishing, New Delhi.

Prasad, K.N. (2001), Development & India's Financial Systems, Sarup & Sons., New Delhi.

Avadhani, Study in Indian Financial System.

**PAPER – IV (OPTIONAL PAPER)  
URBAN ECONOMICS**

**Module 1:** Nature and scope of urban Economics, structure and growth of Urban economy, urban Public Services; Growth of Urban Economy

**Module 2:** Urban Growth; Central Place Theory and its application to the study of Urban Growth-the Urban economic base and urban growth; the communication theory of Urban growth; City size and urban growth; urban spatial structure; Concentric Zone Hypothesis-The Radial Sector theory. The Multiple Nuclei Hypothesis.

**Module 3:** Urban Housing, Labour Market and Poverty:

Housing market Imperfection-trends in slum Housing-tearing down the slums. Urban Labour Market : Determination of Labour incomes-wage differentials-the culture of urban poverty –Measures of Urban poverty-The nature of Urban poverty-The causes of Urban poverty; Public Policies for reducing urban poverty-macro Economic policies income-Maintenance Policies-negative income taxes.

**Module 4 :** urban Development Problems in India, Land Prices and land Speculation-Urban Land celling; Congestion and Urban transport pricing Policy; Cost and supply of alternative urban transport system.

**Module 5:** Urban Growth Strategies-An approach to Metropolitan Planning in Developing Countries; national urbanization policy with reference of India.

**Basic Reading Books:**

1. G.F. Bussars; Repid Problmes of Urbanisation in India.
2. Asok Owtra john : An Approach to urban Studies in India.
3. John D. Herbert and Alfrad P.Van: Urban Planning in the Developing Countries.
4. Ashish bose ; Studies in India's urbanization.
5. R.K. Bharadwaj ; urban Development in India.
6. NCAER; Market Towns and Spatial Development.
7. Richard F. Muth : urban Economic problems.
8. Harry S. Perloff; Issues in Urban economics.
9. harry W. Richardson; Urban Economics

**PAPER – V (OPTIONAL PAPER)**  
**RURAL ECONOMICS AND SOCIAL CHANGE**

**Module 1 :** Nature and scope of rural Economy, Importance of Agriculture in economic Development of India, Rural Economic problems of India; Nature of land Problems-Evolution of Policy-Land Reforms.

**Module 2:** Agricultural Holdings, Fragmentation and Sub-division of Holdings, cooperative Farming-Rural Labour Problems-nature of Rural Unemployment-Employment and Wage Policy-Sources of Technological change and Green Revolution.

**Module 3:** Rural Society-its Structure and Change; Village and its Social Organization-Indian Village and its types, Rural-Urban Continuum and Rural-Urban relationships.

**Module 4:** Rural social Institutions-family, Property, caste, Class, Agrarian structure, indebtedness and Poverty, Jajmani System, Religion, Village, Local Self Government, Panchayat Raj and Community Development Prgrommes.

**Module 5:** Social Change in Rural India-Impact of Westernization, Secularization, Modernization of Indian Rural Society-Post Modernization and Globalization and Indian Villages.

**Basic Reading List:**

1. Carver, The Principles of Rural Economics.
2. Desai, A., Rural Sociology in India.
3. Dube, S.C., India's changing villages.
4. Nanavati & Anjala, rural problems in India.
5. Ruddar Dutt & K.P.M.Sundaram, Indian Economy.
6. Sachdeva, D.A.& Vidya Bhushan, An Introduction to Sociology.

**SEMESTER-4**  
**PAPER – IV (OPTIONAL PAPER)**  
**INDIAN INDUSTRIAL ECONOMICS**

**Module 1: Industrialization:**

Pattern and Phases industrial Productivity and Growth- Industrial Stagnation - The Evidence - Industrial Policies.

**Module 2 : Indian Public Sector:**

Forms of Organization Performance of Public Sector - Problems of Public Sector Enterprises. - The Theory of Disinvestments.

**Module 3: Industrial Finance:**

Sources of Finance - Institutional Finance - Need for Foreign Capital - Components of Foreign Capital - Foreign Investment inflows - Foreign Direct investment.

**Module 4 :Multinational Corporations:**

Reasons for the Growth of MNCs - Foreign Collaborations and MNCs-Effects on Economic Development – FERA, 1973 -Foreign Exchange-Management Act, 1999 - Technology and Productivity-the MNCs as Producer of Technical Knowledge-International Transfer of Technology.

**Module 5 : Current Problems of Selected Industries:**

Iron and Steel, Cotton-Textile, Sugar, Coal, Cement and Engineering Goods Development of small scale and cottage industries in India-industrial sickness.

**Basic Reading Books:**

1. Bains J.S.(1996) Industrial Organisation, Cheltenham UK
2. Kamien M.T. and N.L.Schwarz (1982) : Market Structure and Innovation, Cambridge University Press, Cambridge,
3. Smith D.M. (1971): Industrial Location An Economic and Geographic Analysis, John Wiley, New York.
4. Bhagwati, J. & P. Desai (1972) : India Planning for Industrialization, Oxford University Press, London.
5. Brahmananda, P.R. and V.R. Panchanmukhi (Eds.)(1987), The Development Process of the Indian Economy, Himalaya Publishing House, Bombay.
6. Chekravarthy, S. (1987): Development Planning : the Indian Experience, Oxford University Press, New Delhi.
7. B.Jalan (1996), Indian Economic Policy, Vikiny, New Delhi.,
8. Joshi, V. and I.M.D. Little (1999), India Macro Economics and Political Economy 1964-1991, Oxford University, New Delhi.
9. Kelkar, V.L. and V.V.Bhanoji Rao (Eds) (1996): India Development Policy imperative, Tata McGraw hill, New Delhi.
10. Sandesara, J.C. (1999), Industrial Policy and Planning-1947-1991: Tendencies Interpretations and Issues, Sage Publications, New Delhi.
11. Sandesara J.C. (1982): Industrial Growth in India, Performance and Prospects, Lala Lajapatirai College, Bombay.

12. Sen R and B.Chatterji (2001) : Indian Economy : Agenda for the 21<sup>st</sup> Century, Essays in Honour of Professor PR.Brahmananda , Deep & Deep Publications Pvt. Ltd., New Delhi.
13. Ahluwalia, I.J. (1985) : Industrial Growth in India-Stagnation since the mix sixties-Oxford University Press, New Delhi.
14. Richard, N. Cooper : Growth and Equality, The Role of Foreign Trade Investment World Bank and Oxford University Press, 2002.



**PAPER –IV (OPTIONAL PAPER)  
WELFARE ECONOMICS**

**Module 1:** Benthamite Approach to Aggregate Welfare; Optimum Resource Allocation and Welfare maximization, Assumption of Uniform Income-Utility Function of Individuals: Question of Income Distribution; issue of Interpersonal comparisons of Utility.

**Module 2:** Marshallian Welfare Economics; Consumer's Surplus : Measurement of Consumer's Surplus-difficulties involved, Criticism; Principle of Compensating variation; Hicks's Four consumers surpluses; concept of Consumer's Surplus; Consumer's Surplus and Tax Bounty Analysis.

**Module 3:** Pareto Optimality exchange conditions, The production optimum, the consumption optimum, Concept of Contract curve; Top level optimum; Infinite number of non-comparable optima Vs unique social optimum.

**Module 4:** Compensation criteria-Contributions of Barone, Kaldor and Hicks. The Scitovsky double criterion, Concept of Community indifference map, Samuelson's utility possibility curve; value judgements and welfare economics-, Bergson's social welfare function Arrow's possibility theorem.

**Module 5:** Divergence between private and social costs; Problems of non-market interdependence; Externalities of production and consumption; External economies and diseconomies; Problem of public goods; Pigovian Welfare economics; Second best optima; Marginal cost pricing, Cost benefit analysis, interdependent utilities; Attempts to develop dynamic welfare analysis.

**Basic Reading List:**

Arrow, K.J.(1951), Social Choice and Individual Values, Yale University Press, New Haven.

Baumol, W.J (1965), Welfare Economics and the Theory of the State (Second Edition), Longmans, London.

Baumol, W.J. (Ed) (2001) Welfare Economics, Edward Elgar Publishing Ltd., UK.

Broadway, R.W and N.Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.

Duesenberry J.S. (1949), Income, Saving and the Theory of Consumer Behavior, Harvard University Press, Cambridge, Mass.

Feldman, A.M. (1980), Welfare Economics and Social Choice Theory, Martinus Nijhoff, Boston.

Qraaff, J.de.V (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.

Little, I. M. D. (1939) A Critique of Welfare Economics (2<sup>nd</sup> Edition), Oxford University Press, Oxford.

Marshall, A. (1946), Principles of Economics, Macmillan, London.

Myint, H. (1948), Theories of Welfare Economics, Longmans, London Ng.Y.K. (1979), Welfare Economics, Macmillan, London.

Nicholas, B.(Ed)(2001), Economic Theory and the Welfare State, Edward Elgar Publishing Ltd., UK.

Pigou A.C. (1962), The Economics of Welfare (4<sup>th</sup> Edition), Macmillan.

Quirk, J. and R.Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.

Samuelson , P.A. (1947), Foundations of Economic Analysis, Harvard University Press, Cambridge, Mass.

**Additional Reading List:**

Bishop, R.L.(1943), Consumer's Surplus and Cardinal Utility, quarterly Journal of Economics, Vol.57.

Boulding K.E.(1945), The Concept of Economic Surplus, American Economic Review, Vol.35.

Hicks J.R.(1939), Value and Capital : An Inquiry into Some Fundamental Principles of Economic Theory, Clarendon Press, Oxford.

Hicks, J.R.(1944), The Four Consumers' Surpluses, Review of Economic Studies, Vol,XI.

Lerner, A.P.(1963), Consumer's Surplus and Micro-Macro, Journal of Political Economy, Vol.61.

Bator F.M (1957) The Simple Analytics of Welfare Maximization, American Economic Review, Vol.47.

Bergson, A. (1938), A Reformulation of Certain Aspects of Welfare Maximization, Quarterly Journal of Economics, Vol.52.

Hicks, J.R.,(1939) The Foundations of Welfare Economics, Economic Journal, Vol.49.

Hicks, J.R.(1956), A Revision of Demand Theory, Clarendon Press, Oxford.

Kaldor, N.(1939), Welfare Propositions in Economics, Economic Journal, Vol.49.

Little I.M.D.(1949), The Foundations of Welfare Economics, Oxford Economic Papers Vol.1.

Mishap E.J. (1960). A Survey of Welfare Economics, 1939-59, Economic Journal reprinted in Surveys of Economic Theory, Vol.1, AEA and RES, Macmillan, 1965.

Scitovsky, T.(1942), A note on Welfare Propositions in Economics, Review of Economics Studies, Vol.IX.

Baumol, W.J. and D.Bradford (1970), Optimal Departures from Marginal Cost Pricing, American Economic Review, Vol.60.

Coase, R.H. (1946), The marginal Cost Controversy; Some Further Comments, *Economica*, Vol.14.

Lancaster K. and Lipsey, R.G. (1957), The General Theory of Second Best, Review of Economic Studies ,Vol.XXIV.,

Ruggles N (1949), The Welfare Basic of Marginal Cost Pricing Principle, Review of Economic Studies, Vol.XVI.

Ruggles, N. (1949), Recent Developments in the Theory Marginal Cost Pricing, Review of Economic Studies, Vol.XVI.

## **Paper – IV (OPTIONAL PAPER) ECONOMICS OF INSURANCE**

### **Module 1: Introduction:**

Economic Security; Human quest for economic security through time, exposure to losses; Role of insurance; Definition of insurance. Risk pooling and risk transfer; Economic and legal perspectives; Social Vs Private insurance; Life Vs Non-life insurance; Classification of life, Health and General Insurance policies.

### **Module 2: Risk and Risk Management**

Fundamentals of uncertainty and risk; Pure risk and speculative risk; Expected utility and decision making under uncertainty; Expected utility and the demand for insurance; Moral hazards and insurance demand; Concept of risk management; Essentials of risk management; Elements of risk management, Risk assessment; Risk control and risk financing.

### **Module 3: Insurance and Economic Development**

Risk management and insurance in economic development, Insurance institutions as financial intermediaries, Insurance institutions as investment institutions, insurance institutions in Indian capital market. World Wide risk sharing - Concept of reinsurance, Fundamentals of reinsurance, Types of reinsurance; Reinsurance distribution systems; Reinsurance markets in Developing countries.

### **Module 4: Types of Insurance:**

Fundamentals of Life; Health and General Insurance; Functions and importance of Life, Health and General Insurance; Mathematical basis of life insurance; Plans and legal aspects of life insurance; Provisions of policies, Selection and classification of risks; Types of evaluation.

### **Module 5 : Insurance for Retirement Needs and Regulation**

Retirement Planning Strategies: Investment for retirement, Pension Plans, Pension Plans in India; Regulation of insurance; Theories of regulation, insurance regulation in India; Insurance Regulation and Development Authority. (IRDA)

### **Basic Reading List:**

Bailey R (Ed) (1999), Underwriting in Life and Insurance, LOMA, Atlanta, Ga.  
Bhole, L.M. (1990) The Indian Financial System, Tata McGraw Hill, New Delhi.  
Bickelhaupt, D.L. (1992), General Insurance, Irwin. Inc. Burr Ridge.  
Black K.Jr. and H.D. Skipper Jr(2000), Life and Health Insurance, Prentice Hall, Upper Saddle River, New Jersey  
Finsinger, J, and MV. Pauly (Eds). (1986), The Economic of Insurance Regulation: A Cross National Study, Macmillan, London.  
Graver E.E and L.N.Hayes (Eds). (1994) Mc. Grill's Life insurance. The American College, Blyn Mawr Pa.  
Hedad, G.L. and S. Horn II (1991), Essentials of Risk Management, Vol.1 Insurance Institute of America, Malvern, Pa.  
Skipper, Jr.H.D. (Ed) (1988). International Risk and Insurance: An Environmental Managerial Approach, Irwin Mc.Graw Hill, Boston.  
Tacchino, K.B. and D.A. Little (1993), Planning for Retirement Needs, The American College, Bryn mawr, pa.

**Paper – IV (OPTIONAL PAPER)**  
**COMPUTER PROGRAMMING AND APPLICATIONS**

**Module 1: Basic Components of Computers**

Central Processing Unit (CPU), Input devices-keyboard, Mouse, Optical Mark Reader (OMR), Scanner, Video digitizers, Output devices-Monitor, Printer, Plotters, Data storage devices; Magnetic tape, Disk, Floppy disk, Hard disk, CDROM, Classification of Computers; According to efficiency-Super computers, Main frames, Minicomputers, Micro computers, According to construction-Analog, Digital and Hybrid.

**Module 2: Hardware and Software**

Machine, Assembly and high level languages, Types of translator; interpreters and compiler, Types of operating systems; Batch processing multiprogramming operating, Time sharing, on-line and real time, Types and usage of programming languages; C, C++

**Module 3: Database**

Advantages and types: Network, Rational and object oriented; Data Base Management Systems (DBMS), Types of DBMS software; Data manipulation Language (DML), Query Language (QL), and Report generator, Creating and using a database (Fox Pro), Relational Database Management System (RDBMS):

**Module 4: Statistical Processing Techniques**

Spreadsheets: Advantages of spreadsheet software, Basic features of Microsoft excel; Entering mathematical formula, Spreadsheet navigation; commands like creating deleting and copying rows and columns, Create store and print a spread sheet; Drawing graphs, Computing totals, Mean, Variance, Correlation coefficient, Regression coefficient in two variable model. Multiple regression analysis by using Statistical packages-SPSS, STATISTICA.

**Module 5: Computer Applications:**

Electronic Mailing (Email), Applications-industry; CAD/CAM; Business: Payroll system, stock control, and sales monitoring system; industry; Banking and Finance. Introduction to internet: Facilities in internet, Modem.

**Basing reading List:**

Rajasekharan, S (1986), Numerical Methods in Science and Engineering, A.H. Wheeler, Allahabad.

Sanders, D.H. (1988), Computers Today, McGraw Hill (3<sup>rd</sup> Edition), New York.

Sinha P.K. (1992), Computer Fundamentals, BPB Publications, New Delhi.

Rajaraman, V. (1996), Fundamentals of Computers, prentice Hall of Indian, New Delhi.

Lipschutz, M.M. and S.Lipschultz (1982), Theory and Problems of Data Processing, Schum's Outline Series, McGeaw Hill, New York.

Schild, H (1987), C. Made Easy, McGraw Hill, New York.

Levin R.I. and C.A. Kirkpatrick (1975), Quantitative Approaches to Management (3<sup>rd</sup> Edition) McGraw Hill.

Mirsky, L. (1955), introduction to Linear Algebra, Oxford University Press.

Intrilligator, M.D. (1978), Econometric Models, techniques and Applications, Prentice hall Englewood Cliffs, N.J.

Wood, M.B. (1983), introducing Computer Security, Broadman Association, Delhi.

**PAPER –IV (OPTIONAL PAPER)  
ECONOMICS OF INFRASTRUCTURE**

**Module 1: Introduction:**

Infrastructure and economic development-infrastructure as a public good; social and physical infrastructure; special characteristics of public utilities; The peak load, off load problem; Dual principal controversy; marginal cost pricing Vs other methods of pricing of public utilities; cross subsidization-free prices, quality and efficiency.

**Module 2: Economics of Transport and Communications:**

The structure of transport costs and location of economic activities, Demand for transport; Model of freight and passenger demand; model choice; cost functions in the transport sector; principle of pricing; special problems of individual modes of transport and inter-model coordination in the Indian context.

Rate making in telephone utilities; principle of decreasing costs in telephone industry; criteria for fixation of postal rate; Measurement of standards of service in telephone and postal utilities; Reforms in the telecom sector.

**Module 3: Energy Economics:**

Primacy of energy in the process of economic development; factors determining demand for energy; effects of energy shortages; energy conservation; renewable and non-conventional sources of energy, energy modeling; optimal energy policy.

**Module 4: Electricity, Gas and Water Supply:**

Bulk supply and pricing of electricity; the relative economics of Thermal, Hydel and Nuclear power; The case for a national power grid; Financing of water utilities; urban and rural water supply; uses of natural gas; the exploitation of natural gas, pricing problem.

**Module 5: Social infrastructure:**

Social infrastructure-Concept of Social infrastructure –Organization and financing of supply of social services, private Vs Public sector financing; pricing of social services; Development of social services in the successive five year plan.

**Basic Reading List:**

Crew M.A. and P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.

Indian Council of Social Sciences Research (ICSSR) (1976), Economics of infrastructure. Vol. VI, New Delhi.

National Council of Applied Economic Research (NCAER) (1996), India infrastructure Report: Policy implications for Growth and Welfare, NCAER, New Delhi.

Parikh, K.S. (Ed) (1997), India Development report 1997, Oxford, New Delhi.

Parikh, K.S. (Ed). (1999), India Development Report – 1999-2000, Oxford, New Delhi.

Turvey R. (Ed). (1968), Public Enterprises, Penguin, Harmondsworth.

**PAPER – IV (OPTIONAL PAPER)**  
**ECONOMICS OF INFORMATION TECHNOLOGY**

**Module 1:** Definition of information-industry Value Chain Knowledge Economy-information of Economy-information Economy. Nature and Scope of information Technology-Variou Sources of information.

**Module 2:** The Role of Mass Media, The Tele Communications industry-Origins, The Computer industry – Origins of hardware and software. The Broadcast industry, Cable and Satellite Television.

Theory of public good, information as a public good, Role of Government in information and the Media-Broadcast and Cable Television, Telecom-munications, News Papers.

**Module 3:** information Technology – Labour and Employment-Globalization; Effect on Productivity-Contingent labour-part time employment – impact on Older persons, Gender Issues-Human Resource Development.

**Module 4:** information Technology and the Media in the Global Economy-Global information infrastructure – Relationship between Trade and infrastructure-The General agreement on Trade and Services – WTO basic Telecommunication agreement – WTO information Technology agreement-Trade related intellectual property rights.

**Module 5:** Issues in Media and information Economics – Gap between developed and developing Nations-Piracy-The legal and regulatory environment –The role of the government-information Technology in the Asia ands Pacific- the Geographic shifts in the Electronics industry-Singapore’s National information infrastructure-Malaysia’s National information infrastructure.

**Basic reading List**

Linda low, Economics of information Technology and the Media, World Scientific Singapore University Press, National University of Singapore, Singapore, 2000.

Hal R. Varian ,Joseph Farrell, Carl Shapiro The Economics of Information TechnologyAn Introduction, Cambridge University Press

## **ECONOMICS OF HUMAN DEVELOPMENT**

**Module – 1:** Meaning –Concept-Definitions of Human development-Components of human Development. Human Development and Economic Development: Physical Quality of life index, Human Resource Development; Usefulness of Concept-Theories of Human Development-Gender Empowerment Measure.

**Module – 2:** Human Development index-Measurement of Human Development: Limitations of Human Development measure-Political Freedom index Human Development index and Poverty index-Human Poverty index.

**Module – 3:**Status of Human Development in India and in Indian States; Human Development and Human Rights. The State and Progress of Human Development-Human Development and Dalits.

**Module – 4:** Status Sector Expenditure and Human Development-human Development Expenditure in India and States (Public spending) Social Capital –Economic Attainments and Well-being.

**Module – 5:** Impact of Human development on Economic Development Human Development Expenditure in India and States (Public spending) Social Capital – Economic Attainments and Well-being.

### **Basic Reading List.**

1. Abusslesh Sharifi, India Human Development Report, Oxford.
2. Chalam, K.S., Human development in South India, Anmol Pub.
3. Human development in South Asia, 2001, published for the Mahbubul Haq Human development Center, Oxford.
4. Human Development Report for various years, UNDP.
5. Human development Report, UNDP, 1990.
6. National Human development Report; Government of India, 2002.

**PAPER-IV (OPTIONAL PAPER)  
REGIONAL ECONOMICS**

**Module – 1: Scope and Definition of regional Economic:**

Area-region Space; Taxonomy of Regions; Spatial Organization and Analysis Location Theories-Thunen-Weber-Palander-Christalieu Losch- Greenhut-Lefebvre JoardAlonso-johnson and Richardson; Theory of Location and interdependence.

Techniques of Regional Analysis: Input-Output. Analysis-Linear Programming- -Cost Benefit Analysis, Production Function Analysis-Location Quotient-Shift and Share Analysis.

**Module – 2: Regional Income and Social Accounting:** Equity Vs Efficiency; Regional Growth, Conceptual and Theoretical Foundations; Application of theories; Status of Development in relation to Regional economic development; Export Base Theory – Sectoral Theory Vs Regional Theory of Development; Growth Pole theory-Central place theory – Diffusion Theory-integration: Development Differentials.

**Module – 3:** Identification of Backward regions: Determinants of Regional Development: Natural Endowments Human Resources-Capital-Technology-Economic and Social infrastructure; Factor and commodity mobility and Regional development; Convergence Theory.

**Module – 4: National and regional Planning goals and objectives:** Historical perspectives of Indian development: Regional Development Models: Metropolitan Model-Bombay, Delhi. Calcutta. Command Area Development-Tribal Development-Drought Prone Area-Mineral Based Regions.

**Module – 5: Regional Planning under alternative economic system:** Socialistic countries-people's Republic of China U.S.S.R and Yugoslavia, Developed market economies, UK. Japan, Developing Economies, Latin, America; Practice of Regional Planning in India.

**Basic Reading List**

1. Harry N Richardson: regional Economics.
2. Hugu O. Nourse: Regional Economics,
3. Walter Isard: introduction to Regional Science.
4. Friedman & Alonzo (Ed): regional Development.
5. Amitabh Kundu et al.: input-Output frame-work and Economic Analysis B. Sarah, C.O.A.R. & J.B. Cuillingworth: Regional and Urban Studies, 7. Mark Wright: industrial Location & Regional Analysis.
6. David M. Smith: industrial Location.
7. David Mekee, Robert A. Dean (Ed) William H. Healey: Regional Economics Theory and Policy.
8. H. Richardson: Regional Economics
9. Friedman and Alan (Ed): Regional Development Policy.
10. Seibert: Regional Economic Growth.
11. Fu-Chen Lo Kamal Salih (Ed): Growth pole strategy and Regional Development Policy.
12. Peter Hall: Urban and regional Planning.
13. O.E. CD.: Regional Problems and Policies in O.E.CD Countries. Vol. I & II.



**PAPER –V (OPTIONAL PAPER)  
ECONOMICS AND LAW**

**Module - 1: Introduction:**

Economic Analysis of Law-introduction to legal reasoning – Efficiency; Markets and Efficiency; Coase Theorem and related ideas, Welfare economics; Compensation principles. The civil law and the common law traditions-legal institutions.

**Module – 2: Law relating to consumer activities**

Bargaining Theory; Economic Theory of contract, Remedies as incentives, Duress; Tort Law, Tort Liability and economic models; economics of accidents; fault, victim and strict liability; consumer protection and consumer Courts.

**Module – 3 Law of Business Organisations**

Structure of firm-Kinds, Corporation, Corporate vest, Capital, shares, debentures, insiders' trading; Anti Trust; RBI, IRDA, MRTP, SEBI, Economics of mergers, Amalgamations and takeovers.

**Module – 4: Economic Theory of Crime and Punishment:**

The traditional theory of Criminal law: Economic Theory of Crime and punishment; Reforms of Criminal Procedure and Futility Theses; Law relating to economic offences-Corruption and Human rights.

**Module – 5: Macro Economics, international Aspects and Law**

Property rights, Distribution of income and Law; Economic and Social costs of poverty; Economics of Social Sector; Wealth Distribution by liability Rules, Progressive Taxation and Efficiency; National and Global Environmental problems. W.T.O-TRIPS and TRIMS, export-import Policy, MNCs and Foreign Direct investment; FEMA.

**Basic Reading List**

**Bouckaert, B and G.DeGeest (Ed). (1999)** Encyclopaedia of Law and Economics (Volume I to V) Edward Elgar Publishing Ltd., UK.

**Cooter, R.D. and T.S. Ulen (Ed) (2000).** Law and Economics (3<sup>rd</sup> Edition), Addison Wesley, New York.

**Dan Schmidt, K.G. and T.S. Ulen (2000),** Law and Economics, (3<sup>rd</sup> Edition) Addison Wesley, New York.

**Newman, P. (Ed) (1998),** The New palgrave dictionary of Economic and Law, Stockton PreYork.

**Oliver J.M. (1979),** Law and Economics, George Allen and Unwin, London.

**Posner, R.A. (1998),** Economic Analysis of Law (5<sup>th</sup> edition), Little Brown, Boston.

**Posner, R.A. and F. Parist (Eds). (1997),** Law and Economics, Edward Elgar Publishing Ltd., UK.

**Masseyu, L.P. (1995),** Administrative Law, Eastern Book Company, Lucknow Indian Law institute, Annual Survey of Indian Law, Indian Law institute, New Delhi.

**PAPER – V (OPTIONAL PAPER)**  
**POVERTY AND INCOME DISTRIBUTION**

**Module -1:** Development, meaning; dimensions and paths: ideologies of poverty and income distribution. International aspects of poverty and income distribution, Development and inequality-income distribution and development-Kuznets curve.

**Module-2:** Poverty and income distribution in the Indian context historical perspective-Colonialism, Families and Drain Theory-Trends in Poverty and income Distributions-Temporal and Spatial-during the era of Planning.

**Module-3:** Income distribution and poverty alleviation policies macro and micro instruments. Employment generation and wages; Human capital formation, Social service, Asset distribution, Taxation subsidies - Target growth approach-Basic needs approach.

**Module-4:** Conceptual frame, poverty and income distribution, Poverty and deprivation; Kinds of poverty indicators, Culture of poverty and perspectives. Concepts of inequality-social, Political and others-inter and intra generational aspects of income distribution.

**Module-5:** Measurement of poverty and inequality – Poverty line, its composition and construction – indices of poverty, head count ratio. Poverty gap Squared Poverty Gap-Sen's index, Human Development index, Human poverty income, Limitations-Trends in Rural and Urban, Poverty in India-Criteria for inequality Measurement – Complete Measures of inequality.

**Basic Reading List**

1. **Dudley Jackson:** Poverty, Macmillan Studies, Macmillan Press 1972.
2. **Yusiro Haymai:** Understanding Village Community and the Direction of Agricultural Change in Asia, Hindustan Pub. Corp. 1981.
3. **Michael P.Todaro,** Economics Development (Addison-Wesley), 2000.
4. **A. K.Sen:** On Economic inequality, Oxford Press.
5. **William Loehr (Ed):** Economic Development, Poverty and Income distribution, West View Press, Colorado
6. **Paul Streeten, et. al., First Things First:** Meeting Basic Human Needs in Developing Countries, Oxford University Press, 1981.
7. **M.L.Dantwala,** Poverty in India, Then and Now, 1870-1970.
8. **Dandekar and Rath:** Poverty in India (1971)
9. **Deb Raj Ray:** Development Economics (Oxford University press), 1998.
10. **S. Subrahmanian (Ed):** Measurement of inequality and Poverty, oxford Univeristy Press, 1997.
11. **T.L. Jain:** Poverty in India, ESS. Publications, 1987.

**PAPER –V (OPTIONAL PAPER)**  
**PROJECT APPRAISAL AND COST BENEFIT ANALYSIS**

**Module 1:** Nature of Cost Benefit Analysis. Need. for Cost Benefit Analysis; with, particular reference to the developing economies. Welfare functions of Cost Benefit Analysis (a) Surplus Analysis (b) Social Welfare Function Approach.

**Module 2:** Concepts of Benefits and Costs - Direct and Indirect: Tangible and Intangible - Problems in the evaluation of Benefits and Costs .Accounting prices - Meaning of Accounting prices- Accounting prices and Pareto Optimality-Marginal Cost and Willingness to pay-Limitations of Market Prices-The "Second Best" problem - Accounting prices in the Absence of markets-Usefulness of Accounting prices.

**Module 3:** Externalities - Pecuniary and Technological- externalities the source or external effects-externalities, alternative technologies and cost benefit analysis- Collective goods.

The Social Rate of Discount-Social Time Preference Rate-The opportunity Cost rate of Discount Equilibrium, Social Time preference Rate and Social Opportunity Cost.

**Module 4:** Decision formulae for project choice - Net present value and input constraints - Optimal time phasing-Internal Rate of Return-Present value versus Internal rate of return - other criteria.Risk and Uncertainty - Relevance of risk and Uncertainty - Uncertainty and Decision Criteria-Some rules of Thumb.

**Module 5 :** Plans, Projects, choice and Project design, The selection of projects and the investment programme , Project design and decentralized evaluation.Private sector projects-The need for public evaluation of private projects-The method of evaluation of private projects:.Some applications - Demodar valley flood control scheme-Socio economic survey of Nagarjuna Sagar Project.

**Basic Reading List:**

A.K.Dasgupta and, D.W.Pearce ; Coast Benefit Analysis, Theory and Practice.

D.W.Pearce: Cost Benefit Analysis

I.M.D Little and J.A.Mirrlen Project Appraisal and Planning for Developing countries.

E.J.Mishra :Cost Benefit Analysis.

I.M.D.Little and J.Mirlees : Manual of Industrial Project Analysis, Vol.I., Social Cost Benefit Analysis.

B.Sarveswara Rao: Report on Bogie-Economic; :Survey of Nagarjuna Sagar project.

**PAPER – V (OPTIONAL PAPER)  
APPLIED ECONOMETRICS**

(The Candidates opted for Mathematical Economics and basic Econometrics as one of the specialization in the third semester along are eligible)

**Module 1:** Scaling and units of measurement in the two variable linear regression model and its impact on regression coefficients and standard errors, Coefficient of determination- $R^2$ . the choice between linear and log linear model. Partial correlation coefficients. Single and Joint testing hypothesis. Convergences of specification errors-Omitting relevant variable. Standard form of reporting results for multivariate regression model and identification of econometric problems.

**Module 2:** Consumption Function-Theories, of the consumption function - Absolute income hypothesis-Relative income hypothesis - Life cycle Hypothesis -Permanent income Hypothesis as errors in variables model -Specification of the functional form-problems of estimating the consumption function- Review of some empirical studies.

**Module 3:** Production and Cost, functions-Neo-classical theory of the production function-Cobb-Douglas production function-Problems and methods of estimating Cob-Douglas production function-CES production functions-Estimating CES production function-Trans production function-Specification and estimation-Problems of Estimating aggregate production function - Review of some empirical studies-Estimating Cost function.

**Module 4:** Investment function-Theories of Investment Behaviour - Accelerator Hypothesis - Profits Hypothesis-Jorgenson's Neo-classical theory of investment-problems of estimating investment functions-Review of some empirical studies.

**Module 5:** Macro econometric models-Nature of Macro econometric models-Construction and use of macro econometric models - Review of some macro econometric models is-Kilin Gold E3,jroer model for USA-Whartan group Models-The Brookings Quarterly Econometric Model of the, USA-Macro Econometric models of India.

**Books for references:**

M.D.D. intgriligator ; Econometric Models, Techniques & Applications

Megrand Desai : Applied econometrics

M.K.Evans : Macro Economic Activity -- Theory, Forecasting Control- An Econometric Approach.

J.L.Bridge : Applied Econometrics

K.L.Krishna (Ed.) .-Econometric Applications in India

K.Krishna Murthy and D.U.Sastry: Investment and Financing of Corporate Sector in India.

**PAPER – V (OPTIONAL PAPER)  
ECONOMICS OF SERVICES**

**Module – 1:** Concept of service-Growth and importance of Services in the global and Indian economy composition of services in India-Emerging issues of services in India in the context of globalization and W.T.O. Agreement.

**Module – 2:** Services and information Technology-The Interconnection-Promotion of Services through IT in India during 1990's.

**Module – 3:** Financial Services-Security Markets and their Management in India-Management and Marketing of financial services in India.

**Module – 4: Travel, Transport and Tourism:** interrelationship – Growth of Transport-Transport Planning – Development of infrastructure-Role of the State and Private Sector.

**Module – 5:** Hospitality and Entertainment Service-Hotel industry-Feasibility and Planning of Hospitality - Hotel Regulations-Tariff clarification-Food and Catering Services.

**Basic Reference List**

1. Karsa Cand L.E. Helber-Tourism Planning and Development.
2. A.J. Norvel – the Tourist Industry
3. A.K. Bhatia:- Tourism in India – History and Development
4. A.K. Bhatia – Tourism Development – Principles and Practice
5. A Bull – The Economics of Travel and a Tourism
6. S.V. Sudheer – Tourism-Problems and Prospects
7. M.N. Anand-Tourism and Hotel Industry; in India
8. J.G. Ramakar – Tourism and Transport
9. Leela Shelly – Tourism Development in India
10. V.K. Gupta-Tourism in Indian
11. Alister Matheson & Geoffrey Walt- Tourism: economic Physical and Social Aspects
12. A.K. Bhatia – International tourism: Fundamentals and Practices.
13. U.A. Avadani, "Investment and Security Markets in India", Himalaya Publishing House, Bombay.
14. Alak Gosh, Indian Economy.
15. H.R. Machi Raju, Working of Stock Makers in India, Wiley Eastern.
16. R.K.Sen and B.Chatterjee, "Indian Economy Agenda for the 21<sup>st</sup> Century, Deep and Deep Publications, New Delhi.

**PAPER – V (OPTIONAL PAPER)**  
**SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**

**Module 1: Investment** - Alternative, and attributes - Investment speculation – Security of investment-Investment process, Sources of investment information Securities market-Primary & Secondary-Structure and Functions.

**Module 2:** Return and Risk - Concepts and measurement of returns; Sources of Risk – systematic Risk Vs unsystematic risk. Measurement of Risk.

**Module 3:** Approaches to valuation - Fundamental Analysis - Technical Analysis - Efficient Market Hypothesis - Forms of market efficiency - Empirical evidence on market efficiency.

**Module 4:** Valuation of marketable Securities - Intrinsic value of bonds and preference shares: equity valuation - Growth models, Earnings multiplier approach.

**Module 5 :** Portfolio construction; selection and evaluation - Markowitz Model Efficient Frontier and selection of optimal portfolio, - Single Index Model – Capital Asset Pricing Model, risk and adjusted measures for portfolio Performance evaluations.

**Basic Reading List:**

Prasanna Chandra : investment Analysis & Portfolio Management Tata McGraw hill Publications Ltd.

Punithavathy Panda : Security Analysis & Portfolio Management –Vikas Publication Pvt.Ltd.

Bodie, Kane and Marcus; Investments – tata McGraw Hill.

Fisher & Jordan : Security Analysis & Portfolio management

J.C.Francis ; investments; Analysis and Management

**PAPER – V (OPTIONAL PAPER)**  
**MICRO FINANCE**

**Module 1:** Micro Finance: Sustainable Community Banking - Empowerment of Poor and Marginalized, especially women- Problems faced by Intervening Agencies- Participation of Members - Apex group

**Module 2:** Self-Help Groups and Self-Help promotion: Concepts, Elements, Structure and Precautions to be taken while form the SHGs - Savings Operations of SHGs - Credit Operations of SHGs- Role of NGOs.

**Module 3:** Monitoring and Evaluation: Impact Assessment of Savings and Credit Programmes - Savings and Credit as an Instrument of Self-help promotion among Rural Women- Experiences of GRAMEEN and SEWA- Role of Rashtriya Mahila Khosh.

**Module 4:** Inclusive Growth: Social Exclusion and Inclusive Growth-Gender Exclusion and Inclusive Growth - Government Polices for Sustainable Development.

**Module 5:** Women Empowerment; Concept and importance of Women empowerment Issues of Gender Equity in Rural Areas practical and strategic needs of Women.

**Reference Books**

K.G. Karmakar (1998): Rural Credit and Self-Help Groups, Sage Publications, New Delhi.

R. Shahindur, R, Khandker, (1998),: Fighting Poverty with Micro Credit Experience in Bangladesh, Oxford University Press.

Jayaramall B.NABARD (2001): Micro - Finance Retrospect and Prospects,

Basu, K. and K Jindal (eds) (2000): Microfinance: Emerging Challenges, Tata McGraw Hill Publishing Company, New Delhi, Central Statistical Organisation (2003) ; Statistical Abstract India, CSO, new Delhi.

World Bank (2004): `Microfinance in India: Issues, Challenges and Policy Options', World Bank, Washington, DC.

**Paper V**  
**ANDHRA PRADESH ECONOMY**

**Module-1:** National Income & Major sector of Economy, GDP (Gross Domestic Product). Per capita income and HDI (Human Development Index) as measured of development. Relative Contribution of agriculture to income and employment in the recent four decades of A.P.

**Module-2:** Five year plans of A.P -- Outlay; Finance in public sector plan and resource allocation pattern in the recent five year plan. Demographic Features and social Backwardness, poverty and unemployment – women Empowerment.

**Module-3:** Need for and aims of land reforms in A.P – Structure of land holdings in A.P. Forest, sown and irrigated area in A.P. Cropping Pattern. Source of Agricultural Finance in A.P – Agricultural subsidies.

**Module-4:** Growth and structure of industries in Andhra Pradesh, factories, small and tiny sectors, their comparison, growth, weaknesses and problems – Institutional and non – institutional –source of rural credit – growth and structure of cooperatives in Andhra Pradesh – Share of cooperatives in total credits – adequacy and problems

**Module-5:** Structure of Agricultural output – administered prices including support and procurement prices public Distribution System in A.P- Service sector of A.P – importance, composition and growth with special reference to transport and communication, tourism and information.

**References**

1. CESS: Center for Economics and Social Sciences
2. Human Development Report in Andhra Pradesh 2007
3. National Council of Applied Economics Research, New Delhi, Survey of Backward districts of A.P.
4. Laxmana Rao , V. Economic Growth of A.P.
5. Andhra Pradesh state Archives, two decades of development (1956 – 1976)
6. Selected Socio Economic Indicators – 2007. Directorate of Economics and Statistics Government of A.P. Hyderabad.
7. An outline of Agricultural situation in A.P, 2006-07 (DES – A.P. HYD)
8. S. Socio – Economic Survey 2007-08 Government of A.P (Planning Department)
9. S. Mahendra Dev. Inclusive Growth of Andhra Pradesh