

University of Jammu

Course Structure of MA Economics

Semester I (all courses compulsory)

Microeconomic Analysis I (410)

Macroeconomics I (411)

Development Economics (412)

Mathematical Methods in Economics (413)

Semester III

Compulsory Papers

International Economics (510)

Theory of Economic Growth (511)

Electives in Stream A

Demography (514)

Industrial Economics (516)

Econometrics I (513)

Electives in Stream B

Topics in Mathematical Economics (518)

Financial Institutions & Markets (512)

Agriculture Economics (515)

Semester II (all courses compulsory)

Microeconomic Analysis II (460)

Macroeconomics II (461)

Statistical Analysis (462)

Public Economics (463)

Semester IV

Compulsory Papers

Indian Economic Policy (560)

International Political Economy (561)

Electives in Stream A

Economics of Infrastructure (567)

Indian Industry (566)

Econometrics II (563)

Electives in Stream B

Labour Economics (564)

Indian Agriculture (565)

Economics of the Environment &
Natural Resources (562)

Students shall have to opt for 16 courses in all.

Of the 16 courses, the courses offered by the Department in the first two semesters are compulsory. In semesters III and IV, the student will have to take the two compulsory courses in each semester and one elective course each from Streams A and B. A student may opt for Econometrics II in semester IV only if he/she has opted for Econometrics I in the third semester.

Detailed Syllabus

Semester I

Course Code- 410

Title: Micro Economics Analysis – I

Preamble: The course analysis the economic behaviour of individuals, firms and markets. It is mainly concerned with the objective of equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs. The theory of traditional markets and equilibrium of firm under various types of competition.

UNIT - I BASIC CONCEPTS AND DEMAND ANALYSIS

The nature of Economics, The Boundaries of Economics, Economics issues; Factors of production; Resource allocation; Opportunity cost; Production Possibility Curve; Basic Economic questions; choice and scarcity; Economic Models; Alternative expressions of Economic Model.

Theory of Consumer Behaviour: Laws of Cardinal Utility Analysis; Laws of Diminishing and Equi-marginal Utility; Indifference Curve Analysis; Consumer's Equilibrium and properties of Indifference Curves; Slutsky Substitution Effect; Hicks-Allen Substitution Effect; Income Compensated Demand Curve; Elasticity of Demand; Revealed Preference theory, Critical evaluation.

UNIT -II THEORY OF PRODUCTION AND COSTS

Production function: Short period and Long Period, Law of variable proportions and returns to scale, Isoquants: Producer's Equilibrium; least cost Combination of Inputs; Maximization of Outputs; Production function of Multi Product firm. The Production possibility curve of the firm. The ISO-revenue curve of the multi

product firm; Equilibrium of the Multi product firm; Technical Progress and production function; Elasticity of Technical Substitution between factors.

The Traditional Theory of cost: Short Run Costs; Long Run Costs (the Envelope Curve), Internal and External Economics and diseconomies of scale. Modern Theory of costs (the L-shaped Long Run Average costs Curve).

UNIT - III PRICE AND OUTPUT DETERMINATION - I

Monopoly features; Profit maximizing output of a monopolist; short run and long run equilibrium; Barriers to entry. Price discrimination; Degrees; Price Discrimination in case of dumping; conditions necessary for possibility of price discriminations. Monopolistic competition: Meaning and characteristics: short run equilibrium and long run equilibrium; Excess capacity under monopolistic competition. The relevance of monopolistic competition; Criticism of monopolistic competition.

UNIT -IV PRICE AND OUTPUT DETERMINATION –II

Oligopoly : Characteristics; Non collusive (Cournot's Duopoly Model Bertrand's Duopoly Model. Edgeworth's Model. The kinked demand curve Model and Stackelberg's Model) and Collusive Oligopoly (Cartels aiming at joint profit maximization; Market sharing Cartels; Price leadership Model of Low Cost price leader; The model of Dominant Firm Price Leader. Bilateral Monopoly Model : Wage Determination under collective Bargaining.

Basic Readings:

1. Baumol, W.j. (1982) Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi, Delhi.
2. Da Costa GC (1980) Production, Prices and Distribution, Tata Macgraw Hill, New Delhi
3. Hirshleifer, J and A. Glazer (1997) Price Theory and Application, Prentice Hall of India, New Delhi.
4. Jack Hirshleifer, Amihal Glazer (1997) Price Theory and Application, Prentice Hall of India, New Delhi.

5. Koutsoyiannis, A (1979), Modern Microeconomics, (2nd Edition) Macmillan Press, London.
6. Richard G Lipsey: Cohn Harbury, (1992) First Principles of Economics, (2nd Edition), Oxford University Press.
7. Stigler, G. (1996) Theory of Price, (4th Edition), Prentice Hall of India, New Delhi.
8. Varian, H. (2000) Microeconomics Analysis, W.W, Norton, New York

Course Code. : 411

Title: MACRO ECONOMIC ANALYSIS - I

PREAMBLE: *Macroeconomics or aggregative economics analysis and establishes the functional relationship between the large economic aggregates. The analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of different issues and policies. Keeping in view this the course has been designed to cover such aspects of the Macroeconomics as National Income and accounts, consumption functions, Investment function, Business Cycles and Macro Economic Policy.*

Unit - I: National Income and Accounts and Introduction to Income Determination

Circular - Flow of income in two, three and four - sector economy; different forms of national income accounting - social accounting, flow of funds accounting and balance of payments accounting.

Neo-classical theory of distribution of National Income; Classical model of determination of equilibrium in goods market and money market.

Unit-II: National Income Determination: The IS-LM Model

Demand-side Equilibrium - Equilibrium Income and Interest Rate in the Product Market-derivation of the IS curve, Equilibrium Income and Interest Rate in the Money Market-Derivation of the LM curve, Equilibrium in the Product and Money Markets- the combined IS-LM model;

Fiscal Policy Effects on Demand, Monetary Policy Effects on Demand, Interaction of Fiscal and Monetary Policies crowding out effect, crowding "in" effect.

Unit - III: Sectoral demand functions: Consumption and Investment

Background of the Consumption Function Theories: Empirical evidence, Cross sections, Cycles and Trends, The Keynesian Consumption function, Duesenberry's

Relative Income Hypothesis, Friedman's, Permanent Income Hypothesis, Ando-Modigliani's Life-Cycle Hypothesis.

Investment- Optimal Capital Stock and Rate of Interest, Marginal Efficiency of Capital, Marginal Efficiency of Investment, Investment in the IS-LM Model, Stability and the Slope of the IS Curve, Fiscal Policy and Investment.

Unit - IV: Business Cycles and Macro Economic Policy

Theories of Kaldor, Samuelsson and Hicks, Goodwin's model; Control of business cycles - relative efficacy of monetary and fiscal policies. Role of monetary and fiscal policy in developing countries, prior - savings, inflation and growth - 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 (2 Vols.)*, Oxford University Press London.
- Branson, W.A. (1989), *Macroeconomic Theory and Policy*, (3rd 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.
- Heijdra, B.J. and V.P. Fredriek (2001), *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.
- Jha, R. (1991), *Contemporary Macroeconomics Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Romer, D.L. (1996), *Advanced Macroeconomics*, McGraw Hill Company Ltd., New York.
- Foryen, Richard T. *Macroeconomics - Theories and Policies*, Pearson Education inc., New York.
- Scafe B.L. (1977), *Cycles, Growth and Inflation*; McGraw Hill. New York.

- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
- Surrey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Oxford University Press, Oxford.

ADDITIONAL READING LIST

Unit 1

- Edey, M and A.T. Peacock (1967), *National income and Social Accounts*, Hutchinson University Library, London.
- Powerlson, J.P (1960), *National Income and Flow of Funds Analysis*, McGraw Hill, New York.
- Rao, V.K.R.V. (1983), *India's National Income: 1950 to 1980*, Sage Publications, New Delhi.
- Ruggles, R. and N. Ruggles (1956), *National Income Accounts and Income Analysis*, McGraw Hill, New York.
- United Nations (1974), *Year Book of National Account Statistics*.
- C.Harcourt (ed.). *The Micro Economic Foundations of Macroeconomics*- Macmillan 1997.
- Brian Snowdon and Howard R. Vane, *A Macroeconomic Reader* Koutledge, New York, 1997.
- Karl Bruntier and Allan II. Meltzer, *Money and Economy, Issues on Monetary Analysis* - University of Cambridge, New York, 1993.
- Sloven E. Lands Burg and Lauren J. Feimtone, *Macroeconomics*, McGraw Hill Pub., New York, 1997.

Unit 2

- Duesenberry, J.S. (1949), *Income, Saving and the Theory of Consumer Behaviour*, Harvard University Press, Harvard.
- Freidman, M. (1957), *The Theory of Consumption Function*, Princeton University Press, Princeton.
- Keynes, J.M. (1936), *The General Theory of Employment, Interest and Money*, Macmillan, London.
- Mueller, M.G. (1966), *Readings in Macroeconomics*, Holt Rinehart and Winston, New York.

Unit 3

- Gordon. R. and S.G. Hanis(1998), Macroeconomics, Addison Wesley.
- Culbertson, J.M. (1968), Macroeconomic Theory and Stabilization Policy, McGraw Hill, Kogenkosh, Tokyo.
- Levasic and A Rebmann, Macroeconomics.
- Mc. J Surrey, Macroeconomic Themes.
- Froyen T, Macroeconomics.
- L. Harris, Monetary Theory, McGraw Hill, 1985.
- Muller M.G (ed), Readings in Macroeconomics, 1971.

Unit 4

- Gordon, R.A. (1961), Business Fluctuations, Harper and Row.
- Gordon, R.A. and L.R. Klein (Eds.) (1956), Readings in Business Cycles, Irwin, Homewood.
- Hicks, J.R. (1950), A Contribution to the Theory of Trade Cycle, Clarendon Press, Oxford.
- Lucas, R. (1981), Studies in Business Cycle Theory, MJ.1 Press, Cambridge, Masseurhusses
- Taylor, L. (1983), Structuralist Macroeconomics Basic Books, New Longman.
- Turnovsky, S.J. (1977), Macroeconomic Analysis and Stabilization Policy, Cambridge University Press, Cambridge.

Course Code. : 413

Title: Mathematical Methods in Economics

PREAMBLE - The aim of this course is to train students in the use of mathematical tools to understand concepts in economics presented in the form of mathematical models and express economic ideas in the same form. The course is intended to enable the students to utilize these tools in subsequent courses in the ii, ill and IV semesters especially those courses where the use of mathematics has become the norm.

Unit-I: Number System, Set Theory and Functions.

Number system - Real and Imaginary, Vector and Vector Spaces, Vector and Points elementary mathematical Operation with Matrices, Solution of simultaneous equations: Rank of the matrix, matrix inversion. Linear and orthogonal transformations; Concept of quadratic forms - Eigen Vectors, Set Theory: Bounded and Unbounded, Sets, Linear and Metric spaces, definition of Relation.

Functions: Linear and non-linear, trigonometric; convex and concave, concept of sequence, limit of sequence, concepts of limit and continuity, Economic examples and applications.

Unit -II: CALCULUS

Principles of Differentiation: Rules of Differentiation; Differentiation of Implicit Functions; Partial and total differentiation. Expansion by Taylor Series Allied Economic Applications.

Maxima and Minima - unconstrained and constrained Allied Economic Applications

Principles of Integration: Indefinite and Definite Integrals; Applications in Economic Theory.

Economic applications - Derivation of Consumer Surplus, Profit and utility maximization with one good, product and input, Derivation of demand curves for inputs, goods etc.

Comparative Statics and Allied economic applications combining calculus - Derivation of Slutsky Equation. IS-LM Model. CRS and CES production functions, elasticities of demand, supply, substitution.

Unit-III Difference and Differential Equations

Difference Equations: definitions and concepts; Solutions of First order and Second order difference equations.

Differential Equations: definitions and concepts; Solutions of First order and Second order differential equations.

Simultaneous Differential Equations and Phase Diagrams, Stability properties.

Applications of difference and differential equations in Economics. - Cobweb models and other lagged price adjustment models, the dynamic multiplier process, dynamic price adjustment processes, Phillips Curve.

Unit -IV Linear Programming: Operations and Applications

Linear Programming - Basic Concept; Formulation of a LP problem; Nature of feasible, basic and optimal solutions; Solution of a LP problem through graphical and simplex methods; Statement of basic theorems of Linear Programming; Formulation of the Dual and Its interpretation; Shadow prices and their uses; Concept of duality and statement of duality theorems, Uses in minimax games.

Introduction to Input Output Analysis: Static - Open and Closed Models.

Basic Reading List

1. Allen, R.GD. (1976). Mathematical Analysis for Economists, Macmillan.
2. Chiang, A.C. (1974). Fundamental Methods of Mathematical Economics, McGraw Hill and Kogakusha, New Delhi.
3. Hendry, A.T. (1999). Operation Research, Prentice Hall of India, New Delhi.
4. Taha, HA. (1997). Operation Research: An Introduction (6th Edn.). Prentice Hall of India Pvt. Ltd., New Delhi.
5. Yamane, T. (1973). Mathematics for Economists, Prentice Hall, New Delhi.

Additional Reading List

1. Baumol, W.J. (1977). *Economic Theory and Operations Analysis*, Prentice Hall.
2. Baumol, W.J. (1970). *Economic Dynamic* Macmillan, London.
3. Hadley, G. (1973). *Linear Algebra*, Addison-Wesley Pub. Co., Tokyo.
4. Hadley, G (1962). *Linear Programming*, Addison-Wesley Pub. Co., Massachusetts.
5. Henderson & Quandt, *Microeconomics: A Mathematical Approach*, Tata McGraw Hill.
6. Leonard and Van Long (1978). *Introduction to Maths for students of Economics.*, cambridge.
7. Mathur, P.N. and R. Bhadwaj (eds.X1976). *Economic Analysis in Input-Output Research*. Input- Output Research Association of India, Pune.
8. Mehta & Madnani (1992). *Mathematics for Economists*, S. Chand, New Delhi.
9. Monga, GS. (1972). *Mathematics and Statistics for Economists*, Vikas Publishing House, New Delhi.
10. Samuelson, P.A. (1967). *Foundations of Economic Analysis*, McGraw Hill Tokyo.

Course Code. : 412

Title: Economics of Development

PREAMBLE - *The study of economic development has gained importance because of sustained interest of the developing countries in uplifting their economic conditions by restructuring their economies to acquire greater diversity, efficiency and equity in consonance with their priorities. While few success stories can be counted, many have grappled with chronic problems of narrow economic base, inefficiency and low standard of living. For this and other reasons, there have been many approaches to economic development. In recent times, besides hardcore economic prescriptions to development, concerns hitherto relegated to background like education, health sanitation and infrastructural development, have found a place of pride in explaining the preferences of various economies. Topics incorporated in this paper are devoted to the theories of growth and development and problems of measurement, social and institutional aspects of development, importance of agriculture, and the rational and pattern of industrialization in developing countries. The other important issues in the context of development such as infrastructure-linkages, role of international trade, importance of domestic macroeconomic policies, investment criteria, and relevance of planning have been included in this course.*

Unit - I: Social and institutional aspects of development

Development and underdevelopment - perpetuation of underdevelopment;
Sustainable Development, Poverty - Absolute and relative - measures of poverty and their merits and demerits; Measuring development and development gap,
Human development index and other indices of development; Inequality -
Measures of Inequality - Effects of Inequality; Human resource development :
Population problems -- Theory of demographic transition; Population as limits to growth and as ultimate source -- Population, Poverty and environment: Economic development and institutions -- markets and market failure, state and state failure, issues of good governance.

Unit - II: Theories of Development

Classical theory of capitalistic development: Growth and stagnation, Marxian Model of Growth and Collapse and Schumpeter theory of Economic Development, Partial theories of growth and development -- vicious circle of poverty, circular causation, Dualism -- technical and social; Lewis Model, Ranis and Fei model, Dependency theory of development, Strategies of Development--- Big push, Balanced growth, Unbalanced growth, Critical minimum effort thesis, Low Level Equilibrium trap.

Unit III: Sectoral Aspects of Development and role of international trade

Role of Agriculture in economic development, Transformation of agriculture and rural development, Complementarity between agriculture and industry, Rationale and pattern of industrialization in developing countries, Labour markets in developing countries, Choice of techniques and appropriate technology.

International trade as an engine of growth, Static and dynamic gains of trade, Prebisch-Singer versus free trade, Import substitution versus Export promotion, Dual Gap analysis, WTO and developing countries.

Unit IV: Macro Economic policies, Planning and Development

Role of Monetary and Fiscal Policies in developing countries, Inflation and Economic growth: Empirical Evidence, Aid versus Trade, technology Inflow, MNCs activity in developing countries, Burden of borrowing—IMF and World bank Policies in developing countries.

Need for investment criteria—Present versus Future, Alternative investment criteria, Cost- Benefit analysis, Shadow prices, Project Evaluation and UNIDO guidelines.

Need for planning—Democratic, Decentralized, Indicative planning and Micro Level Planning, Review of Indian Plans Models

Basic Reading List

1. Adelman, I. (1961), *Theories of Economic Growth and Development*, Stanford University Press, Stanford.
2. Behrman, S. And T.N. Srinivasan (1995), *Handbook of Development Economics*, Vol. 3, Elsevier, Amsterdam.
3. Ghatak, S. (1986), *An Introduction to Development Economics*, Allen and Unwin, London.
4. Hayami, Y. (1997), *Development Economics*, Oxford University Press, New York.
5. Higgins, B. (1959), *Economic Development*, W.W., Norton, New York.
6. Meir, G.M. (1995), *Leading Issues in Economic Development* (6th Edition). Oxford University Press, New Delhi.
7. Ray, Debraj (2011), *Development Economics*, Oxford University Press, Delhi.
8. Thirwall, A.P. (2011), *Growth and Development*, (9th Edition) Macmillan, U.K.
9. Todaro, M.P. (2011), *Economic Development*, (9th Edition), Longman London.

Additional Reading List

10. Chakarvarti, S. (1987), *Developing Planning: The Indian Experience*, Clarendon Press, Oxford.
11. Dasgupta, P., A.K. Sen and S. Maglini (1972), *Guidelines for Project Evaluation*, UNIDO, Vienna.
12. Mishan, E.J. (1975), *Cost Benefit Analysis* (2nd Edition) Allen and Unwin, London.
13. Sen, A.K. (Ed.) (1990), *Growth Economics*, Penguin, Harmondsworth.
14. Todaro, M.P. (1971), *Development Planning: Models and Methods*, Oxford University Press, Oxford.
15. United Nations (1994), *Human Development Report*, United Nations, New York.

Semester – II

Course Code. : 460

Title: Micro Economic Analysis - II

***PREAMBLE** - After being instructed rigorously with various aspects of consumer behaviour demand analysis, production theory and costs and the theory of markets in Micro economics, -I and being trained in the use of mathematical tools in economics, this course will introduce students the various theories of distribution, welfare economics, general equilibrium in closed systems, choice under risk and uncertainty, as well as new developments in the theory of markets and economics of information. Mathematical tools covered in Quantative Methods I will be used wherever relevant.*

Unit - I: ALTERNATIVE THEORIES OF THE FIRM & INFORMATION TECHNOLOGY

Critical evaluation of marginal analysis, Baumol's Sales Maximization Model, Price output determination, optimal advertising expenditure, choice of output of various products and Input combinations, Pricing and changes in overhead costs.

Williamsons model of managerial discretion, Maris's model of managerial discretion, Full cost pricing rule. Bain's limit pricing theory and its recent developments including Sylos - labini model of the firm Behavioural model of the firm. Information Technology - System Competition, problem of complements, Lock in, Network Externalities and its Effects and implications, Rights Management and Sharing of Intellectual Property.

Unit - II: GAME THEORY AND GENERAL EQUILIBRIUM

The Payoff Matrix of a Game, Definition of Nash Equilibrium, Pure and Mixed Strategies, Prisoners' Dilemma, Repeated Games - applications, Sequential Games, Sub-game perfect equilibrium - examples - Entry deterrence.

Partial and General Equilibrium, The Walrasian System, Existence, Uniqueness and stability of equilibrium. A graphical illustration of the path to General equilibrium, Algebraic treatment of a two-person two good exchange model,

graphical treatment of the two factor, two commodity two consumer general equilibrium system, static properties Sa general equilibrium state, General equilibrium and allocation of resources.

Unit - III DISTRICUTION AND WELFARE ECONOMICS, KXTERNALITIES AND PROVISIONS FOR PUBLIC GOODS.

Marginal Productivity Theory of Distribution, Product exhaustion Theorem (Clark-Wicksteed - Walras), Pareto optimal conditions, social welfare function, compensation principle, Scitovasky's Paradox, Neitovasky's Double Criterion, Theory of Second best, Arrow's impossibility Theorem.

Externalities - Definitions Externalities and Market Failure, Coase Theorem, Production

Externalities- pollution vouchers, Property Rights and the Tragedy of the Commons Public Goods. - Definitions and characteristics, When to provide a public good, optimal Provision for a Public Good, Private provision for Public Good and the Free - Rider Problem, The Clark - Groves Tax and its 'problems.

Unit - IV CHOICE UNDER RISK AND UNCERTAINTYAND "ECONOMICS OF INFORMATION

Expected Utility Theory, Von Neumann - Morgenstern method of constructing utility Index under risky situations, The St. Petersburg Paradox and Bernoulli's Hypothesis, Allais's Paradox and explanations. Attitude towards Risk - Measures of absolute and relative Risk Aversion, certainty equivalent, risk premium, Risk Averter v/s Risk Lover. Risk lover and Gambling. Risk aversion and Insurance.

Friedman - Savage hypothesis, Markowitz' hypothesis, The Investor's choice problem Information and consumers' choice, information and insurance - Dealing with asymmetric information.

Asymmetric Information - The Market for Lemons & Quality Choice, Adverse Selection, Moral hazard, Signaling, Incentive - Systems.

Basic Reading List

1. Henderson J and R Quandt: Microeconomics Theory, A Mathematical Approach, McGraw-Hill.
2. Hader, J. : Mathematical Theory of Economic Behaviour, Addison-Wesley
3. Koutsoyarmis, A: Modern Microeconomics, Macmillan.
4. Mas-collel A, M.D. Whinston & J.R. Greene: Microeconomics Theory, OUP.
5. Salvatore, D: Microeconomics, OUP
6. Sen, A: Microeconomics, OUP
7. Varian, I-I: Intermediate Microeconomics, East West press.

Course Code.: 461

Title: Macro Economic Analysis - II

PREAMBLE - After going through the contents included in Paper I the students have to go through the empirical aspects relating to supply and demand for money, Neo-classical, Keynesian and post- Keynesian views on interest and money.

Unit - I: COMPETING MACROSYSTEMS

Supply Side Equilibrium - Output and Price Level, the Complete Keynesian System with flexible prices, The Classical System, The Two systems compared, Keynesian Obstacles to Full Employment and the Pigou Effect/Real Balances Hypothesis.

Debates of the Nature of Keynesian Employment - Patinkin's concept of Underemployment Disequilibrium, Interpretation of Keynesian Economies by Clower and Leijonhufvud.

Unit -II: The demand and supply for money

Demand for Money: The Classical Approaches to the demand to Money-Quantity Theory of Money, Fisher's Equation, Cambridge Quantity Theory, Keynes's Regressive Expectations Model, Tobin's Portfolio Balance Approach, transaction, precautionary and speculative demand for money - aggregate demand for money; Derivation of LM curve.

Financial intermediation - Principles of money supply determination, money supply in All - Currency Economy and Fractional Reserve Banking; RBI approach to money supply; Budget deficits and money supply; money supply and open economy; control of money supply.

Unit - III: Inflation and the New Classical Macroeconomics

Definition and Costs - Types of Inflation and their Causes – Demand I 'nil Inflation and Inflation Gap Analysis, Cost-Push Inflation and Trade Unionism, Problems of Distinction between these two types, Inflation and Money Supply,

Monetary Theory of Inflation, Inflation and Unemployment - The Philips Curve, Long-run Philips' Curve. The Solow-Samuelsson theoretical foundations of the Philips Curve, Tobin's modified Philip's curve.

The Quantity Theory of Money, velocity of Circulation of Money, Budget, Deficit and Inflation, Money Growth Inflation and Interest Rate, Adaptive Expectations, Relational Expectations and Policy ineffectiveness, the Keynesian Counter-critique.

Unit - IV MACROECONOMICS IN AN OPEN ECONOMY & NEO-CLASSICAL MACROECONOMICS

Mundell- Fleming model -Asset markets, expectations and exchange rates; monetary approach to balance of payments. The new classical critique of micro foundations, the new classical approach; Policy implications of new classical approach - empirical evidence.

BASIC READING LIST:

- Abel, Andrew B, & Ben S. Bernanke (2006), Macroeconomics, Pearson Education Inc., New York.
- Ackley, G. (1978), Macroeconomics: Theory and Policy, acmillan, New York.
- Black house, R. and A. Salanski (Eds.) (2000), Macroeconomics and the Real World (2 Vols.) Oxford University Press, London.
- Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd 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.
- Heijdra, B.J. and V.P. Frederick (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), Contemporary Macroeconomics Theory and Policy, Wiley Eastern Ltd., New Delhi.

- Romer, D.L. (1996), *Advanced Macroeconomics*. McGraw Hill Company Ltd., New York.
- Scarfe, B.L. (1977), *Cycles, Growth and Inflation*, McGraw Hill, New York.
- Shapiro, F. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
- Surrey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Oxford University Press, Oxford.

Additional Reading List.

Unit I

- Leijonhufvud, A. (1968), *On Keynesian Economics and Economics of Keynes*, Oxford University Press, London.
- Levacic, R. and A. Rebman (1986), *Macroeconomics: An Introduction to Keynesian and Neo-classical Controversies*, Macmillan, London.
- Mankiw, N.G. and D. Romer (Eds.) (1991), *New Keynesian Economics*, (2 Vols.) MIT Press, Cambridge.
- Rakshit, M. (1998), *Studies in the Macroeconomics of Developing Countries*, Oxford University Press, New Delhi.

Unit II

- Friedman, M. (1956), *Studies in the Quantity Theory of Money*, The University of Chicago Press, Chicago.
- Hicks, J.R. (1974), *The Crisis in Keynesian Economics*, Oxford University Press, New Delhi.
- Jha, R. (1999), *Contemporary Macroeconomics Theory and Policy*, New Age International (P) Ltd., New Delhi.
- Laidler, D.E.W. (1977), *Demand for Money: Theory and Evidence*, Dutton, New York. Chakravarty, S.C. (1985), *Report of the Committee to Review the Working of the Monetary System*, Reserve Bank of India, Bombay.
- Gupta, S.B. (1995), *Monetary Planning in India*, Oxford University Press, New Delhi.

- Gurley, J. and E.S. Shaw(1960), Money n a Theory of Finance, Brookings Institution,. Washington.
- Mckinen. GE. (1978), Money, The Price Level and Interest Rates, Prentice Hall of India, New Delhi.
- Reddy, Y.V. (2000),A Review of Monetary and Financial Sector Reforms in India - A Central Banker's Perspective, UBSPD, New Delhi.
- Friedman, M. (1956), Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago.
- Laidler, D.E.W. (1977), Demand for Money : Theory and Evidence, Dum-Don Valley, New York.
- Mekinen, G.E. (1978), Money, The Price Level and Interest Rates, Prentice Hall of India, New Delhi.

Unit3

- Gordon, R. and SG Harris (1998), Macroeconomics, Addison Wesley, Massachusetts.
- Mankiw, N.G and D. Romer (Eds) (1991), New Keynesian Economics, (2 Vols.) MIT Press, Cambridge.
- Frisch, H. (1983), Theories of Inflation, Cambridge University Press, Cambridge.
- Hagger, A.J. (1977), Inflation: Theory and Policy, Macmillan, London.
- Hudson, J. (1982), Inflation: A Theoretical Survey and Synthesis, George Allen and Unwin, London.
- Sheffrin, S.M. (1996), Rational Expectations, Cambridge University Press, Cambridge.

Unit 4

- Leijonhufvud A (1968), On Keynesian Economics and the Economics of Keynes, Oxford University Press.
- Hicks J.R. (1974), The Crisis in Keynesian Economics, Oxford University Press, New Delhi.
- Laidler, D.F.W. (1977), Demand for Money: Theory and Evidence. Dum-Don Valley, New York.
- Richard T Froyen, Macroeconomics.

- Benett T. Mc Callum. Monetary - Economics. Theory and Policy Macmillan, 1989.
- William H. Branson, Macroeconomics Theory and Policy, Princeton University. -
- Dornbusch R. and Fischer, Macroeconomics.
- Lavasic. Macroeconomics
- Prabhat Patnail (ed), Macroeconomics, Oxford University Press.

Course Code- 463

Title: Statistical Analysis

Preamble: The object of this course is to train students in the use of statistical tools and techniques that will help the students in data collection, presentation and draw inferences about various statistical hypothesis. The tools taught will also aid the students in Economic Theory where statistical tools are used.

UNIT - I : MEASURES OF CENTRAL TENDANCY, DISPERSION & CORRELATION AND REGRESSION.

Measures of Central Tendency and Dispersion.

Meaning, assumptions and limitations of Simple correlations and regression analysis; Pearson's Product Moment Formula and Spearman's Rank Correlations.

Concept of least squares and lines of regression; Methods of estimating non-linear equations e.g. parabolic equation, Standard Error of estimate Partial and Multiple Correlations, Coefficient of determination.

UNIT -II: THEORY OF STATISTICS: PROBABILITY AND DISTRIBUTION

Statistics - nature and scope. Types of Statistics - descriptive and inferential.

Probability theory - different concepts and approaches, Laws and Axioms of Probability, conditional theory - different concepts of Interdependence, Baye's theorem and its applications.

Concept of random variable: probability, mass and density functions; Expectations, moments and moment generating functions.

Probability distributions: Binomial, Poisson, and Normal.

UNIT – III: THEORY OF ESTIMATION AND HYPOTHESIS TESTING

Concept of an estimator and its sampling distributions

Properties of good estimator

Formulation of statistical Hypotheses - Null and Alternative

Goodness of fit; confidence interval and level of significance, Hypothesis testing based on Z, t, F, and chi-square tests; Errors of types II and I.

Unit - IV: INDEX NUMBERS AND TIME SERIES ANALYSIS

Nature and Purpose of Index Numbers, Commonly Used Index Numbers, Laspeyres and Paasche's Index Numbers, Chain Base Index Numbers, Official Index Number, True Cost of Living Index, Fisher's test or Index Numbers.

Nature and Decomposition of a Time Series, Analysis of Trend: Polynomial Trend, Non-linear Growth Curves; Moving Average Method, Seasonal Component, Cyclical and Random Component, Forecasts and their Accuracy.

Basic Reading List:

1. Croxton, Croyden and Klein (1971) Applied General Statistics, Prentice Hall of India, New Delhi.
2. Goon, AM, MK Gupta and B. Das Gupta (1983), Fundamentals of Statistics Vol. I, The World Press, Calcutta.
3. Hod, P. (1954) Introduction to Mathematical Statistics, Wiley and Sons.
4. Hogg R.V. and A.T. Craig (1970), Introduction to Mathematical Statistics, Macmillan Publishing Co., New York.
5. Nagar, A.L. and R.K. Das (1993). Basic Statistics, Oxford University Press, New Delhi.
6. Rao, C.R. (1965), Linear Statistical Inference and Application Wiley and Sons.
7. Sukhatme, P.V. and B.V. Sukhatme (1970). Sampling Theory of Survey with Applications Low a State University Press, Ames.
8. Walpole, R. Statistics (1980), Collier Macmillan.

Course Code- 462

Title: Public Economics

***Preamble:** The role and functions of the government in an economy have been changing with the passage of time. The term 'Public Finance' Has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures while budgetary policy is an important part to understand the basic problems of use of resources, distribution of Income etc. there are vast array of physical institutions – tax system, expenditure programs, budgetary procedures, stabilization instruments, debt issues, level of governments etc, which raise a spectrum of issues arising from the operation of these institutions. Further, the existence of externalities, concern for adjustment in the distribution of income and wealth etc require political processes for their solution in a manner which combines individual freedom and justice. This paper combines a thorough understanding of fiscal institutions with a careful analysis of the issues which underlined Budgetary policies in general and Indian experience in particular.*

UNIT - I: RATIONALE FOR PUBLIC POLICY

Social Contract theory of Hobbs and Locke's contribution, Market failures: Imperfections, decreasing costs and externalities; Role of government as, an agent of operational planning and development:

Private and Public mechanism for allocation of resources, problem of allocation of resources, Voluntary exchange models of Samuelson, Musgrave and Bergson; A.Wagner theory of public expenditure, Objective of public expenditure, Tiebout hypothesis, Political economy of public economics - voting and rent seeking.

UNIT -II: PUBLIC DEBT AND TAXATION

Classical view of public debt; compensatory aspects of debt policies, burden of public debt; principles of public debt management, theory of incidence of taxation; theory of optimal taxation, allocation, efficiency and equity trade off, problems of double taxation.

UNIT -III: FISCAL FEDERALISM

Principal of multi unit finance: Fiscal federalism in India; Vertical and Horizontal imbalances, assignment of function and sources of revenue; constitutional positions: Finance commission, Planning commission criteria of transfer of resources; resources transfer from union of states and local bodies, Centre-state financial relationship.

UNIT - IV: INDIAN PUBLIC FINANCE

Indian tax system: major taxes in India income tax, Excise custom, corporation tax, service tax, VAT and agriculture expenditure tax; base of taxes, direct and indirect taxes, reforms in direct and indirect taxes, non tax revenue of Centre and states, Fiscal crises and fiscal sector reforms in India, recommendations of 13th finance commission, problems associated with governance and finances of local bodies.

SELECTED READINGS:

1. Musgrave, L.A. (1959), theory of public finance, McGraw Hill-Kogakhusa. Tokyo.
2. Shoup, C.S. (1970), Public Finance, Aldine, Chicago.
3. Buchanan, J.M. (1970), The Public Finance, Richard D, Irwin, Hovewood.
4. Jha, R (1998), Modern Public Economic, Rutledge, London.
5. Atkinson, A.B. and J.E. Siglitz (1980) Lecture on public Fconornc.
6. Musgrave, R.A. and C.S. Shoup(Ecls.) 1970, Readings in the Economics of taxation, George Allen and Unwin, London.
7. Barman, K. (1986) Public debt management in India, Uppal Publishing House, New Delhi.
8. Chelliah, Raj J, et.al (1981), Trends and issues in India's Federal finance, national institute of Public Finance and Policy, New Delhi.
9. Bhargave, P. K (1982), Centre state Resource transfer in India, The academic press, Furgao.
10. Bhargave, R. N (1967), The theory and working of Union Finance in India, Chaitanya Publishing House, Allahabad.
11. Borker, V. V. (1971), Income tax reforms in India, Popular Prakashan, Bombay.

12. Datt, R. (Ed.) 2001, Second Generation Economic Reforms in India, Deep and Deep Publications, New Delhi.
13. Bagchi, A. (ed) (2005)', Readings in Public Finance, Oxford Press, New Delhi.
14. Myles, Gareth (2007), Intermediate Public Economics, MIT Press, Cambridge, USA.

Semester - III

COMPULSORY COURSES

Course Code- 510

Title: International Economics

Preamble: The course aims at providing a deeper and wider understanding about the principles and theories, which govern the free flow of trade in goods, services and capital between the countries. Besides preparing the students to appreciate the relevance and limitations of the theories and principles, the content of the course also covers the empirical evidence of various theories, welfare implications and gains from trade.

UNIT -I: THEORY OF INTERNATIONAL TRADE - I

Significance and scope of International Economics, Economic Basis of International Trade, Contributions of Adam Smith, David Ricardo and J. S, Mill to the theory of International Trade, Theory of Opportunity Cost.

UNIT -II: THEORY OF INTERNATIONAL TRADE- II

Modern Theories of International Trade: Heckscher-Ohlin Theory of Trade and its empirical verification, Rybeznski Theorem, The Stolper – Samuelson Theorem, Factor-Price-Equalization Theorem, International Trade in Specific Factors Model, Imperfect Competition and International Trade: Concept of Intra-Industry Trade, its Basis Measurement and Significance, New Theories of Trade : Kravis and Linder.

UNIT- III: GAINS FROM TRADE AND INTERNATIONAL TRADE POLICY

Concepts of Terms of Trade, their uses and limitations, Hypotheses of Secular Deterioration in Terms of Trade, Reasons for Deterioration in Commodity Terms of Trade and Policy Implications for Developing Countries; Trade as Engine of

Growth: Concept of Immiserizing Growth, Empirical Evidence and Policy Issues; Theory of Interventions: Tariffs, Quotas and Non-Tariff Barriers to International Trade, Economic Effects of Tariffs and Quotas (Partial and General Equilibrium Analysis); Theory of Optimum Tariff, Concepts of Nominal and Effective Tariffs.

UNIT -IV: BALANCE OF PAYMENTS

Meaning and Components of Balance of Payments, Equilibrium and Disequilibrium in the Balance of Payments (BOP), Process of Adjustment under Fixed and Flexible Exchange Rate Regimes, Expenditure Changing and Expenditure Switching Policies for Balance of Payments (BOP) Adjustment, Policies for Achieving Internal and External Equilibrium simultaneously: Mundell - Flemming Model, The Monetary Approach to the Theory of Balance of Payments (BOP) adjustment.

READING LIST:

1. Paul R. Krugman and Maurice Obstfeld (2007), International Economics: Theory and Policy, Pearson Education, New Delhi.
2. Jagdish N. Bhagwati et al (2003), Lectures on International Trade, Oxford University Press, New Delhi.
3. Dominick Salvatore (2004) international Economics, John Wiley & Sons Inc.
4. H.G Mannur (1998) International Economics, Vikas Publishers, New Delhi.
5. Dunn R. M. & J .H. Mutti (2000) International Economics, Routledge, London.
6. Carbaugh R.J. (1999) International Economics, International Thompson Publishing New York.
7. Dana, M.S. (2000) International Economics: Study Guide & Workbook, Routledge Publishers, London.
8. Bhagwati J. (1988) Protectionism, Cambridge University Press, Massachusetts.
9. Sodersten Bo (1991) International Economics, The Macmillan Press Ltd. London.

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

Course Code.-511

Title: Theory of Economic Growth

Preamble : After having acquainted with various aspects of development economics students in this course will have to deal with various growth models, problems of resource allocation, need for various investment criteria in developing countries, cost-benefit analysis and project evaluations.

UNIT - I: INTRODUCTION TO ECONOMIC GROWTH AND THE EARLY MODELS

Concept and importance of economic growth - Sources of Economic Growth Classical Theory of Economic Growth, Harrod's Model of Growth, Domar Model of Growth, Relevance of the Harrod-Dornar Model to contemporary developing economics, Neo-classical Growth Theory-Generalized Version.

UNIT - II: THE NEO-CLASSICAL MODELS AND THE MODELS OF THE CAMBRIDGE SCHOOL

Solow's Model of Growth, Meade's Model, The Neo-Classical Model and the Golden Rule of Accumulation, Cambridge Models of Economic Growth- Joan Robinson's Model, Kaldor's Model, Pasinetti's Model, Samuelson and Modigliani on the Pasinetti Paradox

UNIT -III: THE TWO SECTOR MODEL, INTRODUCTION FL MONIY, OPTIMAL GROWTH AND TECHNICAL PROGRESS

The Extension o of the Neo-Classical Model of two-sectors- Uzawa's Two- Sector Model of Growth, Money and Economic Growth Optimum Growth Models- Introduction and the Ramsey Model, Technical Progress: Different Types of Technical Progress, Learning by Long Arrow's Model.

UNIT -IV: ENDOGENOUS GROWTH MODELS AND GROWTH ACCOUNTING

Models of endogenous growth-Introduction - The AK Model, the Production Function Approach to Economic Growth; Growth Accounting- Empirical Evidence, Limits to Growth

BOOKS RECOMMENDED

1. Barro, R. and X. Sala-i-Martin, Economic Growth, Prentice Hall India, New Delhi.
2. Branson, W, Macroeconomic Theory and Policy, Harper and Row
3. Chiang. A.C. Element of Dynamic Optimization, McGraw Hill
4. Sen, A.K., Growth Economics, Penguin, Harmondsworth.
5. Solow, R.M. Growth Theory An Exposition, Oxford University Press, Oxford.
6. Wan, I-1.Y., Economic Growth, Harcourt, Brace, Jovanovich New York.
7. Chiang, A.C. Fundamental Methods in Mathematical Economics, McGraw Hill.
8. Robinson, J, The Accumulation of Capital, Macmillan.
9. Domar, B, Essays in the Theory of Economic Growth, Oxford University Press.
10. Thirlwall, A.P. Growth and Development, Palgrave.
11. Harrod R.F., Towards a Dynamic Economics, Macmillan.
12. Evans, M. Macroeconomic Activity, Harper and Row
13. Kaldor N., Essays in Economic Growth and Stability, Gerald Ruckworth.

Semester III

Elective Courses in Stream A

Course Code: 514

Title: Demography

Preamble: The main objective of this paper is to make the students aware of importance of population in Economic. Development and various theories to explain the growth of population in a country. The paper also enlightens the students on quantitative and qualitative aspects and characteristics of population through various demography techniques. In recent lime general characteristics of the population have acquired importance and these have also been included in the frame work of studies. Paper also deals comprehensively with migration and urbanization as structural change taking place in the society.

UNIT-I: CONCEPTS, THEORIES AND INTERNATIONAL STRU CTURE OF POPULATION

Meaning and scope of demography; Theories of population Malthusian theory of population, Optimum theory of population; Leibenstein's theory of population; Theory of demographic transition; Population growth and distribution in more developed and less developed countries; Pattern and determinants of age and sex Structure in more developed and less developed countries; Demographic, economic and social implications of age and sex structure in more developed and less developed countries.

UNIT .2: FERTILITY, MORTALITY, MIGRATION AND URBANIZATION ON IN INTERNATIONAL PERSPECTIVE

Concepts of fertility; Levels and trends in fertility in more and less developed countries Socio-economic factors affecting fertility; Concepts of mortality; Levels and trends in mortality in more and less developed countries; Factors affecting mortality decline in recent past; Concept and types of migration; International migration - its eels on population growth and pattern; Factors affecting migration; Concept of urbanization; Growth and distribution of rural-urban population in

developed and developing countries, Factors affecting urbanization in mortality in more and less developed countries.

UNIT-3: DEMOGRAPHIC DATA AND STRUCTURE OF POPULATION IN INDIA

Study of census in India - Methodology and characteristics of census; Nature of information collected in 2001 census in India; National Family Health Survey 1 and 2 and Rapid Household Survey; Population growth and distribution in India; Age and sex structure of population in India, Trends in fertility, mortality, and life expectancy in India; Appraisal of Kerala model; Pattern of migration and urbanization in India.

UNIT -4: POPULATION AND DEVELOPMENT ISSUES AND POPULATION POLICY IN INDIA

Population explosion -Threatened or real, distant or imminent; Population, economy and environment linkages; Population, health, nutrition, productivity nexus; Population and human development issues; Culture and fertility; Education and fertility; 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; Tasks before the National Population Commission.

Basic Readings List:

1. Agarwal 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), Handbook of Development Economics, Vol.1&2 Elsevier, Amsterdam.
5. Choubey, P.K. (2000), Population Policy in India. Kanishka Publications, New Delhi.

6. 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.
7. Gulati, S.C. (1988), Fertility in India: An Economical Study of a Metropolis, Sege, New Delhi.
8. Simon,. J .L., (1992), Population and Development in Poor Countries, Princeton University Press.
9. Srinivasan, K. (1998), Basic Demographic Techniques and Applications: Sege, New Delhi.
10. Srinivasan, K.-and A. Shariff (1998), India: Towards Population and Demographic Goals, Oxford University Press, New Delhi.
11. Syrock H. et al, (1973), The Methods and Materials of Demography; US Department of Commerce. Washington, D.C.
12. United Nations (1973), The Determinants and Consequences of Populations Trends, Vol. I, UNO Publications, New Delhi.

Course Code: 516

Title: INDUSTRIAL ECONOMICS

Preamble: In the Globalised Era, rapid economic development is impossible without Industrial Development. Keeping this in view the present course is designed to make students aware of the frame work and problems of Industrial Economics, market structure, market conduct, and market performance.

UNIT-I: Frame work& Problems of Industrial Economics

Meaning and scope of industrial economics, The Organizational pattern of the firm on the basis of ownership, internal organizations of the firm, The Choice of the organizational form, Business motives-Profit, Sales Growth and Value maximization of the firm. Size of the firm Optimum firm, Representative firm, Equilibrium firm, factors determining optimum size, reconciliation of optima. Need for the growth of the firm, theories of the growth of the firm: theories of the growth of the firm: Downie's theory Penrose's theory and Marris's theory of the growth of the firm.

Unit -II: MARKET STRUCTURE

Market Structure: Meaning of the market structure, The conceptual framework for the study of industrial economics. Sellers concentration and its measurement: the concentration ratio, the Lorenz curve, product differentiations – its sources and its implications, entry conditions, economies of scale, market structure & innovation – the process of innovation – concepts & relationships – its measurement. The theory of technological innovation. Industrial location analysis – the general determination of industrial location. Theories of industrial locations Weber & Sergeant Florence.

UNIT – III: MARKET CONDUCT

The structural conduct performance approach relationships between structure, conduct & performance, neoclassical developments of the SCP approach. General situations for pricing decisions. Pricing in practice – cost plus pricing, incremental

cost pricing, the target rate of return pricing, acceptance pricing, the going rate pricing, pricing in public enterprises, Diversification and vertical integration, merger – definitions, types & motives, Implication for public policies.

UNIT—IV: MARKET PERFORMANCE & PROJECT APPRAISAL

Industrial productivity – its importance, distinction between production and productivity, factors influencing industrial productivity, Industrial efficiency – meaning of the concept, the determinants of economic efficiency, measurement of the efficiency levels, investment decisions, preparation of the time – profile of the project, methods of project evaluation; - the payback method, the average of accounting rate of return method, the net present value method, the internal rate of return method, ranking of projects; NPV VS IRR. Risk & uncertainties in project appraisal.

Basic Reading Lists:

1. Ahluwalia I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
2. Barthwal, R.R. (1985) Industrial Economics, Wiley Eastern:
3. Cherunilam, F. (1994) Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
4. Desai, B. (1999), Industrial Economy in India (3rd Edition) Himalaya Publishing House, Mumbai.
5. Divine, P.J. and R.M. Jones et. Al(1976), An introduction to Industrial Economics, Georg Allen and Unwin Ltd., London.
6. Government of India, Economic Survey (Annual)
7. Hay, D. and D.J. Morris (1979), Industrial Economics: Theory and Evidence, Oxford University Press, New Delhi.
8. Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition) Chaitanya Publishing House, Allahabad.
9. Reserve Bank of India, Report on Currency and Finance (Annual).
10. Singh, A. and A.N. Sadhu (1988), Industrial Economics; Himalaya Publishing House, Bombay.

Course Code: 513

Title – Econometrics – I

Preamble: Application of economic theory need a reasonable understanding of economic relationships and econometrics methods. The econometric theory thus becomes a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with basic theory of econometrics and relevant applications of the methods. The topics covered in the course include various problems faced in estimation of both single equation and simultaneous equations methods.

UNIT - I: BASIC ECONOMETRICS

Nature, meaning and scope of econometrics, distinction between Statistics and Econometrics ; two variable linear regression model- assumption, estimation through OLS, properties of estimators-Gauss – Markov theorem. Concept and derivation of R square and adjusted R square concept of analysis of variance approach General linear regression model - assumptions, estimation and properties of estimators. Deviation from classical linear regression assumption (non-spherical case) and generalized least square.

UNIT II: PROBLEMS WITH REGRESSION ANALYSIS

Problems of heteroscedasticity, autocorrelation and multicollinearity -Nature, test, consequences and remedial measures. Model mis-specification versus pure autocorrelation, OLS versus FGLS and HAC coexistence of autocorrelation and heteroskedasticity.

UNIT III: SPECIFICATION AND DIAGNOSTIC TESTIN AND NON-LINEAR REGRESSION MODELS

Specification - Type consequences, and tests; nested versus non-nested models Recursive least square, chow prediction failure test.

Nonlinear regression - trial and error method, direct optimization iterative linearization.

UNIT-IV: REGRESSION WITH QUALITATIVE VARIABLE AND OTHER TECHNIQUES

Dummy Variable : Testing structural stability of regression models. Dummy variable trap Regression with dummy dependent variables - LPM, Logit, grouped LOGIT, LOGIT for ungrouped and individual data, Probit and Tabit models their application. Modeling count data Poisson model.

Basic Reading List:

1. Biltagi, B.H.(1998). *Econometrics*, Springer, New York.
2. Chow, GC. (1983). *Econometrics*, McGraw Hill, New York.
3. Goldberger A.S. (1998). *Introductory Econometrics*, Harvard University Press, Cambridge, Mass.
4. Green, W. (2000). *Econometrics*, Prentice Hall of India, New Delhi.
5. Gujarati, D.N. (1995). *Basic Econometrics (2nd Edn.)*. McGraw Hill, New Delhi.
6. Johnston, J. (1991). *Econometrics, Methods (3rd Edn.)*. McGraw Hill. London.
7. Koutsoyiannis, A. (1977). *Theory of Econometrics (2nd Edn.)*. The Macmillan Press Ltd. London.
8. Maddala, GS. (1997). *Econometrics*, McGraw Hill; New York.
9. Theil, H.(1981). *Introduction to Econometrics*, Prentice Hall of India, New Delhi.

Additional Reading List:

1. Intrilligator, M.D. (1978). *Econometric Models, Techniques and Applications*, Prentice Hall, Englewood Cliffs, New Jersey.
2. Intrilligator, M.D. and Z. Griliches (1983). *Handbook of Econometrics*, Vol.1 & II, North Holland, Amsterdam.
3. Johnston, I. and J. Di Nardo (1997), *Econometrics Methods*, McGraw Hill.
4. Pindyck, R. S. and D.L. Rubinfeld (1976). *Econometrics Models and Economic Forecasts*; McGraw Hill-Kogakusha, Tokyo.
5. Theil , H. (1971). *Principles of Econometrics*, J. Wiley, New York.

Semester III : Elective Course in Stream B

Course Code: 518

Title: Topics in Mathematical Economics

Preamble: This course is designed to equip students to understand the economic concepts and theories using mathematical tools and techniques to refine verbal logic.

UNIT - I: THE THEORY OF CONSUMER BEHAVIOUR AND PRODUCTION

The Utility Approach, The Indifference Curve Approach, The Slutsky Equation and its generalisation to n goods, concepts of elasticities. Cournot aggregation conditions, Engel Aggregation conditions, Linear Expenditure Systems, Treatment of Demand for Durable goods (Houthakker's and Taylor's dynamic models). Properties of Linearly Homogenous Production Functions, Cobb Douglas, CES production functions. Constrained optimisation for producers; derivation of input demand functions. Adding up Theorem, production possibility curve, difference and differential equations applied to market equilibrium.

UNIT II: MARKET STRUCTURES

Assumptions of the Neoclassical theory of the firm, profit maximisation conditions of the classical firm, the perfectly competitive industry. Dynamic Changes vis a vis industry equilibrium. Monopoly: Basic Model: Comparison with perfect competition; Market Discrimination, Dynamic changes vis a vis market equilibrium. The Cournot Model, The Stackelberg Model. Pareto Optimality in a 2 X 2 framework; derivation of Pareto Optimality Conditions, Pareto Optimality under perfect competition, Externalities, The Theory of the Second Best.

UNIT III: DIFFERENCE EQUATIONS

First Order Difference Equations and Applications, The Cobweb Theorem, The Dynamics of the Multiplier, formalisation of Harrod's Model, a single dynamic model of income inflation. Second order equations and applications- Samuelson's Multiplier Accelerator Model, Hicks' Trade Cycle Model, Distributed Lags and

multiplier-accelerator interactions (Hicks). Multiplier effects in an Open Economy, capital stock adjustments and extrapolation expectations.

UNIT-IV: DIFFERENTIAL EQUATIONS

General Principles, First Order Equations, Stability of Supply and Demand Equilibrium. Domar's Model, Neo-classical Growth Model (Solow), Phillips' Stabilisation Model for a Closed Economy, a model of foreign exchange speculation under floating exchange rates, simultaneous systems, stability of Walrasian general equilibrium of exchange.

Basic Reading List:

1. RGD Allen, Mathematical Economics, Macmillan
2. RGD Allen, Mathematical Analysis for Economists, Macmillan
3. A.C. Chiang, Fundamental Methods in Mathematical Economics, McGraw-Hill
4. A.C. Chiang, Elements of Dynamic Optimisation, McGraw-Hill
5. JM Henderson and RE Quandt, Microeconomics- A Mathematical Approach, McGraw-Hill

Course Code: 512

Title: Financial Institutions and Markets

Preamble: The positive and significant role of financial institutions in the process of growth and development has been very well recognized in the literature and indeed has become more important during the last two decades as the financial systems of different countries have become integrated in the process of globalization. India is no exception-and has taken far reaching measures since 1991 in this direction. It is, therefore, essential that the student of economics should be well conversant with the theory and practice of different financial institutions and markets to understand and analyse the interconnection between the monetary forces and real life, their development role and limitations in shaping and influencing the monetary and related policies both at the national and international levels.

UNIT- I: NATURE AND ROLE OF FINANCIAL SYSTEM

Money and finance-Money and near-money-Financial intermediation and Financial intermediation and Financial Intermediaries - The structure of the financial system - Functions of the financial sector - Indicators of financial development - Equilibrium in Financial Markets - Financial System and Economic Development-Criteria to evaluate assets: Risk and financial assets, types of risk, return on assets, Risk - Return trade off- Valuation of Securities.

UNIT-II: STRUCTURE OF INTEREST RATES

Theories of interest rate determination; The Classical Theory, The Loanable Funds Theory, The Keynesian Theory and Modern Theory of Interest - Relationship between Short term and Long Term rates Term Structure of Interest rates; The expectations Theory, Liquidity Premium Theory, and Market Segmentation Theory - Spread between lending and deposit rates - Administered interest rates - Appropriate interest rate policy.

UNIT -III: THE CENTRAL BANK, COMMERCIAL BANKS AND MONETARY POLICY

Functions of Central Bank - The aims and objectives of the monetary policy in developed and developing countries - Instruments of monetary policy - Proliferation of banking and non-bank financial intermediaries - Effectiveness of monetary policy - Credit creation and its control; Profitability and efficiency of banks; Development banks - role and functions; Investment banking and merchant banking; Financial sector reforms in India.

UNIT -IV: NON-BANK FINANCIAL INTERMEDIARIES AND FINANCIAL MARKETS

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

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, Discounts market – Government securities market - Markets 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.

BOOKS RECOMMENDED

1. Bhole, L.M. (1999), Financial Institutions and Markets. Tata McGraw Hill Company Ltd New Delhi.
2. Bhole, LM. (2000), Indian Financial System, Chugh Publications, Allahabad.
3. Edminster, R.O. (1986), Financial Institutions, Markets and Management, McGraw Hill, New York.
4. Goldsmith. R.W. (1969), Financial Structure and Development, Yale, London.
5. Hanson, J.A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty-first Century, Oxford University Press, New Delhi.
6. Harker, P.T. and S.A. Zenios (2000) (Ed.) Performance of Financial Institutions, Cambridge University Press, Cambridge.

7. Johnson, H.J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
8. Khan, M.Y. (1996), Indian Financial Systems, Tata McGraw Hill, New Delhi.
9. Machiraju, M.R. (1999), Indian Financial Systems, Vikas Publishing House, New Delhi.
10. Ohlson, J.A. (1987), The Theory of Financial Markets and Institutions, North Holland, Amsterdam.
11. Prasad, K.N. (2001), Development of India's Financial System, Sarup & Sons, New Delhi.
12. Robinson, R.I. and D. Wrightman (1981), Financial Markets, McGraw Hill, London.
13. Smith, P.R (1978), Money and Financial Intermediation : The Theory and Structure of Financial System, Prentic Hall, Englewood-Cliffs, New Jersey.

ADDITIONAL RADING LIST

1. Bishop, P. and D. Dixon (1992), Foreign Exchange Handbook, McGraw Hill, New York.
2. Chandra, P. (1997), Financial Markets, (4th Edition), Tata McGraw Hill, New Delhi.
3. Farrell, J.L. (1997), Portfolio Management, (2nd Edition), McGraw Hill, New York.
4. Machiraju, H.R. (1997), International Financial Markets, in India, Wheeler Publishing, Allahabad.
5. Shaw, E.S. (1983), Financial Deepening in Economic Development, Oxford University Press, London.
6. Fenstermaker, J.M (1969), Readings in Financial Markets and Institutions, Appleton, New York.
7. Shaw, E.S. (1983), Financial Deepening in Economic Development, Oxford University Press, London.
8. Smith, P.F. (1978), Money and Financial Intermediation : The Theory and Structure of Financial System, Prentic Hall, Englewood-Clifts New Jersey.
9. Chander L.V. and S.M. Goldfeld (1977), The Economics of Money and Banking, Harper & Row, New York.

10. Gupta, S.B. (1983), Monetary Economics, S. Chand & Company New Delhi.
11. Rangaranjan, C. (1999), Indian Economics: Essays on Money and Finance, UBS Publication, New Delhi.
12. R BI (1983), Functions and Working of RBI.
13. Sayers, R. S. (1976), Modern Banking, Oxford University Press, New Delhi.
14. Verma, J.S. (1989), A Manual of Merchant
15. Bhat, R.S. (1996), Unit Trust of India and Mutual Funds : A Study, UTI Institute of Capital Markets, Mumai.
16. Sahadevan. K.G and M.T. Thiripalraju (1997), Mutual Funds, Prentice Hall of India, New Delhi.
17. Fishier, G.E. and R.J. Jordon (1992), Security, Analysis and Portfolio Management, Eastern Economy Edition, New Delhi.
18. Goss B.A. and B.S. Yamey(1978), The Economics of Futures Trading, Macmillian, London.
19. R.B.I (1985), Report of the Committee to Review the Working of the Monetary System. (Chakravarty Committee), Bombay.
20. Weller P. (1 992), The Theory of Future Markets, Blackwell, Oxford. Society for Capital Research and Development, Delhi.
21. Brahmananda, P.R. (1982) IMF Loan and India's Economic Future, Himalaya Publishing House, Bombay.
22. Chamberlain, G (1981), Trading in Options, Woodhed-Faulker Cambridge.
23. Crocker, A. (1982). International Money: Issues and Analysis The English Language, Book Society, Nelson, London.
24. Kindlebeger, C.P. (1996), A History of Financial Crisis, Manias Panics and Crashes, John Wiley & Sons, New York.
25. Mackinnon, R.J. (1979), Money in International Exchanges Oxford Niehans, J. (1984), International Monetary Economics John Hopkins University Press, New York.
26. E.B.I. (1995), Report of the Working Group of Foreign Exchange Market in India, (Sodhani Group), Mumbai.
27. Redseth, A. (2000), Open Economy Macroeconomics Cambridge University Press, Cambridge.

28. Yeager, L.B. (1976), *International Monetary Relations: Theory History and Policy*, Harper and Row, New York.

Course Code: 515

Title: Agricultural Economics

Preamble: This course is developed to acquaint students with developments in agriculture, different types of farming, production and Productivity, models for agricultural development and price and marketing of agricultural products. This gives the students understanding about theoretical developments in agricultural economics.

Unit: I Agriculture Economics -nature and scope

Nature and Scope of Agricultural Economics; Role of agriculture in economic development, contribution of land, capital and labour in agricultural development; Different types of farming; Risk and Uncertainty in agriculture sources, expectation and variation measures to control farm risk; Supply and demand behavior in agriculture; Farm mechanization, Land Reforms -theoretical explanation.

Unit: II Agriculture and Economic Development

Changing phases of agriculture in economic development; Basic models, For agricultural development- Schultz's transformation of traditional agriculture model. Lewis's unlimited supply of labour model, Fei-Ranis model of agricultural growth, Mellor's model of agricultural development, Jogenson's model of dual economy, Boserup's model of agricultural development; Interdependence between agriculture and industry- some empirical evidence; Complementarity between agriculture and industry.

Unit: III Agricultural Production and Productivity

Agricultural Production-resource use and efficiency; Production function analysis in agriculture; factor combination and resource substitution; Farm size, production and Productivity; Laws of returns- theoretical and empirical findings-factor-product, factor-factor and product relationships-product; Costs and profits in agriculture; Farm budgeting and programming:

Unit: IV Agriculture Marketing and Prices

Agricultural Marketing - functions and marketing efficiency, classification of marketing, approached to Marketing efficiency estimation, approaches to the study of marketing; Marketing channels- marketing costs and margins, estimation of price spread, reasons for higher marketing cost of agricultural products; Difference between Marketable surplus and Marketed surplus; factors affecting marketable surplus and measure to increase marketable surplus- state policy with respect to agricultural marketing, Terms of trade between agricultural and non – agricultural prices, need for State intervention; Price determination in agriculture, managing price change -brands choice criteria competition, contract farming, mall, mandies and market laid price changes- E marking.

- 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 Science 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 T. Kelly (1999) *Trade Liberalisation and Indian Agriculture*, Oxford University Press, New Delhi.
- Joshi, P.C. (1975), *Land Reforms in India: Trends and prospects*, Allied Publishers, Bombay.
- Kahlon, A.S. and Tyagi D.S. (1983), *Agriculture Price Policy in India*, Allied Publishers, New Delhi:
- Rao, C.H. Hanumantha (1975), *Agricultural Growth, Rural Poverty and Environmental Degradation in India*, Oxford University Press, New Delhi.
- Reserve Bank of India, *Report on Currency and Finance (Annual)*, Mumbai.

- Rudra, A. (1982), Indian Agricultural Economics: Myths and reality, Allied Publishers. New Delhi.
- Stini, G.R. (1979), Farm Size. Resource Use Efficiency and Income Distribution, Allied Publishers, New Delhi.

ADDITIONAL READING LIST:.

Unit – I

- Papola, T.S. (1982), Rural Industrialization in India, Himalaya Publishing House, Bombay.
- Soni, R.N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.
- Wanmali S. and Ramasamy (Eds.) (1995), Developing Rural Infrastructure. Macmillan, New Delhi.

Unit –2

- Appu, P.S. (1996), Land Reforms in India, Vikas, New Delhi.
- Bardhan, P. (1984), Land, Labour and Rural Poverty, Oxford University Press, New Delhi.
- Brahmananda, P.R. and V.R. Panchumukhi (Eds.)(1987), The Development Process of the Indian Economy, Himalaya Publishing House, Bombay.
- Chadha, G.K. and A.N. Sharma (1997), Growth, Employment and Poverty: Change and Continuity in Rural India, Vikas Publishing, New Delhi.
- Chakarvarty, S. (1987), Development Planning: The Indian Experience, Oxford University Press, New Delhi.

Unit – 3

- Raglivan and L. Sarkar (Eds.) (1996), Poverty and Employment, New Age, New Delhi.
- Visaria, P. and R. Basant (1994), Non-Agricultural Employment in India: Trends and Prospects, Sage Publications, New Delhi.

Unit-4

- Jodha N. (Ed. (1996), the 111engesto Indian Banking, Macmillan, New Delhi.
- Reserve Bank of India (1989), Report of the Agricultural Credit Review Committee, Bombay.

- Reserve Bank of India (1989), Report of Agricultural Credit Review Committee, Bombay.

SEMSTER IV

Compulsory Courses

Course Code. : 561

Title: INTERNATIONAL POLITICAL ECONOMY

***Preamble:** The Course provides a deep understanding about the broad principles and theories, which tend to govern the free flow of trade in goods, services and capital-both short-term and long term - at the global level. Besides preparing the student about the relevance and limitations of these theories and principles, the contents of the paper spread over different units they stress on the theory and nature of the subject, which in turn, will greatly help them to examine the impact of the trade policies.*

UNIT-I: INTERNATIONAL POLITICAL ECONOMY

International Political Economy: Meaning, Traditional Schools of International Political Economy. The International Trade System: Meaning; the Creation of the Post-war Trade System; Evolution of the Multilaterals Trade System; The Problem of Trade Cooperation; The Politics of Trade Liberalization; Multilateral Institutions an Trade Cooperation; Protection: Protection and its Consequence the structure of Protection in the Advanced Industrialized Countries; The Economic Consequences of Protection.

UNIT - II: THE THEORY OF REGIONAL BLOCKS

Forms of Economic Cooperation; Static and Dynamic effects of a Custom Union: Production effect; Consumption Effects. European Union (EU) and North American Free Trade Agreement (NAFTA). Economic Progress of SAARC!SAFTA, etc. for Asian Economic Cooperation; Problems and Prospects of forming customs union in the Asian Region: Globalization: meaning; essential conditions for Globalization; implications and impact of Globalization.

UNIT -III: INTERNATIONAL TRADE AND FINANCIAL INSTITUTIONS

The international Monetary System: The rise and fall of Gold Standard and Bretton Wood System (the interwar periods); Present International Monetary System
IM17: Objectives; functions; Conditionality clause of the IMF; The Collapse of Bretton Wood System; World Bank : and its contribution - limitations.

GATT and WTO:GATT and Trade Liberalization : The Doha Declaration; WTO and Developing Countries with Special reference to India; Trade Related Investment Measures (TRIMs), Trade related aspects of Intellectual property (TRIPs) and General Agreement of Trade in Services (GATS).

UNIT- IV: CURRENT DEVELOPMENT AND PROBLEMS IN THE INTERNATIONAL ECONOMY

Asian Crisis and the lessons for the developing countries like India; Impact of Trade Reforms Since 1991 on Balance of Payments, Multinational Corporations: Definitions, benefits; domestic politics and MNCs; The Host Country Dilema; Regulating MNCs activity in Developing Countries; international Regulation of MNCs. International Devt: Debt-Growth link; Magnitude of Debt Problem; Causes of Debt problem; Remedial and preventive measures; Reasons for sharp rise in India's External Debt.

Reading List:

1. Bhagwati J. (Ed.) (1981), International Trade: Selected Readings
Cambridge University Press
2. Carbough, R.J. (1999), International Economic International
Thompson Publishing, New York.
3. Chacholiades, M (1999) International Trade : Theory an Policy, McGraw
Hill, Kogakusha, Japan.
4. Dana, M.S. (2000), International Economics: Study, Guide and Work
Book (5th Edition), Rouledge Publishers, London.]
5. Dunn, R.M. and J.H. Mutti (2000), International Economic
Rouledge, London.
6. Kenen, P.B. (1994), The International Economy, Cambridg University
Press, London.
7. Kindleberger, C.P. (1973), International Economics, R.I Irwin, Homewood.

8. King, p.G (1995), International Economics and International Economic Policy A Reader, McGraw Hill International Singapore.
9. Krugman, P.R. and M. Obstfeld (1994) International Economics: Theory and Policy, Glenview, Foresman.
10. Oatley, Thomas (2004), international Political Economy Pearson Education (Singapore) Pvt. Ltd. Indian Branch 482 F.I.E. Paparganj. Delhi.
11. Salvatore. Dominic (2006) Theory and Problems of International Economics, Tata McGraw Hill Pub. Co. Ltd. New Delhi.

Additional Readings List:

12. Condem W.M. (1965), Recent Developments in the Theory of International trade, Prisceton University Press.
13. Greenway, D. (1983), International Trade Policy, Macmillan Publishers Ltd., London.
14. Clement M.A. R.L. Poffster and K.J. Rothwell (1969), Theoretical Issues in International Economics.
15. Crockett, A (1982), International Money: Issues and Analysis, The ELBS and Nelson.
16. Heller, H. Robvert (1968), International Monetary Economics, Prentice Hall, India.
17. Guegabsm H, (1984) International Monetal Economics, John Hopkins University Press, Baltimore.

Course Code. : 560

Title: INDIAN ECONOMIC POLICY

Preamble: This paper is designed to acquaint the students in a comprehensive manner with different aspects of Indian economy. The policy measures to improve economic development and growth, agriculture and industry planning of the different sectors of the economy and the place of Indian economy in the international level particularly after economic reforms are covered. This will sharpen the analytical faculty of the students to understand the whole system of Economic Planning in India.

Unit: 1 Economic Development and Growth Policies

Approaches to Economic Development and measurement-Income Index, Non-Income Indices, Human Development Index; PQLI, GDI; Growth & Development; How Economies Grow & Change- Forces of Growth, Structural Changes, Factors of growth, Measures for Development; Strategies for development- Big Push Strategy, Critical, Minimum Effort Strategy, Balanced Growth Strategy, Unbalanced Growth Strategy, Developing Economy- level of development, Progressive Features , Major guidelines , Projections & Perspectives- Higher Growth Improved living levels, Inclusive growth.

Unit: 2 Agriculture and Industrial Sectors of the

India Economy:

Policies for Agriculture Development, trends in agriculture investment National Agricultural Policy, Critical appraisal of the Impact of Green Revolution, Land reforms - Meaning, objectives, Land Reforms Policy; a Critical Appraisal; Agricultural Price Policy,' Agricultural Marketing Policy, Government Food Policy; WTO & Agriculture; Industrial Development under Plans - Critical Review, Industrial Policy Resolution 1956;,'Industrial Policy -1991, Privatization of Indian Economy, Performance of public Sector, Government Policy towards Public Sector since 1991, Government Policy Towards Small Scale Industries; Terms of Trade between Agriculture and Industry.

Unit: 3 Indian Planning

Objectives & strategy of Planning in India, Investment Pattern in Indian Plans, Assessment of Planning in India Achievements and failures, Regional Planning Policy in India, Regional Imbalances in India and Policy measures to remove Regional Imbalances, A critical review of Regional Planning Policy; Federal Finances ; Responsibilities and resources, division of functions, resource raising powers, Twelfth Finance Commission-Evaluation, Thirteenth Finance Commission-features & objectives, Parallel Economy' Magnitude & Consequences, cause and remedies, measures taken by the government.

Unit: 4 Economic Reforms and external sector

Economic crisis, Macroeconomic stabilization, structural changes, an appraisal of economic Reforms, economic Reforms and Reduction of Poverty, Uruguay Round of Final Act and its implication for India, Social Clause in GATT, WTO & its Impact on the different sectors of the economy; A Critical review of W'T'O, India's role at Doha Conference 2001; Foreign Trade Policy-2004-09, FERA – FEMA

BASIC READING LIST:

1. Bardhan, Pranab (1994): The Political Economy of Development in India; Oxford University Press. New Delhi.
2. C.T. Kurian: Poverty Planning and Social Transformations-An Alternative in Development Planning Allied Publishers, New Delhi, 1978.
3. V.M. Dandekar: The Indian Economy 1947-97; transforming traditional Agriculture Vol. I'
4. Bimal Jalan: Indian Economic Crisis: The Way Ahead; Oxford University Press, New Delhi 1992.
5. India's Economic Policy Preparing for the 21st Century; Penguin, New Delhi, 1996.
6. A.P.'Thirwall' (Growth and Development, 6th Edition Macmillan Press Ltd., 1999.
7. Vijay Joshi: IMD Little; India's Economy Reforms; Oxford University Press, New Delhi, 1991-2001.
8. B.A. Prakash: Kerala Economy-Problems and Prospects; Sage Publications, New Delhi. 1994.

9. Lima Kapila Indian Economy Since Independence; Vol. 1, II & III, Academic foundation. New Delhi.
10.: Recent Developments in Indian Economy, Part 3&4 Academic Foundation, New Delhi. 1994 & 95.
11. R.K. Sinha: Economic Development Planning and Policy in India, Deep & Deep, 1998
12. Robert. E. B. Lucas and Gustar .F.; Indian Economy-Recent Development and Future Prospects. Oxford University Press, New Delhi, 1989
13. Terry Byres, Major Debates on Indian Economy.
14. Amartya Sen, Poverty and Famine-An Essay on Entitlement and Deprivation. Oxford University Press. New Delhi, 1982.
15.The Standard off Living: Tanner Lectures – Cambridge University Press, 1987.
16.Development as Freedom. Oxford Uni. Press, 1999.
17.India Development and participation, Oxford University Press, 2002.
18. Brahmananda and Panchamuki: Development Process of Indian Economy; Himalaya Publishers, 1987.
19. S. S. Tarapore. Issues in Financial Sector Reforms, UBS Publishers Distributors Ltd. New' Delhi :2000.
20. C. Ranga Rajan. Indian Economy; UBS Publishers Distributors Ltd; New Delhi, 1998.]
21. Ruddar Dutt & KPM Sundaran: Indian Economy, S. Chand & Company Ltd, New Delhi, 2004.
22. A.D.N. Bajpai, S.K. Chaubey, N.G. Pendsc, S.K. Shrivastava; Emerging Trends in Indian Economy. Atlantic Publishers & Distributors, New Delhi, 1995.
23. Ruddar Dutt; Second Generation Economic reforms in India; Indian Economic Association
24. A. Banerjee & S.K. Singh: Banking and Financial sector reforms in India: Indian Economic Association
25. M.R. Aggarwal International Intuitions and Economic Development of Underdeveloped Countries; Indian Economic Association.

26. Alluwalla, Isher Judge & Williamson, John (ed):The South Asian Experience with Growth.
27. Ahiuwalla, I.J. and LM.D. Little (Eds.) (1999), India's Economic Reforms and Development (Essay in honour of Manmohan Singh), Oxford University Press, New Delhi.
28. Bardhan, P.K. (9thEdition)(1999), The Political Economy of Development in India, Oxford University Press, New Delhi.
29. Bawa, R.S. and P.S. Raikhy(Ed. (1997), Structural Changes in Indian Economy, Guru Nanak Dev University Press, Amritsar.
30. Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter State Perspectives, Bookwell, Delhi.
31. Chakravarty, S. (1987) Development Planning: The Indian Experience, Oxford University Press, New Delhi.
32. Dantwala, M.L. (1996), Dilemmas of Growth: The Indian Experience, Sage Publications, New Delhi.
33. Daft, R. (Ed). (2001), Second Generation Economic Reforms in India, Deep & Publications, New Delhi.
34. Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.
35. Jam, A.K. (1986), Economic Planning in India, Ashish Publishing House, New Delhi.
36. (1992), The Indian Economy- Problems and Prospects, Viking, New Delhi.
37. Jalan, B (1996) India's Economic Policy - Preparing for the Twenty First Century, Viking, New Delhi.
38. Joshi, V. and LM.D. Little (1999) India: Macro Economics and Political Economy, 1964- 1991, Oxford University Press, New Delhi.
39. Parikh, K.S. (1999), India Development Report - 1999-2000, Oxford University Press, New Delhi.
40. Reserve Bank of India, Report on Currency and Finance, (Annual).
41. Sandesara, J.C. (1992) Industrial Policy and Planning, 1947 - 1991: Tendencies, interpretations and Issues, Sage Publications, New Delhi.

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

ADDITIONAL READING LIST:

Unit 1

- Appu. P.S. (1996), Land Reforms in India, Vikas, New Delhi.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing House, New Delhi.
- Joshi P.C. (1975), Land Reforms in India, Allied Publishers. Pvt. Ltd., New Delhi.
- Narain, D. (1988), Studies on Indian Agriculture, Oxford University Press, New Delhi.

Unit 2

- Ahiuwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi
- Bhagwati, J.N. and P. Desai (1970), India: Planning for Industrialization, Oxford University Press, London.
- Datta, B. (1978), Economics of Industrialization, The Bookland, Calcutta.
- Mookherjee, D. (Ed.) (1997), Indian Industry: Policies and Performance, Oxford University Press, New Delhi.

Unit 3

- Bhargavea, P.K. (1991), India's Fiscal crisis, Ashish Publishing House, New Delhi.
- Gupta S.P. (1998), Post-Reform India: Emerging Trends, Allied Publishers, New Delhi.
- Kumar, A. (1999), The Black Money in India, Penguin, Harmondsworth.
- Mundle, S. (1999) Public Finance: Policy Issues for India, Oxford University Press, New Delhi.

Unit 4

- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Machirau, H.R. (1998), Indian Financial System, Vikas Publishing House, Pvt. Ltd. New Delhi.
- Rangarajan, C. (1998), Indian Economy: Essays on Money and Finance, UBS, New Delhi.
- Reserve Bank of India, Report on Currency and Finance (Annual).

Semester IV

Electives in Stream A

Course Code. : 567

Title: Economics of Infrastructure

***Preamble:** The course with main emphasis on energy and transport aims at imparting adequate theoretical knowledge to students, so that they are able to understand the importance of infrastructure in economic development. The course is particularly meant for those students who intend to specialize in energy usage, conservation, planning & forecasting and issues related to transport infrastructure development.*

Unit-I Infrastructure and Economic Development Infrastructure and Economic

Development: Theoretical Foundations and Empirical; Components of Infrastructure: Social and Economic Infrastructure, Infrastructure as a Good, Pricing of Public utilities: Marginal Cost Pricing & other Methods of Pricing, Cross-Subsidization-Free Price, Equity Efficiency Trade-off.

Unit-II Transport Economics Transport & Economic Development; Demand for Transport Services: Passenger Freight; Factors Determining Demand for Transport Services; Structure of Transport Costs: Concept of Shared & Avoidable Costs; Capital Costs in Transport and Process Alternative Pricing Strategies for Transport Services; Transport infrastructure User Charges Transport Costs & Location of Industries: Weber's 'Theory of Location.

Unit-III Energy Economics-I Importance and Scope of energy economics. Primacy of energy in the process of economic development, factors determining the demand for energy. Types of energy: Primary Energy and Secondary Energy; Effects of energy shortage; Energy Conservation: Economics of energy conservation. Effects of Market Imperfection on energy conservation & Policy Options. Principal Practical Possibilities of Energy conservation in Energy Producing & Using Sectors Energy Efficiency, Energy Service Companies (ESCOs) and their energy saving models: Guaranteed Saving Model & Shared

Saving Model. Growth of ESC Os in India and their contribution to energy saving, Energy Modeling: Energy Input— Output Analysis, Main Features of India's Recent Energy Policy.

Unit—IV Energy Economics—II Energy Sources: Renewable and Non—Conventional, uses and substitution possibilities. Energy Markets, Planning and Role of Demand Management: Objectives and Need for Energy Planning & Demand Management. Planning Procedures and Problems Implementation.; Integrated Framework for Energy Pricing: Objectives. Basic Pricing Principles. Short—Run v/s Long—run—Marginal— Cost Pricing, Peak—Load and Seasonal Pricing, Shadow Pricing. Pricing of depletable or nonrenewable energy resources, Energy Demand Analysis and Forecasting: Importance & Methods

Basic Reading List

1. Mlohan Munasinghe & Gunter Sechramm (1983), Energy Economics, Demand Management and Conservation Policies, Van Nostrand Reinhold Company New York.
2. Mohan Munasinghe & Peter Meier, (2009), energy Policy Analysis & Modelling Cambridge Energy & Env. Series
3. Parikh Jyoti (1997) Energy Models for 2000 & Beyond,, Tata McGrawl lill
4. H.S. Nortan, Modern Transport Economic
5. Hensher David & Ann M. Brewer (2001) Transport: An Economics & Management Perspective, Oxford University Press, New York.
6. Quinet Emile & Roger Vickerman (2004), Principles of Transport Economics; Edward Elgar Publishers Ltd. U.
7. Chopra. S.K. () Energy Policy for India: Towards Sustainable Energy Security in India in 21st Century, Oxford & IIBH Publishers.
8. World Bank (2000), Greening Industry, Oxford University Press, ISBN10:0195211278
9. Guido Buenstorf (2004) The Economics of Energy and the production Process: An Evolutionary Approach, Edward Elgar Publishing., ISBN10: 184376461X Hardback.
10. Partha Dasgupta (1985) Economic Theory and Exhaustible Resources, Cambridge University Press, ISBN 10:0521297613

11. Schrattenholzer, Asami Miketa, Keywan Riahi, Richard Alexander Roehrl Leo (2004) Achieving a Sustainable Global Energy System: Identifying Possibilities Using Long-term Energy Scenarios Edward-Elgar; ISBN: 1840647981 Hardback.
12. William Shepherd O Energy Studies,,: World Scientific,, ISBNIO: 1860943225 Paperback
13. Lester C. Hunt (Ed.) (2003), Energy in a Competitive Market: Essays in Honour of Cohn Robinson,,: Edward Elgar Publishing,. ISBN 10: 1840647981 Hardback
14. Victor Anderson (), Energy Efficiency Policies Author, Routledge,.
15. Agarwal Beena (), Cold Hearths & Barren Slopes : The Woodfuel Crisis in The Third World, Zed Books Ltd.
16. Sudhakar Reddy et. Al (), Energy Efficiency & Climate Change- Conserving Power for a sustainable development, Sage Publication
17. Samuel Farikhauser () Valuing Climate Change: The Economics of the Greenhouse, Earthscan Publications Ltd, 1995. ISBN 10: 1853832375 Paperback
18. Steve Sorrell ()The Economics of Energy Efficiency: Barriers to Cost-Effective Investment, Edward Elgar Publishing,
19. Dirk Assmann, Ulrich Laumanns, Dieter Uh (Eds) (2006) Renewable Energy: A Global Review of Technologies, Policies and Markets,Earthscan Publications Ltd, ISBN 10: 1844072614 Hardback
20. Robert Bryce (2010) Power Hungry: The Myth of “Green” Energy & the Real Fuel of the Future, BBS Public Affairs, New York
21. Ferdinand E. Banks (), Energy Economics: A Modern Introduction Kluwer Academic Publishers
22. Chris Harris Electricity Economics: Pricing, Structures, & Economics
23. Bani P. Banerjee (2005), Energy and Environment in India: A Handbook Oxford University Press, 2005. ISBN 10: 0195672763
24. Judith A. Cherni (2002), Economic Growth versus the Environment: The Politics of Wealth, Health and Air Pollution, Palgrave Macmillan, ISBN 10: 033392956X23K

Course Code: 566

Title: INDIAN INDUSTRY

Preamble:*In the present competitive era Industry has to play an important role in economic development. This course is design to make students understand. The industrial policy of India, the industrial development pattern in India. Industrial finance, industrial labour and current problems of Indian industry. Globalization and its implication for the Indian industry.*

UNIT – I INDIAN INDUSTRIAL GROWTH AND PATTERN

Classification of Industries, meaning of Industrial policy, Industrial policy of 1948, 1956, 1977,1985, 1991. Industrial development patterns before 1951 – 91 and its impact upon, corporate sector development, foreign investment and collaborations. Industrial development pattern after 1991 and its impact upon corporate sector, collaboration and foreign investment. Issues in industrial proliferation.

UNIT II INDUSTRIAL FINANCE

The need for finance types of finance, sources of finance owned and external funds, choice of funding, internal Vs external sources. Role nature, volume and types of institutional finance IDBI, IFCI, SFC, ICICI, Financial statement – balance sheet, profit and loss account. Assessment of financial soundness of a firm through ratio analysis.

UNIT – III INDUSTRIAL LABOUR

Growth of industrial labour force. Employment dimensions of Indian industry, industrial relations: - definition of industrial relations, objectives of industrial relations, evolution of industrial relations after independence, social security for labour in India, critical assessment of social security measures in India. Industrial legislation, wages and profit of bonus, issues in labour market reforms.

UNIT – IV CURRENT PROBLEMS OF SELECTED INDUSTRIES

Iron and steel industry, cotton textile cement, Automobile industry & electronics industry, industrial development of backward areas challenges, opportunities & suggested measures. Industrial sickness, government policy with regard to industrial sickness in India. Development of cottage & small scale industry in India. Implications of the global change on industrial development, the challenges, facing India.

NOTE FOR PAPER, SETTING:

There shall be two questions in each unit – four shot answer type (each of 250 words) and two medium answer type (each of 500 words). The candidate will have to attempt two short answer type questions and one medium answer type question from each unit. Each short answer type question shall carry 4 marks and each medium answer type question shall carry 12 marks.

Basic Reading List

1. Paul R. Ferguson & Glenys. J. Ferguson, Industrial Economics Issues & Perspectives.
2. R.R. Barthwal, Industrial Economics, New Aaga International pications Ltd, Publishers, Delhi
3. S.S.M. Desai and Ninnal Bhalerao (2002) Industrial Economy of India., Himalaya Publishing House, Delhi.
4. Memoria and Memoria, Dynamics of Indian Relations.
5. Francis Cherunilam, Industrial Economics. .
6. P.L. Dhar, Indian Economy.
7. K.P.M. Sundhram, Indian Economy.
8. Uma Kapilla, Indian Economy.
9. Matrian Nuissian, Indian Economics.
10. Indian Development Report 2002.
11. Indian Industrial Suey 2006-07-08-09.
12. T.N. Bhagoliwal, Economics of labour and entrepreneurs.
13. P.G Gadgil & Gadgil, Industrial Economics of India.
14. Murray. 0. Bryce, Indian Development,
15. J .N. Bhagwati & Padam Deasi, Indian Planning for Industrialization,

Course Code. : 563

Title: ECONOMETRICS -II

Preamble: This paper covers various statistical methods applicable to different topics in economics and those needed for applied economic research. An Introductory unit on multivariate methods has also been included in the course; which constitutes an important tool for analysis in multivariable data in development-related studies.

UNIT-I: DYNAMIC ECONOMETRIC MODEL

Autoregressive and distributed lag models Koyck's approach, partial adjustment and adaptive expectations model, instrumental variables

Problem of auto-correlation - Application; Almon approach to distributed-lag models,. Error correlation mechanism, causality test, Granger test and Sim's test, exogeneity.

UNIT-II: SIMULTANEOUS EQUATION MODELS: SINGLE EQUATION METHODS

Introduction - Structural form, reduced form, recursive form and final form model. The simultaneous equation bias and inconsistency of OLS estimators

The identification problem order and rank conditions of identification. Estimation of simultaneous equation model - single equation model: Indirect least squares (ILS). Instrumental variable (IV); 2SLS and their properties K-class estimator, limited information maximum likelihood (LIML) and least variance ratio (LVR)

UNIT-III: TIME SERIES ANALYSIS

Stationary-unit roots and co-integration. Dickey-Fuller test, Augmented DF test, Engle- Granger test, Random walk model, Trend, volatility, integration, co-integration and error correction, Forecasting with ARIMA modeling, Box-Jenkin's methodology, Vector autoregression , Problems with VAR modelling - Applications: ARCH, GARCH

UNIT IV: PANEL DATA

Panel data techniques, pooling data, the chow test, differencing, with more than two time periods, fixed effect or first differencing, random effects Advanced panel methods- unbalanced panel, when slopes vary with time and individual, random or fixed effects, Hausman test

Basic Reading List

1. Bridge, J.L. (1971). Applied Econometrics, North Holland Publishing Company.
2. Chow, GC. (1983). Econometrics, MCGraw Hill, New York.
3. Intrilligator, M.D. (1978). Econometric Models, Techniques and Applications, Prentice Hall, Englewood Cliffs, New Jersey.
4. Johnston, J. (1991). Econometric Methods, McGraw Hill 'Book Co., London.
5. Johnston, J. and J. DiNardo (1997). Econometric Methods, The McGraw-Hill Companies Inc.
6. Judges Griffiths Hill, Liitkepohl and Lee (1994). The Theory and Practice of Econometrics, 4th edn., John Wiley & Sons, 1994.
7. Kmenta, J. (1997). Elements of Econometrics, University of Michigan Press, New York.
8. Koutsoyannis, A. (1977). Theory of Econometrics (2nd Edn.). The Macmillan Press Ltd., London.
9. Theil, H. (1971) Principles of Econometrics, John Wiley & Sons Inc.

Additional Reading List

1. Gujarati, D.N. (1995), Basic Econometrics (2nd edn.). McGraw Hill, New Delhi.
2. Koutsoyiannis, A. (1977). Theory of Econometrics (2nd edn.). The Macmillan Press Ltd., London.

Semester IV

Electives in Stream B

Course Code. : 564

Title: LABOUR ECONOMICS

Preamble: Issues pertaining to the labour market, wage theories, employment policies, trade unions and collective bargaining in the globalized economy have become vitally important for developing countries. In a country like India where the bulk of the labour force is in the unorganized sector and the organized sector is witnessing jobless” growth, the importance of issues such as employment and unemployment as well as livelihood and social security for the growing millions continues to assume significance. This Paper exposes students to theoretical as well as empirical issues relating to the labour market with special reference to India.

UNIT I: LABOUR MARKETS AND EMPLOYMENT

Nature and characteristics of labour markets in developing countries like India; Paradigms of labour market analysis - Classical, neoclassical and dualistic economy; Methods of recruitment and placement; Employment service organization in India.

Unemployment - Concept, Types, and Measurement, particularly in India; Impact of rationalization, technological change and modernization on employment in organized private industry, Employment policy in Five Year Plans and its evaluation.

UNIT II: 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; Non-wage component of labour remuneration; inflation-wage relationship at micro and macro levels; National wage policy; Wages and Wage Boards in India; Bonus system and profit sharing.

UNIT III: INDUSTRIAL RELATIONS

Theories of labour movement - Growth, pattern and structure of labour unions in India, Achievements of labour unions; Causes of industrial disputes and their settlement and prevention mechanism; Role of tripartism; Current trends in collective bargaining; Role of judicial activism; Labour legislation in India; Indian labour laws and practices in relation to international labour standards. National and international organizations in labour markets.

UNIT IV STATE AND LABOUR

State and social security of labour - Concept of social security and its evolution; Social assistance and social insurance; Review and appraisal of states policies with respect to social security and labour welfare in India; Special problems of labour: Child labour, female labour, Discrimination and gender bias in treatment of labour; Receding state and its effect on working of labour markets; Labour market reforms - Exit policy, need for safety nets, measures imparting flexibility in labour markets; Second National Commission on Labour; Globalization and labour markets.

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, Commonwealth Publishers, New Delhi.
- Jhabvala, R. and R.K. Subrahmanya (Eds.) (2000), The Unorganized Sector: Work, Security and Social Protection, Sage Publications, New Delhi.
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- Venkata Ratnam, C.S. (2001), Globalization and Labour- Management Relations: Dynamics of Change, Sage Publications/Response Books, New Delhi.

Additional Reading List

- McCormick, B. and Smith (Eds.)(1968), The Labour Market, Penguin, Harmandsworth.
- Papola, T.S. and Rodgers, G. (Eds.) (1992), Labour Institutions and Economic Development in India, International Institute for Labour Studies, Geneva.
- Rees, A. (1973), Economics of Work and Pay, Harper and Row, New York
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- Solow R.M. (1990), Labour Market as an institution, Blackwell, London.
- Das, N. (1960), Unemployment, Full Employment and India, Asia Publishing, House, Bombay.
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- Kannapon, S. (1983), Employment Problems and Urban Labour Markets in Developing Countries, University of Michigan, Ann Arbor.
- Papola, T.S. and Sharma, A.N. (Eds.) (1999), Gender and Employment in India, Vikas

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- Sharma. A.N. and A. Kundu (Ed.) (2001), Informal Sector in India Emerging Perspectives, Institute for Human Development, New Delhi.
- Binswanger. H.P. and M.R. Rosenzweig (Ed s.) { 1984}, Contractual Arrangements, Employment, and Wages in Rural Labor Markets in Asia, Yale University Press, New Haven.
- Deshpande L.K. and J.C. Sandesara, (Eds.) (1970), Wage Policy and Wages Determination in India, Bombay University Press, Bombay.

- Foster, A.D). and M.R. Rosenberg, (1993), Information Flows and Discrimination in Labour Markets in Rural Areas in Developing Countries, Annual Conference on Development Economics, World Bank, Washington D.C.
- Hicks J.R: (1932), The Theory of Wages, Clarendon Press, Oxford.
- Madan, B.K. (1977), The Real Wages of Industrial Workers in India, Management Development Institute, New Delhi.
- Mazumdar, D. (1981), Micro-economic Issues of Labour Markets- in Developing Countries, EDI Services Piper No. 40, World Bank, Washington D.C.
- Brennan, J. (1996), Footloose Labour: Working in India's Informal Economy, Cambridge University Press, Cambridge.
- Mernoria, C.B. (1966), Labour Problems and Social Welfare in India, Kitab Mahal, Allahabad.
- Punekar S.D. (1978), Labour Welfare, Trade Unionism and Industrial Relations, Himalaya Publishing House, Bombay.
- Sach, J. (1990), 'Social Conflict and Populist Policies in Latin America,' in R. Brunnetta and C.D. Aringa (Eds.) Labour Relations and Economic Performance, Macmillan, Basing Stoke.
- Singh V.B.(Ed.)(1970), Industrial Labour in India, Popular Prakashan, Bombay.
- Deshpande, S., G. Standing, and L.K. Deshpande, (1998), Labour Flexibility in a Third World Metropolis, Commonwealth Publishers, New Delhi.
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- M.HRD, GOI (1987), Shram Shakti: Report of the National Commission on Self-employed Women and Women Workers in the Informal Sector, Ministry of Human Resources Development, New Delhi.
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- Standing G. and V. Tokman (Eds.) (1991), Towards Social Adjustment, ILO, Geneva.

- Joshi, M.V. (1999), Labour Economics and Labour Problems, Atlantic publishers and Distributors, New Delhi.

Course Code: 565

Title: INDIAN AGRICULTURE

***Preamble:** The contents of the course are structured to make students aware about role and function of agriculture in the economic development of Indian economy. It covers trends in production and productivity, land utilization, pattern of land reforms in India, cooperative movement in India, the extent of agriculture unemployment and credit facilities in agriculture, impact and growth of agriculture in international context.*

Unit : I – Role of agriculture and Problems of agricultural development in India

Contribution of agriculture in national economy, Trends in agricultural production and productivity; Causes of its backwardness, scope and measures for agriculture development, Land utilization – classification of land, change in land utilization pattern, optimal land use pattern; Cropping pattern determinants of cropping patterns, land under food and non – food crops, future cropping pattern: Agriculture in Five Year Plans: Issues and problems in rural industrialization and development of agro—based industries.

Unit: II-Land and Reforms and Cooperation in India

Land reforms in India-land tenure systems, objectives, measures and abolition of intermediaries problems of small and marginal farmers, reorganization of agriculture and progress of land reforms; Technological change and New' Agricultural Strategy-Green revolution, ingredients of green revolution, impact of green revolution on agricultural production , employment, income distribution, economic disparity and inter-regional disparities, Future rationale of green revolution; Cooperative movement in India, genesis and growth of cooperative sector, Agriculture cooperation in India, Problems and prospects of cooperative institutions.

Unit: III- Agricultural Labour and agriculture Finance

Nature and extent of agricultural labour in India; agricultural wages in India, male -female wage differences; Programmes for improving the conditions of agricultural labour; Rural labour unemployment-estimates and magnitude, Non-agricultural labour employment-trends and detriments; Magnitude of rural -urban migration in India, factors responsible for migration, factors responsible for marginalization of rural labour, state policy towards rural employment-latest; Agricultural finance-sources of agriculture finance, extent of rural indebtedness' in India after independence, causes of indebtedness and impact of legislation measures; characteristics and sources of rural credit- institutional and non-institutional, Reorganization of rural credit-cooperatives, commercial banks, Regional Rural Banks, Role of NABARD.

Unit: IV- Agricultural Growth in Indian and External Sector

Recent trends in agricultural growth in India; Inter-regional variations in growth of output and productivity, Cropping pattern shift, Supply of inputs -irrigation , power, seed and fertilizers; Food Security in India - Public Distribution System (Revamped also), Targeted Public Distribution System, status of ICDS and mid day meals; Impact of subsidies on agriculture inputs; Factors affecting capital formation in Indian agriculture, Foreign Trade 'in Indian agricultural development- Globalization of Indian economy and problems and prospects of India agriculture, impact of World Trade Organization on Indian agriculture.

BASIC READING LIST

- Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, Delhi.
- Bilgrami, S.AR. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
- Dantwala, M.L. et. al. (1991), Indian Agricultural Development Science Independence, Oxford & IBH, New Delhi.
- Government of India (1 976), Report of the National Commission on Agriculture, New Delhi.
- Government of India, Economic Survey (Annual), New Delhi.
- Gulati, A., and T. Kelly (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.
- Kahlon, A.S.f and Tyagi D.S. (1983). Agriculture Price Policy in India, Allied Publishers, New Delhi.
- Rao, C.H. Flanumantha (1 975'), Agriculture Growth. Rural Poverty and Environmental Degradation in India Oxford University Press, New Delhi.
- Reserve Bank of India, Report on Currency and Finance (Annual), Mumbai.
- Rudra, A. (1982), Indian Agriculture Economic: Myths and reality, Allied Publishers, New Delhi.
- Saini, G.R. (1979), Farm Siz, Resource Use Efficiency arid Income Distribution, Allied Publishers, New Delhi.

ADDITIONAL READING LIST:

Unit—I

- Bardhan, P. (1984), Land, Labour and Rural Poverty, Oxford University Press, New Delhi.
- Chadha, G.K. and A.N. Sharma (1997). Growth Employment and Poverty : Change and 'Continuity in Rural India, Vikas Publishing, New Delhi.
- Chakarvarty, S. (1987), Development Planning :The Indian Experience, Ox1rd University Press, New Delhi ,
- Chaudhary, P. (1972), Readings in Indian Agricultural Development, George Allen & Unwin, London.
- Chelliah, Raja J. and R. Sudarshan (1999) Income, Poverty and Beyond: Human Development in India, Social Science, Press, New Delhi.
- Dantwala. M.L . (I 996). Dilemmas of Growth :The Indian Experience, Sage Publications, New Delhi
- Ghatak, S. and K. Ingerscent (1 984), Agriculture and Economic Development Select books, New Delhi.
- Government of India, Five Year Plans, New Delhi.
- Meier G.M. (1995), Leading Issues in Economic Development Oxford University Press. New Delhi.
- Raj, K.N. et. a. (1988), Essays in the Commercialization of Indian Agriculture, Oxford University Press, New Delhi.

- Thamarajakshi, R. (1994). Intersectoral Relationship in a Developing Economy, Academic Foundation, Delhi.

Unit -2

- Bhardwaj, K. (1974), Production Conditions in Indian Agriculture. Cambridge, University Press. Cambridge.
- Brahmananda, P.R. and V.R. Panchumukhi (Eds.) (1987), The Development Process of Indian Economy, Himalaya Publishing house, Bombay.
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Ghatak, S. and K. Ingerscent (1984). Agriculture and Economic Development, Selectbooks, New Delhi. Raj, K.N. et al (1988), Essays in The Commercialization of Indian Agriculture. Oxford University Press, New Delhi.

3. Brahmananda. P.R. and V.R Panchumukhi (Eds.) (1987). The Development Process of the Indian Economy, Himalaya Publishing House, Bombay. Chaudhary, P. (1972), Readings in Indian Agricultural Development, George Allen & Unwin, London.

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4. Bhalla G.S. (1994), Economic Liberalisation and Indian Agriculture, Institute for Studies in Industrial Development, New Delhi.

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- Chelliah, Raja J. and R Sudarshan (1999) *Income Poverty and Beyond : Human Development in India*, Social Science Press, New Delhi.
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- Soni, R.N, (1995), *Leading Issues in Agricultural Economics*, Arihant Press, Jalandhar.
- Vidyanathan, A. (1995), *The Indian Economy: Crisis, Response and Prospects*, Orient Longmans, New Delhi

Course Code. : 562

Title: Economics of the Environment & Natural Resources

Preamble: This course is meant to provide some insights into the application of economic theory in the design and implementation of public policy related to management of environment and social sectors. Units incorporated in this paper are devoted to issues environmental economics, the models of optimal use of natural resources, sustainable development, environmental resource problems in India.

UNIT-I: CONCEPTS AND MEASUREMENT OF ENVIRONMENTAL VALUES

Environmental and resource economics: Concepts; Environment and emerging development issues; Markets and externalities; Property rights and externalities; Common property resources; Environmental valuations: Method based on observed market behaviour; Hedonic property model, household production model (travel cost method and household health production function); Methods based on response to hypothetical markets, Contingent valuation method.

UNIT-II: THEORY OF ENVIRONMENTAL POLICY

Environmental externalities -Pigouvian taxes and subsidies, marketable pollution permits and mixed instruments; Coase bargaining solution and collective action; Informal regulation and the new model of pollution control; Monitoring and enforcement of environmental regulation; 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.

UNIT-III: NATURAL RESOURCE MANAGEMENT AND SUSTAINABLE DEVELOPMENT

Theories of optimal use of exhaustible and renewable resources; Environmental and development trade off: Concept of sustainable development; Measurement and indicators of sustainable development; Integrated environmental and economic

accounting; Measurement of environmentally corrected GDP; Macroeconomic policies and environment.

UNIT-IV: ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT POLICIES IN INDIA

Mechanism for environment regulation in India; Environmental laws and their implementation; Policy instruments for controlling water and air pollution: Groundwater governance institutions and laws; Integrated water resource management approach; People's participation in natural resource management; National forest policy; Institution of joint forest management and the joint protected area management; Social forestry-rationale and benefits.

Reading List:

1. Boumal, W.J. and W.E, Oates (1988), The Theory of Environmental Policy, 2nd Edition, Cambridge University Press, Cambridge.
2. Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
3. Fisher, A.C. (1981), Resource and Environmental Economic Cambridge University Press. Cambridge.
4. Hanley, N., J.F. Shogern and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.
5. Hussen, A.W. (1999), Principles of Environmental Economics, Ruledge, London.
6. Jeroen, C.J. M. Van Den Bergh (1999), Handbook of Environmental and Resource Economics, Edward Elcyar Publishing Ltd., U.K.
7. Kolstad, C.D. (1999), Environmental Economics; Oxford University Press, New Delhi.
8. Pearce, D.W. and R. Turner (1991), Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore.
9. Pennan, R Ma and J. McGilvary (1996), Natural Resource and Environmental Economics, Longman, London.

10. Sankar U. (ed.) (2001), Environmental Economics, Oxford University Press, New Delhi.
11. Tietenberg, T. (1994), Environmental Economics and Policy, Liarper Collins, New York.
12. Arrow. K. J. (1970), The Organization of Economic Activity: Issues Pertinent to Choice of Market versus Non-market allocation in Public Expenditure and Policy Analysis (ed.), Haveman. R.H. and J. Margols, Markham, Chicago.
13. Crones, R. and T. Sandler (1989), The Theory of Externalities and Public Goods, Cambridge University Press, Cambridge.
14. Hanley, N. (1997) Environmental Economics in Theory and Practice. Macmillan, London.
15. Mitchell, R.C. and R.T. Carson (1993) Using Surveys to Value Public Goods: Resource for the Future, Washington, D.C.;
16. Smith, V. Kerry (1996), Estimating Economics Values for Nature: Methods for Non-Market Valuation, Edward Elgar, Cheltenham, U.K.
17. Baland, J.M. and J.P. Plateau (1994) Halting Degradation of Natural Resources: Is There a Role for Rural Communities, Oxford University Press, Oxford.
18. Hoel M. (1997), International Coordination of Environmental Policies in New Dimensions in the Economic Theory of Environment, Carrao Carlo and Domenico Siniscalco (ed.). Cambridge University Press, Cambridge.
19. Murthy, N,N. A. James and S. Misra (1999), The Economics of Water Pollution in India, Oxford University Press, New Delhi.

Course Code. : 568

Title: Comparative Economic Development

Preamble:*To acquaint the students with the comparative growth process of economies of different parts of the world, the context in which this growth has occurred and to trace the similarities and differences between the processes of growth and development to draw lessons that would be useful to policy makers.*

Unit I. Overview Of Comparative Economics

Can we Compare Economies?

Market Capitalism: Theory and History

Marxism and Socialism: Theory and History

. " Economics" of Other Religions

Unit II. Varieties Of Advanced Market Capitalism

The United States of America: The Model Market Economy

Japan: A Planned Market Economy with Traditional Elements

Indicative Planning: Theory and the Case of France

Sweden: Evolution of the Social Market Welfare State

The Economic Consequences of Unification of Germany and the evolution of the EU

Unit III. Comparing Transition Economies, China, Russia, East Europe

Alternative Paths of Transition in the Former Soviet Union

Poland: A Case of Shock Therapy

Hungary: A Case of Gradualism

China's Socialist Market Economy: Incrementalism in theory and practice

Unit IV. Alternative Paths Among Developing Economies India

since Economic Liberalization

The Middle East

The East Asian Miracle, the Crisis and After

The Economic Trajectory of Latin American Economies

North and South Korea: Comparing Market and Social Economies

Evolution of the World Economy: Global Economic Growth Trends

Basic Reading List

1. Rosser, Jr, J. Barkley and Marina V. Rosser, *Comparative Economics in a Transforming World Economy*, Second Edition, Prentice Hall India
2. Ito, Takashi, *The Japanese Economy*, MIT Press
3. Johnson, Chalmers, *The MITI and the Japanese Miracle*, Stanford University Press
4. R.B. Jain (ed) *From Command Economy to Market Economy*, Deep and Deep,
5. Stiglitz, J.E., *Globalization and its Discontents*, Penguin
7. Stiglitz, J.E. *The Roaring Nineties: A New History of the World's Most Prosperous Decade*, WW Norton
6. Jalan, B. (1996). *Indian Economic Policy ¾ Preparing for the Twenty First Century*, Viking, New Delhi.
7. Amsden, Alice, *The Korean Miracle*
8. Riskin, Carl, *China's Political Economy*, OUP
9. Deshpande, GP and Alka Acharya- *Building the Bridge of Dreams'* Tulika
10. Cardoso, E and A. Helwege, *Latin America's Economy*, MIT Press

