

## SKILL DEVELOPMENT ASPECTS OF THE CURRICULUM

Programme: M.A. Economics Programme Code: PG34

### M.A. ECONOMICS

#### PG 34 T M.A. Economics Programme Outcomes

- ❖ To impart in depth knowledge to students about economic theories, working of labour and factor markets and how income generated and distributed.
- ❖ Students would be able to apply **economic** theories and concepts to contemporary social issues, as well as formulation and analysis of policy and recognize the role of ethical values in **economic** decisions.
- ❖ To give students in depth knowledge into special fields of choice like agricultural economics, industrial economics, financial market, development economics, international trade, urban economics, rural economics, economics of social sector, econometrics, mathematics and statistics for economics
- ❖ Familiarize the students about the how the economy is influenced by economic policy, technological advances and demographic conditions.
- ❖ In addition to the learning of advanced economic theory and its applications, provide a competitive edge in State and Central Civil Services, NET/ SET exams etc

## *M.A. ECONOMICS*

### CHOICE BASED CREDIT SYSTEM

#### I SEMESTER

#### **COURSE CODE: PG34T 101: MICRO ECONOMIC ANALYSIS-I**

#### **Course Outcome:**

- ❖ Understand the economic behaviour of individual economic agents, consumers and firms
- ❖ Analyse the process of price formation in different type of markets
- ❖ Apply the microeconomic tools to estimate demand, production, costs and profits of business firms

#### **Module -I: Introduction and Basic Concepts**

**6 Hours**

**Basic economic problems** - Choice and scarcity - Characteristics of equilibrium and disequilibrium systems.

#### **Module -II: Demand and Supply Analysis**

**16 Hours**

Theories of Demand - Utility analysis - Indifference curves and their applications - Revealed preference theory - Revision of demand theory by Hicks - Lancaster's approach to demand theory - Consumer's choice involving risk - **Recent developments in demand analysis - (Pragmatic approach and Linear expenditure systems)** - Elasticities of demand (Price, Cross, Income) - Theoretical aspects and empirical estimation  
Factors Influencing Supply - Changes in Supply - Supply Elasticity - Determinants of Supply Elasticity - Market Determination of Price and Quantity - Equilibrium Supply and Demand.

#### **Module -III: Theory of Production and Costs**

**14 Hours**

Production function - Short-run and Long-run - Law of variable proportions – Isoquants - Least cost combination of inputs - Returns to scale - Multi-product firm - Elasticity of substitution - Technical progress and production function - Cobb-Douglass - CES, VES and Translog production functions and their properties - **Empirical evidences**; Traditional and modern theories of costs - Economies of Scale and Economies of Scope - **Empirical evidence - Derivation of cost functions from production functions.**

#### **Module -IV: Price and Output Determination under Different Markets**

**16 Hours**

Marginal analysis as an approach to price and output determination - Perfect competition - Short and long-run equilibrium of the firm and industry - Supply curve - Monopoly - Short and long-run equilibrium - Price discrimination - Monopoly control and regulation - Monopolistic competition - Equilibrium of the firm and the group with product differentiation and selling costs - Excess capacity under monopolistic competition – Oligopoly - Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, Kinked Demand Curve and Stackelberg's Solution) and Collusive (Cartels and Mergers, Price Leadership and Basing Point Price System) Models.

#### **Module -V: Alternative Theories of the Firm**

**8 Hours**

Critical evaluation of marginal analysis; Baumol's sales revenue maximization model; Williamson's model of managerial discretion; Marris model of managerial enterprise; **Full cost pricing rule; Bain's**

limit pricing theory and its recent developments including Sylos-Labini's model; Behavioural model of the firm; Game theoretic models.

### Reading List

1. Baumol, W.J., (1995) Economic Theory and operations Analysis, Prentice Hall, New York.
2. Browning E.K. and J.M. Browning (1998), Microeconomics: Theory and Applications, Kalyani Publisher, New Delhi.
3. Gravelle, Hugh and Ray Rees (2011): Micro Economics, Pearson Education Ltd, New Delhi.
4. Koutsoyiannis, A. (2000) Modern Microeconomics, (2nd Edition), Macmillan Press, London.
5. Kreps, David .M. (1990): A Course in Micro Economic Theory, University Press Princeton.
6. Layard. P. R. G. and A.W.Walters (1978): Micro Economic Theory, McGraw Hill New York.
7. Pindyck, Robert S., Daniel L. Rubinfeld and Prem L. Mehta (2009): Microeconomics, Dorling Kindersley (India) Pvt. Ltd.
8. Salvatore, Dominick (2003): Micro Economics Theory & Applications, Oxford University Press, Inc. 198 Madison Avenue. New York.
9. Sen, Anindya (1999): Micro Economic Theory and Applications, Oxford University Press, New Delhi.
10. Stigler. G. (1996): Theory of Price (4<sup>th</sup> Edition), Prentice Hall of India, New Delhi.
11. Varian, H. (2000): Micro Economic Analysis, W.W.Norton, New York.
12. Walter, Nicholson (1978), Microeconomic Theory, The Dryden Press, London.

## **COURSE CODE: PG34T 102: MACRO ECONOMIC ANALYSIS-I**

### **Course Outcome:**

- ❖ Study the macroeconomic measurement indicators.
- ❖ Understand the importance of national income and economic development and various types of national income accounts.
- ❖ In-depth understanding of theories of employment and determination of output and income

### **Module-I: National Income and Accounts**

**8 Hours**

Measurement of Macro Variables and Economic Performance - Important Concepts: GNP, GDP, NNP, NDP, NI, PI, DPI - Real GDP versus Nominal GDP - GDP Deflator, National Income and Economic Welfare; National Income Accounts; Social Accounting; Input-Output Accounting; Flow of Funds Accounting and Balance of Payments Accounting; Importance of National Income Analysis.

### **Module-II: Theories of Employment**

**16 Hours**

The Classical Theory of Employment: Say's Law of Markets and Quantity Theory of Money; Classical Full Employment Equilibrium; Savings, Investment and Rate of Interest; Wage-Price Flexibility as a Remedy for Unemployment; Policy Implications of the Classical Equilibrium Model; A Critique of the Classical Theory of Employment and Income; Keynesian Macro Economics- Before Keynes, Keynesian Revolution, and after Keynes; Keynesian Theory of Employment: Concept of Underemployment Equilibrium; Role of Aggregate Demand and Aggregate Supply Functions; Principle of Effective Demand.

### **Module-III: Consumption Function and Investment Function**

**16 Hours**

Consumption Function and its Determinants: Implications of Consumption Function; Alternative Theories of Consumption Behaviour - Irving Fischer and Inter-temporal Choice - Franco Modigliani and the Life-Cycle Hypothesis - Robert Hall and the Random-Walk Hypothesis. - David Laibson and the Pull of Instant Gratification; Investment Function and its Determinants: Business Fixed Investment, Residential Investment, Inventory Investment - Equilibrium Income and Output in Simple Two Sector Model, Three Sector and Four Sector Models; Multiplier and Accelerator Analysis; Relevance and Critique of Keynesian Macroeconomics.

### **Module-IV: Equilibrium Analysis for Real and Money Markets**

**16 Hours**

Simple Keynesian Model; IS-LM Model: Interaction of Real and Monetary Sectors of the Economy - Keynesian Version of the IS-LM Model - Neo-Classical version of the IS-LM Model; Fiscal and Monetary Policy Analysis in an IS-LM Model; IS-LM Model with Government Sector - Policy Analysis in a Keynesian Model - Policy Analysis in a Neo-Classical Model - Fiscal Policy and Crowding out - The Role and Relative Effectiveness of Fiscal and Monetary Policy; The Aggregate Supply and Aggregate Demand Model; The Neo-Classical Three Sector Model - Pigou Effect - The Keynesian Three Sector Model - Keynes Effect.

### **Module-V: New Classical Economics**

**4 Hours**

Emergence of New Classical Macroeconomics: Rational Expectations Analysis - Policy Conclusions and Implications - Supply-Side Economics - Theoretical Propositions and Implications.

### Reading List:

1. Ackeley G. (1978): *Macro Economics: Theory and Policy*, McMillan, New York.
2. Blackhouse, R and A. Salansi (Eds) (2000): *Macro Economics and the Real World*, OUP, London.
3. Branson, W.A. (1989): *Macro Economic Theory and Policy*, Harper and Row, New York.
4. Dornbusch, R and F. Stanley (1997): *Macro Economics*, McGraw Hill, New York.
5. Edward Shapiro (1996): *Macro Economic Analysis*, Galgotia Publications, New Delhi.
6. Frisch, H. (1983): *Theories of Inflation*, Cambridge University Press, Cambridge.
7. Gupta, R.D. and Rana A.S. (1998): *Post-Keynesian Economics*, Kalyani Publishers, Ludhiana.
8. Gordon, R. and Harris S.G. (1998): *Macro Economics*, Addison Wesley
9. Hall, R.E. and J. B. Taylor (1986): *Macro Economics*, W. W. Norton, New York.
10. Jha, R. (1999): *Contemporary Macro Economic Theory and Policy*, New Age International New Delhi.
11. Reddy, Y. V. (2000): *A Review of Monetary and Financial Sector Reforms in India*, UBSPD, New Delhi.
12. Romer, D.L. (1996): *Advanced Macro Economics*, McGraw Hill, New York.
13. Sheffrin, S. M. (1996): *Rational Expectations*, Cambridge University Press, Cambridge.
14. Taylor. K. (1983): *Structuralist Macro Economics*, Basic Books, New Longman.
15. Turnovsky, S. J. (1977): *Macro Economic Analysis and Stabilization Policy*, Cambridge University Press, Cambridge.

## **COURSE CODE: PG34T 103: ECONOMICS OF GROWTH AND DEVELOPMENT-I**

### **Course Outcome:**

- ❖ Economics of Growth and Development helps to understand the several concepts and measurement of economic growth and development,
- ❖ Students have the knowledge on growth and distributive Justice-poverty measurement and income distribution and their value, development gap, causes, consequences and measures to reduce development gap.
- ❖ Compare the classical and neo-classical growth and development models etc; analyse the impact on output, income and employment both in developed and developing countries.
- ❖ It also demonstrates the experience of success and failure in the economies of different regions of the world.

### **Module-I: Economic Development: An Overview**

**14 Hours**

Economic Development - Sustainable Development - Ethics and Economic Development - Why Study Development Economics?; Measurement of Economic Development - Concept of Human Development - Human Development Index - Human Capability Approach to Development - Development as Freedom - Development versus Displacement.

### **Module-II: Theory of Poverty and Income Distribution**

**08 Hrs**

Growth and Distribution Justice - Kuznet's Hypothesis; Poverty and its Measurement - Poverty Alleviation Measures; Convergence and Divergence Economic Theories; Development Gap - Causes, Consequences and Measures to Reduce Development Gap.

### **Module-III: Grand Theories of Economic Growth and Development**

**14 Hours**

Classical Theory of Economic Development and its Salient Features- Adam Smith's and David Ricardo's Theories of Growth - Karl Marx: Growth and Decay of Capitalism; Theory of Social Change, Surplus Value Theory, Reserve Army and Materialistic Interpretation of History; Schumpeter's Growth Theory: Capitalistic Development, Crisis in Capitalism, Innovation, Degeneration of Capitalism - Structural Analysis of Development.

### **Module-IV: Neo-Classical Growth Theories**

**14 Hours**

Stylized Factors of Neo-Classical Growth Theory; J.E. Meade's Growth Model; Harrod- Domar Model; Kaldor & Mirrlees Model; Mrs. Joan Robinson's Model; Cambridge Criticism of Neo-Classical Growth Model

### **Module-V: Partial Theories of Economic Growth and Development**

**10 Hrs**

Salient Features of Partial Theories; Vicious Circle of Poverty - Theory of Circular Cumulative Causation; Lewis Model; Big-push and Critical Minimum Effort Thesis; Balanced and Unbalanced Growth Theories; Dualistic Theories - Dixit - Marglin Models - Dependency Theory of Development; Two Sector Model of Uzawa; Endogenous Growth Models - Romar-Lucas Model.

### **Reading List:**

1. Adelman, Irma (1961): *Theories of Economic Growth and Development*, Stanford University Press, Stanford, USA.

2. Branko, Milanovic (2016): *Global Inequality: A New Approach for the Age of Globalization*, Harvard University Press, Cambridge.
3. Higgins, Benjamin (1968): *Economic Development: Theory, Principles and History*, W. W. Norton, New York, USA.
4. Meier Gerald M. (2005): *Leading Issues in Economic Development*, Oxford University Press, New York, USA.
5. Ray, Debraj (1998): *Development Economics*, Princeton University Press, New Jersey.
6. Rogers, Peter P. and K. F. Jalal and J. A. Boyd (2005): *Sustainable Development*, The Continuing Education Division, Harvard University and Glen Educational Foundation, Harvard.
7. Srivastava, O. S. (1996): *Economics of Growth, Development and Planning*, Vikas Publishing House Pvt. Ltd., New Delhi.
8. Thrilwal, A. P. (2006): *Growth and Development*, 6<sup>th</sup> Edition, West Press Ltd., New Delhi.
9. Todaro, Michael. P. (1989): *Economic Development in the Third World*, 4<sup>th</sup> Edition, Orient and Longman, London.

## **COURSE CODE: PG34T 104: MATHEMATICS FOR ECONOMICS**

### **Course Outcome:**

- ❖ Students will learn applications of equilibrium equations and graphs which are directly useful in economic analysis.
- ❖ Students will be familiar with the maxima, minima, elasticity, decide the optimal level of production for a firm.
- ❖ Demonstrate the rules of differentiation, calculating integration, describe the importance and application of integration in consumer's and producer's surpluses.
- ❖ Demonstrate knowledge of basic concept of linear program, duality, capacity to solve linear programming problems, familiar with the basic techniques most commonly used in economic problems

### **Module-I: Basic Mathematical Concepts**

**14 Hours**

Importance of Mathematical Economics; Basic Concepts– Exponents, Functions, Types of functions– Linear and Non-Linear Functions, Factoring, Quadratic, Cubic, Exponential and Logarithmic Functions; Simultaneous Equations– Solutions for Two Variables And Three Variables; Graphs– Slopes and Intercepts, Graphs of Non-Linear Functions; SGR and CAGR.

### **Module-II: Applications of Equilibrium Equations and Graphs**

**12 Hours**

Market Equilibrium of Demand and Supply– Single and Multi-Commodity System; Effects of Specific Tax and Subsidy on Market Equilibrium Price and Quantity; Equilibrium of Income Determination Models; IS-LM Analysis; Production-Possibilities Frontiers.

### **Module-III: Derivatives and Integral Calculus**

**14 Hours**

Derivatives– Rules of Derivatives; Marginal Concepts– Relationship among TC, MC, AC; TR, MR, AR; Utility; Elasticity of Demand and Supply– its types; Partial Derivatives and Applications; Maxima and Minima in Single and Multivariable Functions; Integration– Indefinite Integral, Rules of Integration, Definite Integral; Properties of Definite Integral, Economic Application to Integrals of Consumer's Surplus and Producer's surplus; Difference Equations– Definitions and Concepts, Lagged Income Determination Model, The Cobweb Model, The Domar Growth Model, The Harrod Model, The Solow Growth Model.

### **Module-IV: Matrix and Determinants**

**10 Hours**

Concept of Matrix– Types of Matrices, Minor and Cofactors, Rank of a Matrix, Inverse of a Matrix; Determinants– its Properties, Second and Third-Order Determinants, Solution of Simultaneous Equations by using Cramer's Rule; Jacobian Determinants, Leontief Input-Output Models– its structure, The Open Model and The Closed Model.

### **Module-V: Linear Programming**

**10 Hours**

Basic Concepts– Advantages of LPP, Formulation of LPP, Feasible, Basic and Optimal Solutions, Solution of Linear Programming through Graphical Method and Simplex Method; Corner Rule Method, The Row Minima Method, Lowest Cost Entry Method (LCEM), Vogel's Approximation Method (VAM); Duality Theorems– Economic interpretation of a Dual– Micro and Macro Level; Concept of a Game; Strategies– Simple and Mixed; Value of a Game; Saddle Point Solution; Simple Applications.



**Reading List:**

1. Allen, R.G.D. (1974): *Mathematical Analysis for Economists*, Macmillan Press, New Delhi.
2. Barry, Bressler (2001): *A unified Introduction to Mathematical Economics*, McGraw Hill, New Delhi.
3. Black J. and J.F. Bradley (1973): *Essential Mathematics for Economists*, John Wiley & Sons. London.
4. Chaing, A.C. (1986): *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
5. Edward T. Dowling (1992): *Introduction to Mathematical Economics*, Schaum's Outline Series Tata Mc Graw Hill, New Delhi.
6. Mehta, B. C. and G.M.K Madhani (2004): *Elementary Mathematics in Economics*, Laxkshmi Narain Agarwal, Agra.
7. Mike Rosser and Piotr Lis (2016): *Basic Mathematics for Economists*, Routledge, New York.
8. Monga, G.S. (1972): *Mathematics and Statistics for Economists*, Vikas Publishing House, New Delhi.
9. Veerachamy, R. (2002): *Quantitative Methods for Economists*, New Age International Publishers, Bangalore.
10. Yamane, Taro (1975): *Mathematics for Economists*, PHI, New Delhi.

## **COURSE CODE: PG34T 105: INDIAN ECONOMY**

### **Course Outcomes:**

- ❖ Identify the problems of Indian Economy
- ❖ Investigate the causes for the persistent problems in agricultural, industrial, financial and foreign trade sectors
- ❖ Evaluation of the reform measures undertaken by the government; and
- ❖ Analyse the impact of monetary and fiscal policies and major economic events like the budget

### **Module-I: An Overview of Indian Economy**

**12 Hours**

Characteristics of Indian Economy; Demographic Features of Indian population; Trends in the growth of National Income; Green Accounting; Structural Changes in the Economy; Poverty and Inequality; Trends in Savings, Investment and Capital Output Ratio and their Implications; India's Development Experience; Planning and Development Strategies; Planning Commission to NITI Aayog; Parallel Economy and its Implications.

### **Module -II: Agricultural Sector**

**14 Hours**

Agriculture-Importance; Cropping Pattern; Land Reforms; Farm size and efficiency; Agricultural Labour Problems; Mechanization and Green Revolution; Agricultural Finance and Rural Indebtedness and Farmers' Suicide; Agricultural Marketing; Agricultural Price; Agricultural Co-operatives; Technological Factor in Agriculture Growth-Seeds Fertilizers, Irrigation; Food problem and Public Distribution System; WTO and Agriculture.

### **Module -III: Industrial Sector**

**14 Hours**

Importance of Industrialization; Growth and Structural Composition; Structural Transformation; Small-Scale Industries- Role and Performance; Privatization and Public Sector, Private Sector Industries and their Performance and Problems; Industrial Labour; Industrial Finance; Development Banks; Capital Market; Industrial Monopoly; MRTP; New Industrial Policy; Competition Law mergers; acquisitions and Takeover.

### **Module -IV: Foreign Trade Sector**

**10 Hours**

Exchange Rate policy of India; Trends in India's Foreign Trade; Balance of Payment; Problems of Policies; New Foreign Trade Policy; Export promotion V/S Import Substitution; Foreign Direct Investment in India; Globalisation and its impact on India's Trade and Investment.

### **Module -V: Financial Sector**

**10 Hours**

RBI; Money and Money Markets; Monetary Policy; Money Supply; Commercial Banks; Banking and Non-Banking Financial Sector; Financial Sector Reforms; Demonetisation and its Impact.

### **References:**

1. Agarwal A.N. and Agarwal M.K. (2016): Indian Economy: Problems of Development and Planning, New Age International (P) Limited Publishers, New Delhi.
2. Agarwal H. S. (2011): Indian Economy, Lakshmi Narain Agarwal, Agra.
3. Agarwal, R. C. (2015): Economics of Development and Planning (2014-15), Lakshmi Narain Agarwal, Agra.
4. Ahluwalia, I. J. and M D Little (Eds.) (1999): India's Economic Reforms and Development (Essays in Honor of Manmohan Singh) OUP, New Delhi.

5. Brahmananda, P. R. and V. R. Panchamukhi (Eds.)(2001): Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, New Delhi.
6. Dhingra, I. C. (2002): Indian Economy, S. Chand and Company Limited, Ram Nagar, New Delhi.
7. Government of India (2017): Economic Survey of India (Annual), Ministry of Finance, Government of India, New Delhi.
8. Hanumantha Rao C. H. and H. Linnemann (Eds.)(1996): Economic Reforms and Poverty Alleviation in India Sage, New Delhi.
9. Jalan, B. (1996), India's Economic Policy-Preparing for the Twenty First Century, Viking New Delhi.
10. Lekhi, R.K. Joginder Singh (2014): The Economics of Development and Planning, Kalyani Publishers New Delhi.
11. Misra S. K. and V. K. Puri (2018): Indian Economy, Himalaya Publishing House, Mumbai
12. Rangarajan C. (1998): Indian Economy: Essays on Money and Finance UBS, New Delhi.
13. Ruddar Dutt and K.P.M. Sundharam (2002): Indian Economy, S. Chand and Company Limited, New Delhi.
14. Sen, R.K. and B.Chatterjee (2001): Indian Economy: Agenda for 21<sup>st</sup> Century (Essay in Honour of Prof. P. R. Brahmananda), Deep & Deep, New Delhi.
15. Sundaram, K.P.M. (2004): An Introduction to Indian Economy, S. Chand and Company Limited, Ram Nagar, New Delhi.

## **COURSE CODE: PG34T 106A: AGRICULTURAL ECONOMICS**

**(Specialisation/Optional Paper)**

### **Course Outcome:**

- ❖ Agriculture economics helps to understand the nature and scope of agriculture economics, importance, its modernization, relation with other sector and it also proved with some theories.
- ❖ It analyses the agricultural production and productivity, efficiency in traditional agriculture and their value, resource combination and substitution, cost concepts and supply curves, laws of returns, farm budgeting,
- ❖ It demonstrates the growth trends in five-year plans, variations in output and productivity, cropping pattern, public investment and capital formation, technological progress, food security and sustainable agriculture.
- ❖ It provides the knowledge on Institutional and technological change in Indian agriculture and agriculture marketing, state policy, terms of trade between agriculture and non-agriculture prices and international trade.

### **Module-I: Agriculture and Economic Development: 14 Hrs**

Nature and scope of agricultural economics; **Traditional agriculture and its modernization;**

Role of agriculture in economic development; Interdependence between agriculture and industry— **some empirical evidence;** Models of interaction between agriculture and the rest of the economy; Agricultural development, poverty and environment

### **Module-II: Agricultural Production and Productivity: 12 Hrs**

Agricultural production — **Resource use and efficiency;** Production function analyses in agriculture; **Factor combination** and resource substitution; **Cost and supply curves;** **Size of farm and laws of returns —** Theoretical and empirical findings; **Farm budgeting and cost concepts;** Supply response of individual crops and aggregate supply; Resource use efficiency in traditional agriculture; **Technical change, labour absorption** and gender issues in agricultural services

### **Module-III: Agricultural Growth in India: 12 Hrs**

Agricultural Production under Five Year Plans - Recent Trends in Agricultural Growth in India - **Cropping Pattern Shifts** - Impact of Agriculture on Industry - Diversification of Agriculture - Inter-Regional Variations in Growth, Output and Productivity - Role of Public Investment and Capital Formation in Indian Agriculture - **Strategy of Agricultural Development and Technological Progress** - Sustainable Agriculture in India - Food Security: Nature of Food Problem - PDS - Right to Food.

### **Module-IV: Institutional and Technological Change in Indian Agriculture: 12 Hrs**

Land Reforms - Land Reform Measures - Achievements and failures of Land Reforms - Problems of Marginal and Small Farmers – **Technical change in Indian Agriculture** – Expansion of irrigation, use of HYV seeds, fertilizers, plant protection measures, Machinery and electricity in agriculture - Soil Conservation, Dry Farming, Land Reclamation and Development -Pricing of Inputs – Subsidies.

**Module-V: Agricultural Marketing, Prices and International Trade: 10 Hrs**

Market structure and imperfections; Regulated markets; Marketed and marketable surplus; Behaviour of agricultural prices — Cobweb model; State policy with respect to agricultural marketing; Terms of trade between agricultural and non-agricultural prices; Objectives of agricultural price policy — Instruments and evaluation - International trade in agricultural commodities – Trends and Patterns - Impact of World Trade Organisation on Indian agriculture.

**Reading List:**

1. Bagchi, K. K. (Ed.) (2008): *Agrarian Crisis, Farmers' Suicides, and Livelihood Security of Rural Labour in India*, Abhijeet Publications, Delhi.
2. Bhaduri, A. (1984): *The Economic Structure of Backward Agriculture*, Macmillan, Delhi.
3. Bhalla, G.S. and Gurmail Singh (2001): *Economic Liberalization and Indian Agriculture*, Sage Publication, Pvt. Ltd. Delhi.
4. Bilgrami, S.A.R. (1996): *Agricultural Economics*, Himalaya Publishing House, Delhi.
5. Dantwala, M. L. (1991): *Indian Agricultural Development since Independence*, 2<sup>nd</sup> (Revised) Edition, Oxford and IBH, New Delhi.
6. Gulati, A. and T. Kelly (1999): *Trade Liberalisation and Indian Agriculture*, Oxford University Press, New Delhi.
7. Kahlon, A.S. and Tyagi D.S. (1983): *Agriculture Price Policy in India*, Allied Publishers, New Delhi.
8. Lekhi, R.K. and Joginder Singh. (2015): *Agricultural Economics*, Kalyani Publishers, New Delhi.
9. Rao, C. H. Hanamantha (2006): *Agriculture, Food Security, Poverty, and Environment*, Oxford University Press, New Delhi.
10. Rao, C. H. Hanumatha (1994): *Agricultural Growth, Rural Poverty and Environmental Degradation in India*, Oxford University Press, New Delhi.
11. Rudra, A. (1982): *Indian Agricultural Economics: Myths and Reality*, Allied Publishers, New Delhi.
12. Saini, G.R. (1979): *Farm Size, Resource Use Efficiency and Income Distribution*, Allied Publishers, New Delhi.
13. Sankaran, S. (1973): *Agricultural Economy of India*, Progressive Corporation Private Ltd., Bombay.
14. Swaminathan, M. S. (2007): *Agriculture Cannot Wait: New Horizons in Indian Agriculture*, Academic Foundation, New Delhi.

## **COURSE CODE: PG34T 106B: INDUSTRIAL ECONOMICS (Specialization /Optional)**

### **Course Outcome:**

- ❖ Learn how economic theories are used in analysis of industrial location. Evaluate these theories in view of empirical evidence. Describe policy Implications of these theories.
- ❖ Develop an understanding about different industrial policies, structure and Composition of industry.
- ❖ Develop an understanding of economics of integration, diversification and Integrations.
- ❖ To understand the basic issues such as productivity, efficiency and capacity Utilization involved in the industrial development of India and measures Required for improving productivity and efficiency

- ❖ **Module-I: Framework and Problems of Industrial Economics: 16 Hrs**  
Concepts and Organization of Firm; Ownership, Control and Objectives of the Firm; Passive and Active Behaviour of the Firm; Market Structure; Product Differentiation; Entry Conditions; Economies of Scale; Market Structure and Profitability; Theories of Industrial Location; Weber and Sargent Florence; Factors Affecting Location.
- ❖ **Module-II: Market Conduct and Performance: 12 Hrs**  
Product Pricing; Marginal Costing; Administered Pricing; Theories and Evidence; Investment; Expenditure; Theories and Empirical Evidence on Mergers and Acquisitions; Diversification, Size and Growth of a Firm; Growth and Profitability of a Firm; Constraints on Growth, Productivity, Efficiency and Capacity Utilization; Concept and Measurement.
- ❖ **Module-III: Indian Industrial Growth and Pattern: 12 Hrs**  
Classification of Industries; Industrial Policy in India; Role of Public and Private Sector; Recent Trends; Multinational Corporations and Transfer of Technology. Liberalisation and Privatization, Regional Industrial Growth in India; Industrial Concentration and Remedial Measures; Issues in Industrial Pollution and Environmental Preservation, Pollution Control Policies; Industrial Sickness.
- ❖ **Module-IV: Industrial Finance: 12 Hrs**  
Role, Nature, Value and Types of Institutional Finance; IDBI, IFCI, ICICI, SFCs, SIDBI, and Commercial Banks. Profit and Loss Account; Assessment of Financial Soundness and Ratio Analysis.
- ❖ **Module-V: Current Problems of Selected Industries: 08 Hrs**  
Iron and Steel, Cotton Textiles, Jute Textiles, Sugar, Coal, Cement and Engineering Goods Industries; Development of Small Scale and Cottage Industries in India.

### **Reading List:**

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

6. Government of India (2017): *Economic Survey of India (Annual)*, Ministry of Finance, Government of India, New Delhi.
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*, (5<sup>th</sup> Edition), Chaitanya Publishing House, Allahabad.
9. Reserve Bank of India: *Report on Currency and Finance (Annual)*, Reserve Bank of India.
10. Singh, A. and A.N. Sadhu (1988): *Industrial Economics*, Himalaya Publishing House, Bombay.

**COURSE CODE: PG34T 106C: ECONOMICS OF EDUCATION (Specialization /Optional)**

**Course Outcome:**

- ❖ Acquire a deeper understanding about the role of human capital especially of education in economic development.
- ❖ Possess knowledge of the latest development in education.
- ❖ Acquire skills to relate human development with economic development.
- ❖ Acquire knowledge about cost- benefit analysis, approaches to educational Planning, educational planning and subsidies.

***Module-I: Human Capital and Development***

Human Capital- Origin-Classical and Neo-Classical Approach, Concept, Components, Nexus between Human Capital, Physical Capital and Natural Capital; Theory of Investment in Human Capital; Concept and Dimensions of Human Development; Growth Accounting Equations of Denison and Schultz.

***Module -II: Economics of Education***

Economics of Education-Concept, Demand for Education, Private Demand and Social Demand; Determinants of Demand; Costs of Education–Expenditure on Education; Private Costs and Social Costs; Benefit of Education– Direct and Indirect Benefits; Private and Social Benefit; Cost–Benefit Analysis-Meaning, Tools (BCR, NPV and IRR), Limitations.

***Module-III: Educational and Manpower Planning***

Approaches to Educational Planning- Social Demand approach; The Rate of Return Approach; The Manpower Requirement Approach; The Tinbergen Model; The Bowels model; The Adelman Model

***Module-IV: Educational Financing and Subsidies***

Resource Mobilization and Financing, the Balance between the Public and Private Financing; Pricing and Subsidies-The Argument for Public Subsidy, Effects of Educational Financing on Equity and Efficiency; Education and Labour Market – Effects of Education, Ability and Family Background on Earnings, Poverty and Income Distribution, Education and Employment (The Path Model Analysis).

***Module-V: Education and Economic Development in India***

Objectives of Educational Planning; A Review of Educational Development in India – Primary, Secondary, Vocational, Higher, Technical and Adult Education; New Educational Policy in India; Expenditure on Education and Improvement in Literacy in India; Educational Development and Employment in India.



### Reading List:

1. Aggarwal and Aggarwal (1992): *Educational Planning in India*, Vol. I, Delhi.
2. Chandra, Prasanna (1995): *Project: Planning, Analysis, Selection, Implications and Review*, Tata McGraw-Hill Publishing Company Limited, New Delhi.
3. Govinda, R. (2002): *India Education Report*, Oxford University Press, New Delhi.
4. Heggade, O. D. (1992): *Economics of Education*, Himalaya Publishing House, Bombay.
5. McMohan, W. W. (1999): *Education of Development: Measuring the Social Benefit*, Oxford University Press, Oxford
6. Nanjundappa, D. M. (1976): *Working of University Finances*, Sterling Publishers Pvt. Ltd., New Delhi.
7. Nanjundappa, D. M. (1994): *Finance and Management of Higher Education*, Deep and Deep, New Delhi.
8. Psacharopoulos, George (1987): *Economics of Education: Research and Studies*, (Ed.), Pergamon Press, New York.
9. Psacharopoulos, George and Maureen Woodhall (1985): *Education for Development: An Analysis of Investment Choice*, Oxford University Press.
10. Rao, V.K.R.V (1966): *Education and Human Resources Development*, Allied Publishers Bombay.
11. Saumen and Chattopadhyay (2012): *Education and Economics: Disciplinary Evolution and Policy Discourse*, Oxford University Press, New Delhi.
12. Shah, K. R. (1997): *Essays on Economics of Human Resource*, Spellbound Publications, Rohtak.
13. Shri Prakash (1994): *Cost of Education: Theoretical Exploration and Empirical Prognostication*, Deep and Deep Publications, New Delhi.
14. Tilak, J, B.G. (1987): *The Economics of Inequality in Education*, Sage Publications, New Delhi
15. Tilak, J.B.G. (1994): *Education for Development in Asia*, Sage Publications, New Delhi
16. Vaizey, Johan (1962): *The Economics of Education*, Faber and Faber, 24 Russell Square, London.
17. Woodhall, M. (1992): *Cost-Benefit Analysis in Educational Planning*, UNESCO, Paris

## **COURSE CODE: PG34T 106D: REGIONAL ECONOMICS (Specialization /Optional)**

### **Course Outcome:**

- ❖ The aim of this paper is to enable the students to gain the in-depth knowledge of regional economics.
- ❖ The paper focus on the comprehensive understanding of the Regional imbalances in India and Karnataka.
- ❖ Students will able to understand the techniques of Regional Economics

### **Module-I: Introduction**

**12 Hours**

Definition and Scope of Regional Economics - Regional Economics as an Independent Field of Academic Enquiry; Region-Concept, Types of Region, Importance of Regionalization, Approaches to Regionalization, Globalization and Regionalization and Indicators of Regional Development.

### **Module-II: Regional Growth**

**12 Hours**

Neo-Classical Growth Models; Cumulative Causation Model; Center-Periphery Model; Growth Pole Analysis; Convergence and Divergence of Disparities in **Per Capita Regional Income**; Techniques of Regional Analysis.

### **Module-III: Inter-regional Differentials in India's Development**

**12 Hours**

Regional Characteristics in India and Imbalances; Agriculture; Industry; Physical Infrastructure; Social Sector; Role of **Planning Commission and Finance Commission in Reducing Regional Imbalances**; Liberalization and Regional Imbalances.

### **Module-IV: Regional Economic Policy and Regional Planning**

**10 Hours**

Importance and Objectives of Regional Economic Policy - Formulation of Regional Economic Policy - **Tools and Techniques** - Implementation Mechanism and Limitations; Regional Planning - **Backward Area Development Programmes** - Institutional and Policy Framework for Removal of Regional Disparities - **New Economic Policy** and Regional Disparities.

### **Module-IV: Regional Disparities in Karnataka**

**14 Hours**

Trends in the Level of Development and State Income; Inter-District Variations in the Rate of Development and **Per Capita Income**; Regional Disparities in Agriculture and Irrigation Development; **Regional Disparities in Industrial Development** and Industrial Dispersal Policies; **Incentives for Development of Industries in Backward Areas**; Banking and Regional Development; Economic Infrastructure and Regional Development.

### **Reading List:**

1. Beckman, M. (1969): *Location Theory*, Random House, London.
2. Bhalla, G.S. and Y. K. Alagh (1989): *Performance of Indian Agriculture: A District-wise Study*, Sterling, New Delhi.
3. Brahmananda, P.R. and V.R. Panchamukhi (Eds.)(2001): *Development Experience in the Indian Economy: Inter-State Perspectives*, Bookwell, Delhi.
4. Dadibhavi, R. V. (1986): *Income, Productivity and Industrial Structure*, Chugh Publications, Allahabad.

5. Dholakia, R.H. (1985): *Regional Disparity in Economic Growth in India*, Himalaya Publishing House, Bombay.
6. Hansen, N.M. (1974): *Public Policy and Regional Economic Development: The Experience in Nine Western Countries*, Ballinger, Massachusetts.
7. Hoover, E.N. (1974): *An Introduction to Regional Economics*, Alfred.A.Knopf, New York.
8. Isard, W. (1960): *Methods of Regional Analysis*, MIT Press, Cambridge, Mass.
9. Nair, K.R.G. (1982): *Regional Experience in a Developing Economy*, Wiley; Eastern, New Delhi.
10. Pande (1969): *Report of the Working Group on Identification of Backward Areas*, GOI, Planning Commission.
11. Rao, H. (1984): *Regional Disparities and Development in India*, Ashish Publishing House, New Delhi.
12. Richardson (1973): *Elements of Regional Economics*, MacMillan London.
13. Richardson, H.N. (1969): *Regional Economics*, Weidenfield & Nicolson, London.

**COURSE CODE: PG34T 106E: HUMAN DEVELOPMENT**  
**(Specialisation/ Optional Paper)**

**Course Outcome:**

- ❖ Educate the students on various concepts and measurement of human development and highlight the importance of human capital in general. And education and Health' in particular in human capital formation.
- ❖ Study the gender dimensions of human development and the advisements of India in human development.

**Module-I: Introduction to Human Development**

Concept of Growth and Development; Growth with Equity and Social Justice; Inclusive Growth; Capabilities approach; Human Development: Concept, Measurement and Indicators –PQLI, HDI, IHDI, HPI, MPI, GDI, GII and GEM.

**Module-II: Economics of Education**

Human Capital: Concept and Components; Nexus between Human Capital, Physical Capital and Natural Capital; Theory of Investment in Human Capital; Education and Economic Development; Demand for Education–Private Demand and Social Demand; Determinants of Demand; Cost and Benefits of Education -Expenditure on Education: Magnitude, Trends and Impact; Financing of Education; Education Policy in India.

**Module-III: Economics of Health**

Concept, Determinants and Indicators of Health; Demand and Supply of Healthcare; Financing of Healthcare; Expenditure on Health-Health Status in India-Health Policy in India

**Module-IV: Gender Issues and Economic Development**

Demographic Profile –Composition and Age-structure, Reproductive Health: Concept, Measurement and Management-Concept and Contribution of Women's Work-Gender Dimensions of Employment and Unemployment –Feminization of Aging and Poverty.

**Module-V: Human Development in India**

Trends and Regional Patterns of HDI, HPI, MPI, GDI and GEM in India; Social Security Measures-Concept, Different Levels and Schemes; Analysis of 'Safety Net' Programmes in India; Review of Current HDI of India.

**Reading List:**

1. Baru R.U. (1998): *Private Health Care in India: Social Characteristics and Trends*, Sage Publications, New Delhi.
2. Dreze, Jean and Sen, Amartya (1995): *Indian Economic Development and Social Opportunity*, Oxford University Press, New Delhi.
3. Government of India: *India Human Development Report 2001*.
4. Heggade, O. D (1992): *Economics of Education*, Himalaya Publishing House, Bombay.
5. *Human Development Report of India*, Oxford University Press,-2011
6. McMohan, W. W. (1999): *Education of Development: Measuring the Social Benefit*, Oxford University Press, Oxford.
7. Psacharopoulos, George (1987): *Economics of Education: Research and Studies*, (Ed.), Pergamon Press, New York.
8. Shri Prakash (1994): *Cost of Education: Theoretical Exploration and Empirical Prognostication*, Deep and Deep Publications, New Delhi.
9. Taori, Kamal (2000): *Sustainable Human Development: Issues and Challenges*, Concept Publishing Company, New Delhi.

10. Tilak, J. B. G. (1994): *Education for Development in Asia*, Sage Publications, New Delhi
11. Marris, Stephen, Nancy Devlin and Devid Parkin (2009): *Economic Analysis in Health Care*, Wiley India
12. UNDP: *Human Development Report*, Annual publications, UNDP
13. Yashoda, Shanmugasundaram (1994): *Theory and Practice of Health Economics in India*, Allied Publisers Ltd, Madras.

## **COURSE CODE: PG34T 106F: KARNATAKA ECONOMY (Specialisation/ Optional Paper)**

### **Course Outcome:**

- ❖ The objective of this course is to teach the students about sectoral aspects of Karnataka economy.
- ❖ To make the students to understand historical and geographical features of Karnataka economy.
- ❖ To study in detail regional disparities and state finance.

### **Module-I: Introduction**

Karnataka in the Indian Economy; Natural Resources; Trends in State Per-Capita Income; Indicators of Economic Development; Indicators of Human Development; Regional Disparity in District Human Development.

### **Module-II: Agricultural Development**

Land-use Pattern in Karnataka- Trend in Area, Production, Major Crops- Regional Pattern of Agriculture Production- Horticultural/Plantation Crop, Vegetables-Fruits-Floriculture-Sericulture-Livestock Economy- Agricultural Marketing-Agricultural Finance- Agriculture Prices-Agrarian Crisis.

### **Module-III: Industrial Development**

Industrial Structure (Major, Medium and MSMEs) - policies and programmes- Industrial Finance-Co-operatives commercial Banks-RRB's-KSFC, SIDRP and KSIIDC.

### **Module-IV: Infrastructure Development**

Present State of Development; Economic Infrastructure-Irrigation, Power, Transport and Communication; Social Infrastructure-Education and Health; Planning for Infrastructural Development.

### **Module-V: Regional Disparities and State Finance**

Position and Extent, Causes and Consequences; the causes for backward area; criteria for Identification of Backward areas; Measures to reduce imbalance; Trends in sources of Finance; Revenue and non Revenue sources; Sharing of Central Taxes and Grants-in-Aid; Trends in Expenditure Pattern Development or non-development; Trends in indebtedness of the state.

### **Reading List:**

1. Government of Karnataka (2005): *High Power*. Committee for Redressal of Regional Imbalances (HPCRRI), Government of Karnataka, Bangalore
2. Government of Karnataka (2015): *Human Development: Performance of District, Taluks and Urban Local Bodies in Karnataka, 2014: A Snapshot*, Planning, Programme Monitoring and Statistics Department of Government of Karnataka, Bengaluru (<http://planning.kar.nic.in> – Human Development Division).
3. Government of Karnataka: *Economic Survey of Karnataka*, Government of Karnataka (Various Annual Reports) (<http://planning.kar.nic.in>)

4. Gowda, Sreenivasa and T. Nanjgowda: *Economic Development of Karnataka: Leading Aspects.*
5. Heggade, Odeyar D: *Karnataka Economy:*
6. Madaiah M. (1989): *Karnataka Economy: Growth, Issues and Lines of Development*, Himalaya Publishing House, Mumbai.
7. Madaiah, M. and R. Ramapriya (1989): *Karnataka Economy: Growth, Issues and Lines of Development*, Himalaya Publishing House, Delhi.
8. Puttaswamaiah, K, (1980): *Economic development of Karnataka: A Treatise in Continuity and Change*, Oxford and IBH Publication.
9. Rao, Hemalatha (1984): *Regional Disparities and Development in India*, Ashish Publishing House, New Delhi.

## M.A. ECONOMICS

### CHOICE BASED CREDIT SYSTEM

#### II SEMESTER

#### COURSE CODE: PG34T 201: MICRO ECONOMIC ANALYSIS-II

##### Course Outcome:

- ❖ Understand the process of the determination of factor prices;
- ❖ Analyse the conditions for maximizing social welfare and identify the barriers to attain maximum welfare;
- ❖ Design consumption and investment strategies in a state of uncertainty; and
- ❖ Ability to identify mechanisms for searching and comparing information

##### Module I: Theory of Distribution

14 Hours

Functional v/s personal distribution - Neoclassical Approach - Marginal Productivity Theory – Factor pricing in perfectly competitive markets - The demand and supply for labour and determination of factor price - Theory of distribution in imperfect product and factor markets - Elasticity of technical substitution - Technical progress and factor shares - Product exhaustion theorem - Determination of Rent, Wages, Interest and Profit - Macro-Theories of Distribution – Marx - Kalecki degree of monopoly and Kaldor theory.

##### Module II: General Equilibrium

12 Hours

Interdependence in the Economy - Partial and General Equilibrium Analyses - Walrasian Excess Demand and Input - Output Approaches to General Equilibrium - Existence, Uniqueness and Stability of Equilibrium - Static Properties of General Equilibrium State: Equilibrium of Production and Equilibrium of Consumption - General Equilibrium and Allocation of Resources - Prices of Commodities and Factors - Factor Ownership and Income Distribution - Relationship between Relative Commodity and Factor Prices (Stolper-Samuelson Theorem) - Relationship between Output Mix and Real Factor Prices, Effect of Changes in Factor Supply

##### Module III: Welfare Economics

12 Hours

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

##### Module IV: Economics of Uncertainty

12 Hours

Individual behaviours towards risk - Expected utility and uncertainty - Equivalence approaches - Risk and risk aversion - Sensitivity analysis - Gambling and insurance - Economics of insurance - Cost and risk - Risk pooling and risk spreading - Mean variance analysis and Portfolio selection- Optimal consumption under uncertainty - Competitive firm under uncertainty - Factor demand under price uncertainty.

##### Module V: Economics of Information

10 Hours

Economics of search - Different Models - Efficient market hypothesis - Stochastic models of inventory demand - Markets with asymmetric information - Incomplete Information - Search and transaction costs - Economics of information.



### **Reading List**

1. Borch, K.H. (1968): The Economics of Uncertainty, Princeton University Press, Princeton.
2. Broadway R.W. and N. Bruce, (1984): Welfare Economics, Basil Blackwell, London.
3. Brofen Brenner, M. (1979): Income Distribution Theory, Macmillan, London.
4. Dacosta, G.C. (1980): Production Prices and Distribution, Tata McGraw Hill, New Delhi.
5. Diamond and Rothschild (Eds) (1978): Uncertainty in Economics, Academic Press, New York.
6. Graff J. De. V. (1957): Theoretical Welfare Economics, Cambridge University Press, Cambridge.
7. Hirshelifer J and A. Glazer (1997): Price Theory and Applications, Prentice Hall of India.
8. Koutsoyiannis. A. (1979): Modern Micro Economics, Macmillan Press, London.
9. Mishan.E.J. (1969): Welfare Economics: An assessment, North Holland., Amsterdam.
10. Qurk, J. and R Saponnik (1968): Introduction to General Equilibrium and Welfare Economics, McGraw Hill, New York
11. Pindyck, R.S. and D.Rubinfeld, (1995): Micro Economics Prentice Hall of India, New Delhi.
12. Salvatore, Dominick (2003): Micro Economics Theory & Applications, Oxford University Press, Inc. 198 Madison Avenue. New York.
13. Sen, Anindya (1999): Micro Economics: Theory and Applications, Oxford University Press, New Delhi.
14. Weintrub.E.R. (1974): General Equilibrium Theory, McMillan, London.

## **COURSE CODE: PG34T 202: MACRO ECONOMIC ANALYSIS- II**

### **Course Outcome:**

- ❖ The aim of this course is to study the fundamentals of demand for and supply of money.
- ❖ To provide comprehensive understanding of modern quantity theories of money.
- ❖ To enable the students to study in detail, theories of inflation and policy implications.

### **Module-I: Theories of Money**

**8 Hours**

Walrasian and Non-Walrasian Approaches in Macroeconomics – the Classical Heritage – Says' Equality and Says' Identity – Walras' Law – Walrasian System – Patinkin and Real Balance Effect – Arrow – Debreu Model – Overlapping Generation Model of Samuelson – Cash in Advance Model of Clower.

### **Module-II: Post-Keynesian Theories of Money**

**10 Hours**

Post-Keynesian Demand for Money Theories – Inventory Theory of Baumol – Portfolio Balance Theory of Tobin – Restatement of the Quantity Theory as a Theory of Demand for Money by Friedman – Supply of Money Theories – Money Multiplier Model – Behavioural Model of Money Supply – Endogenous Money Supply Theory.

### **Module-III: Inflation: Theories and Policies**

**16 Hours**

Theories of Inflation - Demand-Pull and Cost-Push Theories of Inflation - Phillips Curve - Monetarist, Keynesian and New Classical Views on Inflation and Unemployment - Role of Aggregate Demand and Aggregate Supply Management - Monetary and Fiscal Policy Options. Inflation and Interest Rates: Real and Nominal Interest Rates - Fisher Effect - Nominal Interest Rate and the Demand for Money - Social Costs of Inflation - Hyperinflation - Classical Dichotomy.

### **Module-IV: Modern Theories of Money**

**18 Hours**

Re-interpretation of Keynes by Clower and Leijonhufvud – The Dual Decision Hypothesis – Rationing Models of Barrow, Grossman and Malinvaud – Monetarist contributions – An Overview of Major Themes in Monetarism – Lucas' Surprise Supply Function – The Inter-temporal Substitution Model – Policy Ineffectiveness Argument – The Lucas Critique – Post Keynesian Macroeconomics – Basic Themes – The Historical Time Concept- Kalecki's Pricing Theory – The New Keynesian School – Micro Foundations of Macroeconomics – Small Menu Cost Model – Implicit Wage Contract Model – Efficient Wage Theories – Insider-Outsider Model – The New Growth or Endogenous Growth Theory.

### **Module-V: Open Economy**

**8 Hours**

Basic Concepts - Mundell; Fleming Model; International Flows of Capital and Goods - Saving and Investment in a Small Open Economy - Exchange Rates - A Case of a Large Open Economy (Example United States and India) - Equilibrium in an Open Economy - Influence of Policies on an Open Economy.

## Reading List:

1. Ackeley, G. (1978): *Macro Economics: Theory and Policy*, McMillan, New York.
2. Turnovsky, S. J. (1977): *Macro Economic Analysis and Stabilization Policy*, Cambridge University Press, Cambridge.
3. Sheffrin, S. M. (1996): *Rational Expectations*, Cambridge University Press, Cambridge.
4. Frisch, H. (1983): *Theories of Inflation*, Cambridge University Press, Cambridge.
5. Mankiw, N. G. and D. Romer (1991): *New Keynesian Economics*, (2 vols), MIT Press, Cambridge.  
Laidler, D.F.W. (1977): *Demand for Money: Theory and Evidence*, Dum-Don
6. Valley, New York.
7. Reddy, Y. V. (2000): *A Review of Monetary and Financial Sector Reforms in India*, UBSP D, New Delhi.
8. Hall, R. E. and J. B. Taylor (1986): *Macro Economics*, W. W. Norton, New York.
9. Blackhouse, R. and A. Salansi (Eds.) (2000): *Macro Economics and the Real World*, Oxford University Press, London.
10. Branson, W. A. (1989): *Macro Economic Theory and Policy*, Harper and Row, New York.
11. Dornbusch, R. and F. Stanley (1997): *Macro Economics*, McGraw Hill, New York.
12. Edward Shapiro (1996): *Macro Economic Analysis*, Galgotia Publications, New Delhi.
13. Gupta, R. D. and Rana A. S. (1998): *Post-Keynesian Economics*, Kalyani Publishers, Ludhiyana.
14. Romer, D. L. (1996): *Advanced Macro Economics*, McGraw Hill, New York.
15. Gordon, R. and Harris S.G. (1998): *Macro Economics*, Addison Wesley
16. Taylor, K. (1983): *Structuralist Macro Economics*, Basic Books, New Longman

## **COURSE CODE: PG34T 203: ECONOMICS OF GROWTH AND DEVELOPMENT-II**

### **Course Outcome:**

- ❖ Economics of growth and development helps to understand the efficiency and productivity value in key sectors and their sectoral growth across the country including Agriculture, Industry and infrastructure.
- ❖ Trade and economic development proved with some models/theories. Trade impact WTO and GATT.
- ❖ Acquire the Knowledge of social sector including food, health and demography, poverty and environment along with policy.
- ❖ It helps to describe the mechanism of application of macroeconomics policies and their impact in development process.

### **Module-I: Development: Sectoral Aspects:**

**16 Hrs**

Agriculture and Economic Development - Efficiency and Productivity - Sustainable Agriculture - Globalization and Agriculture- Agricultural Development Policy - Rationale of Industrialization - Critical Issues in Industry Development - Terms of Trade between Agriculture and Industry - Industry Development Policy - Infrastructure and Economic Development - Critical Issues in Infrastructure Development - Infrastructure Development Policy - Information and Communication Technology.

### **Module-II: Trade and Economic Development:**

**10 Hrs**

Trade and Economic Development - Trade as an Engine of Growth- Static and Dynamic Gains, Declining Terms of Trade -Prebisch - Singer and Myrdal's Thesis - Trade Liberalization and Trade Policy Debate - WTO and Developing Countries - GATS.

### **Module-III: Social aspects of Development:**

**10 Hrs**

Food Security - Health - Education and Nutrition - Population Problem - Theory of Demographic Transition - Population as limit to Growth and Ultimate Source - Human Resource Development - Social Capital - Population, Poverty and Environment - Environment Policy.

### **Module-IV: Macro Economic Policies and Development:**

**12 Hrs**

Role of Monetary and Fiscal Policies in Developing Countries - Inflation and Economic Development - Resources Mobilization, Internal and External - Foreign Direct Investment, Multinational Corporations and Developing Countries.

### **Module-V: Resources Allocation for Development:**

**12 Hrs**

Need for Investment Criteria in Developing Countries, Present vs Future, Alternative Investment Criteria - Cost Benefit-Analysis - Social Cost-Benefit Analysis - Shadow Prices - Project Appraisal- UNIDO Guidelines.

### **Reading List:**

1. Adelman, Irma (1961): *Theories of Economic Growth and Development*, Stanford University Press, Stanford.
2. Behrman, J. and T. N. Srinivasan (1995): *Handbook of Development Economics*, Vol.3. Elsevier, Stendam.
3. Debraj Ray (1998): *Development Economics*, Princeton University Press Princeton New Jersey.
4. Gerald M. Meier and James E. Eanch (2005): *Leading Issues in Economic Development*, Oxford New York.
5. Ghatak (1986): *An Introduction to Development Economics*, Allen and Unwin, London.
6. Kindleberger, C. P. (1997): *Economic Development*, McGraw Hill, New York.

7. Robert J Barro and Xavier Sale-I-Martin (2004): *Economic Growth*, MIT Press, Cambridge.
8. Srivastava, O.S. (1996): *Economics of Growth, Development and Planning*, Vikas Publishing House Pvt. Ltd., New Delhi.
9. Stuart, R. Lynn (2003): *Economic Development: Theory and Practice for a Divided World*, Prentice Hall, New Jersey.
10. Thirlwall, A.P. (2006): *Growth and Development*, 6<sup>th</sup> Education, West press Pvt. Ltd. New Delhi.
11. Todaro, Michael P. (1989): *Economic Development in the Third World*, Orient and Longman, London.
12. Todaro, Michael P. and Stephen C. Smith. (2012): *Economic Development*, 11<sup>th</sup> Edition, Addison Wesley, Boston.

## COURSE CODE: PG34T 204: STATISTICS FOR ECONOMICS

### Course Outcomes:

- ❖ An understanding of how to think about, evaluate and draw conclusions from economic data by applying statistical techniques.
- ❖ Familiarize the statistical concepts that are widely used in Econometrics and Research in Economics
- ❖ Familiarise and understand the students on statistical concepts including Sampling methods, classification of data, measurement of central tendency and dispersion, theory of probability distribution and sampling distribution.
- ❖ To make them understand statistical inferences, correlation and regression analysis, time series and index number.

#### ❖ **Module-I: Introduction to Statistics**

**12-Hours**

Types of Data - Nominal, Ordinal & Ratio Scale Data. Qualitative and Quantitative Data, Individual, Discrete and Continuous Data. Cross Section, Time Series and Pooled Data . Sources of Data; Descriptive Statistics and Inferential Statistics. Sources of Data- Primary and Secondary Data; Schedules and Questionnaires; Sampling- Meaning, Sampling Techniques-Simple Random, Stratified and Systematic Random Sampling Methods; Tabulation and Frequency Distribution.

#### **Module-II: Measures of Average and Dispersion**

**10-Hours**

Measurement of Average - Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, and Mode. Measures of Dispersion. Skewness and kurtosis.

#### **Module-III: Probability and Distribution**

**16-Hours**

Probability Theory - Concepts and Approaches to Estimate Probability - Probability Distribution Functions - Theoretical Distribution: Binomial, Poisson, Normal, t, Chi-Square & F Distribution.

- ❖ Theory of Estimation and Hypothesis Testing; Concept of Estimator - Sampling Distribution of Estimator, Point and Interval Estimation, Properties of Good Estimator for Small and Large Samples; Hypothesis Testing: Approaches to Hypothesis Testing; - Confidence Interval Approach, Test of Significance Approach, and P-Value Approach; Formulation of Hypothesis - Null and Alternative Hypothesis; Level of Significance - One Sided and Two Sided Hypothesis - Type-I and Type-II Error; Test Statistic- Critical Value - Parametric and Non-Parametric Tests.

#### **Module-IV: Correlation and Regression**

**10-Hours**

- ❖ Correlation- Meaning and Types of Correlation - Measurement of Correlation. Regression- Simple Regression Model; Estimation - Least Squares Method, Goodness of Fit; Introduction to Multiple Regression.

#### **Module-V: Index Numbers & Time Series Analysis**

**10-Hours**

- ❖ Nature and Purpose of Index Numbers; Types of Index Numbers- Simple and Aggregate Index Numbers: Laspeyre's Index, Paasche's Index, Marshall and Edgeworth's Index - Fisher's Index - Time Reversal and Factor Reversal Tests Problems of Construction of Index Numbers and Limitation of Index Numbers. Time series analysis- Nature and Components; Analysis of Trend - Moving Average Method and Least-Square Method  
{**Practical Component: Graphical Presentation of Data: Tabular and Graphical Methods - Relative Frequency and Percentage - Frequency Distribution - Bar Graphs, Line Graph, Pie Charts, Histogram, Cumulative Distribution and Ogives**}

**Reading List:**

1. Anderson, Sweeney & Williams (2007): *Statistics for Business & Economics*, 9<sup>th</sup> Edition, Thomson South-Western, Bangalore.
2. Bose, D. (2018): *An Introduction to Mathematical Economics*, Himalaya Publishing House, Pvt. Ltd. Mumbai.
3. Goon, A. M., M. K. Gupta and B. Dasgupta (1968): *Fundamentals of Statistics*,
4. Gupta, B.N. (1992): *Statistics Theory and Practice*, Sahitya Bhavan, Agra.
5. Gupta, S. C. (2016): *Fundamentals of Statistics*, Himalaya Publishing House, Bombay.
6. Gupta, S. P. (2014): *Statistical Methods*, S. Chand & Company, New Delhi, (43<sup>rd</sup> Edition)
7. Gupta, S.C. and Kapoor, V. K. (2016): *Fundamentals of Applied Statistics*, Sultan Chand & Sons, New
8. Mehta and Madnani (2017): *Mathematics for Economists*, Sultan Chand and Sons, New Delhi.
9. Monga, G. S. (2015): *Mathematics and Statistics for Economics*, Second Revised Edition, Vikas Publishing House, Pvt. Ltd. New Delhi.
10. Nagar, A. L. and R. K. Das (1997): *Basic Statistics*, Oxford University Press, New Delhi
11. Salvatore, D. (2015): *Mathematics and Statistics*, Schaum's Series, Tata McGraw Hill.
12. Veerachamy, R. (2005): *Quantitative Methods for Economics*, New Age International (P) Ltd., New Delhi.
13. Yamane Toro (1967): *Statistics - An Introductory Analysis*, Harper and Row Publishers, New York.

## **COURSE CODE: PG34T 205A: AGRI-BUSINESS (Specialisation/ Optional paper)**

### **Course Outcomes:**

- ❖ Knowledge on Agri-Business helps to understand the concepts, its necessities, characteristics, commercialisations, trends and pattern in India.
- ❖ It shows the importance of agricultural credit Institutions in agriculture development and both theoretical and Indian agricultural marketing problems and remedial measures.
- ❖ This helps to understand the agricultural price instability, price policy, objectives and instruments.
- ❖ It demonstrates the importance of agribusiness in international trade, WTO, AOA MNC's their importance, functions, progress, problems and prospectus.

### **Module-I: Introduction to Agri-Business:**

**10 Hrs**

Meaning of Agri-business; Need for Agri-Business; Characteristics of Agri-Business in India; Commercialization of Agriculture leading to Agri-Business; Trends and Pattern of Agri-Business in India.

### **Module-II: Agricultural Credit Institutions:**

**14 Hrs**

Introduction - Commercial Banks- Lead Bank Scheme - Multi-Agency Approach - Nationalization of Banks - Regional Rural Banks - National Bank for Agriculture and Rural Development (NABARD) - Reserve Bank of India  
- Government Policy for Agricultural Credit - Agricultural Credit under Plans and Rural Credit in India - Farmers Service Societies.

### **Module-III: Agricultural Marketing:**

**12 Hrs**

Concept, Structure, Importance, Defects of Agricultural Markets in India; Functions of Agricultural Marketing- Packaging, Transportation, Grading and Standardization, and Storage and Warehousing; Role of Government in Promoting Agricultural Marketing in India; Promotion of Regulated Markets (APMCs)-Importance, Functions, Problems and Remedial Measures.

### **Module-IV: Agricultural Prices:**

**12 Hrs**

Instability in Agricultural Prices-Causes and Effects and Fluctuations; Need for Stabilization in Agricultural Prices; Agricultural Price Policy in India-Need, Objectives, Origin and Development, Instruments, Limitations and Suggestions.

### **Module-V: WTO and Agri-Exports:**

**12 Hrs**

International Trade in Agri-business- WTO and Agreement on Agriculture (AOA), Trends in Import and Export of Agricultural Commodities, Role of Multinational Corporations in Agri-exports; Agri-Export Zones in India- Importance, Functions, Progress, Problems and Prospects.

### **Reading List:**

1. Acharya, S. S. and Agarwal N. L. (1994): *Agricultural Marketing in India*, (Second Edition), Oxford & IBH Publishing Co. Pvt. Ltd.
2. Bhalla, G.S. (1994): *Economic Liberalisation and Indian Agriculture*, Institute for Studies in Industrial Development, New Delhi.
3. Dandekar, V. M. (1994): *The Indian Economy: 1947-92, Vol. I, Agriculture*, Sage Publications, New Delhi.
4. Dantawala, M. L. (1991): *Indian Agricultural Development since Independence*, (Second Edition), Oxford & IBH, New Delhi.
5. Government of India (1976): *Report of the National Commission on Agriculture*, New Delhi.



6. Gulati, A. and T. Kelly, (1997): *Trade Liberalisation and Indian Agriculture*, Oxford University Press, New Delhi.
7. Hansra, B. S. and Vijayaragavan, K. (2003): *Agribusiness and Extension Management*, Concept Publishing Company, New Delhi.
8. Kahlon, A. S. and Tyagi D. S. (1983): *Agricultural Price Policy in India*, Allied Publishers, New Delhi.
9. Larson, A. L. (1957): *Agricultural Marketing*, Prentice-Hall, INC, USA.
10. Lekhi, R. K. and Joginder Singh (1999): *Agricultural Economics*, Kalyani Publishers, New Delhi.
11. Mamoria, C. B. (1999): *Agricultural Problems of India*, Kitab Mahal, Allahabad.
12. Omvi Rawling: *Introduction to Agri-Business*, PHI, New Jersey.
13. Raj. K.N. et. al (1988): *Essays in Commercialization of Indian Agriculture*, Oxford University Press, New Delhi.
14. Soni, R. N. (1995): *Leading Issues in Agricultural Economics*, Arihant Press, Jalandhar.
15. Vaidhyathan, A. (1989): *Livestock Economy of India*, Oxford & IBH, New Delhi.

## **COURSE CODE: PG34T 205B: LABOUR ECONOMICS (Specialization /Optional paper)**

### **Course Outcomes:**

- ❖ To understand meaning, nature, scope and importance of labour economics. Major events, trends and development of labour markets in the real world.
- ❖ To appreciate differences in views of economists both from positive and Normative standpoints with respect to issues in labour market and wage Determination.
- ❖ To understand labour unions, labour legislations and importance of I.L.O.
- ❖ The students will learn basic economic forces behind employment and wages, Sources of labour market imperfections, driving forces for education and skill Development, discrimination among the workers and Government policies for Labour welfare.

### **Module-I: Labour Markets:**

**14Hrs**

Nature and Characteristics of Labour Market; Paradigms of Labour Market Analysis; Classical, Neo-Classical and Modern Analysis of Demand and Supply Forces; Demand For Labour in Relation to Size and Pattern of Investment; Supply of Labour in Relation to Growth of Labour Force; Labour Market Policies; Mobility and Productivity of Labour; Rationalization; Methods of Recruitment and Placement.

### **Module-II: Employment:**

**12 Hrs**

Employment and Development Relationship; Poverty and Unemployment in Developing Countries; Unemployment; Concept, Types and Measurement (with reference to India); Impact of Rationalization; Technological Change and Modernization of Employment in Organised Private Industry; Employment in Public Sector Industry; Analysis of Educated Unemployment; Employment Policies in Five-Year Plans and Evaluation.

### **Module-III: Wage Determination:**

**12Hrs**

Neo-Classical and Bargaining Theories of Wage Determination; Concepts of Minimum Wage, Living Wage and Fair Wage in Theory and Practice; Productivity and Wage Policy; Wage Boards in India; Bonus System and Profit Sharing.

### **Module-IV: Industrial Relations:**

**10 Hrs**

Growth and Structure of Labour Unions in India; Causes of Industrial Disputes; their Settlement and Prevention Mechanism; Role of tri-partitism; Current Trends in Collective Bargaining; Labour Legislation in India; Labour Management Relations.

### **Module-V: State and Labour:**

**12 Hrs**

State and Social Security of Labour; Concepts of Social Security and its Evaluation; Labour Welfare in India; Child Labour; Female Labour and Gender Bias in Payment of Wages; Exit Policy; National Commission on Labour; Globalisation and Labour Market.

### **Reading List:**

1. Datt, G. (1996): *Bargaining Power, Wages and Employment: An Analysis of*
2. Hajela, P. D. (1998): *Labour Restructuring in India: A Critique of the New Economic Policies*, Commonwealth Publishers, New Delhi.
3. Jhabvala, R. and R. K. Subrahmanya (Eds.)(2000): *The Unorganised Sector: Work Security and Social Protection*, Sage Publication, New Delhi.
4. Lester, R.A. (1964): *Economics of Labour*, (2<sup>nd</sup> Ed). Macmillan, New York.
5. McConnell, C. R. and S. L. Brue (2013): *Contemporary Labour Economics*, McGraw; Hill, New York.
6. Papola, T.S., P. P. Ghosh and A.N. Sharma (Eds.) (1993): *Labour Employment and Industrial Relations in India*, B. R. Publishing Corporation, New Delhi.

7. Rosenberg, M.R. (1998): *Labour Markets in Low Income Countries*, in Chenery, H.B. and T.N.Srinivasan, (Eds.), *The Handbook of Development Economics*, North; Holland, New York.
8. Venkata Ratnam, C.S. (2001): *Globalization and Labour: Management Relations: Dynamics of Change*, Sage Publications, New Delhi.

## **COURSE CODE: PG34T205C: ECONOMICS OF HEALTH (Specialisation/Optional)**

### **Course Outcomes:**

- ❖ To understand the basic concepts of health economics, scope and importance of health economics.
- ❖ A better understanding of the economic theory of health through a study of Economic models.
- ❖ Learn to evaluate and interpret empirical findings in health and healthcare Services on the basis of cost-benefit analysis.
- ❖ Possess knowledge of the latest developments in pricing and policies of Health and healthcare services.

### **Module-I: Introduction**

Health Economics-Concept, Importance of Health Economics; Scope of Economics of Health; Health as Commodity; Determinants of Health– Poverty, Malnutrition and Environmental Issues; Indicators of Health; Nexus between Health and Economic Growth.

### **Module-II: Demand for Health**

Nature of Demand for Health, Determinants of Demand, Elasticity of Demand-Price and Income Elasticity; Models of Demand for Health

### **Module-III: Supply of Health**

Nature of Supply of Health; Health Production Function; Pricing of Health Care Services- Drugs, Hospitals; Cost of Health Care Services; Market Failure; Externalities and Public Goods

### **Module-IV: Financing and Evaluation of Health Care Services**

Health Delivery Systems in India- Public and Private Financing of Health Care; Health Insurance and Co-operatives-Concept, Schemes and Progress; Expenditure on Health in India-Trends in Public and Private Expenditure; Public and Private Health Infrastructures; Evaluation of Health Services-Cost-Benefit Analysis (CBA), cost-Effectiveness Analysis (CEA), Cost-minimisation and cost-Utility analysis; Economic Reforms and Health Sector

### **Module-V: Economic Development and Health Attainments in India**

Life Expectancy- Concept, Male-female and Rural-urban Life Expectancy and Regional Pattern of Life Expectancy; Infant Mortality Rate- Concept and Trends and Determinants; Maternal Mortality Rate-Concept and Trends and Determinants; Fertility Rate-Concept and Trends in Fertility Rates; Crude Birth Rate and Death Rates; Nexus between Health and Economic Development; Swachh Bharat Abhiyan/Clean India Mission; Review of National Healthy Policy 2017.

### Reading List:

1. Baru, R. U. (1998): *Private Health Care in India; Social Characteristics and Trends*, Sage Publications, New Delhi.
2. Berman, Peter (1991): *Health Economics, Health Financing and the Health Needs of Poor, Women, and Children*, Ford Foundation, New Delhi.
3. Berman, Peter and M. E. Khan (1993): *Paying for India's Health Care*, Sage Publications, New Delhi.
4. Carrin Guy (1984): *Economic Evaluation of Health Care in Developing Countries: Theory and Applications*, Croom Helm, London
5. Charles Phelps (1991): *Health Economics*, Oxford University, Press, New York
6. Charles, C. Griffin (1992): *Health Care in Asia: A Comparative Study of Cost and Financing*, World Bank
7. Cooper, M. H. and Culyer, A. J. (1973): *Health Economics*, Penguin Book Ltd, England.
8. Das Gupta, M., Chen, L. C. and Krishna, T. N (1996): *Health, Poverty and Development in India*, Oxford University Press, Delhi.
9. Gopal, K. (1982): *Economics of Health and Nutrition*, Chaugh Publishers
10. Jack, William (1999): *Principles of Health Economics for Developing Countries*, World Bank, Washington DC.
11. Morris, Stephen, N. Devlin and D. Parkin (2009): *Economic Analysis in Health Care*, Wiley India Pvt. Ltd. New Delhi.
12. Panchamukhi, P. R. (2002): *Economics of Health: An Introductory Review*, Reading Material, Indian Economic Trust
13. Panchamukhi, P. R. (1980): *Economics of Health: A Trend Report*, in ICSSR: A Survey of Research Economics, Vol. VI, Infrastructure, Allied, Delhi.
14. Prasad, Sujata and C. Sathyamala (2006): *Securing Health for All: Dimensions and Challenges*, Institute for Human Development, New Delhi.
15. Sarakar, Ashok Kumar (2005): *NGOs: The New Lexicon of Health Care*, Concept of Publishing Company, New Delhi.
16. World Bank (1987): *Financing Health Services in Development Counter: An Agent for Reform*, World Bank.
17. Zweifel, Peter and Friedrich Breyer (1997): *Health Economics*, Oxford University Press, New York.

## **COURSE CODE: PG34T 205D: URBAN ECONOMICS (Specialization /Optional paper)**

### **Course Outcomes:**

- ❖ Describe the conceptual and theoretical framework of urban economics.
- ❖ Interpret the pattern and trends of urbanization.
- ❖ Evaluate the impact of urbanization and issues and challenges of urbanization.
- ❖ Evaluate Government policies on various aspects of urban development.

### **Module-I: Introduction to Urban Economics**

**14 Hours**

Nature and Scope - Process of Urbanization-Factors initiating Urbanization process –City Stages-The Economic Theory of Urban Spatial Structures –The Concept of **City Structures**; the Concentric Zone Hypothesis –Urban Land-use: **Models of Household Residential Locational Decision-Land-use Framework** –**Von Thunen: Income-related Framework: Park-Burgess** –**Budget Constraint Models of Allonso; Muth and Siegel.**

### **Module-II: Theories Urban Growth**

**12 Hours**

Central Place Theory-Urban Economic Base and Urban Growth –The Human Ecological Approach to Urban Growth –**City Size and Urban Growth**-The **Costs and Benefits of City Size** –Urban Size Ratchet –**Rank Size Rule** - The Cost and Benefits of City Size - Optimum City Size.

### **Module-III: Urbanization in India**

**10 Hours**

Trends in India's Urbanization –Major Trends and Issues in India's Urbanization-Structure of Urban Growth –Spatial Distribution of Urban Population-Extent of **Urban Sprawls.**

### **Module-IV: Urban Problems and Planning in India**

**14 Hours**

Urban Housing and Problems of Slum-up Gradation-Urban Water Supply and Sanitation-**Urban Transport-Urban Environment**-**Measures to Control Pollution-Urban Poverty and Alleviation Measures**-Concept, Need, Objectives and Techniques of **Urban Planning**-The **Master Plan Approach**-The Emerging Planning Issues.

### **Module V: Urban Governance**

**10 Hours**

Urban Government Activity-Urban Local Bodies, Structure and Finances-**Urban Fiscal Problems**-Financing Development of Urban Infrastructure-Management of Urban Infrastructure; The **Public-Private Partnership Mechanism.**

### **Reading List:**

1. Amitabh Kundu (1993): *In the Name of the Urban Poor: Access to Basic Amenities*, Sage Publications, New Delhi
2. Amitabh Kundu, K.C. Shivaramakrishnan and others (2005): *Handbook of Urbanization in India*, Oxford University Press, New Delhi.
3. Bose A.N. (1980): *Urban Economics: A Trend Report*, in ICSSR: A Survey of Research in Economics, vol. 6, Allied Publishers.
4. Bose, A.N. (1978): *India's Urbanization 1991-2001*, Tata McGraw Hill.
5. Brian, C. Aldrich and Ranvinder S. Sandhu (1995): *Housing the Urban Poor: Policy and Practice in Developing Countries*, Sage Publications, New Delhi.
6. Button, K.J. (1977): *Urban Economics*, Richard D Irwin, Homewood, Illionis.
7. Goodall, B. (1972): *The Economics of Urban Areas*, Pregamon Press, New York.
8. Meera Kosambi (1994): *Urbanization and Urban Development in India*, Monograph-1,

Research in Sociology and Social Anthropology: Third Survey, Indian Council of Social Science Research, New Delhi.

9. Mills E (1983): *Report of the Task Force on Housing and Urban Development, I to IV*, Planning Commission, Government of India, New Delhi.
10. NCAER (2005): *India Infrastructure Report, Financing Urban Infrastructure*, Oxford University Press, New Delhi.
11. NIUA (2017): *Urban Statistical Handbook, National Institute of Urban Affairs*, New Delhi.
12. Sundarm K.V. (1977): *Urban and Regional Planning in India*, Vikas Publishing House, New Delhi.

## **COURSE CODE: PG34T205E: GENDER AND DEVELOPMENT**

(Specialisation/Optional)

### **Course Outcome:**

- ❖ **The objective of this course is to enable the students to understand thoroughly the theories of Gender and Development.**
- ❖ **It also attempts to study the economic growth and gender equality, impact of technology women's labour market.**
- ❖ **Students would have knowledge about the gender planning, gender budgeting and development**

### **MODULE-I: INTRODUCTION**

Basic Concepts - Difference Between Gender And Sex - Patriarchy - Feminism - Schools Of Feminism - Gender Division Of Work - Invisibility Of Women's Work - Gender Mainstreaming - Concept Of Gender Economics - Gender Concerns In Economic Theory - Sen's Contribution.; Women In Decision Making.

### **MODULE-II: DEMOGRAPHIC ASPECTS**

Demography of Female Population, Age Structure, Mortality Rates and Sex Ratio- Causes of Declining Sex Ratios and Fertility Rates in LDCs and Particularly India- Theories and Measurement of Fertility and its Control; Women and their Access to Nutrition, Health, Education, and Social and Community Resources, and their Impact on Female Mortality and Fertility, Economic Status, and Work Participation Rate (WPR).

### **Module-III: Economic Growth and Gender Equality**

Globalization Of The World Economy And Gender Status - Impact Of Economic Growth On Gender Equality- Gender Equality And Economic Growth And Socio-Economic Development. Impact Of Globalization On Gender Status - Concept Of The "Feminization Of Poverty" - Basic Causes - Problems Of Measuring The Feminization Of Poverty - Gender Differences In Incomes - Women's Contribution To Gdp - Estimation Of Women's Unpaid Work.

### **Module-IV: Women, Technology and Environment**

Impact of Technological Development and Modernization on Women's Work Participation in General and in Various Sectors such as Agriculture, Non-Agriculture Rural Activities, Small and Cottage Industries and Organized Industry-Female Activities and Ecological and Environmental Concerns: The Two Way Relationship — Role of New Technologies for Helping Women-Provision of Information and Training for Simple Harvesting of Economic Services.

### **MODULE-V: GENDER PLANNING AND DEVELOPMENT POLICIES**

Gender And Development Indices; Mainstreaming Gender Into Development Policies; Paradigm Shift From Women's Well Being To Women's Empowerment; Democratic Decentralization (Panchayats) And Women's Empowerment In India; Gender Budgets: Gender Budgeting - Methodology Of Gender Budget Preparation - Approaches And Principles Of Gender Budgeting - Experiences Of Different Countries In Gender Budgeting - Gender Budgeting In India And Karnataka.



## Reading List:

1. Batliwala, S. (1993): *The Empowerment of Women in South Asia: Concepts and Practices*, Sage Publications, New Delhi.
2. Boraian, M. P. (2008): *Empowerment of Rural Women: The Deterrents and Determinants*, Concept Publishing Company, New Delhi.
3. Boserup, Ester (1970): *Women's Role in Economic Development*, St Martin's Press, New York.
4. Burra, Neera, J. D. Ranadive and R.K. Murthy (2007): *Micro-Credit, Poverty and Empowerment*, Sage Publications, New Delhi.
5. Sharma Kumud, Sujata. C. P. (2011): *Towards Equality: Report of the Committee on the Status of Women in India*, Pearson Education, New Delhi.  
GOI (1974): *Towards Equality: Report of the Committee on the Status of Women in India*, Ministry of Education and Social Welfare, New Delhi.
6. Hunt, J. (2004): Introduction to Gender Analysis Concepts and Steps, *Development Bulletin*, No. 64:100-106.
7. Irene Tinker (1990): *Persistent Inequalities: Women and World Development*, OUP, New York.
8. John, Mary E. (1996): Gender and Development in India, *EPW*, 31 (47):3071-3077.
9. Kabeer, Naila, (1995): *Reversed Realities: Gender Hierarchies in Development Thought*, Kali for Women, New Delhi.
10. Klasen, S. (2006): UNDP's Gender-Related Measures: Some Conceptual Problems and Possible Solutions, *Journal of Human Development and Capabilities* 7 (2), pp.243-74.
11. March, C., Smyth, I. and Mukhopadhyay M. (1996): *Guide to Gender-Analysis Frameworks*. Oxfam, London.
12. Moser, A. (2005): *Gender Mainstreaming Since Beijing: A Review of Success and Limitations in International Institutions*, Routledge, New York.
13. National Commission on Women in Self Employment (1987): *Shramshakti Report*, New Delhi
14. Palanithurai, G., T.Parthiban and J. Vanishree (2007): *Empowering Women: Grassroots Experience from Tamil Nadu*, Concept Publishing Company, New Delhi.
15. Swapna, Mukhopadhyay (Ed.) (2007): *The Enigma of the Kerala Woman: The Failed Promise of Literacy*, Social Science Press, New Delhi.
16. UNDP (2006): *Human Development Report, Fighting Climate Change: Human Solidarity in A Divided World*, Palgrave, New York.

**COURSE CODE: PG34T205F: HUMAN DEVELOPMENT IN KARNATAKA  
(Specialisation/Optional)**

**Course Outcome:**

- ❖ The objective of this course is educating the students about various concept of human development.
- ❖ To familiar students about the importance human capital in general and human development disparities among different districts of Karnataka.
- ❖ To impart knowledge to students about different dimension of human development.

*Module - I: Introduction to Economic Development*

Economic Growth (SGDP and District Income) and Social Change - Salient Features of Karnataka Economy - Civil Society and Democratic Polity - Growth in Population - Changes in Demographic Composition - Karnataka: A State in Socio-Economic Transition.

*Module - II: Progress in Human Development*

HDI Ranking - Districts According to HDI Ranking - Variations in District HDI and their Implications - Income, Employment and Poverty in Karnataka - District Human Development Reports - Gram Panchayat Human Development Report - Brief Information; Analysis of Regional Variations - Framework for Human Development in Karnataka.

*Module -III: Education, Health, Nutrition and Family Welfare*

Growth of Education and Literacy since 1951 - Inter-District Disparities - Development of Higher Education and Associated Problems - Karnataka's Education Policy. Development of Health and Family Welfare Sector in Karnataka - Major Disease Burden - Health Programs - Family Welfare Programs - Problems - Nutrition and Food Security in Karnataka.

*Module -IV: Development of Social Sectors*

Housing, Water Supply and Sanitation Programmes - Inter-District Disparities - Problems - Need for Long-Term Approach.

*Module - V: People's Participation and Democratic Governance*

Development and Democratic Decentralization Process - Role of Panchayat Raj Institutions and Urban Local Bodies - Powers, Functions and Finances - People's Participation and Decentralized Planning - Emergence of Third Sector in Karnataka - NGOs and Government Organizations, Co-operatives and Civil Society - People's Movements for Environment Protection, Abolition of Online Lottery, Liquor Prohibition Etc., - Institutional.

**Reading List:**

1. Government of Karnataka (2005): *High Power. Committee for Redressal of Regional Imbalances (HPCRRI)*, Government of Karnataka, Bangalore
2. Government of Karnataka (2005): *Human Development in Karnataka*, Planning Department, Bangalore.
3. Government of Karnataka (2015): *Human Development: Performance of District, Taluks and Urban Local Bodies in Karnataka, 2014: A Snapshot*, Planning, Programme Monitoring and Statistics Department of Government of Karnataka, Bengaluru (<http://planning.kar.nic.in> – Human Development Division).
4. Government of Karnataka (2015): *A Handbook on Statistics Outline of Karnataka*, Directorate of Economics and Statistics, Bangalore.
5. Government of Karnataka: *Economic Survey of Karnataka*, Government of Karnataka (Various Annual Reports) (<http://planning.kar.nic.in>)
6. Gowda, Sreenivasa and T. Nanjgowda: *Economic Development of Karnataka: Leading Aspects*.
7. Indian Economic Association (1998): *Economic Development of Karnataka*, Edited by M. V. Srinivasagowda and D.T. Nanjgowda.
8. Madaiah, M. (1989): *Karnataka Economy: Growth, Issues and Lines of Development*, Himalaya Publishing House, Mumbai.
9. Madaiah, M. and R. Ramapriya (1989): *Karnataka Economy: Growth, Issues and Lines of Development*, Himalaya Publishing House, Delhi.
10. Puttaswamaiah, K, (1980): *Economic development of Karnataka: A Treatise in Continuity and Change*, Oxford and IBH Publication.
11. Rao, Hemalatha (1984): *Regional Disparities and Development in India*, Ashish Publishing House, New Delhi.

## **COURSE CODE: PG34T206:INDIAN ECONOMY (Open Elective Course)**

### **Course Outcome:**

- ❖ To study the sectoral structure of Indian economy.
- ❖ To study the importance of agriculture and industrial sectors.
- ❖ To examine the impact of financial sector and economic reforms.
- ❖ To study the financial conditions of central governments.

### **Module-I: An Overview of Indian Economy**

Characteristics of Indian Economy; Demographic Features of Indian population; Trends in the growth of National Income; Green Accounting; Structural Changes in the Economy; Poverty and Inequality; Trends in Savings, Investment and Capital Output Ratio and their Implications; India's Development Experience; Planning and Development Strategies; Planning Commission to NITI Aayog; Parallel Economy and its Implications.

### **Module -II: Agricultural Sector**

Agriculture-Importance; Cropping Pattern; Land Reforms; Farm size and efficiency; Agricultural Labour Problems; Mechanization and Green Revolution; Agricultural Finance and Rural Indebtedness and Farmers' Suicide; Agricultural Marketing; Agricultural Price; Agricultural Co-operatives; Technological Factor in Agriculture Growth-Seeds Fertilizers, Irrigation; Food problem and Public Distribution System; WTO and Agriculture.

### **Module -III: Industrial Sector**

Importance of Industrialization; Growth and Structural Composition; Structural Transformation; Small-Scale Industries- Role and Performance; Privatization and Public Sector, Private Sector Industries and their Performance and Problems; Industrial Labour; Industrial Finance; Development Banks; Capital Market; Industrial Monopoly; MRTP; New Industrial Policy; Mergers and Takeover.

### **Module -IV: Foreign Trade Sector**

Exchange Rate policy of India; Trends in India's Foreign Trade; Balance of Payment; Problems of Policies; New Foreign Trade Policy; Export promotion V/S Import Substitution; Foreign Direct Investment in India; Globalisation and its impact on India's Trade and Investment.

### **Module -V: Financial Sector**

RBI; Money and Money Markets; Monetary Policy; Money Supply; Commercial Banks; Banking and Non-Banking Financial Sector; Financial Sector Reforms; Demonetisation and its Impact.

### **Reading List:**

1. Agarwal A.N. and Agarwal M.K. (2016): *Indian Economy: Problems of Development and Planning*, New Age International (P) Limited Publishers, New Delhi.
2. Agarwal, H. S. (2011): *Indian Economy*, Lakshmi Narain Agarwal, Agra.
3. Agarwal, R. C. (2015): *Economics of Development and Planning (2014-15)*, Lakshmi Narain Agarwal, Agra.
4. Ahluwalia, I. J. and M D Little (Eds.) (1999): *India's Economic Reforms and Development* (Essays in Honor of Manmohan Singh) OUP, New Delhi.
5. Brahmananda, P. R. and V. R. Panchamukhi (Eds.) (2001): *Development Experience in the Indian Economy: Inter-State Perspectives*, Bookwell, New Delhi.
6. Dhingra, I. C. (2017): *Indian Economy*, S. Chand and Company Limited, Ram Nagar, New Delhi.
7. Government of India (2017): *Economic Survey of India* (Annual), Ministry of Finance, Government of India, New Delhi.
8. Hanumantha Rao C. H. and H. Linnemann (Eds.)(1996): *Economic Reforms and Poverty Alleviation in India*, Sage Publication, New Delhi.
9. Jalan, B. (1996): *India's Economic Policy-Preparing for the Twenty First Century*, Viking New Delhi.
10. Misra, S. K. and V. K. Puri (2018): *Indian Economy*, Himalaya Publishing House, Mumbai
11. Mujamdar, N. A. (2004): *Economics Reforms and Sans Development*, Academic Foundation, New Delhi,
12. Rangarajan, C. (1998): *Indian Economy: Essays on Money and Finance*, UBS, New Delhi.
13. Rudder Dutt and K.P.M. Sundharam (2002): *Indian Economy*, S. Chand and Company Limited, New Delhi.
14. Sen, R.K. and B.Chatterjee (2001): *Indian Economy: Agenda for 21<sup>st</sup> Century* (Essay in Honour of Prof. P. R. Brahmananda), Deep & Deep, New Delhi.
15. Sundaram, K.P.M. (2004): *An Introduction to Indian Economy*, S. Chand and Company Limited, Ram Nagar, New Delhi.

## M.A. ECONOMICS

### CHOICE BASED CREDIT SYSTEM

#### Revised Syllabus

### III SEMESTER

#### **COURSE CODE: PG34T 301: PUBLIC ECONOMICS**

##### **Course Outcome:**

- ❖ This course enables the students to learn about nature and scope of public economics, economic systems, market failure in provision of public goods, mechanism for revealing for public choice and types of public policy for provision of public goods and thereby attaining maximum social advantage.
- ❖ It also aims at understanding the theories of public expenditure, public revenue mobilization and public debt and its management.
- ❖ At the end of the course, the students would have learned the essential theories and frameworks needed to design the public policies for effective of provision of public goods and services and efficient management of public assets and liabilities.

##### **Module-I: Introduction**

**12 Hours**

Public Economics-Nature, Scope, Meaning and Evolution; Government-Powers, Fiscal Functions-Allocation, Distribution and Stabilisation and Role of Government in a Mixed Economy; Theory of Public Goods- Private Goods, Public Goods, Club Goods, Commons, Merit Goods and Demerit Goods; Public Goods and Market Failure; Public Goods as a Special case of Externalities and Market Failure; Principle of Maximum Social Advantage.

##### **Module-II: Public Choice and Policy**

**18 Hours**

Voting and Public Choice- Majority Voting rule, Problems in Allocating Resources and Aggregation of Preference Revelation; Alternative to Majority Voting Systems Arrow's Impossibility Theorem; Sen's Theory of Social Choice; Economic Theory of democracy; Rent Seeking and Directly Unproductive Activities; Public Policy for Allocation of Resource-; Voluntary Exchange Model; Samuelson and Musgrave; Johansen Model; Clarke, Grooves and Ledyard Model; Tiebout Model- Theory of Club Goods.

##### **Module-III: Theories of Public Expenditure**

**8 Hours**

General Theories of Public Expenditure: Wagner's Hypothesis; Peacock- Wiseman Hypothesis; Colin Clark Hypothesis; Expenditure Evaluation- Criteria for Public Investment- Social cost- Benefit Analysis; Reforms in Expenditure Budgeting System- Zero Based Budgeting.

##### **Module-IV: Public Revenue and Taxation**

**12 Hours**

Public Revenue: Sources and Classification, Taxation, Tax Elasticity and Buoyancy, Taxable Capacity and Tax Effort, Theory of Incidence; Different Concepts of Incidence, Benefits and Ability to Pay Approaches, Taxation and Dead Weight Loss, Theory of Optimal Taxation, Equity in Taxation, Direct and Indirect Taxes, Effect of Taxation on Production and Distribution.

**Module-V: Public Debt and Its Management****10 Hours**

**Public Debt-Concept, Sources of Public Debt - Internal and External, Objectives, Reasons for Growing Public Debt; Classical and Modern Views on Public Debt, Burden of Public Debt; Public Borrowings and Price Level- Crowding out of Private Investment and Activity; Principles of Debt Management and Repayment.**

**Reading List:**

1. Anderson, John E. (2002): *Public Finance: Principles and Policy*, Houghton Mifflin Company, Boston.
2. Bagchi A. (2005) : *Readings in Public Finance*, Cambridge University Press, New Delhi
3. Bhatia, H. L. (2015): *Public Finance*, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Chand, S. N. (2013): *Public Finance*, Atlantic Publishers and Distributors (P) Ltd., New Delhi.
5. Cullis, John and Phillip Jones (2010): *Public Finance and Public Choice: Analytical Perspective*, Oxford University Press, New York
6. Hinderiks, Jean and Gareth Myles (2014): *Intermediate Public Economics*, PHI, New Delhi
7. Hugh Dalton (1997): *Principles of Public Finance*, Allied Publishers Pvt. Ltd.
8. Hyman David N. (2012): *Public Finance- A Contemporary Application of Theory to Policy*, Thomson South – Western Ohio, USA.
9. Jha, Rajesh K. (2012): *Public Finance*, Perason, Delhi.
10. Kennedy, M. Marria John (2012): *Public Finance*, PHI Learning Private Limited New Delhi.
11. Lekhi, R.K. and Joginder Singh (2015): *Public Finance*, Kalyani Publishers, NewDelhi.
12. Musgrave R.A and Musgrave P.A. (2009): *Public Finance in Theory and Practice*, McGraw- Hill Kogakusha, Tokyo.
13. Om Prakash (2016): *Public Economics: Theory and Practice*, Vishal Publishing Co. Jalandhar-Delhi.
14. Rao, Govind (2010): *Public Finance: Theory and Practice Essay in Honour of A.Bagchi*, Sage Publications, New Delhi.
15. Rosen, Harvey S. and Ted Gayer (2012): *Public Finance*, 8<sup>th</sup> Edition, MaGraw Hill Education Private Limited, New Delhi.
16. Singh, S.K. (2015): *Public Economics: Theory and Practice* S. Chand and Co., New Delhi.
17. Tyagi B.P. and H. P. Singh (2016): *Public Finance*, Jayaprakashnath and Company, Meerut, India.

## **COURSE CODE: PG34T 302: INTERNATIONAL TRADE AND FINANCE – I**

### **Course Outcomes**

- 1) Deep understanding about International trade theories and their empirical testing
- 2) To make them understand the students about benefits of International trade in terms of Gains from trade and Terms of trade
- 3) Conceptual understanding of International trade policy and Trade and Economic integration among the countries such as EU, NAFTA, SAFTA and ASEAN
- 4) By the end of the course, students should be able to apply International trade theories and policies in their research.

### **Module-I: International Trade Theories-I**

**10-Hours**

Mercantilists Views on Trade - Trade based on Absolute Advantage- Adam Smith; Trade based on Comparative Advantage- David Ricardo; **Mill's Reciprocal Demand**; Opportunity cost trade theory; Empirical Testing of Absolute Cost and Comparative Cost.

### **Model-II: International Trade Theories-II**

**12-Hours**

Heckscher-Ohlin-Samuelson Trade Theory; Assumptions- Factor Intensity, Factor Abundance - Factor Endowments and Heckscher-Ohlin Theorem - **Empirical Test of Heckscher-Ohlin Model-Leontief Paradox** –Factor Price Equalization Theorem: Stolper-Samuelson Theorem; Economic Growth and International Trade; The Rybczynski Theorem - Technical Progress - Immiserizing Growth - Growth Changes Tastes and Trade in both Nations.

### **Module-III: International Trade Theories-III**

**12-Hours**

Economies of Scale, Imperfect Competition, and International Trade- New Trade Theories- Economies of Scale and International Trade, Imperfect Competition and International Trade- Trade Based on Product Differentiation; **Intra-Industry Trade**- Trade Based on Dynamic Technological Differences- Costs of Transportation, Environmental Standards, and International Trade- Environmental Standards, Industry Location, and International Trade

### **Module-IV: International Trade Policies**

**16-Hours**

Trade Restrictions; Tariffs - **Partial Equilibrium Analysis of a Tariff** - The Theory of Tariff Structure - **General Equilibrium Analysis of a Tariff** - The Optimum Tariff;

**Non-Tariff Trade Barriers and the New Protectionism:** Import Quotas - Voluntary Export Restraints - Technical, Administrative and other Regulations; International Cartels and Dumping; The Political Economy of Protectionism and Strategic Trade and Industrial Policy; Outstanding Trade Problems.

### **Module -V: Economic Integration**

**10-Hours**

**Customs Unions and Free Trade; Introduction** - Trade Creating Customs Union and Trade Diverting Customs Union, Static and Dynamic Benefits from Customs Union; History of Economic Integration - The European Economic Community, The European Free Trade Association and NAFTA; Attempts of Developing Countries towards Economic Integration – SAFTA and ASEAN.



**Reading List:**

1. Carbough, R.J. (2017): *International Economics*, (16<sup>th</sup> Edition) International Thompson Publishing, New York.
2. Dana, M.S. (2017): *International Economics: Study, Guide and Work Book*, (5<sup>th</sup> edition), Rutledge Publishers, London.
3. Gita Gopinatha, Elhanan, Helpman Kenneth and Regoff (2014): *Handbook of International Economics*, Elsevier Publications
4. Jackson, J. (1998): *The World Trading System*, Cambridge University Press, Mass.
  
5. Jagadish N. Bhagwati (1983): *Dependence and Interdependence* (Ed) by Gane Grossman, Vol.2, Basil Blackwell, Oxford.
6. Kenen, P.B. (2000): *The International Economy*, (4<sup>th</sup> Edition) Cambridge University Press, London.
7. Kindleberger, C.P. (1978): *International Economics*, (6<sup>th</sup> Edition) R.D.Irwin Homewood.
8. Krugman, P.R. and M. Obstfield (2012): *International Economics: Theory and Policy*, (9<sup>th</sup> Edition) Addison-Wesley Publications.
9. Metzler: *Readings in International Economic*, American Economic Series.
10. Salvatore, D. (2014): *International Economics*, (11<sup>th</sup> Edition), MacMillan Publication.
11. Soderstein, B. (1993): *International Economics*, MacMillan, London.
12. Soderstein, B. and Reed, Geoffrey (1994): *International Economics*, (3<sup>rd</sup> Edition) MacMillan, London.
13. UNCTAD: *World Investment Reports*, Various Issues.
14. Vaish, M. C. and Sudama Singh (2010): *International Economics*, (8<sup>th</sup> Edition), Oxford and IBH Publication, New Delhi.

## **COURSE CODE: PG34T 303: RESEARCH METHODOLOGY AND DATA ANALYSIS**

### **Course Outcomes**

- ❖ Ability to frame research question/s;
- ❖ Capacity to search and manage literature in a scientific manner;
- ❖ Designing suitable instruments to collect data;
- ❖ Developing appropriate data analysis plans; and
- ❖ Imbibing written and oral presentation skills to communicate information and data to multiple audiences.

### **Module - I: Introduction to Research Process 8 Hours**

Meaning of Research and Characteristics - **Planning a Research** - Stages of Research - Research Problem - Theoretical Foundation - Review of Literature - Objectives - Hypotheses - Types of Research: Pure and Applied Research - Qualitative, Quantitative and Mixed - **Exploratory, Descriptive, Diagnostic, Evaluation, Action and Experimental Research** - Historical Research - Surveys - Case Study - Field Study Need and Importance of Research in Economics - Applicability - Ethical issues in Research.

### **Module - II Data Sources and Methods of Data Collection 10 Hours**

Primary and Secondary Sources of Data; Quantitative Data - Sources - Time Series Data - Cross Section Data and Pooled Data - Census, Reports and Documents, other Published and Unpublished Sources; **Observation - Interview Method, Schedules and Questionnaires - Questionnaire Designing Procedure - Case Study, Projective Methods - Simulation** - Merits and Demerits.

### **Module - III: Sampling Considerations and Data Processing 12 Hours**

*Sampling Considerations:* Concepts - Sample vs Census - Principles of **Sampling Design & Process** - Types of Sample Design: Probability Sampling Techniques: Simple Random, Stratified Random, Cluster and Multi-Stage and other Methods of Sampling. Non-Probability Sampling Techniques: Quota Sampling, Convenient Sampling, Purposive Sampling, Judgment Sampling and other Methods - **Determination of Sample Size** - Advantages and Disadvantages - Errors in Sampling.

*Data Processing:* **Processing and Distribution - Field Work Validation - Tabulation - Editing - Coding - Classification and Tabulation of Data - Presentation - Graphical Representation.**

### **Module - IV: Data Analysis and Interpretation (Theoretical Exposure) 20 Hours**

**Univariate and Multivariate Data Analysis - Descriptive v/s Inferential Analysis - Descriptive Analysis of Univariate Data and Bivariate Data - Testing of Hypotheses:** Concepts, Steps in Testing of Hypothesis.

*Estimation of Mean:* **Test of Single Sample Mean - Two Independent Means Tests - Testing for Means of Paired Data - Testing for the Equality of K Population Means - Assumptions for ANOVA - Between Treatments Estimate of Population Variance - Within Treatments Estimate of Population Variance - Comparing the Variance of Estimates - The F Test - Multiple Comparison Procedures.**

*Estimation of Variance:* **Test of Single Sample Variance - Two Sample Variance Test.**

*Non-Parametric Tests:* Advantages & Disadvantages - **Chi-square tests - Tests for Randomness.**

*Introduction to Advanced Data Analysis Techniques:* **Correlation and Regression Analysis - Factor Analysis - Discriminant Analysis - Cluster Analysis - Multidimensional Scaling.**

### **Module - V: Report Writing and Presentation of Results 10 Hours**

Importance of Report Writing - Types of Reports: Brief Reports, Detailed Reports, Technical Reports and Business Reports - **Report Preparation** - Report Structure: Preliminary Section, Main Report - **Interpretations of Results - Research Findings and Suggested Recommendations** - Limitations of the Study, and End Notes - **Report Writing: Report**

Formulation - Effective Documentation: Need and Guidelines: Presenting Tabular Data, Visual Representations: Tables, Graphs, Charts - Presenting Footnotes and Bibliography - Oral Presentation of Research.

**References:** [Please refer to the Latest Editions]

1. Bryman Alan, *Social Research Methods*, Oxford University Press, Oxford.
2. Kothari C.R., *Research Methodology*, New Age International Publication, New Delhi.
3. Krishnawamy O.R. and Ranghanathan, M., *Methodology of Research in Social Sciences*, Himalaya Publishing House, Bangalore.
4. Kurian C.T. *Research Methodology in Economics*, Institute of Development Studies, Madras.
5. Majumdar P.K., *Research Methods in Social Science*, Viva Books Private Limited, New Delhi.
6. Robert, A. Day, *How to Write and Publish a Scientific Paper*, Cambridge University Press, Great Britain.

## COURSE CODE: PG34T 304: THEORY OF ECONOMETRICS

### Course outcomes

- ❖ Familiarise the Econometrics applications that are widely used in empirical work in economics and other related disciplines.
- ❖ Conceptual understanding and 'hands on' applications using economic data drawn from real-world examples, along with formal theoretical proofs and empirical testing
- ❖ Familiarise and understand the students on Advanced econometrics concepts including  
Problems faced in estimation and inference in the context of single and multiple equations regression model and various diagnosis testing.
- ❖ To make them understand Simultaneous equations and problems in estimation.
- ❖ By the end of the course, students should be able to develop simple econometric models and interpret the econometric and statistical results reported in other studies.

### Module-I: Introduction to Econometrics

10-Hours

Meaning, Nature and Scope of Econometrics; Distinction between Economics and Econometrics; Mathematics and Econometrics, Statistics and Econometrics; Methodology of Econometrics ; Types of Econometrics.

### Module-II: Simple and Multiple Regression Model

16-Hours

*Simple Regression*- Meaning, Basic Ideas, Significance of Disturbance Term. Method of Estimation: Ordinary Least Squares and Maximum Likelihood. Estimation - BLUE Property – Coefficient of Determination, Assumptions, Hypothesis Testing; Confidence Interval and Test of Significance Testing Regression Coefficients, Interpretation of Results. Multiple Regression: Three Variable Regression Model- Partial Regression. Method of Estimation, R-Square and Adjusted R-Square; Hypothesis Testing; Individual regression coefficients, Overall Significance Test ANOVA; Introduction to Matrix Approach.

### Model-III: Diagnosis Testing;

10-Hours

Multicollinearity- Nature, Causes ,Consequences, Detection and Remedial Measures.  
Heteroscedasticity- Nature, Causes,Consequences, Detection and Remedial Measures.  
Auto-Correlation- Nature, Causes, Consequences, Detection and Remedial Measures.

### Module-IV: Dummy Variable and Dynamic Regression Models

12-Hours

*Dummy Variable Model*- Meaning, Nature, Dummy Variable Trap; Dummy Variable Model with Single Qualitative Variable, Two Qualitative Variables; Dummy Variable Model with Mixture of Qualitative and Quantitative Variables.

### Model -VAutoregressive and Dynamic Models-

12-Hours

Role of Lag in Economics, Estimation Methods, Koyck's: Adaptive Adjustment and Partial Expectation Models; Almon Approach to Distributed Lag Models.  
Nature, Simultaneous Equation Bias, Identification; Under - Exact - Over Identification; Rules of Identification - Order and Rank Condition of Identification; Estimation of Simultaneous Equations Models- ILS, 2SLS, 3SLS, LIMLE, FIMLE.

1. Badi, H. Baltagi (2011): *Econometrics*, Springer-Verlag Berlin Heidelberg, New York.
2. Dougherty, Christopher (2011): *Introduction to Econometrics*, Oxford University Press, UK.

3. Ghosh, Sukesh K. (1991): *Econometrics-Theory and Applications*, Prentice Hall, Englewood Cliffs, New Jersey.
4. Greene, William H. (2016): *Econometric Analysis*, Pearson, New Delhi.
5. Gujarati, Damodar N., Dawn C. Porter and Sangeetha Gunasekar (2017): *Basic Econometrics*, (5<sup>th</sup> Edition) Tata McGraw Hill Bombay.
6. Julia, Hebden (2000): *Statistics for Economics*, Heritage Publication, Oxford University.
7. Koutsoyiannis, A. (2000): *Theory of Econometrics*, (2<sup>nd</sup> Edition) MacMillan Publication, London.
8. Madani, G.M.K. (2015): *Introduction to Econometrics: Principles and Applications* (8<sup>th</sup> Edition) Principles and applications, Oxford & IBH Publishers.
9. Maddala, G. S. (2016): *Introduction to Econometrics*, Wiley India, New Delhi.
10. Ramanathan, Ramu (2015): *Introductory Econometrics with Applications*, South-Western Cengage Learning, New Delhi.
11. Theil, H. (1981): *Introduction to Econometrics*, Prentice-Hall, Englewood Cliffs, New Jersey.
12. Wooldridge, J. M. (2016): *Introductory Econometrics: A Modern Approach*, Thomson South-Western, Akash Press, New Delhi.

## **COURSE CODE: PG34T 305A: RURAL DEVELOPMENT (Specialization /Optional paper)**

### **Course outcomes**

- ❖ This course provides the students with the basics of rural development, including concepts, characteristics, problems, theories and approaches and programmes implemented for rural redevelopment in India.
- ❖ It also enables the students to study the various aspects of poverty and unemployment in India, transferring the rural economy-economic diversification in rural areas and the role of infrastructures in rural development.
- ❖ At the end of the course, the students will be able to understand the problems, approaches, programmes implemented for the development of rural economy in India and understand the essentiality to design the new policies and programmes for sustainable development of rural economy in India.

### **Module-I: Nature and Scope of Rural Development**

**8 Hours**

Need for Rural Development; Concept, Objectives and Indicators of Rural Development; Characteristics of Rural Economy; and Rural-Urban Linkage

### **Module-II: Theories and Approaches to Rural Development**

**12 Hours**

Unbalanced Growth Theory; Dualistic Models Of Development- Lewis Model And Fei And Ranis Model; Approaches To Rural Development In India

### **Module-III: Poverty and Unemployment in Rural India**

**18 Hours**

Rural Poverty-Concept, Poverty Line, Measurement, Poverty Trends, Regional Pattern of Poverty and Causes of Poverty; Unemployment- Concept, Measurement, Trends, Regional Pattern and Causes of Unemployment; Review of Current Poverty Alleviation and Employment Generation Programmes in India.

### **Module-IV: Transferring Rural Economy**

**18 Hours**

Importance of Agriculture and Allies Activities in Rural Development; Rural Non-Agricultural Employment in India- Importance, Growth, Regional Pattern and Determinants; MSMEs-Concept, Classification Importance, Progress, Problems and Remedial Measures; Rural Industrialisation-Importance, Programmes, Progress and Problems of Small-Scale Industries (SSI) and Remedial Measures

### **Module-V: Infrastructures for Rural Development**

**14 Hours**

Rural Infrastructures- Meaning, Classification, Importance, Problems; Educational and Health infrastructure; Housing and Sanitation; Drinking Water Supply; Rural Energy; Rural Transport and Communication; Rural Electrification

### **Reading List:**

1. Biradar, R. R. (2012): *Incidence of Poverty among Social Groups in Rural India: Why do the Poorer Remain Poor?*, Institute for Social and Economic Change (ISEC), Bangalore.
2. Biradar, R.R.(2009): *Rural Non-Agricultural Employment in India: An Analysis of Its Determinants and Impact on Poverty and Inequality*, Concept Publishing Company, New Delhi
3. Chambers, R. (1983): *Rural Development: Putting the Last First*, Longman, Harlow.
4. Dandekar, V.M. and N. Rath (1971): *Poverty in India*, GIPE, Pune.

5. Dantwala, M. L. (1973): *Poverty in India: Then and Now, 1870-1970*, Macmillan, Bombay.
6. Dantwala, M. L. and Others (Ed) (1986): *Indian Agricultural Development since Independence: A Collection of Essays*, Oxford and IBH Publishing Co.Pvt. LTd. New Delhi.
7. Desai, Vasant (2015): *Rural Development*, Himalaya Publication, Mumbai.
8. Gupta. K .R. (Ed) (2003): *Rural Development in India*, Atlantic Publishers and Distributors, New Delhi.
9. Jain, Gopal Lal (1997): *Rural Development*, Mangal Deep Publications, Jaipur,.
10. Maheshwari, S. R. (1985): *Rural Development in India*, Sage Publications, New Delhi.
11. Satya Sundaram, I. (2015): *Rural Development*, Himalaya Publishing House, Delhi.
12. Singh, Katar (1986): *Rural Development: Principles, Policies and Management*, Sage Publications, New Delhi, (Second Edition).
13. Srinivasan, T. N. and P. K. Bardhan (Eds.) (1974): *Poverty and Income Distribution in India*, Statistical Publishing Society, Calcutta.
14. Prasad, B. K. (2003): *Rural Development: Concept, Approach and Strategy*, Sarup and Sons, New Delhi.
15. Moni, M. and Suresh Misra (2009): *Rural India: Achieving Millennium Development Goals and Grassroots Development*, Concept Publishing Company, New Delhi.
16. Mondal, Sagar and G. L. Ray (2011): *Rural Development*, Kalyani Publishers, New Delhi.
17. Saminathan, M. S. (2010): *Integrated Rural Development*, Concept Publishing Company, New Delhi.

## **COURSE CODE: PG34T 305B: FINANCIAL INSTITUTIONS AND MARKETS-I**

### **Course Outcome:**

- ❖ Students would have knowledge regarding money market, capital market, stock exchange i.e. Indian Financial System which is the backbone of the country.
- ❖ To familiar students about the relationship between financial development and economic development.
- ❖ To impart knowledge to students about controller of financial system, e.g. RBI, SEBI, etc.
- ❖ Identify the existence and development of primary and secondary market, debt market, new financial instruments which are utilize and effectively participate in the development process.

### **Module-I: Financial Markets**

**12 Hours**

Money Market: Introduction - Functions, Efficiency - The Indian Money Market-Role of RBI in the Money Market - Money Market Centres - Steps to Develop Money Market in India - **Money Market Instruments** - Treasury Bills, Commercial Paper, Commercial bills, Certificates of Deposit, Call/Notice Money Market, Money Market Derivatives - Collateralised Borrowing and Lending Obligation (CBLO) - Link between the Money Market and the Monetary Policy in India - Tools for Managing Liquidity in the Money Market.

### **Module-II: Capital Market**

**10 Hours**

Introduction, History, Functions, Types, Scams and Reforms - The **Primary Market** - Introduction, Free Pricing Regime and Book Building - **New Issue Mechanism in India**, **Primary Issues**, and Resource Mobilization form the Primary Market, Mutual Funds.

### **Module-III: Secondary Market**

**12 Hours**

Introduction, **Stock Exchanges National and Regional** - Measures to boost Liquidity in the Secondary Market - Market Making System - Impact of Reforms and Measures on **Secondary Market Activities**.

### **Module-IV: Derivatives Market and Debt Market**

**16 Hours**

Derivatives Market: Introduction - Forwards and Futures - Futures Trading Strategies - Options - Trading Strategies - Derivatives Market in India - **Derivatives Trading in India**.

Debt Market: Introduction - Private Corporate Debt Market - Public Sector Undertaking Bond Market - **Government Securities Market**.

### **Module -V: New Financial Instruments**

**10 Hours**

New Financial Instruments - Meaning - **Floating Rate Bonds** - Zero Interest Bonds - Deep Discount Bonds - Revolving Underwriting Finance Facility (RUFF) - Auction Rated Debentures (ARD) - Secured Premium Notes (SPNs) with Detachable Warrants - Non-Convertible Debentures (NCDs) with Detachable Equity Warrants - Tradable Warrants - Fully Convertible Debentures - Domestic Convertible Bonds - Differential Shares - Securitized Paper - Collateralized Debt Obligations (CDO) - Inverse Float and Perpetual Bonds - Municipal Bonds.



## Reading List:

1. Bhole, L. M. (2000): *Indian Financial System*, Chugh Publications. Allahabad.
2. Edminster, R. O. (1986): *Financial Institutions: Markets and Development*, Yale, London.
3. Goldsmith, R. W. (1969): *Financial Structure and Development*, Yale, London.
4. Hanson, J.A. and S. Kathuria (Eds.) (1999): *India: A Financial Sector for the Twenty First Century*, Oxford University Press, New Delhi.
5. Harker, P.T. and S. A. Zenios (2000) (Ed.): *Performance of Financial Institutions*, Cambridge University Press, Cambridge.
6. Johnson, J.J. (1993): *Financial Institutions and Markets*, McGraw Hill, New York.
7. Khan, M. Y. (2009): *Indian Financial System*, Tata McGraw-Hill Education, New Delhi.
8. Machiraju, H. R. (2010): *Indian Financial System*, Fourth Edition, Vikas Publishing House Pvt. Ltd., New Delhi.
9. Ohlson, J.A. (1987): *The Theory of Financial Markets and Institution*, North Holland, Amsterdam.
10. Parameswaran R and Natarajan S. (2013): *Indian Banking: For the Students of B.com/B.A. and Management Courses*, S. Chand and Co Ltd, New Delhi.
11. Pathak, Bharati V. (2014): *The Indian Financial System*, Pearson Education, New Delhi India.
12. Prasad, K.N.: *Development of India's Financial System*, Sarup & Sons, New Delhi.
13. Robinson, R. I. and D. Wrightman (1981): *Financial Markets*, McGraw Hill, London.
14. Smith, P.F. (1978): *Money and Financial Intermediation: The Theory and Structure of Financial System*, Prentice Hall, Englewood-Cliffs, New Jersey.
15. Vasant Desai. (2017): *The Indian Financial System and Development*, Himalaya Publishing House, Mumbai.

## **COURSE CODE: PG34T 305C: DEMOGRAPHY (Specialization /Optional)**

### **Course Outcome:**

- ❖ To understand meaning, nature, scope and importance of demography. Relationship between development and population growth.
- ❖ Understand various theories of population and their implications for India.
- ❖ To understand structure and characteristics of Indian population,
- ❖ To understand an analysis of Indian Population Policy

### **Module-I: Introduction**

**12-Hours**

Meaning, Nature and Scope of Demography; Population Theories- Pre- Malthusian, Malthusian and Post- Malthusian Theories; Theory of optimum Population; Theory of Demographic Transition.

### **Module-II: Fertility and Mortality**

**12-Hours**

Meaning and Measurement of Fertility, Factors Affecting Fertility in the Developed and Less Developed Countries; Mortality-Meaning and Measurement of Mortality- Factors Affecting Fertility in the Developed and Less Developed Countries; Infant Mortality- Meaning and Measurement of Infant Mortality and Factors Affecting Fertility in the Developed and Less Developed Countries.

### **Module-III: Migration and Urbanization**

**12-Hours**

Meaning and Importance of Migration in the Study of Population; Types and Causes of Migration – Levels, Trends and Differentials in the DCs and LDCs; Urbanization-Meaning, Process of urbanization, Reasons for Growing Urbanization and Impact of Urbanization.

### **Module-IV: Effects of In-migration and Out-migration**

**12-Hours**

Effect of In-migration and Out-migration on the Growth of Population- Factors Affecting Migration-Theories Concerning Internal Migration-Urbanization , **Todaro Model:** Distribution and Growth of Urban and Rural Population in DCs and LDs; Levels and Trends of Urbanization in DCs and LDCs and Particularly in India.

### **Module-V: Population Policies in India**

**12-Hours**

Population Policies and their Impact on Fertility in DCs and LDCs; Nature, Scope and Need for Population Education; Demographic Trends in India; Population of India from 1971 to 2011 Censuses; and Family Welfare Programmes in India; The New Population Policy of India.

### **Reading List:**

1. Agarwal, S. N.(2016): *India's Population Problems*, Tata McGraw Hill , Bombay.
2. Bhende, A. and Kanitkar T.: *Principles of Population Studies*, Himalaya Publication House , Mumbai.
3. Bogue , D.J. (1971): *Principles of Demography*, John Wiley , New York.
4. Bose, Ashish (1974): *Pattern of Population Change in India*, Vikas Publishing House, New Delhi.
5. Choubey, P. K. (2000): *Population Policy in India*, Kanishka Publication New Delhi.
6. Choubey, P.K. (2000): *Population Policy in India*, Kanishka Publication, New Delhi.
7. Ghosh, B.N.: *Population Economics*, Deep and Deep Publications, New Delhi.
8. Government of India: *Population Census Reports: 1951 to 2011*, Government of India.
9. Hans Raj: *Fundamentals of Demography*, Surjeet Publications , Delhi.
10. Kammeyar Kenneth (Ed.) (1975): *Population Studies*, Rand McNally, Chicago

11. Mishra, B. D.: *An Introduction to Study of Population*, South Asian Publishers, New Delhi.

## **COURSE CODE: PG34T305D:ENVIRONMENTAL ECONOMICS**

### **Course Outcomes:**

- ❖ Understand the linkages between economic activities and environment;
- ❖ Analyse the nature of resource scarcity and develop mechanisms for optimum resource use;
- ❖ Measuring the impact of environmental degradation on India's economy, polity and people's health;
  - ❖ Developing and applying tools for valuation of environmental damages; and
  - ❖ Identifying the global environmental issues to understand India's role in contributing to achieving sustainable development.

### **Module-I: Elements of Economics of Environment**

Meaning, Nature and Scope of Environmental Economics; Elements of Ecology; Interaction between Ecological and Economic Systems; Environment-Development-Poverty Nexus; Sustainable Development-Concept and Operationalisation

### **Module-II: Economics of Natural Resource Use**

Resource Taxonomy; Economics of Exhaustible Resources- Scarcity Rents, Hotelling's Theory of Optimum Depletion and Recent Developments; Economics of Renewable Resources; Resource Scarcity as Limits to Growth; Pricing of Resources; Energy and Economic Development; Loss of Bio-diversity

### **Module-III: Environmental Regulation**

Market Failures - Externalities – Meaning and Types - Divergence between Social Cost and Private Cost - Market Failure – Internalization of Externalities - Pigouvian Solution - Coase's Theorem and Its Critique - Property Rights Collective Action —Public Goods and Externalities - Free Rider Problem – Tragedy of the Commons; Theory of Environmental Regulation- Command and Control Versus Market Based Instruments, Standards, Quotas, Tradable Permits;

### **Module-IV: Environmental Pollution and Management**

Extent, Causes and Consequences of Degradation of Land, Water, Forests and Air; Common Property Resources – Contributions and Management; Pollution Abatement; Climate Change-Extent, Impact, Adjustment and Mitigation; Issues in International Trade and Environment; People's participation in management of natural resources (water and trees); Environmental Regulation System in India- Design, Monitoring and Enforcement; Environmental Ethics

### **Module-V: Valuation of Environment**

Use values; Option values and non-use values; Valuation methods-Methods based on observed market behaviour; Hedonic property values and household production models (travel cost method and household health production function), Methods based on response to hypothetical markets, contingent valuation methods; Environmental Impact Assessment; Integrated Economic and Environmental Accounting.

### **Reading List:**

1. Barry C. Field, Martha K. Field. (2013): *Environmental Economics - An Introduction*, The McGraw-Hill Co., New York.
2. Baumol, W.J. and W.E. Oates (1998): *The Theory of Environmental Policy*, Cambridge University Press, Cambridge.
3. Bhattacharya, R. N. (Ed.) (2001): *Environmental Economics: An Indian Perspective*, Oxford University Press, New Delhi.
4. Chopra, Kanachan and C. H. Hanamantha Rao (2007): *Growth, Equity, Environment and Population*, Sage Publications, New Delhi.
5. Daly, H.E. (1999): *Ecological Economics and Ecology of Economics: Essay and Criticism*, Edward Elgar, Cheltenham, UK, Northampton, MA, USA.
6. Hanley, N., J. F. Shogren, White, B. (2001): *Introduction to Environmental Economics*, Oxford University Press, New Delhi.
7. Hanley, N., J. F. Shogren and B. White: *Environmental Economics*, Macmillan, New Delhi.
8. Hartwick, J. M and N. Olewiler (1986): *The Economics of Natural Resource Use*, Harper and Row Publishers, New York.
9. Karpagam, M. (2012): *Environmental Economics: An Introduction*, Sterling Publishers, New Delhi.
10. Kerr and Others (Eds.) (1997): *Natural Resource Economics: Theory and Applications for India*, Oxford University Press, New Delhi.
11. Rangarajan C. (1998): *Indian Economy: Essays on Money and Finance*, UBS, New Delhi.
12. Sen, R. K. and B. Chatterjee (2001): *Indian Economy: Agenda for 21<sup>st</sup> Century* (Essay in Honour of Prof.P.R.Brahmananda), Deep & Deep, New Delhi.
13. Sengupta, R. (2003): *Ecology and Economics*, Oxford University Press, New Delhi.
14. Shankar, U. (Ed.) (2001): *Environmental Economics*, (Readers in Economics) Oxford University Press.
15. Singh, Katar and Anil Shishodia (2007): *Environmental Economics; heory and Applications*, Sage Publications, New Delhi.
16. Sinha, Udai Prakash (2007): *Economics of Social Sector and Environment*, Concept Publishing Company, New Delhi.
17. Tietenberg, T, Lynne Lewis. (2016): *Environmental and Natural Resource Economics*, 10<sup>th</sup> Edition, Pearson Education House, London.
18. World Bank (1992): *World Development Report, 1992: Environment and Development*, Oxford University Press, New Delhi.

**COURSE CODE: PG34T 305E: THEORY OF CO-OPERATION (Specialisation/  
Optional paper) New Course**

**Course Outcomes:**

- ❖ Knowledge on cooperation helps to understand the theories, concepts, principles, social, economic and moral benefits and its value
- ❖ Understanding of theoretical and structural aspect of co-operative organisation. And create awareness how it differs from the capitalism, socialism and its place in planned economy is possible.
- ❖ It helps to understand the evolution of cooperative models and principles including Raiffeisen Model, Schulze-Delitzsch Model and Rochdale Model; Co-operation and other economic systems:
- ❖ The study of cooperation also helps to understand the cooperative doctrines of ancient, modern cooperation viz Utopian Co-operative doctrines -Robert Owen, Dr. William King and Charles Fourier -Socialistic Ideas and Co-operation G.D.H. Cole and Charles Guide-Fair Price Theory.
- ❖ It also helps understand the state level cooperation, state aid, advantages, its limitations, officials and non-officials in co-operative movement

**Module-I: Introduction**

**10 Hours**

Concept of Co-operation - Definition - Scope - Importance of Co-operation - Economic Benefits, Social Benefits, and Moral Benefits of Co-operation - Evolution of Co-operation - Principles of Co-operation - A Critical Evaluation of Co-operative Principles – Co-operative Values.

**Module-II: Structure of Co-operatives**

**14 Hours**

Theoretical and Structural Aspect of Co-operative Organisations - Small Size Vs Large Size, Limited vs Unlimited Liability, Federal vs Unitary Structure - Formal and Informal Co-operation; Co-operatives as an Organization- Co-operative Society as a Business Organization - Differentiation with other Forms of Organizations such as: Capitalism, and Socialism - Place of Co-operatives in a Planned Economy.

**Module-III: Evolution and Models of Co-operation**

**14 Hours**

Models of Co-operation - Evolution of Co-operative Principle - Rochdale Principles - ICA Principles-1937, 1966, 1995 - Raiffeisen Mode I- Schulze-Delitzsch Model and Rochdale Model; Co-operation and Other Economic Systems: Capitalism, Socialism and Mixed Economy, Co-operation versus Capitalism and Socialism.

**Module-IV: Contributions to Co-operatives**

**14 Hours**

Co-operative Doctrines - Ancient and Modern Form of Co-operation - Uthopian Co-operative doctrines - Robert Owen, Dr. William King and Charles Fourier - Socialistic Ideas and Co-operation - Theory of Consumer Socialism, A Theory of Workers Control of Co-operatives - Contribution of G.D.H. Cole and Charles Guide-Fair Price Theory.

## **Module-V: State and Co-operation**

**8 Hours**

**Different forms of State aid - Advantages and Limitations of state aid - Officials and Non-officials in Co-operative Movement.**

### **Reading List:**

1. Ajit Kumar N.: *Co-operation*, Himalaya Publishing House, Mumbai,
2. Bedi, R. D. (1980): *Theory, History and Practice of Cooperation*, Loyal Book Depot, Meerut.
3. Hajela, T. N.(1994): *Co-operation: Principles, Problems and Practice*, Konark Publishers, New Delhi.
4. Krishnaswamy, O. R. and Kulandhiswamy V. (2000): *Co-operation: Concept and Theory*, Arudra Academy, Coimbatore, Tamil Nadu.
5. Mathur, B.S.(1994): *Co-operation in India*, Sahitya Bhawan, Agra.
6. Sharada, V. (1986): *Theory of Co-operation*, Himalaya Publishing House, Bombay.

**COURSE CODE: PG34T 305F: ECONOMICS OF INFRASTRUCTURE  
(Specialisation/Optional)**

**Course Outcomes**

- ❖ Students will understand basic **Economics** theories and models required for **infrastructure** sector understanding.
- ❖ Students will exhibit the ability to integrate technical, **economic**, social and regulatory frameworks for **Infrastructure** sector planning and resource management.
- ❖ Students will be able to demonstrate clear understanding of concepts Infrastructure economics and policy
- ❖ Able to apply this knowledge to the analysis of specific infrastructure economics issues in India

**Module-I: Introduction**

**12 Hours**

Meaning; Infrastructure and Economic Development; Infrastructure as a Public Good; Special Characteristics of Public Utilities – The **Peak Load, Off-load Problem**, Dual Principle Controversy, **Economies of Scale**, Pricing of Infrastructure Services; State's Role in Infrastructure Development – Rationale and Strategy.

**Module-II: Economic Infrastructure**

**14 Hours**

Concept and Significance; Role of Transport (**Road, Air, and Marine**), Communications, Irrigation, and Information in Development; Development of Economic Infrastructure in India; Sector Specific Problems – Problems of Individual Modes of Transport – Inter-modal Co-ordination; Financing and Pricing Problems

**Module-III: Energy Economics**

**10 Hours**

Primacy of Energy in the Process of Economic Development; Factors Determining Demand for Energy; Effects of Energy Shortages; Energy Conservation; **Renewable and Non-conventional Sources of Energy**; The Search for an Optimal Energy Policy in India.

**Module-IV: Social Infrastructure**

**10 Hours**

Concept and Significance; Social Infrastructure and Human Development; Development of Social Infrastructure in India; Financing and Pricing Problems; Sector-specific Problems – **Housing, Education, Health, Drinking Water Supply and Sanitation.**

**Module-V: Commercialization of Infrastructure**

**14 Hours**

Need for Commercialization; Strategies for Commercialization – Corporatization, Privatization; **Public-Private Provision of Social services**; Problems in Commercialization – Financing, Pricing, Risk Management, Users' Involvement; State's Role in Infrastructure Reforms.

**Reading List:**

1. Gowda, Sreenivasa, M.V. and S. Subramaniam (Eds.) (1997): *Infrastructure Development for Economic Growth*, Deep and Deep Publications, New Delhi.
2. Indian Council of Social Science Research (ICSSR) (1976): *Economics of Infrastructure*, Vol. VI, New Delhi
3. Joshi, B.N. (1990): *Infrastructure for Economic Development in India*, Ashish Publishing House, New Delhi.



4. Kessides Christine (1993): *The Contributions of Infrastructure to Economic Development: A Review of Experience and Policy Implications*, World Bank Discussion Paper No. 213.
5. National Council of Applied Economic Research (NCAER) (1996): *India Infrastructure Report: Policy Implications for Growth and Welfare*, New Delhi
6. World Bank (1994): *World Development Report, 1994: Infrastructure for Development*, Oxford Uni. Press, New York.
7. Parikh, K.S. (Ed) (1997): *India Development Report, 1997*, Oxford University Press, New Delhi.
8. Parikh, K.S. (Ed.) (1999): *India Development Report, 1999-2000*, Oxford University Press, New Delhi.
9. Pachauri, R.K. (Ed.) (1980): *Energy Policy for India*, Macmillan, New Delhi.
10. Guru, D.D. and A. Qamar (1988): *Energy and Economic Development*, Sage Publications, New Delhi
11. Tilak, J.B.G. (1994): *Education for Development of Asia*, Sage Publications, New Delhi.
12. World Bank (1983): *World Development Report, 1983: Investing in Health*, Oxford University Press, New York.

## **COURSE CODE: PG34T 306: KARNATAKA ECONOMY (Open Elective Course)**

### **Course Outcomes**

- ❖ The objective of this course is to teach the students about sectoral aspects of Karnataka economy.
- ❖ To make the students to understand historical and geographical features of Karnataka economy.
- ❖ To study in detail regional disparities and state finance.

### **Module-I: Introduction**

**10 Hours**

Karnataka in the Indian Economy; Natural Resources; trends in state per-capita income; Net District; Indicators of Economic Development; ; Indicators of Human Development.

### **Module-II: Agricultural Development**

**12 Hours**

Land Use Pattern in Karnataka-Trend in Area, Production, Major Crops- Regional Pattern of agriculture Production-Horticultural/Plantation Crop, Vegetables-Fruits-Floriculture-Sericulture-Live Stock Economy- Agricultural Marketing-Agricultural Finance- Agriculture Prices-Agrarian Crisis.

### **Module-III: Industrial Development**

**12 Hours**

Industrial Structure (Major, Medium and MSMEMS) - policies and programmes- Industrial Finance- Co-operatives commercial Banks-RRB's-KSFC, SIDRP and KSIIDC.

### **Module-IV: Infrastructure Development**

**12 Hours**

Present State of Development; Economic Infrastructure-Irrigation, Power, Transport and Communication; Social Infrastructure-Education and Health; Planning for Infrastructural Development.

### **Module-V: Regional Disparities and State Finance**

**14 Hours**

Position and Extent, Causes and Consequences; the causes for backward area; criteria for Identification of Backward areas; Measures to reduce imbalance; Trends in sources of Finance; Revenue and non Revenue sources; Sharing of Central Taxes and Grants-in-Aid; Trends in Expenditure Pattern Development or non-development; Trends in indebtedness of the state.

### **Reading List:**

1. Government of Karnataka (2005): *High Power*. Committee for Redressal of Regional Imbalances (HPCRRI), Government of Karnataka, Bangalore
2. Government of Karnataka (2015): *Human Development: Performance of District, Taluks and Urban Local Bodies in Karnataka, 2014: A Snapshot*, Planning, Programme Monitoring and Statistics Department of Government of Karnataka, Bengaluru (<http://planning.kar.nic.in> – Human Development Division).
3. Government of Karnataka: *Economic Survey of Karnataka*, Government of Karnataka (Various Annual Reports) (<http://planning.kar.nic.in>)
4. Gowda, Sreenivasa and T. Nanjogowda: *Economic Development of Karnataka: Leading Aspects*.
5. Heggade, Odeyar D: *Karnataka Economy*:
6. Madaiah M. (1989): *Karnataka Economy: Growth, Issues and Lines of Development*, Himalaya Publishing House, Mumbai.

7. Madaiah, M. and R. Ramapriya (1989): *Karnataka Economy: Growth, Issues and Lines of Development*, Himalaya Publishing House, Delhi.
8. Puttaswamaiah, K, (1980): *Economic development of Karnataka: A Treatise in Continuity and Change*, Oxford and IBH Publication.
9. Rao, Hemalatha (1984): *Regional Disparities and Development in India*, Ashish Publishing House, New Delhi.

**M.A. ECONOMICS**  
**IV SEMESTER**

**COURSE CODE: PG34T 401: INDIAN PUBLIC FINANCE**

**Course Outcomes**

- ❖ This course aims to enable the students to understand various aspects of Indian public finance and policy which include the trends and patterns of public revenue in India, public expenditure, budget and fiscal policy, public debt and its management.
- ❖ It also aims at understanding the federal finance, center-state financial relations and transfers, state and local finances.
- ❖ At the end of the course, the students will be able to understand various forms of budget and preparation of budget and public policies for effective provision and management of Indian public assets, goods and services.

**Module-I: Public Revenue**

**14 Hours**

Sources of Revenue-Tax and Non-Tax Revenue; Trends and Patterns of Tax Revenue– Direct and Indirect Taxes; Direct Tax Code; Indirect Taxes – Goods and Services Tax (GST)- Objectives, Classification of GST, Tax Rates, Trends and Patterns of GST and Impact of GST on Indian Economy; Tax Reforms in India-Review of Earlier Committees and Evaluation of Kelkar and Chellaiah Committees; Agricultural Taxation- Importance of Agricultural Taxation - Present Position of Agricultural Taxation - Burden of Agricultural Taxation in India and Proposals – K. N. Raj Committee Report 1972.

**Module-II: Public Expenditure and Debt**

**14 Hours**

Structure and Trends in Public Expenditure of Central and State Governments, Causes for Increase in Public Expenditure; Expenditure Control and Accountability – Fiscal Responsibility and Budget Management (FRBM) Act; Issues in Public Expenditure- Equity, Efficiency, Welfare and Social Security; Impact of Public Expenditure on Indian Economy; Recommendations of Expenditure Reforms Commission (ERC) in India.

Sources of Public Debt - Internal and External - Burden of Public Debt- Public Borrowings and Crowding out of Private Investment; Trends, Structure and Redemption of Public Debt in India.

**Module III: Budget and Fiscal Policy**

**14 Hours**

Classification of Budgets and Budget Preparation - Budgetary Deficits: Concepts, Significance and Estimation; Deficit Financing – Methods and Implications; Government Accounting – Techniques of Budgetary Control; Analysis of Current Budget; Fiscal Policy – Objectives, Techniques and Targets of Fiscal Policy, Interdependence between Fiscal and Monetary Policies, Fiscal Policy and Stabilisation; Automatic and Discretionary Stabilisation- Long term Fiscal Policy.

**Module-IV: Fiscal Federalism****10 Hours**

Principles of Federal Finance- Fiscal Federalism in India- Assignment of Functions and Sources of Revenue – Constitutional Provisions; Finance Commissions and Devolution of Resources- Grants –in-aid- Resource Transfer from Union to States and Local Bodies- Criteria for Transfer of Resources; Centre – State Financial Relations in India – Problems of States Resources and Indebtedness.

**Module-V: State and Local Finances****8 Hours**

State Finance-Introduction, Source of State Finance- Revenue and Capital Account; Financial Trends and Fiscal Consolidation; Local Finance- Introduction, Multi-level Governance-Local Bodies and their Functions - Finances of Local Bodies - Local Taxation, Criteria for Resource allocation to the local bodies-14<sup>th</sup> Finance Commission Recommendations.

**Reading List:**

1. Annigeri, V. B., R. S. Deshpande and Ravindra Dholakia (Eds.) (2018): Issues in Indian Public Policy, Springer, Singapore.
2. Bagchi A. (2005) : *Readings in Public Finance*, Cambridge University Press, New Delhi
3. Bhatia, H. L. (2015): *Public Finance*, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Chand, S. N. (2013): *Public Finance*, Atlantic Publishers and Distributors (P) Ltd., New Delhi.
5. Government of India: *Annual Budget Reports*, Ministry of Finance, New Delhi.
6. Jha, Rajesh K. (2012): *Public Finance*, Pearson Education House Ltd., Delhi.
7. Lekhi, R.K. and Joginder Singh (2015): *Public Finance*, Kalyani Publishers, NewDelhi.
8. Malhotra, Rajeev (2014): *India Public Policy Report 2014*, Oxford University Press, New Delhi.
9. Om Prakash (2016): *Public Economics: Theory and Practice*, Vishal Publishing Co. Jalandhar-Delhi.
10. Rao, Govind (2010): *Public Finance: Theory and Practice Essay in Honour of A.Bagchi*, Sage Publications, New Delhi.
11. Ray, Partha (2013): *Monetary Policy*, Oxford University Press, New Delhi.
12. Singh, S.K. (2015): *Public Economics: Theory and Practice* S. Chand and Co., New Delhi.
13. Tyagi B.P. and H. P. Singh (2016): *Public Finance*, Jayaprakashnath and Company, Meerut, India.

## COURSE CODE: PG34T 402: INTERNATIONAL TRADE AND FINANCE – II

### Course Outcomes

- ❖ Deep understanding about multilateral trading systems, international financial transactions and financial institutions
- ❖ Familiarize the students about theories on International capital flow and their empirical testing
- ❖ Deep understanding about multilateral trade body's (GATT and WTO), principles, objectives, agreements, trade negotiations, trade dispute settlements, present status and prospects
- ❖ Familiarize the students about international financial transactions: Balance of payment, exchange rate theories and determination
- ❖ Working of International financial institutions such as IMF, World Bank, and Regional financial institutions

### Module-I: Globalization, WTO and the Developing Countries

12-Hours

*World Trade Organization*- General Agreements on Tariffs and Trade (GATT) to World Trade Organization (WTO); Objectives and Functions; Trade Related Intellectual Properties (TRIPs); - Trade Related Investment Measures (TRIMs); General Agreements on Trade in Services (GATS); Trade and Environment; Doha Development Rounds- Recent Developments in WTO, Future of WTO; Regionalism vs Multilateralism; Developing Countries in the Globalization era; TRIPs and GATS; India's foreign trade before and during the WTO regime; Trade Reforms in India; competitiveness of Indian industries.

### Module-II: Balance of Payments

16-Hours

Balance of Payments Accounting- Equilibrium and Disequilibrium in the Balance of Payments (BOP); Adjustment Mechanism of BOP- Traditional, The Elasticity Approach, Marshall-Lerner Condition, Absorption and Monetary approaches for adjustment in Balance of Payments; Mundell-Fleming Model; Causes for Disequilibrium; Removal of Disequilibrium; Foreign trade multiplier; Monetary and Fiscal Intervention; Devaluation and BOP Crisis- Capital Flight.

### India's BOP and exchange Rate policies in the 1990s

BOP crisis and reserves position in the early 1990s; Devaluation; LERMS/partial convertibility; managed float of Rupee-Dollar rate.

### Module-III: Foreign Exchange Markets and Exchange Rates

12-Hours

Introduction-Functions of the Foreign Exchange Markets; Foreign Exchange Rates; Equilibrium Foreign Exchange Rates; Arbitrage; The Exchange Rate and the Balance of Payments.

Spot and Forward Rates, Currency Swaps, Futures, and Options- Foreign Exchange Risks, Hedging, and Speculation; Interest Arbitrage and the Efficiency of Foreign Exchange Markets; Eurocurrency or Offshore Financial Markets. Exchange Rate Determination; Mint Parity Theory and Purchasing Power Parity; Other Forms of Exchange Rate Arrangements Today - Fixed or Floating Exchange Rates; Objectives and Methods of Exchange control

### Module IV: The International Monetary System: Past, Present, and Future

10-Hours

The Gold Standard and the Interwar Experience-The Bretton Woods System; The Gold-Exchange Standard; Borrowing from the International Monetary Fund; Operation of the Bretton Woods System;

Evolution of the Bretton Woods System; U.S. Balance-of-Payments Deficits and Collapse of the Bretton Woods System-

***The International Monetary System: Present and Future***

Operation of the Present System; Current IMF Operation; Problems with Present Exchange Rate Arrangements; Proposals for Reforming Present Exchange Rate Arrangements; Financial Crises in Emerging Market Economies; Other Current International Economic Problems.

**Module-V: International Resource Movements and Multinational Corporations 10-Hours**

Introduction; International Capital Flows; Conceptual framework—Types, The theory of transnational corporations and foreign direct investment; The investment development path and the emergence of TNCs from developing and transition economies; Application of the theory to TNCs from developing and transition economies; Competitive advantages, drivers and motives; Sources of competitive advantages; Drivers to internationalization; Home country drivers (push factors); Host country drivers (pull factors); Empirical evidence on drivers (push and pull).

Motives and Welfare Effects of International Capital Flows; Multinational Corporations – Effects on the Investing and Host Countries; Labour Migration - Motives and Effects of International Labour Migration.

**Reading List:**

1. Carbough, R.J. (2017): *International Economics*, (16<sup>th</sup> Edition) International Thompson Publishing, New York.
2. Dana, M.S. (2017): *International Economics: Study, Guide and Workbook*, (5<sup>th</sup> edition), Rutledge Publishers, London.
3. Gita Gopinatha, Elhanan, Helpman Kenneth and Regoff (2014): *Handbook of International Economics*, Elsevier Publications
4. Jackson, J. (1998): *The World Trading System*, Cambridge University Press, Mass.
5. Jagadish, N. Bhagwati (1983): *Dependence and Interdependence* (Ed.) by Gane Grossman, Vol.2, Basil Blackwell, Oxford.
6. Kenen, P.B. (2000): *The International Economy*, (4<sup>th</sup> Edition) Cambridge University Press, London.
7. Kindleberger, C.P. (1978): *International Economics*, (6<sup>th</sup> Edition) R.D.Irwin Homewood.
8. Krugman, P.R. and M. Obstfield (2012): *International Economics: Theory and Policy*, (9<sup>th</sup> Edition) Addison-Wesley Publications.
9. Metzler: *Readings in International Economic*, American Economic Series.
10. Salvatore, D. (2014): *International Economics*, (11<sup>th</sup> Edition), MacMillan Publication.
11. Soderstein, B. (1993): *International Economics*, MacMillan, London.
12. Soderstein, B. and Reed, Geoffrey (1994): *International Economics*, (3<sup>rd</sup> Edition) MacMillan, London.
13. Vaish, M. C. and Sudama Singh (2010): *International Economics*, (8<sup>th</sup> Edition), Oxford and IBH Publication, New Delhi.
14. World Investment Report (2006): *FDI from Developing and Transition Economies: Implications for Development*, UNCATD Publication ([www.unctad.org/en/docs/wir2006\\_en.pdf](http://www.unctad.org/en/docs/wir2006_en.pdf).)

## **COURSE CODE: PG34T 404: APPLIED ECONOMETRICS**

### **Course Outcomes**

- ❖ This course aims at understanding the procedures useful in modeling and forecasting time series data.
- ❖ It also aims at familiarizing the students with recent advances in time series analysis that have affected the developments of the theory of dynamic econometrics.
- ❖ This is a course for applied econometrics deal with advanced models forecasting in different complex situations.
- ❖ Demonstrate the knowledge of applications of vector auto-regressions and models for volatility, panel data models in Economics

### **Module-I: Regression with Qualitative Dependent Variable**

**10 Hours**

Nature of Qualitative Variables - Linear Probability Model- advantages and disadvantages of LPM; its Types – Logit, Probit, and Tobit Model for Grouped and Ungrouped Data - Their Application in Economics.

### **Module-II: Forecasting and Univariate Time Series Models**

**16 Hours**

Introduction - Types of Forecasting Methods- Qualitative and Quantitative Methods; Measuring the Accuracy of Forecasting Models- Statistical methods- the Naïve Forecast- Simple Moving Average Forecast- Trend Forecast; Graphical Methods of Forecasting Accuracy.

*Univariate Time Series Models:* MA Model- Definition, Properties, Identification, Estimation and Forecasting; AR Model- Definition, Properties, Estimation and Forecasting; Mixed Auto Regressive Moving Average Models (ARMA) – Definition, Properties, Parameters, Estimation and Forecasting; ARIMA models.

### **Module-III: Vector Auto-Regressions and Models for Volatility**

**12 Hours**

Introduction - Stationary and Non-Stationary Stochastic Process; Testing of Unit Root; Co-integration - Tests for Co-integration - Engel-Granger Test - Johansen Test; ECM; VAR and Causality, Some Problems with VAR Modeling; Measuring Volatility – The ARCH (p) Model and GARCH (p, q) Model - Their Application in Economics.

### **Module-IV: Panel Data Models**

**12 Hours**

Why Panel Data? - Estimation - Fixed Effects Method - All Coefficient Constant across Time and Individuals - Slope Coefficients Constant but Intercept Varies across Individuals - Slope Coefficients Constant but Intercept Varies Over Individuals as Well as Time - All Coefficients Vary across Individuals - Random Effects Method - Fixed Effects v/s Random Effects Model - Hausman Test - Their Application in Economics.

### **Module-V: Econometric Applications in Economics**

**10 Hours**

Engle Curves - Demand curves, and Complete demand systems: With linear expenditure system as an example - Production functions - Cobb-Douglas, Leontief, CES, VES and their proprieties - Technical change - Cost functions and duality - Income distributions (lognormal and pareto) - Measures of inequality, and Poverty studies - Macro consumption and savings function - Permanent and relative income hypotheses - Investment function - Accelerator and distributed-lag models - Neoclassical models - Endogeneity and dynamic models.



**Reading List:**

1. Badi H. Baltagi (2005): *Econometric Analysis of Panel Data*, 4<sup>th</sup> Edition, John Wiley & Sons, Ltd.
2. Desai, Meghnad (1976): *Applied Econometrics*, McGraw Hill Publishing Company Ltd., New York
3. Dominick Salvatore and Derrick Reagle (2002): *Statistics and Econometrics: Theory and Problems*, Second Edition, Schaum's Outline Series, McGraw-Hill, New Delhi.
4. Gujarati, Damodar N., Dawn C. Porter and Sangeetha Gunasekar (2017): *Basic Econometrics*, (5<sup>th</sup> Edition) Tata McGraw Hill Bombay.
5. Gujarati, D.N. (2011): *Econometrics by Example*, Palgrave Macmillan Pvt. Ltd.
6. Harvey, A. C. (2000): *Econometric Analysis of Time Series*, Phillip Allen, London.
7. Intriligator, M. D. (1978): *Econometric Models, Techniques and Applications*, Englewood Cliffs, N.J., Prentice-Hall, North-Holland.
8. Kerry Patterson (2000): *An Introduction to Applied Econometrics a Time series Approach*, Palgrave Macmillam Pvt. Ltd.
9. Koutsoyiannis, A. (2000): *Theory of Econometrics*, MaC Millan Publication, London.
10. Maddala, G.S. (2000): *Econometrics Methods and Applications*, Aldershot, U.K.
11. Patricia, E Gaynor and R.C. Kirkpatric (1994): *Introduction to Time Series Modelling and Forecasting in Business and Economics*, McGraw Hill, New Delhi.
12. Robert S. Pindyck and Daniel L. Rubinfeld, (2000): *Econometric Models and Economic Forecasts*, McGraw Hill- Kogach Usha Tokyo.
13. Sufi M. Nazem (1988): *Applied Time Series Analysis for Business and Economic Forecasting*, Marcell Dekker, Inc New York
14. Enders, Walter (2010): *Applied Econometric Times Series*, John Wiley & Sons, Ltd.
15. Wooldridge, J.M. (2000): *Introductory Econometrics: A Modern Approach*, South western College Publications.

## **COURSE CODE: PG34T 405: MANAGERIAL ECONOMICS (New Course)**

### **Course Outcomes:**

- ❖ To estimate and forecast demand for a firm
- ❖ To design strategies for achieving production maximization and cost minimization
- ❖ Analyse production and pricing decision of a firm under different markets conditions

### **Module-I: Introduction to Managerial Economics**

**8 Hours**

Meaning, Nature and Scope; Relationship of Managerial Economics to Economic Theory as well as Decision Science; **Organization of Business Firms** - Concepts and Types of Business Organization, Proprietorship, Partnership, Joint Stock Company, Corporation, Co-operatives. Objectives of Firms; **Case Study Method: Analyze a Case and Usefulness of Case Study.**

### **Module-II: Demand Estimation and Forecasting**

**12 Hours**

Identification Problem - **Marketing Research Approaches - Regression Analysis - Problems in Regression Analysis - Demand Estimation; Demand Forecasting: Time Series Analysis - Smoothing Techniques - Barometric Methods - Econometric Models.**

### **Module-III: Optimization Technique: Linear Programming**

**12 Hours**

**Problems of Optimization - Linear programming for Optimization -Meaning, Assumptions and Applications of Linear Programming - Basic Linear Programming Concepts - Procedure used in Formulating and Solving Linear Programming Problem - Linear Programming and Profit Maximization - Linear Programming and Cost Minimization - Graphical Solution and Simplex Method - Dual Problem and Shadow Prices - Linear Programming and Logistics in the Global Economy - Game Theory and Optimization Technique in Decision Making Process.**

### **Module -IV: Pricing Practices and Strategies and Profit Analysis**

**16 Hours**

*Pricing Practices:* Specific Pricing Problems - Popular Pricing Practices: **Cost-Oriented Pricing, Cost-Plus Pricing and Other Price Determinants, Peak - Load Pricing, Price over the Life Cycle of the Product, Penetration Price - Pricing of Multiple Products - Price Discrimination - International Price Discrimination and Dumping - Transfer Pricing.**

*Profit Analysis:* Nature and Function of Profits: Business versus Economic Profit - Theories of Profit: Residual Claimant Theory, Wage Fund Theory, Dynamic Surplus Theory, Innovation Theory - **Profit Policy - Break- Even Analysis and Profit Measurement, Profit Forecasting.**

### **Module -V: Capital Budgeting**

**12 Hours**

Meaning and Importance - **Capital Budgeting Process. Capital Budgeting Decisions** - Factors Influencing in Investment Decision - Methods used for Investment Decisions: **Cost-Benefit Analysis, Steps for Capital Project Evaluation, Techniques for Investment Appraisal** - Sources of Fund for Long-Term Financing - **Measurement of Cost.**

### **References:**

1. Keat Paul G. and Philip K.Y. Young, *Managerial Economics- Economic Tools for Today's Decision Makers*, Prentice Hall, New Jersey.

2. Mc Guigon R. James, R. Charles Moyer, Frederick H Deb, Harris (2002), *Managerial Economics: Applications, Strategy and Tactics*, South Western, USA
3. Mehta P.L., *Managerial Economics: Analysis, Problems and Cases*, Sultan Chand and Sons, New Delhi.
4. Petersen H. Craig and W. Cris Lewis, *Managerial Economics*, Maxwell Macmillan International Editions, New York.
5. Salvatore Dominick, *Managerial Economics in a Global Economy*, McGraw Hill Inc., New York.
6. Samuelson William F, and Stephen G. Marks, *Managerial Economics*, John Wiley and Sons, Inc., New Jersey.
7. Shankaran S. *Managerial Economics*, Margham Publications, Madras.
8. Thomas Christopher R. and Charles Maurice S., *Managerial Economics*, McGraw-Hill Irwin, Boston.

**COURSE CODE: PG34T 406A: INSTITUTIONS FOR RURAL DEVELOPMENT  
(Specialization /Optional paper)**

**Course Outcomes:**

- ❖ The objectives of this course are to familiarize the students with local institutions involved in mobilization of the weaker sections of the society and motivating to take pro-active role in rural development, to understand the institutions involved in provision of credit and agricultural marketing facilities for rural development, co-operative societies, participatory rural development institutions and micro-leveling planning.
- ❖ At the end of the course, it will enable the students to understand various aspects of rural development and build their institutional capabilities to commit themselves for development of rural areas by providing necessary inputs

**Module-I: Introduction to Institutions**

**10 Hours**

Institutions- Meaning, Importance and Classification - Class and Caste, Marriage, Family; Rural Credit Institutions; Rural Markets; Co-operatives; Panchayat Raj Institutions; Non-Government Organisations, Shelf-Help Groups, Resource Users' Association, Rural Leadership, Land Reforms.

**Module-II: Rural Credit Institutions**

**10 Hours**

Non-institutional Credit Lending Agencies and Institutional Credit Lending Agencies- Credit Co-operative Societies (PACs and PCARDBs/PLDBs); Commercial Banks; Regional Rural Banks; Apex Institutions-RBI and NABARD; Impact of Financial Sector Reforms on Rural Credit Delivery System.

**Module-III: Agricultural Marketing**

**12 Hours**

Agricultural Marketing-Meaning, Types and Defects and Government Measures for Removal of Defects; Co-operative Marketing Societies-Meaning, Structure, Importance, Progress, Problems and Remedial Measures; Regulated Markets- Meaning, Functions/Importance, Progress, Defects and Remedial Measures; Forward Marketing-Meaning, Importance, Progress and Prospects.

**Module-IV: Co-operative Societies**

**14 Hours**

Co-operative Movement in India- Historical Perspective, Structure, Principles and Role of Co-operatives in Economic Development; Co-operative Farming- Meaning, Importance, Forms, Progress and Problems and Remedial Measures; Co-operative Processing- Meaning, Structure, Importance, Progress, Defects and Remedial Measures.

**Module-V: Participatory Institutions and Micro Level Planning**

**14 Hours**

Peoples' Participation and Panchayat Raj Institutions (PRIs)- Structure, Functions, Resources, Performance, Problems and Remedial Measures; Non-Government Organizations (NGOs)-Meaning and Topology of NGOs, Importance of NGOs; Problems of NGOs and Remedial Measures; Micro-level Planning and Peoples' Participation.

*Reading List:*

1. **Bhose, Joel S. G. R. (2003): NGOs and Rural Development, Concept Publishing Company New Delhi**
2. Cheshire, Lynda, V. Higgins and G. Lawrence (2012): *Rural Governance: International Perspectives*, Routledge, New York.
3. Crowell, Daniel W. (2005): *The SEWA Movement and Rural Development*, Sage Publications, New Delhi.
4. Das, Purnendu Sekhar (Ed.) (2005): *Decentralized Planning and Participatory Rural Development*, Concept Publishing Company, New Delhi.
5. **Hajela, T. N. (1969): Principles, Problems and Practice of Co-operation, Lalwani, Bombay.**
6. **Mathur, B. S (1999): Co-operation in India, Sahitya Bhawan Publishers and Distributors (P). Ltd, Agra.**
7. Misra, R. P. and R. N. Achyutha (1998): *Micro-Level Rural Planning: Principle, Methods and Case Studies*, Concept Publishing Company, New Delhi.
8. Palanithurai, G. P. (1999): *New Panchayati Raj System at Work: An Evaluation*, Concept Publishing Company New Delhi.
9. Rajasekhar, D. (2004): *Poverty Alleviation Strategies of NGOs*, Concept Publishing Company, New Delhi.
10. Rajasekhar, D. (Ed) (1999): *Decentralized Governance and NGOs: Issues, Strategies and Ways Forward*, Concept Publishing Company New Delhi.
11. Rajasekhar, D. and R. R. Biradar (2004): *Reluctant Partners Coming together: Interface Between People, Government and the NGOs*, Concept Publishing Company, New Delhi.
12. Singh, Katar (1986): *Rural Development: Principles, Policies and Management*, Sage Publications, New Delhi.
13. Singh, Nagendra P. (Ed.) (1982): *Role of Financial Institutions in Rural Entrepreneurship and Development*, MDI Publication, New Delhi.
14. Singh, R. (1990): *Panchayat Raj and Rural Organizations*, Chuagh Publications, Allahabad.
15. Sinha, S. K. (1998): *Rural Credit and Co-operatives in India*, Suneja Publishers, New Delhi.
16. Sreenivasa, Gowda, M. V. and Susheela Subrahmanya (1997): *Infrastructure Development for Economic Growth*, Deep and Deep, New Delhi.

## **COURSE CODE: PG34T 406B: FINANCIAL INSTITUTIONS AND MARKETS-II**

### **Course Outcome:**

- ❖ It provides a path to follow research in general area of economics and business.
- ❖ Students will be understanding the Indian financial system, Non-Bank Financial Institutions, Insurance, Investment Banking, Merchant Banking, Mutual Funds Insurance, Foreign Exchange Market and Financial Sector Reforms.
- ❖ Students would gain understanding of primarily about estimation and hypothesis testing. What is different and generally much more interesting and useful is that parameter being estimated and tested.
- ❖ To familiarise the students fully with the changing role of financial institutions in the process of economic growth and development in India.

### **Module-I: Financial Systems in India**

**10 Hours**

Financial System: Significance and Definition - Purpose and Organization. Financial System and Economic Development; Financial Intermediation and Economic Development in India

### **Module-II: Non-Bank Financial Institutions (NBFIs)**

**14 Hours**

The Fundamental aspects of NBFIs - New Theory of Finance - Role and Significance of NBFIs and Monetary Theory in Developed Countries and Developing Countries - The **Structure and Growth of NBFIs in India** - Financial Sector Reforms - Liberalization Measures for NBFIs (1996) -Limits on Acceptance of Deposits - Size of NBFIs - Distribution of Deposits - Capital Issues of Finance Companies - assets of NBFIs - Investment Norms for NBFIs - Deployment of Funds-Leasing Companies.

### **Module-III: Insurance, Investment Banking, Merchant Banking & Mutual Funds 16 Hours**

**Insurance:** Growth and Structure of Insurance Companies - Life Insurance Corporation and its Progress - General Insurance Companies and their Functions - **Reforms in the Insurance Sector**

**Investment banking:** Investment Banks- **Introduction, Functions, Types - Investment Banking Services and Commercial Banks** - Their Activities.

**Merchant Banking:** Introduction - Banking Commission Report (1972) - Merchant Banking in India - **Regulations of Merchant Banking** - Prospects - General Obligations and Responsibilities.

**Mutual Funds:** Introduction - Mutual Funds in India - Types of Mutual Funds -Return from Mutual Funds - **SEBI's Directives** - **Private Mutual Funds** - Asset Management Company - Unit Trust of India - Evaluation of the Performance of Mutual Funds - Components of investment Performance - Market Timing-**Money Market Mutual Funds** - RBI Guidelines.

### **Module-IV: Foreign Exchange Market**

**10 Hours**

Market Regimes and Rates-Trading in **foreign Exchange Markets** - Speculation - **Foreign Exchange Rates** - Market Makers - Liberalized Exchange Rate Management System, 1992 - Capital Account Convertibility - Relationship between Exchange and Money Markets - **Foreign Exchange Market** **foreign Currency Accounts** - Currency Arbitrage - **Hedging with Options.**

### **Module - V: Financial Sector Reforms**

**10 Hours**

Regulation of **Non-Bank Financial Intermediaries** and the RBI - Need for Comprehensive Monetary Policy - RBI and Financial Sectors Reforms.

## Reading List:

1. Bhole, L.M. (1999): *Financial Institutions and Markets*, Tata McGraw Hill Company Ltd., New Delhi.
2. Bhole, L. M. (2000): *Indian Financial System*, Chugh Publications. Allahabad.
3. Khan, M. Y. (2009): *Indian Financial System*, Tata McGraw-Hill Education, New Delhi.
4. Machiraju, H.R. (2019): *Indian Financial System*, Fifth Edition, Vikas Publishing House Pvt. Ltd., New Delhi.
5. Madaiah, M. (1971): *Financial Intermediaries, Monetary Policy and Economic Development*, Prasaraanga, Mysore.
6. Nirmala, Prasad and Chandradass J. (2016): *Banking and Financial System*, Himalaya Publishing House, Mumbai.
7. Parameswaran, R. and Natarajan S. (2013): *Indian Banking*, S. Chand and Co, New Delhi.
8. Pathak, Bharati V. (2011): *The Indian Financial System: Markets, Institutions and Services*, Pearson Education, New Delhi, India.
9. Reserve Bank of India: *Report on Currency and Finance* (latest edition).
10. Reserve Bank of India: *Trends and Progress of Banking in India* (latest edition), Mumbai.
11. Varshney and Sundaram (2014): *Banking Theory, Law and Practice*, Sultan Chand and Sons, New Delhi.
12. Vasant, Desai (2017): *The Indian Financial System and Development*, Himalaya Publishing House, Mumbai.

**COURSE CODE: PG34T 406C: HUMAN RESOURCE MANAGEMENT**  
**(Specialisation/Optional paper)**

**Course Outcome:**

- ❖ This course enables the students to understand thoroughly the theories of Human Resource Management and familiarize the students about the vital aspects of Human Resource Management-scope and its importance of HRM, economic and non-economic factors and their interactions, distinction between human resource and non-human resource, functions of HRM; planning, recruitment and selection. At the end of the course, it will enable the students to ensure efficient and effective human resource management.

**Module-I: Introduction**

**12-Hours**

Concept Of HRM- Meaning, Objectives, Scope And Its Importance; Economic And Non-Economic Factors And Their Interactions, Distinction Between Human Resource And Non-Human Resource

**Module-II: Functions Of HRM**

**12-Hours**

Functions Of HRM; Planning, Recruitment And Selection, Training And Development, Compensation, Welfare And Industrial Relation Functions

**Module-III: Human Resource Planning**

**12-Hours**

Human Resource Planning (Hrp): Definition, Need And Process Of Hrp, Responsibility For Hrp, Job – Analysis And Its Components.

**Module-IV Appraisal**

**12-Hours**

**Performance Appraisal:** Need And Significance- Setting Employees Performance, Objectives And Goals; Creating Organizational Conditions For Improving Employee Performance.

**Module-V: Management**

**12-Hours**

**Emotional Intelligence IQ V/S EQ** Creativity and Its Role In Management – Building Positive Attitude-Time Management And Stress Management

**Reading List:**

1. Aswathappa, K. (2000): *Human Resource And Personal Management*, Tata Mc Graw Hill, New Delhi.
2. Daniel, Goleman (2009): *Emotional Intelligence*, Bloomsbury Publishing, London.
3. David, Fortana (1991): *Stress Management*, Willey.
4. Holloway, J. (2000): *Performance Measurement And Evaluation*, Sage Publications, New Delhi.
5. Jim Mathewinan (2000): *Human Resource Planning*, Jaico Publish House, Bangalore. *Profits*, 8th Edition, Mcgraw-Hill/Irwin, Boston
6. Shankar, Digambar Bagade (2000): *Time Management*, Himalaya Publishing House, New Delhi.
7. Wayne, F. Cascio (2010): *Managing Human Resources: Productivity, Quality Of Work Life*,



**COURSE CODE: PG34T 406D: ENVIRONMENTAL HAZARDS AND DISASTER MANAGEMENT (NEW COURSE)**

**Course Outcomes:**

- ❖ To study the present conditions of ecological imbalance.
- ❖ To understand the causes and consequences of climate change
- ❖ To analyze the reasons for Environmental Hazards and Disasters.
- ❖ To evaluate policies towards mitigating climate change and other environmental hazards

**Module-I: Environmental Hazards**

**(12 Hours)**

Introduction - Changing Perspectives -Pre-1950, 1950-1999 and 2000 onwards - Paradigms of Hazard - The Dominant (Behavioural) Paradigm - The Radical (Structuralist) Paradigm - What are the Environmental Hazards - Natural Hazards - Technical Hazards -Tectonic Hazards: Volcanic Hazards - Biophysical Hazards: Thermal Extremes, Disease Epidemics and Wildfires - Hydrological Hazards - Floods - Droughts - Technological Hazards - The Growth of Industrial Hazards

**Module-II: Environmental Disasters**

**(18 Hours)**

Hazard, Risk and Disaster - Human Vulnerability to Disaster - Dimensions of Disaster - Disaster Reporting - **Disaster Impact Assessment** - Disaster Patterns - Reasons for Increasing - Disaster Impact

*Floods:* Types of Flood - River Floods - Coastal Floods - Causes of Floods - Beneficent Effects of Floods - Negative Effects of Flood.

*Drought and Desertification:* Concepts and Causes - Indicators - Impacts of Drought and Desertification - **Importance of Remote Sensing in Desertification Control.**

*Fire:* Causes and Consequences - Loss of Forest and Biodiversity.

*Acid Rain:* Causes, Effects, Prevention of Acid Rain - Individuals Efforts and Government Actions towards Control of Acid Rain.

**Module-III: Reducing the Impacts of Disasters**

**8 Hours**

Cost of Disasters - The Range of Options - **Mitigation** - Disaster Aid - Internal Government Aid - International Aid - Mitigation - Insurance - Government Insurance - Protection - Hazard Resistance - **Macro-Protection - Micro-Protection - Adaptation - Preparedness - Adaptation - Land Use Planning**

**Module-IV: International Environmental Concerns**

**12 Hours**

Pollution as a Global Problem - Greenhouse Effect - Ozone Depletion - Global Warming and Threat to Biodiversity - International Action for Environmental Protection - Helsinki Protocol (1985) and Montreal Protocol (1987) - Earth Summit (1992) - International Financing of Environmental Protection - Debt for Nature Swaps - Trade and Environment - Sustainability in Ecology - Sustainability in Ecological Economics.

**Module-V: Environmental Issues and Regulation in India**

**10 Hours**

The status of Air pollution - Water Pollution - Land Degradation - Causes and Effects of Environmental Degradation - Urban and Rural Environmental Problems - Evolution of Environmental Policy -Environmental Protection Act, 1986 - Fiscal Incentives - **Enforcement and Implementation Issues** - Pollution Control Board -National Disaster Management Authority (India).

## Reading List:

1. Baumol, W.J. and W. E. Oates (1998): *The Theory of Environmental Policy*, Cambridge University Press, Cambridge Canter, L.W., Environmental Impact Assessment, McGraw Hill, New York.
2. Cutter, S. L. (1999): *Environmental Risk and Hazards*, Prentice-Hall of India Pvt. Ltd., New Delhi.
3. Dixon, J. (1994): *Economic Analysis of Environmental Impacts*, Earth Scan Publications, London.
4. Freeman, III, A M. (2003): *The Economic Approach to Environmental Policy*, Edward Elgar, U K.
5. Jempa, C. and Munasinghe M. (1998): *Climate Change Policy: Facts, Issues and Analyses*, Cambridge University Press, Cambridge.
6. Kolluru Rao, Bartell Steven, Pitblado R. and Stricoff (1996): *Risk Assessment and Management Handbook*, McGraw Hill Inc., New York.
7. Lawrence, D. P. (2003): *Environmental Impact Assessment – Practical solutions to Recurrent Problems*, Wiley-Interscience, New Jersey.
8. Mehta S, Mundle S. and Sankar U. (1993): *Incentives and Regulation for Pollution Control*, Sage Publications, New Delhi
9. Michael, Common and Sigrid Stagl (2005): *Ecological Economics: An Introduction*, Cambridge University Press, Cambridge.
10. Raghavan, K. V. and A. A. Khan (1990): *Methodologies in Hazard Identification and Risk Assessment*, Manual by CLRI.
11. Sam Mannan, Lees (2012): *Loss Prevention in the Process Industries, Hazard Identification, Assessment and Control*, 4<sup>th</sup> Edition, Butterworth Heineman.
12. Shankar, U, (ed.) (2001): *Environmental Economics (Readers in Economics)* Oxford University Press
13. United Nations: *Accounting and Valuation of Environment*, Vol. I and II: A Premier for Developing Countries, ESCAP, New York.

## **COURSE CODE: PG34T 406E: CO-OPERATIVE MANAGEMENT**

### **Course Outcome:**

- ❖ The purpose of this paper is to familiarize the student with emergence of co-operative movement at the global level and in India.
- ❖ Students will understand the objectives and principles of co-operative management and marketing management.
- ❖ Students will learn about the marketing management and office management in India.

### **Module-I: Origin of Co-operative Movement:**

**11 Hrs**

Cooperative Movement In: Germany -Great -Denmark - Japan - USA - Canada - Italy - Sweden - France And Israel; Origin And Growth Of Cooperative Movement In India - Pre-Independence Developments - Major Developments In The Post-Independence Period - Types Of Co-Operatives

### **Module-II: Concept of Management:**

**10 Hrs**

Definition, Nature, Scope, Principles, Objectives, and Functions Cooperative Management - Importance of Management - Problems of Management.

### **Module-III: Management of Cooperatives:**

**16 Hrs**

Principles of Co-operatives Management - Functions of Cooperative Management - Problems of Cooperative Management.

*Management of Credit Cooperatives:* Introduction - Structure - Objectives - Management Aspects - Managing Committee - Board of Directors -Chairman /Executives - Problems of Credit Co-operatives. *Management of Non-Credit Cooperatives:* Consumer Co-operatives - Marketing Cooperatives - Dairy Cooperatives - Housing Cooperation.

*Human Resource Management:* Human Resource Management in Co-operatives - Management Information System - Management Information System in Co-Operatives

### **Module-IV: Marketing Management:**

**13 Hrs**

Cooperative Marketing Management in India - Management Aspects of Marketing Co-operatives - Objectives of Cooperative Marketing Management - Adoption of Cooperative Marketing Approach - Role of Cooperative Marketing Management - **Marketing Intelligence** and Integrated Marketing System.

### **Module-V: Office Management:**

**10 Hrs**

Office Organization and Office Maintenance of Records - **Distribution of Work Among Staff Members** - Office Correspondence - Filing System - Maintenance of Records and Statistics.

### **Reading List:**

1. Kamat, G. S. (2011): *New Dimensions of Co-operative Management*, Himalaya Publishing House, New Delhi.
2. Kulandiswamy, V. (2003): *Principles and Practice of Co-operative Management*, Rainbow Publications, Coimbatore.
3. Nakkikron. S. (1984):*Co-operative Management*, Rainbow Publications, Coimbatore.
4. Ramkishen, Y. (2003): *Management of Co-operatives*, Jaico Publishing House, New Delhi.
5. Shah, A.K. (1989): *Functional Management for the Co-operative*, Rainbow Publishers, Coimbatore.
6. Varkey, V.O. and V.G. Vartak (1998): *Co-operative Management*, Varsha Prakasham Pune.

**COURSE CODE: PG34T 406F: ENERGY ECONOMICS (Specialisation/Optional Paper) (NEW COURSE)**

**Course Outcomes:**

- ❖ To understand the basic concepts of energy economics, sources of energy and importance of energy in economic development.
- ❖ To analyze the extent and factors affecting energy demand, energy supply, energy markets and Environmental consequences of energy use and policies and regulatory Mechanism for the sector.
- ❖ Evaluate performance on the basis of cost- benefit analysis.
- ❖ To learn about pricing, planning and policies adopted for ensuring energy Efficiency and conservation for sustainable development.

**Module-I: Energy Concepts**

**10 Hours**

Concepts - Definitions - Sources and Categories of Energy - Energy Balance Tables - Energy Data Sources - Energy System - Energy - Economy Linkages - Green Energy; Forms of Energy - Electricity, Coal, Oil and Renewable Sources - Availability and Features - **Management of Energy Resources** - Energy and Environmental Sustainability.

**Module-II: Energy Supply and Demand Analysis**

**18 Hours**

*Energy Supply Analysis:* Availability and Supply of Different Sources of Energy - Supply Constraints - Role of Renewable Sources of Energy - Institutional Framework for Energy Supply in India - Supply Scenario and **Investment Requirements** - Alternative Energy Sources - Energy Imports - Trends and Issues - Policies of the Government.

*Energy Demand Analysis:* Determinants of Energy Demand - **Estimating Energy Demand - Methods of Estimation** - Price and Income Elasticity - Demand Estimation under Administered Price Regimes - Demand - Supply Gap - Energy Shortage and Crisis - Need for **Energy Demand Management** - Renewable Energy Options.

**Module-III: Energy Pricing**

**10 Hours**

Need - **Methods and Principles of Energy Pricing** - Economic Efficiency and Equity Considerations - Pricing Under Supply Constrained Framework - Energy Markets - Regulation - Issues and Challenges.

**Module-IV: Energy Efficiency and Conservation**

**10 Hours**

Need - Principles and Methods - Energy Supply Side and Demand Side Management and Efficiency - Institutional Machinery and Community Engagement - Estimation of Benefits - **Energy Audit** - Policy Alternatives.

**Module-V: Energy Planning and Policy**

**12 Hours**

Approaches to Energy Planning - Principles and Components - Implementation Machinery - Decentralised Approach to Energy Planning - Planning for Energy Security - Integrated Energy Policy - Issues and Challenges; Alternative Energy Sources: Wind Energy - Solar Energy - Bio Mass Power - Waste-to-Power Small Hydro Power - Availability and Utilisation - Government Policies.

**Reading List:**

1. Kneese, A. V. and Sweeny, J L. (1985): *Handbook of Natural Resource and Energy Economics*. North Holland.

2. Munasinghe, M & Meier P. (1993): *Energy Policy Analysis and Modeling*, Cambridge University Press, U K.
3. Paul Stevens (Ed.) (1997): *The Economics of Energy Vol -I and Vol -II* Edward Elgar.
4. Sankar, U. (1992): *Public Sector Pricing: Theory and Applications*, Indian Economic Association Trust for Research and Development, New Delhi.

