

**SEMESTER – I**  
**CORE PAPER I-MICRO ECONOMICS – I**

**UNIT I: ADVANCES IN DEMAND THEORY**

Modern utility analysis of choices involving risk or uncertainty – Bernoulli, Neumann Morgenstern, Friedman Savage and Markowitz Hypotheses – Revealed preference theory and derivation of demand-indifference curve – Hicks revision of demand theory – Logical ordering.

**UNIT II: THEORY OF PRODUCTION**

The production Function – Production Function – short and long run – Relation between return to scale and return to factor – Cobb-Douglas and CES Production Functions – Single and Multi-product Firms.

**UNIT III: THEORY OF COSTS**

Total Revenue, Marginal Revenue. Cost Functions – The Traditional Theory of Cost: Short-Run Costs; Long-Run Costs – ‘The Envelope Curve’ – Modern Theory of Costs: Short-Run Costs; Long-Run Costs – ‘The L-Shaped’ Scale Curve – The Relevance of the Shape of Cost Curves in Decision-making.

**UNIT IV: THEORY OF THE FIRM: PERFECT COMPETITION/ MONOPOLY**

Market Structure – Perfect Competition – Assumptions – Short-Run Equilibrium – Long-Run Equilibrium – Dynamic Changes and Industry Equilibrium. Definition – Demand and Revenue – Equilibrium of the Monopolists: Short-Run Equilibrium – Long-Run Equilibrium – Comparison of Pure Competition and Monopoly – the Multi-plant Firm – Bilateral Monopoly – Price Discrimination.

**UNIT V: THEORY OF THE FIRM: MONOPOLISTIC COMPETITION AND OLIGOPOLY**

Monopolistic Competition – Equilibrium of the Firm – Excess Capacity – Selling Cost – Comparison with Pure Competition. Oligopoly: Non-Collusive Oligopoly – Cournot; The Kinked-Demand and Stackelberg Models. Collusive Oligopoly – Cartels – Price leadership.

**RECOMMENDED TEXT:**

1. Koutsoyiannis. A.: Modern Microeconomics 2<sup>nd</sup> edition, Macmillan
2. Hal.R. Varian: Intermediate Micro Economics- Modern Approach, 4<sup>th</sup> edn, W.W. Norton & Company.
3. W.J. Baumol and Alan Blinder – Micro Economics, New York University.

**BOOKS FOR REFERENCE:**

1. Baumol, W.J., (1978) : Economic Theory and Operations Analysis, Prentice Hall of India.
2. Green, H.A.J (1974) : Consumer Theory, 2nd Edition, Macmillan.
3. Jack Hirschleifer (1980)

## **CORE PAPER II - INDIAN ECONOMICS – I**

### **UNIT I**

Meaning of under development – Economic Development and Economic Growth – Major issues of Economic Development – Economic and Non-economic factors – Features of Indian Economy - National Income – concepts – measurement and problems – National income at factor cost and at Market price – National income of India – Trends in National income

### **UNIT II**

Evolution of planning – success and failures of five year plans in India – Public sector and Indian planning – Disinvestment – twelfth five year plan – inclusive and sustainable growth – infrastructure and Economic development – Macro perspective – Impact – trends.

### **UNIT III**

Human development – Measurement - Human development index – progress of human development in India – Poverty – Multidimensional poverty Index – reforms – causes of poverty – growth and inequality – poverty and inclusive growth - comparison of poverty in India and China – Poverty alleviation programmes in India - Inequality after economic reforms in 1991 – Economic development and population growth – India's demographic transition – Gender equity and Demographic transition – India's Demographic dividend and its impact of economy – Population policies of India.

### **UNIT IV**

Unemployment and employment perspective – concepts and measurements – labour force and workforce participation rates – characteristics of Indian labour markets – trends and pattern of employment growth – growth in employment, GDP and employment elasticity - Employment and labour policy – Indian labour laws and labour markets – Public employment programmes for unorganised workers – case of NREGA

### **UNIT V**

Importance of Agriculture in National Economy - Agriculture growth - Green Revolution and Land reformation - its impact – performance of Agriculture sector in five year plans – agriculture and rural India – rural distress in post-reform India – Agriculture policies – Food Management – recent policy initiatives Public Distributive system in India - – food security and future sources of growth in Agriculture – food subsidy

### **BOOKS FOR REFERENCE**

1. Indian Economy: performance and policies - UMAKAPILA

2. India Economy since Independence - UMAKAPILA
3. RuddarDutt and KPM. Sundharam: IndianEconomy

## **CORE PAPER III- STATISTICS FOR ECONOMISTS**

### **UNIT - I**

Probability–Theorems-Addition-Multiplication-ConditionalProbability–  
BayesTheorem MathematicalExpectation-TheoreticalDistribution–Normal-  
BinomialandPoisson

### **UNIT - II**

Index Number – Types of Index Numbers – Construction of Consumer Price Index  
– Wholesale Price and Production Indices in India.

### **UNIT - III**

Analysis of Time Series – Measurement of Trend – Semi Averages, Moving  
Averages - method of Least Square- Simple Correlation – Partial Correlation -  
Regression

### **UNIT - IV**

Hypothesis Testing, Standard Error – Large Sample Test for Two Means and Two  
Standard Deviations–TwoProportionandConfidenceIntervalSmallSampleTest–t-  
Test–Pairedt- Test-Chi SquareTest

### **UNIT - V**

FTest-AnalysisofVarianceOneWay-TwoWayClassifications-DesignofExperiments-  
LatinSquares.

### **RECOMMENDED TEXT:**

1. Gupta .S.P. Statistical Methods, Sultan Chand and Sons,New Delhi,2005
2. Sancheti.DCandKapoor.VKStatisticalTheory-  
MethodandApplication,SultanChandand Sons, New Delhi,2005.
3. Shukla .MC &Gulshan.SS, Statistical Theory and Practice. Sultan Chand and  
Sons, New Delhi,2000.

## **Elective Paper - I: HISTORY OF MODERN ECONOMIC ANALYSIS**

### **UNIT-I**

Theory of value, General Equilibrium, Game theory and Welfare

Samuelson Paul - Hicks John R, -Arrow, Kenneth, -Coase, Ronald H-Nash, John

### **UNIT-II**

Statics, Dynamics, Macro Models, Econometrics, Macroeconomics, Monetary Economics and Financial Economics

Friedman, Milton. -Tobin, James-Modigliani, Franco -Markowitz, Hary- Scholes, Myron

### **UNIT-III**

Economic Development, Economic Growth, Input-Output Analysis Programming social Accounts, Economic and social Systems

Kuznets, Simon -Schultz, Theodore -W Lewis Sir W. Arthur -Solow, Robert-M.Leontief, Wassily- W.Hayek Fredricch-Myrdal, Gunnar.

### **UNIT-IV**

International Trade, Capital Movement and Quantitative, Economic History

Meade, James - E.Ohlin, Bertil- Mundell, Robert A.-North, Douglas C.-Fogel, Robert W

### **UNIT-V**

Other: Simon, Herbert A - Decision making within Economic organisation

George, J- Industrial Economics

Buchanan, James M. - Theory of Public Choice

Lucas, Robert J - Rational Expectations Approach to Macroeconomics

Sen, Amartya K. - Applied Welfare Economics.

### **BOOK FOR REFERENCE:**

1. Mark, Blang - Economic Theory in Retrospect
2. Schumpeter - Ten Great Economists
3. Alexander Haney - History of Economic Doctrines
4. Eric Roll - History of Economic Theory

## **Elective Paper-II: ENVIRONMENTAL ECONOMICS**

### **UNIT - I: INTRODUCTION**

The services provided by the environment for the economic system - Environment for the economic system - The flow of environmental resource

### **UNIT - II: ECONOMIC ROOTS OF ENVIRONMENTAL DAMAGE**

The market as allocation and mechanism: Conditions for efficient allocation - Market failure and the environment: Environmental damage as an –eternity, environment as –Public good, The –tragedy of the commons

### **UNIT - III: ECONOMIC INSTRUMENTS FOR ENVIRONMENTAL PROTECTION**

The concept of —Optimum Pollution - Limitations of Command-and –Control policy - Pollution Tax - Tradable permits- Property rights to environmental goods (Coase solution)

### **UNIT - IV: THE ECONOMIC VALUE OF NATURE**

The meaning to economic value: Willingness to pay - Types of environmental value: Use and non-use values - Cost-benefit analysis - –Stated Preference and revealed preference approaches to environmental valuation

### **UNIT - V: CLIMATE CHANGE, SUSTAINABLE DEVELOPMENT**

Sources of climate change, economic consequences of climate change - Economic Policy for climate change: costs and benefits of mitigation and adaptation - Definition of sustainable development, Policy for sustainable development - Poverty – development interrelationship.

### **BOOKS FOR REFERENCES**

1. Charles D. Kolstad (2003), Environmental Economics, Oxford University Press, New York.
2. Nick Hanley, Jason F. Shogren and Ben White (1999), Environmental Economics: In Theory and Practice, Macmillan India Limited, New Delhi.
3. Barry C. Field (1997), Environmental Economics: An Introduction, McGraw-Hill Companies, Singapore.
4. Ulaganathan Sankar (2008), Environmental Economics, Oxford University Press, New Delhi.
5. Rabindra N. Bhattacharya (2005), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi.
6. Katar Singh and Anil Shishodia (2007), Environmental Economics: Theory and Applications, Sage Publications, New Delhi.
7. Subhashini Muthukrishnan (2010), Economics of Environment, PHI Learning Private Limited, New Delhi.
8. Jhingan, M.L. and Chandar K. Sharma (2007), Environmental Economics: The Theory, Management and Policy, Vrinda Publications (P) Ltd., Delhi.
9. A. Jonathan Lesser, Daniel E. Dodds and Richard O. Zerbe Jr. (1997), Environmental Economics and Policy, Addison-Wesley Ltd., New York.

## SEMESTER – II

### CORE PAPER IV - MICROECONOMICS – II

#### UNIT - I: MODERN THEORIES OF THE FIRM

Baumol's Theory of Sales Revenue Maximisation – Marris's Model of the Managerial Enterprise – O. Williamson's Model of Managerial Discretion – the Behavioural model of Cyert and March.

#### UNIT – II: DISTRIBUTION THEORIES

Macro theories of distribution – Ricardian, Marxian, Kalecki and Kaldor's – Marginal productivity theory – Product Exhaustion theorem – Elasticity of Technical Substitution – Theory of distribution in imperfect product and factors markets – Determination of wages, interest and profit

#### UNIT – III: ECONOMICS OF INFORMATION

Asymmetric Information - Moral hazard problem, adverse selection, principal agent problem, implications of asymmetric information, market signaling, information and insurance.

#### UNIT – IV: GENERAL EQUILIBRIUM THEORY

Two Sector Model of General Equilibrium: Assumptions – Static Properties of a General Equilibrium State – General Equilibrium and the Allocation of Resources and Money.

#### UNIT – V: WELFARE ECONOMICS

Criteria of Social Welfare: The Pareto-Optimality Criterion – Arrow impossibility theorem – The Kaldor-Hicks 'Compensation Criterion' – the Bergson Criterion 'Social Welfare Function' – Maximisation of Social Welfare.

#### RECOMMENDED TEXT:

1. Koutsoyiannis. A. : Modern Microeconomics 2<sup>nd</sup> edition, Macmillan
2. Hal.R.Varian : Intermediate Micro Economics- Modern Approach, 4<sup>th</sup> edn, W.W. Norton & Company.
3. W.J.Baumol and Alan Blinder – Micro Economics, New York University.

#### BOOKS FOR REFERENCE:

1. Baumol.W.J.,(1978) : Economic Theory and Operations Analysis, Prentice Hall of India.
2. Green,H.A.J(1974) : Consumer Theory, 2<sup>nd</sup> Edition, Macmillan.
3. Jack Hirschleifer(1980) : Price Theory and Applications, 2<sup>nd</sup> Edition, Macmillan
4. Richard,H.Leftwich : The Price System and Resource Allocation.

## **CORE PAPER V- INDIAN ECONOMICS – II**

### **UNIT-I**

Savings and investments in India – various plan periods– its impact on Indian Economy – factors affecting savings in India– Savings in post reform periods- Capital formation and its determinants – growth performance of capital formation in India – External shocks and its impact on savings, investment and capital formation in India.

### **UNIT-II**

Industrial development and policies – New Industrial policy reforms 1991-its comparison with previous industrial policies - performances of small, medium and large industries in India -employment trends in manufacturing sector -- Industrial development and foreign direct investment – strategies of disinvestment and privatisation – Industrial growth performance in India – pre reform and post reform periods.

### **UNIT- III**

India's external sector – Export promotion vs import substitution – foreign trade policies - Structural changes in India's foreign trade during 80 and 90s – India's services trade –Gold and Oil trade - special economic zones –Balance of payments of India – Exchange rate fluctuations and its impact on Indian Economy– external debt and Indian economy–external sector reforms.

### **UNIT - IV**

Foreign direct investment and portfolio investment in India – Foreign Aid vs Foreign direct investment-Foreign Direct Investment and Economic Development- sectoral performance-- growth trends of foreign direct investment – India-china comparison —performances of foreign institutional investments.

### **UNIT - V**

Globalization and India–WTO negotiations and India– Impact of globalization on Indian Economics –Pre and Post reform period - Reforms in Money market and Capital Market – Globalization, External shocks and Indian Economy – Global financial crisis and its impact on Indian economy – Environmental changes and sustainable development of India – issues and challenges.

### **BOOKS FOR REFERENCE**

1. Indian Economy: performance and policies - UMAKAPILA
2. India Economy since Independence - UMAKAPILA
3. Ruddar Dutt and KPM. Sundharam: Indian Economy



## **CORE PAPER VI- MATHEMATICS FOR ECONOMICS**

### **UNIT - I**

Matrices – Matrix operations – Commutative Associative and Distributive Laws – Determinants – Rank of a matrix – Matrix Inverse – Cramer’s Rule - Finding the values of unknown variables in the market(Prices)

### **UNIT - II**

Differentiation – one variable-AC,MC-AR,MR –Elasticities-Price-income-cross Elasticities-  
– Conditions for Profit Maximisation and Cost Minimisation

### **UNIT - III**

Partial Derivatives - Functions of two Variables — Properties of Homogenous Functions- Euler’s Theorem- Uses of Homogenous Functions in Economics-Cobb-Douglas Production Function.

### **UNIT - IV**

Constrained Optimisation – Use of Lagrange Multiplier Method – Application to Utility Maximisation, Profit Maximisation and Cost Minimisation.

### **UNIT - V**

Elementary Integration Techniques–Indefinite Integrals–Definite Integrals–Economic Applications of Integrals–Consumer’s Surplus and Producers Surplus

### **RECOMMENDED TEXT**

1. Edward. T. Dowling, Mathematical Economics, 2<sup>nd</sup> Edition, McGraw Hill, New York, 1992.

### **BOOKS FOR REFERENCE**

1. Chiang A.C. Fundamental Methods of Mathematical Economics, McGraw Hill Book Company, New York, 1974.
2. Mehta V.L. and Madnani G.M.K, Mathematics for Economists, Sultan Chandra and Sons, New Delhi, 2005.
3. Monga, G.S. Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi, 1972.
4. K. Sydsaeter and P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi, 2002.

### **Journals:**

1. Journal of Applied Mathematics
2. Journal of Mathematical Economics

## **Elective Paper – III: INDUSTRIAL ECONOMICS**

### **UNIT – I**

Meaning of Industrialisation - The role of Industry in Economic Development - Theories of Industry - Hoffman - Chenery and Gerschenkron

### **UNIT – II**

Concept and Organisation of a Firm - Market Structure - Sellers Concentration - Product Differentiation - Entry Conditions - Economics of Scale - Profitability and Innovation

### **UNIT – III**

Theories of Industrial Location - Weber - Sargant Florence - Factors Affecting Location

### **UNIT – IV**

Growth of the Firm - Size and Growth - Growth and Profitability of the Firm - Constraints on Growth - Productivity - Efficiency - Capacity Utilisation - Concept - Measurement

### **UNIT – V**

Classification of Industries - Use Based - Resource Based - Industrial Policy in India - Role of Public and Private Sectors - Recent Trends in Industrial Growth - India as a Global Hub - MNCs - Transfer of Technology - Liberalisation - Privatisation

### **BOOKS FOR REFERENCE:**

1. Ahulwalia .I.J.-Industrial Growth in India, Oxford University Press, New Delhi.
2. Ahulwalia .I.J.-Industrial Growth in India,
3. Chernuliam .F -Industrial Economics; Indian Perspective, Himalaya publishing House.
4. Desai.B - Industrial Economy in India (3rd Ed.) HPH, Mumbai.
5. Kuchhal .S.C. -Industrial Economy of India(5th Edition), Chaitanya Publishing House.
6. Sing,A and A.N.Sadhu- Industrial Economics, Himalaya Publishing House, Mumbai. Government of India, Economic Survey(Annual).

## **Extra Disciplinary-I: TAMIL NADU ECONOMY**

### **UNIT-I: TAMIL NADU ECONOMY**

Economic and Social Indicators - Human Development Index Rank - Gender Disparity Index - Poverty Index - Work participation rate - Unemployment rate - Literacy Rate - Life expectancy - State Income - Sectoral Share - Gross State Domestic Product - Per capita Income Comparison of Tamil Nadu and All India (only data).

### **UNIT-II: AGRICULTURE**

Contribution to Gross State Domestic Product -Land use pattern in Tamil Nadu - Land holding - Principal crops in Tamil Nadu - Agricultural production - Loss of Agricultural production due to Natural Calamities - Rainfall in Tamil Nadu - Irrigation - Crop Insurance - Agricultural marketing.

### **UNIT-III: INDUSTRY**

Index of Industrial Production - Industrial Scenario in Tamil Nadu - Foreign Direct investment inflow into States - Production trend - Export contribution of top 5 major industries - Micro, Small, Medium enterprises - Khadi & Village industries.

### **UNIT-IV: TRANSPORT**

Road network – Highways – Maintenance of Road Quality – Private public participation under infrastructure – Growth of vehicle population – Railways – Metro rail project – Mono rail projects – Sea Ports.

### **UNIT-V: HEALTH**

Health care delivery – Crude birth rate – death rate – infant mortality rate – Total fertility rate – Maternal mortality rate – Primary, Secondary, Tertiary Health system - Education – Educational development index – Gross enrollment ratio - Primary, Secondary, Higher Education in Tamil Nadu.

## SEMESTER –III

### CORE PAPER VII-MACROECONOMICS-I

#### UNIT - I: KEY MACRO ECONOMIC VARIABLES

Aggregate Income-Expenditure and circular flow-computation of GDP-Real Vs- Nominal GDP-Measurement of Cost of Living (CPI and WPI)- Measurement of Unemployment rate

#### UNIT - II: THEORIES OF CONSUMPTION AND INVESTMENT

The Consumption function and its determinants – Hypotheses of Absolute, Relative and Permanent Incomes and Life Cycle. The Investment function and its determinants, The Saving function and Marginal Efficiency of Capital. Investment Function – Marginal Efficiency of Investment, Multiplier Analysis, Accelerator and Investment behavior concepts of super multiplier.

#### UNIT - III: THEORY OF INCOME AND EMPLOYMENT

Basic assumptions of the classicals, Say's Law of Market, Classical theory of Employment saving and Investment theory wage and price flexibility criticisms of classical theory- Keynesian theory of employment and income-Aggregated demand- Effective Demand-The concept of under employment equilibrium.

#### UNIT - IV: THEORY OF DEMAND FOR MONEY

Quantity theory of money - Fisher's and Cambridge equation, Keynesian theory of money – Milton Friedman restatement of Quantity theory of money- Patinkin's Real Balance Effect- Tobin's Portfolio analysis, Crisis in Keynesian economics and the revival of monetarism.

#### UNIT - V: THEORY OF SUPPLY OF MONEY:

RBI Approach to money supply: narrow money, broad money, reserve (high powered) money-open market operations-cash reserve ratio-Fractional banking-reporeate-money multiplier-Money Supply in open economy-market for loanable funds in an open economy - Control of money supply.

#### RECOMMENDED TEXT:

1. Branson, W.A.(1989) : Macroeconomic Theory and Policy, (3<sup>rd</sup> Edition), Harper and Row, New York.
2. Shapiro, E.(1996) : Macroeconomic Analysis, Galgotia Publications, New Delhi.
3. N.Gregory Mankiw : Macro Economics, Worth Publishers.

#### BOOKS FOR REFERENCE

1. Ackley, G. (1978) - Macroeconomics: Theory and Policy, Macmillan, New York Blackhouse,
2. R.and A.Salanski(2000)-Macroeconomics and the Real World (2 Vols.) Oxford University Press, London.
3. Dornbusch, R.and F.Stanley(1997)-Macroeconomics, McGraw Hill, Inc., New York.
4. Gupta S.B(1993) - Monetary Economics, S Chand Publications, New Delhi.

5. Hall, R.E. and J.B. Taylor (1986) -Macroeconomics,W.W.Norton, NewYork.
6. Heijdra,B.J.and V.P. Fredericck (2001) - Foundations of Modern Macroeconomics, Oxford University Press, NewDelhi.
7. Jha,R.(1991)- ContemporaryMacroeconomicTheoryandPolicy,WileyEasterLtd.,New Delhi.
8. Romer,D.L.(1996)-AdvancedMacroeconomics,McGrawHillCompanyLtd.,NewYork.
9. Scarfe, B.L. (1977) - Cycles, Growth and Inflation, McGraw Hill, NewYork.
10. Surrey, M.J.C. (Ed.) (1976) - MacroeconomicThemes,Oxford University Press, Oxford.

## **CORE PAPER VIII-PUBLIC FINANCE-I**

### **UNIT - I: INTRODUCTION**

Public Finance and Public Economics - Government in Mixed Economy -  
Public and Private Sectors - Cooperation or Competition -  
Role of Public Enterprises in India - Pricing Policies of Public Enterprises -  
Administered prices - Peak load pricing - Marginal cost pricing.

### **UNIT - II: PUBLIC GOODS AND PUBLIC CHOICE**

Allocation, growth and stabilization function of government - private goods, public goods and merit goods - market failure - imperfections, decreasing costs, externalities, uncertainty and non-existence of future markets - Theory of second best - problems of allocating resources - problems of preference revelation and aggregation of preferences - voting systems.

### **UNIT - III: PUBLIC GOOD AND TAXATION**

Samuelson theory of public goods - Lindahl solution, theory of clubs, median voter theorem, theory of rent seeking - Taxation: Theories of Taxation -  
Concept of Excess Burden of Taxes - Excess burden of an Excise Tax -  
Excess burden of Tax on Wage incomes - direct  
Vs. Indirect taxes, efficiency and equity, deadweight loss (income tax, commodity tax)

### **UNIT - IV: TAXATION AND PUBLIC DEBT**

Taxation and labour supply, taxation and savings, risk-taking and wealth, general equilibrium (Herberger) models of tax incidence, theory of optimal taxation - Deficit Financing - Concept of Burden of Public debt - Compensatory aspect of debt policy - debt management

### **UNIT - V: BUDGETING**

Budgeting - type of budgeting - public budget, kinds of budgets, zero based budgeting - programme and performance budgeting - Union and State government Budgets - Neutral and compensatory and functional finance - balanced budget multiplier.

### **RECOMMENDED TEXT:**

1. Bhargava (2004) : Public Finance, Its Theory and Working in India, Chaitanya Publishing House.
2. Musgrave, R.A. (1959) : The Theory of Public Finance, McGraw Hill, Kogakusha, Tokyo
3. Musgrave, R.A. and P.B. Musgrave (1976) : Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.

### **BOOKS FOR REFERENCE**

1. Atkinson, A.B. and J.E. Siglitz (1980) : Lectures on Public Economics, Tata McGraw Hill, New York.
2. Auerbach, A.J. and M. Feldstern (Eds.) (1985) : Handbook of Public Economics, Vol. I, North Holland, Amsterdam.

3. Buchanan, J.M. (1970): The Public Finances, Richard D. Irwin, Homewood.
4. Goode, R. (1986) Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
5. Houghton, J.M. (1970) : The Public Finance : Selected Readings, Penguin, Harmondsworth.
6. Jha, R. (1998) Modern Public Economics, Routledge, London.
7. Menutt, P. (1996) : The Economics of Public Choice, Edward Elgar, U.K.
8. Shoup, C.S. (1970) : Public Finance, Aldine, Chicago.
9. Shome, P. (Ed.) (1995): Tax Policy : Handbook, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D.C.

## **CORE PAPER IX- INTERNATIONAL ECONOMICS – I**

### **UNIT- I**

Nature and scope of international economics – Inter-regional and International Trade- theories of International trade – Basic concepts: - Community Indifference Curve — offer curve -Classical theories – Adam Smith – David Ricardo — J.S.Mill’s reciprocal theory – Heberler and Opportunity cost theory

### **UNIT - II**

Modern theory of International Trade – Huckster-Ohlin theory of International Trade — Superiority of H-O theory over classical theories of International Trade — Factor price equalisationtheorem–factorpriceandfactorreversals–obstacles–LernerandKindelberger analysis of factor price equalisation theorem- Stolper-samuelson theorem – Rybczynskitheorem-

### **UNIT - III**

Inter- industry trade and Intra-industry trade- differences –global pattern of intra industry trade –An explanation of Intra-industry trade

### **UNIT- IV**

Economies of Scale and Trade: Differential products and trade, differences in taste and Trade; The specific factor model – single and two specific factor case – Technological Gap and product cycle models– increasing returns to scale

### **UNIT - V**

Terms of Trade – concepts of terms of trade – Determinants of Terms of trade – static and dynamic gains from trade – Samuelson on gains from trade – immiserising growth – Economic Growth and trade -Technical progress and Trade – Hicksian graphical analysis – neutral, capital and labour saving technologies and its impact on terms of trade- Prebisch- singer thesis – impact of deterioration of terms of trade on developing countries.

### **RECOMMENDED TEXT:**

1. International Economics – Bosodersten
2. International economicspaulkrugman
3. International Economics – K.C.Rana andK.C.Verma
4. International Economics theory and policy – D.NDwivedi

### **BOOK REFERENCES**

1. International trade theory and policy – GiancarloGandolfo
2. International Economics: MiltiadesChacholiades
3. International Economics – K.C.Rana andK.C.Verma
4. International Economics Francischerunilam



## **CORE PAPER X-DEVELOPMENT ECONOMICS-I**

### **UNIT - I: INTRODUCTION**

Features of less developed economics- Similarities and differences  
Distinction between growth and development; Indicators of development: GDP as development indicator; purchasing power points; Human Development Index

### **UNIT - II: INEQUALITY, POVERTY & DEVELOPMENT**

Measuring inequality: Lorenz curve and Gini co-efficient  
Economic growth and inequality: Kuznets inverted U Hypothesis; consequences of inequality  
Measuring Poverty: Headcount index, income gap index and capability poverty---  
The impact of growth and poverty

### **UNIT - III: THEORIES OF DEVELOPMENT - I**

Adam Smith's  
Theory Malthus  
Theory Ricardo's  
Theory  
Marx Theory of Capitalist development

### **UNIT -IV: THEORIES OF DEVELOPMENT - II**

Development with unlimited supplies of labour (Lewis Theory)  
Schumpeter's Theory of development  
Rostow's Stages of growth theory

### **UNIT -V: THEORIES OF GROWTH**

Harrod-Damon model  
Solow; growth theory: the convergence hypothesis, Solow residual  
New growth theory (Romer)

### **RECOMMENDED TEXT**

1. Adelman, I. (1961) : Theories of Economic Growth and Development, Stanford University Press, Stanford.
2. Thirlwall, A.P. (1978) : Growth and Development, 2ed. Macmillan
3. Michael P. Todaro and Stephen C. Smith (2003): Economic Development, Pearson Education Pte. Ltd., Singapore.

### **BOOKS FOR REFERENCE:**

1. Chakravarty, S. (1982): Alternative Approaches to a theory of Economic Growth, Oxford University Press.
2. Chakravarty, S. (1989): Development Planning: The Indian Experience, Clarendon Press.
3. Chatak, S. (1986) An Introduction to Development Economics, Allen and Unwin.
4. Kindleberger, C.P. (1977) : Economic Development 3ed McGraw Hill.

5. Meler, G.M.(ed.)(1984)  
:LeadingIssuesinEconomicDevelopment4ed.Oxford UniversityPress.
6. Mair, G.M., and D. Seers (Eds.) (1987): Pioneers in Development, Oxford UniversityPress.
7. **Pathway to Economic Development** by Amilaya Krishna Dutt (NewDelhi, Oxford University Press,2014).

## **Elective Paper – IV: ECONOMICS OF INFRASTRUCTURE**

### **UNIT-I**

Infrastructure and economic development – Infrastructure as a public good; Social and physical infrastructure; Special characteristics of utilities. The peak-load, Off-Load Problem, Dual Principle Controversy

### **UNIT-II**

The structure of Transport Costs and Location of Economic Activities. Demand for Transport. Models of Freight and Passenger Demand. Model Choice; Cost Functions in the Transport Sector. Principle of Pricing. Special Problems of Individuals Modes of Transport.

### **UNIT-III**

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 the Indian Context.

### **UNIT-IV**

Organization and Financing of Services- Private vs. Public Sector Financing- the fixation of prices of social services- Health, Education and Human Development Concept- scope and relevance of Human Resource Development- Education and Economic Growth- Educational Planning - Social Demand - The case for Universal, Free, Primary Education; Structure of higher education and problems of its financing in India; The issues in education policy – importance of health and its impact on Economic development.

### **UNIT –V**

Infrastructure in Modern India – strategies for Infrastructure development – differences in infrastructure building between China and India – infrastructure investments in India – prioritization of infrastructure sectors for development – Macroperspective of Infrastructure development in India - Infrastructure and Plans.

### **RECOMMENDED TEXT**

1. Crew, M.A.P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.
2. Indian Council of Social Sciences Research (ICSSR) (1976), Economics of Infrastructure, Vol. VI, New Delhi.
3. National Council of Applied Economic Research (NCAER) (1996), India Infrastructure Report;
4. Policy Implications for Growth and Welfare, NCAER, New Delhi.
5. Parikh, K.S. (Ed.) (1997), India Development Report, Oxford, New Delhi.
6. Turvey. R. (Ed.) (1968), Public Enterprises, Penguin, Harmondsworth.

### **BOOKS FOR REFERENCE**

1. Goyal, S.K. (Ed.) (1995), Public Enterprises, Indian Institute of Public Administration, New Delhi.
2. Panchamukh, P.R. (1980), Economics of Health: A Trend Report in ICSSR, A Survey of Research in Economics, Vol. VI, Infrastructure, Allied, Delhi.
3. Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi.

## **UNIT - I: INTRODUCTION**

Labour as a unique factor of production - Labour Force Labour market – Equilibrium between supply and demand for labour.

## **UNIT - II: PROBLEM OF EMPLOYMENT**

Employment - Problems of unemployment and under employment - Role of Employment Exchanges - Vocational Training - Skill Development Measures - Manpower planning.

## **UNIT- III: WAGE STRUCTURE**

Employee's remuneration - Wage structure in India - Wage differentials - Theories of wages - Wages Act, 1936 - Wage Act 1948 - Bonus and fringe benefits payments of Bonus Act 1965 and amendments - Recent Developments.

## **UNIT - IV: SOCIAL SECURITY MEASURES**

Social Security - ILO and security - Social security measures in India - Employees state Insurance Act 1948 - Employees Provident Funds Act 1952 and Public Provident Fund Act 1968 - Recent developments - Social security in Tamil Nadu.

## **UNIT- V: TRADE UNIONS**

Trade Unionism - Development of Trade Unions in India and their present position - Industrial relations - Industrial conflicts - Preventive and remedial measures - Industrial Act 1947 and amendments - Workers participation in Management - Collective bargaining - adjudication and arbitration - Status of industrial relation in India.

## **BOOKS FOR REFERENCES:**

1. Helfgott, Labour Economics, (New York : Random House 1974)
2. Kamik, V.B., Indian Trade Union: A Survey (Mumbai: Allied Publishers Pvt.Ltd. 1966)
3. McCONNell, Campbell R., and Stanley.L.Brue, Contemporary Labour Economics ( Singapore, McGraw-Hill Book Co 1989)
4. Reynolds, Lloyd. , Labour Economics and Labour Welfare (New Delhi: Prentice – Hall Of India Pvt. Ltd. 1978)
5. Sepsfore, David and ZafirisTzannatos., Current Issues in Labour Economics (Hong Kong, Macmilan 1990)
6. Singh, V.B and Saran, A.K., Industrial Labour in India (Mumbai: Asia Publishing House 1960)
7. Verma, Pramod., Labour Economics and Industrial Relations (New Delhi: TataMcGraw Hill Publishing Co. Ltd. 1987).

## **SEMESTER – IV**

### **CORE PAPER XI- MACRO ECONOMICS II**

## **UNIT-I: KEYNESIAN THEORY THROUGH IS-LM FRAMEWORK**

IS-LM Model – Derivation of IS-LM Curves - Fiscal Policies in IS-LM Framework  
- Monetary Policies in IS-LM Framework - Policy Implications of Keynesian  
Economics: Philips Curve

## **UNIT – II: MONETARISM**

The Crisis in Keynesian Theory: Stagflation - Expectations Augmented Philips  
Curve (NAIRU) Policy Implications of Monetarism

## **UNIT III: NEW CLASSICAL ECONOMICS AND NEW KEYNESIAN ECONOMICS**

New Classical Economics: Rational Expectations Hypothesis – The Concept of  
Policy Irrelevance-Policy Implications of New Classical Economics-  
New Keynesian Economics:  
Similarities and Differences between Traditional Keynesian Economics and New Keynesian  
Economics - Explaining the Upward Slopping Short run Aggregate Supply  
Curve through Sticky Wages and Sticky Prices-  
Policy Implications of New Keynesian Economics

## **UNIT - IV: BUSINESS CYCLE:**

Theories of Schumpeter, Kaldor, Samuelson, Hicks and Goodwin model, Control of Business  
Cycles, relative Efficiency of Monetary and Fiscal Policies

## **UNIT - V: OPEN ECONOMY AND MACRO ECONOMY**

The GDP in an Open Economy - Capital Movement and Interest Rate Parity -  
Mundell– Fleming model – Merits - Dangers of Free Capital Flows–The Global  
Recession of 2008

## **RECOMMENDED TEXT:**

1. Branson, W.A.(1989) : Macroeconomic Theory and Policy, (3<sup>rd</sup> Edition), Harper and Row, New York.
2. Shapiro, E.(1996) : Macroeconomic Analysis, Galgotia Publications, New Delhi.
3. N.Gregory Mankiw : Macro Economics, Worth Publishers.

## **BOOKS FOR REFERENCE**

1. Ackley, G. (1978) - Macroeconomics: Theory and Policy, Macmillan, New York Blackhouse,
2. R.and A.Salansi(2000)-Macroeconomics and the Real World (2 Vols.) Oxford University Press, London.
3. Dornbusch, R.and F.Stanley(1997)-Macroeconomics, McGraw Hill, Inc., New York.
4. Gupta S.B(1993) - Monetary Economics, S Chand Publications, New Delhi.
5. Hall, R.E. and J.B. Taylor (1986) -Macroeconomics, W.W.Norton, New York.
6. Heijdra, B.J.and V.P. Fredericck (2001) - Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
7. Jha, R. (1991) - Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
8. Romer, D.L.(1996)-Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
9. Scarfe, B.L. (1977) - Cycles, Growth and Inflation, McGraw Hill, New York.

10. Surrey, M.J.C. (Ed.) (1976) - Macroeconomic Themes, Oxford University Press, Oxford.

## **CORE PAPER XII- PUBLIC ECONOMICS -II**

### **UNIT - I: PUBLIC POLICY**

Demand revealing schemes for public goods – Contribution of Clarks, Groves and Leyard, Tiebout model, theory of club goods, stabilization policy – Keynesian case for stabilization policy: Uncertainty and expectations, Failure of inter – temporal markets.

### **UNIT - II: PUBLIC EXPENDITURE**

Public Expenditure – Wagner's Law – Wiseman – Peacock Hypothesis – Structure and Growth of Public Expenditure – Evaluation of Public expenditure – Cost Benefit Analysis– ShadowPrices–DiscountRate– ReformsinPublicExpenditure–PerformanceBudgeting– Programme Budgeting - Zero Base Budgeting – Appraisal of Public Expenditure Policy in India.

### **UNIT-III:FISCALFEDERALISM**

Fiscalfederalism:TheoriesofFiscalFederalism-ConceptsofDeficits– DeficitFinancing– Budget Deficit – Issues of Equity and Efficiency – Designing Equalisation transfers – Conditional and Unconditionalgrants.

### **UNIT - IV: INDIAN FISCAL FEDERALISM**

Indian federalism- Tax assignments to Centre and States–Particular Taxes – Personal income Tax – Corporation Income Tax – Capital Gains Tax –Union Excise Duties - MANVAT, MODVAT –VAT- GST –Service tax; Tax Evasion – State Taxes- Appraisal of Tax Policies of India-Goods; tax reforms in India-Goods and services tax.

### **UNIT - V: FISCAL POLICY**

Objectives – Fiscal and monetary policies – Fiscal policy for stabilization – Automatic Vs Discretionarystabilization– AlternativemeasuresofResourcemobilizationandtheirimpact on growth, distribution andprices.

### **RECOMMENDED TEXT:**

1. Bhargava(2004) :Publicfinance,ItsTheoryandworkingin India,ChaitanyaPublishingHouse.
2. Musgrave,R.A.(1959) : The Theory of Public Finance,McGraw Hill, Kogakhusa, Tokyo
3. Musgrave,R.A.andP.B.Musgrave(1976):PublicFinanceinTheoryandPractice, McGraw Hill, Kogakusha, Tokyo.

### **BOOKS FOR REFERENCE**

1. Atkinson, A.B. and J.E.Siglitz(1980) : Lectures onPublicEconomics, Tata McGraw Hill, NewYork.
2. Auerbach,A.J.and M. Feldstern(Eds.)(1985) :HandbookofPublicEconomics, Vol. I, North Holland,Amsterdam.
3. Buchanan,J.M.(1970):ThePublicFinances,RichardD.Irwin, Homewood.
4. Goode, R. (1986)Government Finan~~ce~~ in Developing Countries, Tata McGraw Hill, NewDelhi.



5. Houghton, J.M. (1970) : The Public Finance : Selected Readings, Penguin, Harmondsworth.
6. Jha, R. (1998) Modern Public Economics, Routledge, London.
7. Menutt, P. (1996) : The Economics of Public Choice, Edward Elgar, U.K.
8. Shoup, C.S. (1970) : Public Finance, Aldine, Chicago.
9. Shome, P. (Ed.) (1995): Tax Policy : Handbook, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D.C.

## **UNIT - I**

Trade policy – Free trade vs Restricted trade policy – Barrier to trade – Tariff – Meaning and types of Tariff – General Equilibrium analysis of tariff – Effects of Tariff – Theory of optimum tariff — Non-tariff barriers – Quotas – Dumping – Export taxes and subsidies – Voluntary export restraints — the state trading – International trade cartels – Theory of Customs Union – trade creation and trade diversion – effects of customs union – Trade problems and policies of developing countries. Foreign trade and National Income – trade multiplier and export multiplier

## **UNIT - II**

Balance of payments and trade – Structure of balance of payments — Balance of payments equilibrium – Balance of payments adjustments – exchange rate – Devaluation and balance of payments – Elasticity approach – The J-curve effect – Absorption approach – Balance of payment adjustments – domestic price, income, capital movements, monetary approach and expenditure policies – balance of payment adjustments through controls

## **UNIT - III**

Foreign exchange - functions – determination of equilibrium – spot and forward rates of exchange – Theories of exchange rate determination – Mint parity theory – purchasing power parity theory – balance of payment theory – Fixed exchange vs flexible exchange – Exchange controls – current account and capital account convertibility

## **UNIT - IV**

International capital movements – Foreign aid and development – Aid vs Trade effects of International capital flows – Internal and external balance – The Mundell-Fleming model – internal and external balance through monetary – fiscal policy mix – fixed exchange rate system and flexible exchange rate system – balance of payments with inflation and unemployment.

## **UNIT - V**

International monetary system – Problems of international monetary system – Brettonwood system and its breakdown – GATT – WTO – European currency markets – European monetary system – Globalization and integration of global economy – Global financial crisis and global Economy – International trade and Environment

### **RECOMMENDED TEXT:**

1. International Economics – Bosodersten
2. International economics paulkrugman
3. International Economics – K.C.Rana and K.C.Verma
4. International Economics theory and policy – D.NDwivedi

### **BOOK REFERENCES**

1. International trade theory and policy – Giancarlo Gandolfo
2. International Economics: Miltiades Chacholiades
3. International Economics – K.C.Rana and K.C.Verma
4. International Economics Francischerunilam

**CORE XIV- FINANCIAL ECONOMICS**

31

**UNIT-1**

Introduction to Capital markets-An over view of financial markets; structure and characteristics, primary & secondary, markets IPO, book building, Allotment & listing; Market infrastructure institution: stock exchanges & depositories; Market intermediaries: stock brokers & subbrokers, Authorised persons (AP)& Depository participants (DP), Registrar& share Transfer agents (RTA) Merchant Bankers &Under Writers, Credit Rating Agencies.

## **UNIT-II**

Trading, Clearing & settlement: Debt Markets, Money Markets, Bonds & Debentures and yield;

Wholesale debt market of NSE. Equity markets: Trading, clearing, & settlement cycle ,Margining system, Pay-in & Pay-Out of cash and securities. Income Tax on Dividends, Long term/short term capital gains Tax, Wealth Tax on equity investments.

## **UNIT-III**

Derivative markets: Derivative market in India & its regulations LC Gupta committee. Need for derivatives& its economic utility; hedging & arbitrage through derivatives. Forward Vs Futures; Futures&Options; American option & European Option; Call Option & Put Option; Pay-Offs for futures and different types of options. Pricing derivatives. Trading system, Clearing & settlement; Margins, initial margin, MTM- market to market, VaR margin; commodities trading, Forex/currency trading, interest rate futures/derivatives trading &taxation.

## **UNIT - IV**

Regulation of Financial Markets: legal and regulatory frame work : The role of the Regulators: SEBI, FMC, IRDA, PFRDA, RBI; Know Your Customer, SEBI Guidelines for capital issues, Circular Trading, Price sensitive information and Insider Trading, UPSI - Unpublished Price Sensitive Information (one case study from insider trading). Investor Protection : IPF — Investor Protection Funds, Investor Awareness Initiatives by SEBI, Stock Exchanges, Depositories and Mutual Funds.

## **UNIT - V**

Mutual Funds, Types & Options, Equity MI', Debt MF, Balanced MF, Diversified MF. Sectoral MF, Growth Option Vs Dividend Option, Tax benefits. Angel Funds, Venture Capital Financing, Start-ups, Unicorns, Dragons. Finance Information System (FIS), AIR. Interpretation and impact of Leading Economic Indicators: GDP, CPI, WPI, HP, CAD, TD, FD, PMI, etc. International Economic Indicators & impact on the Financial Markets: USD Index, Crude, Bullion, Bast Metals, USA, Euro & Asian Mkts.

## **RECOMMENDED TEXT:**

32

- Bhole : Financial Institutions and Markets, TMIJ.

- M.Y. Khan, (2001): Financial Services, TMH

**BOOKS FOR REFERENCE:**

- Fabozzi, (2002) : Foundations of Financial Markets and Institutions, Pearson Education,  
New Delhi.
- James C. Van Horne, : Financial Management and Policy,(2002) Prentice Hall of India Pvt.  
Ltd.New Delhi.
- Kuchhal S.C. : Financial management: An Analytical and Conceptual Approach — Chaitanya  
publishing House, Allahabad.
- P.V. Kulkarni : Financial management, Himalaya Publishing House.
- Panday, I.M. : Financial

## **I: SECTORAL CONTRIBUTION IN DEVELOPMENT**

Agricultural sector's contribution to development and policies for enhancing agriculture's role in development

Rural-

Urban migration: Push and Pull factors.

Manufacturing sector  
and developmental.

Urban informal sector: Characteristics of the sector and consequences of its growth.

## **UNIT - II: HUMAN CAPITAL AND DEVELOPMENT**

Population: Demographic transition, population–  
development interrelationship The role of health in national and  
economic performance

Education and Economic growth: the return on education; and productivity

Economic rationale for government's role in providing health care and education in  
poor economics

## **UNIT - III: STRATEGIES FOR DEVELOPMENT**

Balanced and Unbalanced growth

The role of market and state in development

Strengths and limitations of inward-  
oriented and outward trade policies

The–Washington Consensus components and critical evaluation  
n

## **UNIT - IV: GENDER EMPOWERMENT**

The concept of gender empowerment UNDP's Gender Empowerment Measure

The mutual interrelationship between gender empowerment and economic devel-  
opment

The concept of sustainable development (Brundtland definition), policies for sustain-  
able development

## **UNIT - V: NON-ECONOMIC FACTORS IN DEVELOPMENT**

Geography and development; the–internal resource curse (DUTCH Disease) Social capital and economic growth

Institution for development: Property rights, –inclusive political institutions

## **RECOMMENDED TEXT**

1. Adelman, I. (1961) : Theories of Economic Growth and Development, Stanford University Press, Stanford.
2. Thirlwall, A.P. (1978) : Growth and Development, 2ed. Macmillan
3. Michael P. Todaro and Stephen C. Smith (2003): Economic Development, Pearson Education Pte. Ltd., Singapore.

## **BOOKS FOR REFERENCE:**

1. Chakravarty, S. (1982): Alternative Approaches to a theory of Economic Growth, Oxford University Press.
2. Chakravarty, S. (1989): Development Planning: The Indian Experience, Clarendon Press. 34
3. Chatak, S. (1986) An Introduction to Development Economics, Allen and Unwin.

4. Kindleberger, C.P. (1977) : Economic Development 3ed McGrawHill.
5. Meler, G.M. (ed.) (1984)  
: Leading Issues in Economic Development 4ed. Oxford University Press.
6. Mair, G.M., and D. Seers (Eds.) (1987): Pioneers in Development, Oxford University Press.
7. **Pathway to Economic Development** by Amilaya Krishna Dutt  
(New Delhi, Oxford University Press, 2014).

## **ELECTIVE V - OPERATION RESEARCH**

### **UNIT-I**

Operation Research-Meaning-Scope-Limitations-Application in decision making

### **UNIT-II**

Linear Programming — Graphical — Simplex Method (restricted to two variables) - Profit Maximization — Cost Minimization - Input-Out analysis — Leontif Model.

### **UNIT - III**

Transportation Models —North West Corner method-Least Cost Method- Vogels Approximation method-Assignment Models

### **UNIT - IV**

Decision Theory -Use of Probability — Applications -Baye's Theorem -Decision Trees

### **UNIT - V**

Network Analysis — Construction of the Network - Critical path calculation (CPM) - Queuing Theory —Single Channel -Erhlang Model -Number of Customers— Number Waiting Line & System.

### **RECOMMENDED TEXT**

- Hamdy A. Taha , Operations Research; An Introduction, Prentice Hall of India Private Limited, New Delhi ,2003.
- Gupta P.K. and Manmohan : Business Statistics & Operations Research, Sultan Chand & Sons, New Delhi.
- Vittal, P.R. : Business Statistics and Operations Research, Margham Publications Chennai

### **BOOKS FOR REFERENCE:**

- J.K. Sharma: Operations Research: Theory and Applications, Rajiv Bein for Macmillan India Ltd, New Delhi