

**GURU NANAK COLLEGE (AUTONOMOUS)**

**REVISED PROPOSED SYLLABI FOR M.A ECONOMICS**

*By*

**BOARD OF STUDIES**



**POST GRADUATE AND RESEARCH  
DEPARTMENT OF ECONOMICS  
GURU NANAK COLLEGE, VELACHERY  
CHENNAI – 600 042**

**JANUARY 2017**

**APPENDIX – 11 (R & S)**  
**UNIVERSITY OF MADRAS**  
**GURU NANAK COLLEGE (AUTONOMOUS)**  
**DEPARTMENT OF ECONOMICS**

**Introduction**

Economics will not remain healthy if it becomes static or if it gets into set routine, unrelated to the sweeping changes all around as a consequence of the emerging dynamics of the Indian situation.

In view of the rapidly emerging socio-economic environment fresh issues arise continually at the national and global levels that require newer methods of analysis. So course curriculum should be constantly reviewed in the light of the changes.

Over the recent past, the subject of Economics has undergone significant changes on account of the vast explosion of knowledge. Therefore constant endeavour should be made to re-assess the extent to which the syllabus needs modifications and improvements, not only in the light of experience but also in the light of latest developments in thought, technique, analysis and the rapidly changing socio-economic environment in the country.

While there exist a potential demand for economists it has to go largely unsatisfied because the economics graduates produced in our country are unsuited for the job. To overcome this obstacle in the employability of economics students, teaching of economics should be linked with the needs of business and industry. If it is done, then not only the teaching of economics made job oriented, but also will satisfy a need which has very real social importance.

In order to achieve the objective of quality of value based higher education the board of studies has revised the final curriculum and syllabus on 20.1.2017.

**Scope**

Economists are employed in large numbers in industries, institutions and different departments of the Government. Financial institutions – both national and international absorb Economists with some training. With globalization the need for economists in business and industry is growing. Hence constant effort should be made to improve the skill and knowledge of the students of economics and make them employable.

**Aims and Goals**

1. To take cognizance of the different economic systems that are prevailing,

2. To make the students know about the basic functions of an economy,
3. To enable the learners understand the various markets and their roles in an economic set-up,
4. To hone one's skill in analysis and interpretation of economic principles,
5. To equip enough knowledge to start an enterprise.
6. To develop self-confidence among student community.
7. To cater to the present day need of the society.

**Methodology:**

Interactive method of teaching in the classroom will be appreciated. It should be more of a two way communication rather than the teacher dominant lecture alone method. Apart from lectures, case studies are recommended as it improves the analytical and interpretative skill of the students. Lecture method, use of visual media, case study, field visit, Assignment, Peer learning etc. can be adopted.

**Materials:**

The following are the learning materials suggested:-

- Text books
- Reference books
- Journals
- Records and
- CDs
- Articles from Internet

**Media:**

The following are the media of learning suggested:

- Chalk Board
- Printed Sheets
- Computer
- OHP
- PP
- LCD
- Oral

**Outcome:**

After completion of three years, the program should be able to demonstrate the following abilities among the students:-

- To supply young economists.
- Employability.
- Develop the opportunities in analyzing the problems of society and finding a solution.
- To develop self-confidence.
- To meet the challenges of the ever changing economic environment.
- To develop skills and ethics
- To develop value orientation.
- To make them good citizens and to discharge their social responsibility.
- To prepare them for higher studies.

**GURU NANAK COLLEGE (AUTONOMOUS)**

**REVISED PROPOSED SYLLABI FOR M.A ECONOMICS**

<b>SEM</b>	<b>COURSE COMPONENT</b>	<b>SUBJECT NAME</b>	<b>CREDITS</b>	<b>HOURS</b>
<b>I</b>	Core - I	Micro Economics – I	4	6
	Core - II	Indian Economic Development - I	4	6
	Core - III	Research Methodology	4	6
	Elective - I	Energy Economics	3	6
	Elective - II	Mathematics for Economists - I	3	6
		Soft Skills - I	2	
<b>II</b>	Core - IV	Micro Economics - II	4	6
	Core - V	Indian Economic Development - II	4	6
	Core - VI	Statistics for Economists	4	6
	Elective - VII	Mathematics for Economists - II	3	6
	Extra Disciplinary - I	Environmental Economics	3	6
		Soft Skills -II	2	
<b>III</b>	Core - VII	Macro Economics - I	4	6
	Core - VII	Public Economics - I	4	6
	Core - IX	International Economics - I	4	6
	Elective - IV	Economics of Development	3	6
	Extra Disciplinary - II	Health Economics	3	6
		Soft Skills - III	2	
		Internship	2	
<b>IV</b>	Core - X	Macro Economics - II	4	5
	Core - XI	Public Economics - II	4	5
	Core - XII	International Economics - II	4	5
	Core - XIII	Monetary Economics	4	5
	In lieu of Project Two Core papers (XIV & XV)	Financial Economics	4	3
		Gender Economics	4	3
		Computer Application for Economics	3	4
	Elective - V		3	
		Soft Skills - IV	2	

## **M.A. ECONOMICS**

### **COURSES STUDY**

#### **A. Core papers**

1. Micro Economic Theory – I
2. Micro Economic Theory – II
3. Indian Economic Development and Policy – I
4. Indian Economic Development and Policy - II
5. Research Methodology
6. Statistics for Economist
7. Macro Economic Theory – I
8. Macro Economic Theory – II
9. Public Economics – I
10. Public Economics – II
11. International Economics – I
12. International Economics – II
13. Monetary Economics
14. Financial Economics
15. Gender Economics

#### **B. Elective Papers**

1. Energy Economics
2. Mathematics for Economists – I
3. Mathematics for Economists – II
4. Economics of Development
5. Computer Application for Economics

#### **C. Extra Disciplinary Papers**

1. Environmental Economics
2. Health Economics

## Evaluation Pattern

The Evaluation pattern comprises of Continuous Internal Assessment (CIA) and External Examination (EE).

- (1) For Continuous Internal Assessment (CIA) 50 marks may be allotted. The components may be as follows:
  - (a) Test (for one hour) = 15 marks (3 tests may be conducted, the average of the best 2 may be taken into account)
  - (b) Assignment – Individual or Group = 5 marks
  - (c) Presentations = 5 marks
- (2) External Evaluation  
 The total marks 100 (50 marks)  
 Question paper pattern for all subjects:

### Section A (10 x 2 = 20 marks) Short Answer Questions

Ten questions out of twelve

### Section B (5 x 8 = 40 marks) Paragraph questions

Five questions may be answered out of seven, with open choice. Each answer shall not exceed 4 pages.

### Section C (4 x 10 = 40 marks) Essay type questions

Four questions out of six. Each answer shall not exceed six pages.

## Passing Minimum

For passing, put together an aggregate of (both internal and external) 40 marks in each paper is mandatory. However, for External Examination, the passing minimum is 40 marks.

### For Awarding Classes:

40% to 49%	Third Class
50% to 59%	Second Class
60% to 74%	First Class

75% and above

Pass with Distinction

**Proposed syllabus [PG]****GURU NANAK COLLEGE****M.A. DEGREE COURSE IN ECONOMICS****FIRST SEMESTER****CORE-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-Recent developments in demand theory.

**Unit II: Theory of Production**

The production Function – Production Function – short and long run – Relation between returns to scale and returns 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.



## **CORE- II - INDIAN ECONOMIC DEVELOPMENT AND POLICY – I**

### **Unit I: Resource Development in India**

Resource profile of India – Policies relating to the development of land, forest, water, fisheries and mineral resources – Economic development and Environmental degradation – Land degradation and Soil erosion – deforestation – faulty utilization of water resources

### **Unit II: Planning**

Plan Concepts-Indian Planning-concept of mixed economy, objectives of planning, perspective planning - Decentralised planning – indicative Planning – District Planning – Local Planning - Indian plan models: Mahalanobis, and Input – Output, Multi – sectoral models, minimum needs - evaluation and appraisal of five years plans

### **Unit III: National Income**

Concept and measurement of National Income-Trend in National Income - Sectoral contribution to GDP since Independence-Real Vs. Nominal-Measurement of Inflation-Inflationary Trend in India Concepts of Money supply-M1, M2, M3, and M4; L1,L2 and L3.

### **Unit IV: Poverty and Unemployment**

Poverty - Measurement of poverty Line – Poverty Trend in India Regional disparities in incidence of poverty-Planning for Poverty Eradication-Public Policies Relating to Income and Asset Distribution – Concept and measurement employment and unemployment; Rural Vs urban employment-non farm employment-migration issues

### **Unit V: Trade Policies**

Trade policies: import substitution and export promotion – Recent Policies Changes - Technology Transfer – Reforms in Exchange Rates - role of foreign capital – Foreign Direct Investment (FDI) and Its Implications on Indian Economy.

## **CORE-III. RESEARCH METHODOLOGY**

### **Unit I**

Nature and Scope Social Research - Aims – objectives. The nature of theory and data (fact) and their relevance for social research.

### **Unit II**

Stages in research process - selection of problem - Formulation of research problem – Theoretical frame work - formulation of Hypotheses – Research designs.

### **Unit III**

Techniques of data collection; Observation, Schedule an Questionnaire - and interview methods – Projective and other methods and Organisation of social surveys - importance and scope of social survey analysis of the different steps involved in the planning – preparation of budget – staff and its training .

### **Unit IV**

Analysis of data: Editing, Processing, Consolidation and Tabulation Application of Techniques – Scaling Techniques.

### **Unit V**

Research presentation: General organization of research presentation – aims and objectives of presentation effectiveness in presentation of statistical data – rules for arrangement of text-diagrams-references, etc.

### **Recommended Text**

1. Goode, W.J. (1952) and Hatt, P.K. : Method in social Research, McGraw-Hill.
2. Kothari. C.R.(2005) : Research Methodology: Methods & Techniques, Wiley Eastern limited, New Delhi.

### **Reference Books**

1. Cochran W.G (1963) : Sampling Techniques (Second Edition) John Wiley & sons.
2. Donald R.Cooper; Pamela S. Schindler, (1999) : Business-Research Methods, Tata McGraw Hill, New Delhi
3. Forces and Bircher (1973) : Social Research Methods. Prentice Hall Inc.
4. Hicks, J.R. (1979) : Casualty in Economics.

## **ELECTIVE – I: ENERGY ECONOMICS\***

### **Objectives**

This paper enables the students to understand the basics of energy economics and to solve the problems of energy and environmental issues.

### **Unit – I: Introduction to Energy Economics**

Natural Resources – classification – importance – Role of Natural Resources in Economic Development – Energy Resources – Types and classification – Properties of Energy – Forms of Energy – Emergence of Energy Economics – Its nature and scope – Energy indicators – Energy Economics relation with other branches.

### **Unit – II: Energy and Development**

Role of Energy in Economic Development – Energy Intensity and Energy Elasticity – National and International comparison – Low, Middle and High Income Economies – Role of International Institutions – OPEC, OAPEC, IEA, and World Bank.

### **Unit – III: Energy and Environment**

Energy Crisis causes, consequences – Remedial measures – Environmental Crisis – causes, consequences, remedial measures – Impact of Energy Consumption and Production on Environment with illustrations – Role of Energy and Environmental Economists in solving Energy and Environmental Crisis.

### **Unit – IV: Energy Conservation and Energy Management**

Energy Planning and Energy Conservation: Meaning, objectives and importance – Energy Management – Meaning, Objectives and Importance – Recent Developments – Energy Auditing – Energy Accounting – Energy Pricing and Taxes – Role of Economists in Promoting Sustainable Energy Management. M.A. Economics: Syllabus (CBCS)

### **Unit – V: India's Energy Profile**

Indian Energy Sector – Organizational Structure – Energy Supply (Coal, Lignite, Oil, Gas and Powers – Hydro, Nuclear, Thermal) – Energy Demand (Agriculture, Industry, Transport, Domestic, etc) Renewable Energy Sources and Technology (Solar, Wind, Biogas, Biomass, Geothermal, OTEC, Tidal, Wave Hydrogen, Fuel Cell, Bio-diesel) – Renewable Energy Programs – Energy under Five Year plans – Energy issues and policy options for India.

### **Reference Books**

1. Agarwal, M.C. and Monga, J.R. – Economic and Commercial Geography, (National Publishing House, New Delhi, 1992).
2. Agarwal, S.K. – Environment and Natural Resources Economics (Scott Foresman & Co., London, 1985).
3. Common, M. – Environmental and Resource Economics (Longman, London, 1996)
4. David Pearce et al – Sustainable Development – Economics and Environment in the Third World (Earthscan Publications, London, 1990)

## **ELECTIVE – II: MATHEMATICS FOR ECONOMISTS – I\***

### **Unit I :**

Set Theory: Concept and Operation of Sets.

### **Unit II:**

Equation of straight line - Parabola - Rectangular Hyperbola – Relationships among Total, Average and Marginal Curves.

### **Unit III:**

Logarithmic and Exponential Functions – Convex and Concave Functions – Indifference, Iso-quant and Transformation Curves.

### **Unit IV:**

Concept of Limit - Techniques of Differentiation – Elasticities – Conditions for Extremum of Functions of one variable.

### **Unit V:**

Functions of two Variables – Partial Derivatives – Maxima and Minima – Properties of Homogenous Functions – Uses of Homogenous Functions in Economics.

### **Recommended Text**

1. Edward. T. Dowling : Mathematics for Economists, McGraw – Hill Book Company.
2. Mehta V.L. & Madhani : Mathematics for Economists, Sultan Chand and Sons.

### **Reference Books:**

1. Allen R.G.D. :Mathematical Analysis for Economists, Macmillan and Company Limited, London.
2. Chiang A.C. : Fundamental Methods of Mathematical Economics, McGraw – Hill Book Company.
3. Stafford.L.W.T. :Mathematics for Economist, The English Language Book Society and Macdonald and Evans Limited, London.
4. Mabett. A.J. :Mathematics for Economists, Macmillan Master Series.
5. Weber : Mathematics for Economists.

## **SECOND SEMESTER**

### **CORE –IV: MICRO ECONOMICS – II**

#### **Unit I: Modern Theories of the Firm**

Baumol's Theory of Sales Revenue Maximisation – Marris 's Model of the Managerial Enterprise – O. Williamsons'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**

Economics of Information- Moral hazard problem, adverse selection, principal agent problem, implications of asymmetric information, market signaling, hidden information modeling, efficiency wage model, 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 – 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. Dwivedi : Micro Economic theory and applications, Pearson.

#### **Reference Books:**

1. Baumol.W.J., (1978) : Economic Theory and Operations Analysis, Prentice Hall of India.
2. Cohen. K.J. and Cyert. R.M. (1976) : Theory of the Firm, Prentice Hall of India.
3. Ferguson, C.E., (1968) : Micro Economic Theory, Cambridge, University Press, London.
4. Green, H.A.J (1974) : Consumer Theory, 2nd Edition, Macmillan.

## **CORE-V: INDIAN ECONOMIC DEVELOPMENT AND POLICY - II**

### **Unit I: Agriculture**

Agriculture growth at National and State levels – Institutional and technological policy – green revolution – agricultural price policy, agricultural credit – Food Security – Public Distribution System(PDS) – Agricultural Finance – Agricultural Marketing – inter-sectoral terms of trade – WTO and its implications.

### **Unit II: Industry**

Industry growth at National and State levels – Over view of earlier Industrial policies (1948 - 1990) - Industrial policy since 1990 – pattern of industrial growth – productivity trends, modernization, small Vs large industry – Special Economic Zones – Industrial Finance.

### **Unit III: Population and Human Development**

Population and Development – National Population Policy (2000) – Demographic Dividend - Human development indicators: review of change since early fifties –wide regional variations – demographic trend in India and dividend –health services, Health policy; Education Policy; Financing of Health and Education.

### **Unit IV: Infrastructure Development in India**

Infrastructure and economic development – Economic Infrastructure – Energy, Power, Transport, Communication, Science and Technology – Policies pertaining to Economic Infrastructure development – Financing of Infrastructure development – PPP Model – Financing institutions – International collaborations.

### **Unit V: Indian Public Finance:**

Finances of Central and State governments – an overview of Central budgets – trends – public debt of India – deficit financing in India – Fiscal reforms – Fiscal Responsibility Act – recommendations of tax and expenditure commissions – Centre – State financial relations – Constitutional provisions relating to fiscal and financial powers of the states – financial aspects of Sarkaria Commission – The Finance Commission awards – Centre- State conflict of finance.

#### **Recommended Text:**

1. Dutt and Sundaram(2007) :Indian Economy, S.Chand & Company
2. Dhingra. I.C.(2006) : Indian Economy, S.Chand & Company.
3. Chakravarty, S. (1987) :Development Planning: The Indian Experience, OUP, New Delhi.

#### **Reference Books**

1. J. Bhagwati and S. Chakravarty : Indian Economic Analysis: A. Survey.
2. A. K. Das Gupta : Planning and Economic Growth
3. Bhagwati and Desai : Planning for Industrialization

## **CORE-VI: STATISTICS FOR ECONOMISTS**

### **Unit I**

Random experiments - sample space-events-different approaches to probability (classical, statistical and axiomatic) - statistical regularity-independence and conditional probability-Bayes theorem-simple problems.

### **Unit II**

Random variables (Discrete and Continuous)-probability mass and density functions (MGF-Moment Generating Function)-standard distributions (Binomial, Poisson and Normal)-properties of Bi-variate distributions-Correlation and Regression- applications and simple problems.

### **Unit III**

Sampling, Different types of sampling-Sampling and Non-sampling errors-Sampling Distributions-Standard error-point estimation-properties of estimators (Unbiasedness, consistency and efficiency)-Hypothesis testing-Null and alternative hypothesis - type I and type II errors-level of Significance-p-value-Large Sample tests (Z tests).

### **Unit IV**

Small Sample tests (t, F tests), test for independence of attributes ( $\chi^2$  test), ANOVA, concept of confidence intervals (CI), CI based on Z and t statistic.

### **Unit V**

Introduction to time series-components of time series-estimation of trend (moving averages, least square method for linear and exponential trend) - measuring cyclical and seasonal variation - introduction to index numbers-weighted and unweighted index numbers(price and quantity index numbers) - consumer price index number-concept of deflation and real wages(income).

### **Recommended Text:**

1. A.M. Mood, F.A. Graybill and D.C. Boes (1973) : Introduction to theory of Statistics, 3<sup>rd</sup> ed. McGraw Hill.
2. S.P. Gupta (1983): Statistical Methods, 19<sup>th</sup> ed. Sultan Chand and sons, New Delhi.

### **Reference Books:**

1. D.N. Elhance (2004) : Practical problems in statistics, Kitab Mahal, Allahabad.
2. A.L. Nagar and R.K. Das : Basic statistics, Oxford university Press, New Delhi.
3. M.R. Spiegel and L.J. Stephens (1999): Theory and Problems of Statistics, Tata McGraw Hill Co, Ltd.
4. R. Veerachamy: Quantitative Techniques for Economists, New Age International P. Ltd.

## **ELECTIVE – III: MATHEMATICS FOR ECONOMISTS - II**

### **Unit I**

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

### **Unit II**

Matrices – Matrix operations – Commutative Associative and Distributive Laws – Determinants – Rank of a matrix – Matrix Inverse – Cramer's Rule.

### **Unit III**

Input - Output Analysis – Leontieff Model.

### **Unit IV**

Linear Programming – Graphical Method – Simplex Method – Primal and Dual.

### **Unit V**

Elementary Integration Techniques – Indefinite Integrals – Definite Integrals – Economic Applications of Integrals – Consumer's Surplus – Producer's Surplus.

### **Recommended Text**

1. Edward. T. Dowling : Mathematics for Economists, Mcgraw – Hill Book Company.
2. Mehta V.L. & Madnani: Mathematics for Economists, Sultan Chand and Sons.

### **Books for References:**

1. Allen R.G.D. :Mathematical Analysis for Economists, Macmillan andCompany Limited, London.
2. Chiang A.C. :Fundamental Methods of Mathematical Economics, Mcgraw – Hill Book Company.
3. Stafford.L.W.T. :Mathematis for Economist, The English Language Book Society and Macdonald and Evans Limited, London.
4. Mabett. A.J. :Mathematics for Economists, Macmillan Master Series.
5. Weber : Mathematics for Economists.



## **EXTRA DISCIPLINARY – I - ENVIRONMENTAL ECONOMICS**

### **Objectives:**

To know the impact of Economics on the Environment. To understand the use of Economic Tools in the analysis of environmental issues and policy making.

### **Unit – I: Definition and Scope of Environmental Economics**

Introduction – Economics and Environment – Definition of Environmental Economics – Scope and Significance of Environmental Economics: Environment Inter-linkages – Market failure and Externality – Accounting for the Environment – Pareto Optimality – Individual Choice Vs Social Choice.

### **Unit – II: Resource Economics**

Natural Resources: Types and Classification – Economics of Natural Resources Exploitation – Market Structure and the exploitation of Non-Renewable Resources – Conservation of Resources: Definition and Meaning– Methods of Conservation – Material Substitution – Product Life Extension – Recycling – Optimum Recycling – Waste Management.

### **Unit – III: Environment and Sustainable Development**

The Environmental Costs of Economic Growth – Limits to Growth – Sustainable Development – Brundtland Commission - Sustainable Industrialization – Pollution abatement and Control.

### **Unit – IV: Cost Benefit Analysis**

Cost Benefit Analysis: Definition – Advantages & Limitations of Cost Benefit Analysis – Methods for Valuing Environmental Costs and Benefits: Environmental Impact Assessment: Meaning & Measurement.

### **Unit – V: Policy Measures**

Basic Approach to Environmental Policy – Problem of Pollution Control – Moralsuasion – Direct Control – Regulation – Prohibition – Fiscal techniques – Effluent Charges and Subsidies – Common Effluent Treatment Plant.

### **Reference Books:**

1. Kolstad, Charles, Environmental Economics, Oxford University Press, New Delhi – 2001.
2. Sankar, U, Environmental Economics, Oxford University Press, New Delhi, 2001.
3. Sengupta, Ramprasad, Ecology and Economics, Oxford University Press, New Delhi, 2001.
4. Bhattacharya, Rabindra, N. Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi, 2001.

## **THIRD SEMESTER**

### **CORE-VII - MACRO ECONOMICS - 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 classists, Says 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 , The concept of under employment – Aggregate demand – Effective Demand

#### **Unit IV: Theory of Demand for money**

Theory of Money : Quantity theory money Fischers and Cambridge equation, Keynesian theory of money – Modern Quantity theory of money – Milton Friedman – 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**

Supply of Money - A Behavioural Model of Money Supply Determination, RBI Approach to money supply, High powered money and money multiplier, Money Supply in open economy, Control of money supply.

#### **Recommended Text:**

1. Branson, W.A. (1989): Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
2. Shapiro, E. (1996): Macroeconomic Analysis, Galgotia Publications, New Delhi.

#### **Reference Books**

1. Ackley, G. (1978) : Macroeconomics: Theory and Policy, Macmillan, New York.
2. Blackhouse, R.and A. Salansi (2000) Macroeconomics and the Real World (2 Vols.) Oxford University Press, London.
3. Dornbusch, R.andF. Stanley (1997): Macroeconomics, McGraw Hill, Inc., New York.

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

### **Unit I: Public Finance: 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: Welfare Economics**

Welfare foundation of public economics – Pareto optimality – Arrow's social welfare function – Majority Rule – Intensity of Preference – Transaction cost and non-market decision making - Market failures- Theory of Second best.

### **Unit III: Public Good and Taxation**

Public goods and externalities, merit goods, Samuelson theory, free rider problem, Lindahl solution, Coasian theory, theory of clubs, median voter theorem, theory of rent seeking- Taxation :Theories of Taxation — Concept of Excess Burden of Taxes – Classical and Modern views – direct Vs. Indirect taxes, efficiency and equity, dead weight 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.

### **Reference Books**

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.

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

### **Unit I: International Economics: Introduction**

Nature and scope of International Economics: Pure theory of International Trade Theories of Absolute cost Advantage, Comparative cost Advantage theory and J.S.Mill's reciprocal theory. Neo Classical theory of Haberler, Opportunity cost Advantage theory. Basic concepts – Community indifference curves and Offer curves. Modern theory of International Trade – Heckscher - Ohlin contribution – factor price equalization theorem-factor prices and factor reversals – obstacles to factor price equalization.

### **Unit II: Measurement of Gains**

Terms of Trade – different concepts of Terms of trade – Determinants of Terms of trade – static and dynamic gains from trade – Samuelson on gains from trade – Immiserising growth – Technical progress and trade – Hicksian graphical analysis – neutral, capital saving and labour saving technologies and its impact on terms of trade.

### **Unit III : Theory of Interventions**

Tariffs and development-Impact of tariffs –partial and general equilibrium analysis-Political economy of non-tariff barriers-quotas types-dumping and the economic rationale of dumping.

### **Unit IV: Foreign Capital**

Role of foreign capital in economic development – issues in foreign capital in economic development – theory of direct investment – issues in foreign direct investment – Multinational Corporations – Transfers and Capital movements – interest rate and capital movements – foreign aid.

### **Unit V: Foreign Exchange Market**

Introduction: structure and functions of foreign exchange market- methods of foreign payments - concepts of Spot and Forward exchange Rate - Determinants of Exchange Rate under Fixed and Flexible Exchange rate - Regime and Role of hedging in the determination of exchange rate - Theory of Interest Rate parity

### **Recommended Text**

1. M.C.Vaish & Sudama Singh : International Economics, Oxford & IBH.
2. K.C.Rana and K.N.Verma(2004-05) :International Economics, Vishal Publishing Co. Jalandhar.
3. Francis Cherunilam (1998) : International Economics, 3rd Edition, TataMcGraw Hill Publishing company.

## **ELECTIVE – IV - ECONOMICS OF DEVELOPMENT**

### **Unit I**

Poverty, inequality, and Development – measuring inequality and poverty – poverty, inequality, and social welfare – Kuznets' inverted-U Hypothesis – Growth and inequality – Rural poverty – women and poverty – Ahluwalia – Chenery Welfare Index.

### **Unit II**

Population Growth and Economic Development: Causes, consequences – and controversies – population growth and the quality of life – the causes of high fertility in developing countries – the consequences of High fertility – goals and objectives.

### **Unit III**

Roles of Education and Health – Investing in education and health: the human capital approach – child labour – the gender gap: women and education – educational systems and development – health systems and development.

### **Unit IV**

Agricultural Transformation and rural development – agricultural progress and rural development – the structure of agrarian system in the developing world – the economics of agricultural development: transition – subsistence farming: Risk Aversion – improving small scale agriculture – conditions of rural development – macroeconomic instability, IMF stabilization policies and their critics.

### **Unit V**

The nature of development planning and the role of the state – planning in mixed developing economics – the rationale for development planning – fiscal policy for development – macrostability and resource mobilization – state owned enterprises. Military expenditures and economic development.

### **Recommended Text**

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

### **Reference Books:**

1. Chakravarthy, S. (1982): Alternative Approaches to a theory of Economic Growth, Oxford University Press.
2. Chakravarthy, 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.

## **EXTRA DISCIPLINARY – II - HEALTH ECONOMICS\***

### **Unit – I: Introduction**

Demand for Health and Health Care Welfare economics of medical care, production of health, demand for health and health care, equity, efficiency and the need, link between development and health, investing in health for economic development, public-private partnership and the role of state

### **Unit – II: Health Production Function**

Nature of production function, different types of production function and their applications, national and international perspective, distributional inequities in opportunity and commercialization of medical and paramedical education, cost escalation in the health care system, easy access and availability to appropriate technology, need for regulation and control.

### **Unit – III: Health Care Incentives and Financing**

Goals of health care provision and financing, competitive health insurance and risk adjustment, demand and supply of health insurance, asymmetric information and agency, market insurance, self-insurance and protection, employment based insurance, health insurance in India

### **Unit – IV: Measuring and Valuing Health Outcomes**

Measurement of health state utilities, QALYs and its alternatives- different approaches of valuing health, multi-attribute utility instruments and their development

### **Unit – V: Health Care in India**

Various health indicators and its recent trend, health care expenditures, target of health care and achievements, different options for financing healthcare, taxation, user fees, health insurance, role of urban and rural local bodies, role of non-governmental organizations, economic impact of HIV/AIDS in India and gender issues

### **Reference Books:**

1. Folland, S., A.C. Goodman and M. Stano, Economics of Health and Health Care, fifth edition, Pearson Prentice Hall, 2006
2. Culyer, A. J. and J.P. Newhouse (eds.), Handbook of Health Economics, Volumes 1A & B, North-Holland, 2000
3. Zweifel, P., Health Economics, Oxford University Press, 1997
4. CII-Mckinsey Report, Healthcare in India: The Road Ahead, 2004.

## **FOURTH SEMESTER**

### **CORE-X: MACRO ECONOMICS – II**

#### **Unit I: The IS –LM Model**

The neo-classical and Keynesian version of IS-LM models – Interaction of Real and Monetary Sector- Fiscal and Monetary Policy analysis in IS – LM model – Pigou effect and Real balance effect in IS-LM model – Trade policy in IS-LM models.

#### **Unit II: Theory of Inflation and Unemployment**

Theory of Inflation: Concept – Types – Categories, Excess demand Inflation Keynesian Income Expenditure approach, Inflationary gap –Phillips curve Controversy, Tobins modified Phillips Curve, Policies to control inflation- Natural Rate of Hypothesis and its implication of Monetary Policy.

#### **Unit III: Business Cycle**

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

#### **Unit IV: Post – Keynesian Macro Economics**

Walrasian and Keynesian Adjustment mechanism – Reinterpretation of Keynes – Dual Decision hypothesis - Neo-Keynesian quantity constraint models – micro theoretic foundation for wage and price rigidity – small menu cost – Efficient wage theory – staggered wage setting – insider – outsider model – models of coordination failure.

#### **Unit V: Macro Economics in an Open Economy**

Macro Economics is an open Economy, Mundell Flemming Model – New Classical Macro Economics –Policy Implications of New Classical Approach. Macro Economic Policy Goals, Full Employment – Price Stability – Economic Growth – Monetary and Fiscal Mechanism in the Indian Context.

#### **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.

#### **Reference Books**

1. Ackley, G. (1978) : Macroeconomics: Theory and Policy, Macmillan, New York.
2. Blackhouse, R.and A. Salansi (2000) Macroeconomics and the Real World (2 Vols.) Oxford University Press, London.
3. Dornbusch, R.andF. Stanley (1997): Macroeconomics, McGraw Hill, Inc., New York.

## **CORE – XI: PUBLIC FINANCE -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 – Shadow Prices – Discount Rate – Reforms in Public Expenditure –Performance Budgeting – Programme Budgeting - Zero Base Budgeting – Appraisal of Public Expenditure Policy in India.

### **Unit III: Fiscal Federalism**

Fiscal federalism: Theories of Fiscal Federalism- Concepts of Deficits – Deficit Financing – Budget Deficit – Issues of Equity and Efficiency – Designing Equalisation transfers – Conditional and Unconditional grants.

### **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 –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 Discretionary stabilization – Alternative measures of Resource mobilization and their impact on growth, distribution and prices.

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

### **Reference Books**

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.



## **CORE - XII: INTERNATIONAL ECONOMICS – II**

### **Unit I: Balance of Payment**

Balance of Payment and National Income – foreign trade multiplier and National Income – Repercussions of Balance of payment disequilibrium and stability problem – BOP and exchange rate determination – Purchasing Power Parity Theory – fixed versus flexible exchange rate system – developments in international monetary system. Balance of Payment and disequilibrium - Balance of Payment disequilibrium and corrective measures – Automatic mechanisms under fixed and flexible exchange rates – Recent developments in exchange rate management.

### **Unit II: Balance of Payment (Continued)**

Devaluation: elasticity approach, income absorption approach –monetary approach – exchange controls – means of achieving internal and external equilibrium – Fiscal and monetary mix.

### **Unit III: The Theory of Regional Blocks**

Forms of economic cooperation - Reforms for the emergence of trading blocks at the global level – Static and dynamic effects of a customs union and free trade areas – Rationale and economic progress of SAARC/SAPTA and ASEAN regions – Problems and prospects of forming a customs union in the Asian Region – European Union – Functions of GATT/WTO (TRIPs/TRIMs) – UNCTAD – IMF – World Bank and Asian Development Bank – Their achievements and failures.

### **Unit IV: International Monetary System:**

International Monetary System: Problems in International Monetary System – International debt - International Liquidity – I.M.F. and Special Drawing Rights – Euro-dollar market. – Recent developments and issues in regional common currencies.

### **Unit V: Alternative Theories of Trade**

Alternative theories of Trade – Economies of Scale, Imperfect competition and International trade. Monopolistic competition –Technology imitation gaps and Product cycles

### **Recommended Text**

1. M.C.Vaish & Sudama Singh : International Economics, Oxford & IBH.
2. K.C.Rana and K.N.Verma(2004-05) :International Economics, Vishal Publishing Co. Jalandhar,.
3. Francis Cherunilam (1998) : International Economics, 3rd Edition, TataMcGraw Hill Publishing company.

### **Reference Books:**

1. Bo Sodersten.(1980): International Economics.
2. Kindleberger, C.P.: International Economics, 5th Edition.
3. Paul R. Krugman and Maurice Obstfeld (2005) : International Economics Theory and Policy, 6th Edition, Pearson Education.
4. Bhagwati. J. : International Economics.

## **CORE –XIII: MONETARY ECONOMICS**

### **Unit I**

Money in Macro Economy: The Classical Approach; The Keynesian Approach: Post – Keynesian Developments – Empirical Evidence.

### **Unit II**

The Demand for Money: The Classical Approach: The Keynesian Approach: Post – Keynesian Developments – Empirical Evidence.

### **Unit III**

The Supply of Money: The Classical version; The New View of James Tobin – Theories of Interests – Monetary Policy.

### **Unit IV**

Monetary System in India - Financial Intermediaries: Implications for the Theory and Policy of Money.

### **Unit V**

International Monetary System: Problems and Prospects.

### **Recommended Text:**

1. Vaish. M.C. (1995) : Monetary Theory, Ratan Prakashan Mandir
2. Sundaram. K.P.M. (2000) : Money, Banking and international Trade, Sultan and Chand, New Delhi.

### **Reference Books:**

1. Laidler, D.E.W.: The Demand for Money: Theories and Evidence, Allied publisher (Pvt) Ltd.
2. Pierce, D.G. and Shaw, D.M.: Monetary Economics: Theories, Evidence and Policy. Butter Worths, London.
3. Graham Bird : The International Monetary System and the Less Developed Countries.
4. R.B.I.: Working of the Monetary System in India; Report of Sukumoy Chakravarty Committee, 1985.
5. Aschier, J. and Hsieh, Ching Yao: Macro Economics, Income and Monetary Theory, Charles Merrill & Co, Ohio.
6. Friedman, M: The Role of Monetary Policy, A.E.R., March 1968.
7. Johnson, H.G.: Essays in Monetary Economics, Allen and Unwin, London.
8. Report of the Committee on the Financial System 1991 – Narasimhan Committee.

**(In lieu of Project Two Core papers, XIV and XV)**

**CORE – XIV: FINANCIAL ECONOMICS**

**Unit I**

Money market – Banks - regulation of working capital finance.

**Unit II**

Capital market – structure – characteristics – primary, secondary markets – market intermediaries, stock brokers, under writers – depository's credit rating agencies.

**Unit III**

Stock market system – trading, listing, regulation of stock market operations – market efficiency – NSE- OTC. Online trading system – SEBI Guidelines for capital issues – pricing – insider trading – investor protection.

**Unit IV**

Derivative markets – options and futures – trading system – pricing derivatives – risk hedging through derivatives – derivative market in India – its regulations.

**Unit V**

An over view of financial markets – legal and regulatory frame work – financial sector reforms – SEBI –SCRA- various segments of financial markets - Venture Capital Financing, Mutual Funds – finance information system(FIS).

**Recommended Text**

1. Bhole : Financial Institutions and Markets, TMH.
2. M.Y. Khan, (2001) : Financial Services, TMH.

**Reference Books:**

1. Fabozzi, (2002): Foundations of Financial Markets and Institutions, Pearson Education, New Delhi.
2. James C. Van Horne, (2002) : Financial Management and Policy, Prentice Hall of India Pvt. Ltd. New Delhi.
3. Kuchhal S.C. : Financial management : An Analytical and Conceptual Approach – Chaitanya publishing House, Allahabad.
4. P.V. KulKarni : Financial management, Himalaya Publishing House.
5. Panday, I.M.: Financial Management, Vikas Publishing House Pvt. Ltd.,
6. Prasanna Chandra: Financial Management: Theory and Practice – Tata McGraw Hill Publishing Co. Ltd., New Delhi.

## **CORE: XV -GENDER ECONOMICS\***

### **Unit - I: Introduction**

Nature and Significance of Women Studies – Distinction between economic and Non-economic Dimensions of Women Studies – Some key Concepts – Exploitation, Deprivation, oppression, Gender Display index and HDI, HPI and GEM

### **Unit - II : Theories of Woman Exploitation**

Marx – Engel's Theory of Exploitation – Exchange theory and Exploitation – Perspectives of Gary. S Becker and Amartya Sen on Women Exploitation

### **Unit - III: International Concern for Women Development**

Role of UNO and World bank in Women's Development – Significance of International Women's Year and Decade – International Conferences on Women

### **Unit - IV: Women and Economic development**

Women contributions to economic development – Women in Agriculture and industry and in Services – development programmes for Empowering Women under India's Five Year Plans

Unit - V : Women and Entrepreneurship Emergence and Growth of Women Entrepreneurship – Motivating factors – Role of State – progress and Performance of Women Entrepreneur Schemes – problems and prospects of Women Entrepreneurship.

### **Reference Books:**

1. Maithreyi Krishnaraj, Gender Population and Development
2. R.K.Sen and Anita Banaerji, Women and Economic Development

## **ELECTIVE-V: COMPUTER APPLICATION IN ECONOMIC ANALYSIS**

### **Unit – I**

Brief History of Computer – Application of Computer in Business – Parts of Computer – Steps in Programming – Algorithms – Flow Charts – Overview of Operating Systems – Computer Languages.

### **Unit – II**

MS Office – MS Word – MS Excel – MS Powerpoint – MS Outlook – MS Access

### **Unit – III**

Introduction of E-Commerce – Electronic data Interchange B to C transaction – B to B transaction – Electronic Payment – Protocol – SET Secured Electronic Transaction – Certification of Authentication – Electronic cash payment.

### **Unit – IV**

Introduction – Internet – Intranet – Security issues and solutions – Antivirus programmes – E-mail – Chat – Secured mails.

### **Unit - V**

Business related packages like Tally, SPSS, Video Conferencing – Tele meeting, Tele fax, Net meeting, Voice mail.

### **Recommended Text**

1. Sanders, D.H. (1988): Computers Today, McGraw Hill (3 rd Edition), New York.
2. Sinha, P.K. (1992) : Computer Fundamentals, BPB Publications, New Delhi.
3. Handbook of Statistical

### **Books for Reference**

1. Rajasekaran, S. (1986): Numerical Methods in Science and Engineering, A.H. Wheeler, Allahabad.
2. Rajasekaran, S. (1986): Numerical Methods in Science and Engineering, A.H. Wheeler, Allahabad.
3. Sanders, D.H. (1988): Computers Today, McGraw Hill (3 rd Edition), New York.
4. Sinha, P.K. (1992): Computer Fundamentals, BPB Publications, New Delhi.

## **LABOUR ECONOMICS**

### **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**

Employees 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 Funds 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.

### **Reference Books**

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 Zafiris Tzannatos., Current Issues in Labour Economics (Hong Kong, Macmillan 1990)
6. Singh, V.B and Saran, A.K., Industrial Labour in India (Mumbai: Asia Publishing House 1960)