



## SYLLABUS

### MASTERS OF ARTS - ECONOMICS (M.A. ECO)

### 2 YEARS PROGRAMME



**HIMALAYAN GARHWAL UNIVERSITY UTTARAKHAND**

<http://www.hgu.ac.in>



## MARKS EVALUATION SCHEME - MA ECONOMICS

### Semester – I

Paper Code	Paper Name	Internal	External	Total
MAEC101	Micro Economics I : Theory of Product Pricing	30	70	100
MAEC102	Macro Economics I	30	70	100
MAEC103	Statistical Methods for Economic Analysis	30	70	100
MAEC104	Optional Paper	30	70	100
MAEC105	<b>PRACTICAL</b> (Research Methodology)	30	70	100
<b>Total</b>		<b>150</b>	<b>350</b>	<b>500</b>

### Semester – II

Paper Code	Paper Name	Internal	External	Total
MAEC201	Micro Economics II: Theory of Distribution & Welfare Economics	30	70	100
MAEC202	Macro Economics II	30	70	100
MAEC203	Economics of Growth	30	70	100
MAEC204	Optional Paper	30	70	100
MAEC205	<b>PRACTICAL</b> (Computer Application in E)	30	70	100
<b>Total</b>		<b>150</b>	<b>350</b>	<b>500</b>

### Semester – III

Paper Code	Paper Name	Internal	External	Total
MAEC301	Public Finance	30	70	100
MAEC302	Economics of Development & Planning	30	70	100
MAEC303	Indian Economic Policy	30	70	100
MAEC304	Optional Paper	30	70	100
MAEC305	<b>PRACTICAL</b>	30	70	100
<b>Total</b>		<b>150</b>	<b>350</b>	<b>500</b>

### Semester – IV

Paper Code	Paper Name	Internal	External	Total
MAEC401	International Economics	30	70	100
MAEC402	Indian Public Finance	30	70	100
MAEC403	Financial Institution & Markets	30	70	100
MAEC404	Optional Paper	30	70	100
MAEC405	<b>PRACTICAL</b>	30	70	100
<b>Total</b>		<b>150</b>	<b>350</b>	<b>500</b>
<b>GRAND TOTAL</b>		<b>600</b>	<b>1400</b>	<b>2000</b>



*[Handwritten Signature]*



# Himalayan Garhwal University

## DETAILED SYLLABI OF ECONOMICS

### M.A.\*

There will be twenty papers spread over four semesters. Out of these, sixteen theory papers will be taught in the semesters. Twelve theory papers will be compulsory. Three compulsory papers will be taught in each Semester. In each semester, there will be four theory papers consisting of three compulsory & one optional paper out of the prescribed optional papers. In addition to it, there shall be three practical (surveys/field works/project work etc.) one each in three semester and one viva-voce spread over fourth semester. The number of optional to be offered will be decided by the department each year, depending upon the facilities available in the department. Two latest articles will be discussed in each theory paper. Each paper shall carry 100 marks. The maximum marks for M.A. will thus be 2000 (Two Thousand).

**Semester Ist**            I Micro Economics I : Theory of Product Pricing  
                              II Macro Economics I  
                              III Statistical Methods for Economic Analysis  
                              IV Optional Paper  
                              V **PRACTICAL** (Research Methodology)

**Semester IInd**        VI Micro Economics II: Theory of Distribution & Welfare Economics.  
                              VII Macro Economics II  
                              VIII Economics of Growth  
                              IX Optional Paper  
                              X **PRACTICAL** (Computer Application in Economic Analysis)

**Semester IIIrd**        XI Public Finance  
                              XII Economics of Development & Planning  
                              XIII Indian Economic Policy  
                              XIV Optional Paper  
                              XV **PRACTICAL** (Assignment : at least of 3000 words handwritten on current economic issues)

**Semester IVth**        XVI International Economics  
                              XVII Indian Public Finance  
                              XVIII Financial Institution & Markets  
                              XIX Optional Paper  
                              XX **VIVA-VOCE** (Dissertation in at least of 5000 words and Viva-Voce)

### LIST OF OPTIONAL PAPERS

**Semester Ist**        Paper A ELEMENTARY MATHEMATICS FOR ECONOMIC ANALYSIS  
                              Paper B DEMOGRAPHY  
                              Paper C REGIONAL ECONOMICS  
                              Paper D HISTORY OF ECONOMIC THOUGHT



<b>Semester II<sup>nd</sup></b>	Paper E	AGRICULTURAL ECONOMICS
	Paper F	INDIAN ECONOMIC THOUGHT
	Paper G	ENVIRONMENTAL ECONOMICS
	Paper H	GENDER ECONOMICS
<b>Semester III<sup>rd</sup></b>	Paper I	INDUSTRIAL ECONOMICS
	Paper J	ECONOMICS OF INFRASTRUCTURE
	Paper K	ECONOMICS OF HEALTH & EDUCATION
	Paper L	ECONOMICS OF INSURANCE
<b>Semester IV<sup>th</sup></b>	Paper M	ECONOMETRICS
	Paper N	LABOUR ECONOMICS
	Paper O	ECONOMICS OF LAW
	Paper P	INTERNATIONAL ECONOMIC INSTITUTIONS



## M. A. - I SEMESTER

### **PAPER I: MAEC101      MICRO ECONOMICS-I : THEORY OF PRODUCT PRICING**

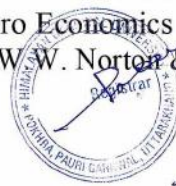
#### **PREAMBLE**

This paper analyses the economic behaviour of individuals, firms and markets. It is mainly concerned with the objective of equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm in modern markets characterised by few sellers.

- UNIT 1:** Introduction and Basic concepts-Basic Economic Problem-Choice and Scarcity; Deductive and Inductive Methods of Analysis; Positive and Normative Economics; Economic Model.
- UNIT 2:** The theory of Consumer's Behaviour- Properties of indifference curve; Price, Income and Substitution effects-Hicks and Slutsky Approach and Applications, Derivation of demand curves and income-Consumption curves from indifference curves, Substitution and Complimentarity, Elasticity of demand, Relation between elasticity, Marginal revenue, Average revenue and total revenue, Revealed Preference Theory.
- UNIT 3:** Theory of Production and Cost-Production function-short period and long period; law of variable proportions and returns to scale; Isoquants-Least cost combination of inputs; Expansion Path, Concepts of product line-Isocline and ridge line, Multi-product firm; Elasticity of substitution; Euler's theorem; Cobb-Douglas and CES Production Functions, Theories of costs; Derivation of cost functions from production functions; derived demand for factors.
- UNIT 4:** Price and Output Determination-Perfect competition-short run and long run equilibrium of the firm and industry, price and output determination, supply curve; Monopoly-short run and long run equilibrium, price discrimination, welfare aspects, monopoly control and regulation.
- UNIT 5:** Monopolistic competition-general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group with price variation, product differentiation and selling costs, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition; Oligopoly-Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, kinked demand curve and Stackelberg's solution) and collusive (Cartels and mergers, price leadership and basing point price system)models; Price and output determination under monopoly and bilateral monopoly.

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

- |                       |  |
|-----------------------|--|
| 1. Gould & Lajear     | Micro Economics                                      |
| 2. Richard A. Bilas   | Micro Economic Theory                                |
| 3. Paul, A. Samuelson | Economics  |
| 4. R. H. Lelftwich    | The Price system and Resource Allocation             |
| 5. A. Koutsoyiannis   | Modern Micro Economics                               |
| 6. Joseph E. Stiglitz | Economics, W.W. Norton & Company New York<br>London. |



**Additional Reading List :**

1. J. R. Hicks Value and Capital
2. Milton Friedman Price Theory – A Provisional Text.
3. W. J. Baumol Economic Theory & Operations Analysis
4. Joan Robinson The Economics of Imperfect Competition.
5. W. J. L. Ryan Price Theory
6. K. E. Boulding Economic Analysis, Volume I.
7. A. E. A. Readings in Price Theory.
8. E. H. Chamberlin The Theory of Monopolistic Competition
9. Choudhary, Kalyanjit Roy (1999) Modern Micro Economic Theory, Pragati Publication, Delhi.
10. Samuelson & Nordhaus Economics, Tata McGraw-Hill Publishing Company Ltd., New Delhi



*[Handwritten signature]*



## M. A. - I SEMESTER

### PAPER II: MAEC102 MACRO ECONOMICS I

#### PREAMBLE

Macroeconomics or aggregative economics analyses and establishes the functional relationship between the large aggregates. The aggregate analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of the different issues and policies. Macroeconomics now is not only a scientific method of analysis; but also a body of empirical economic knowledge.

The paper entitled “macro Economics” equips the students at the postgraduate level to understand systemic facts and latest theoretical developments for empirical analysis.

**UNIT 1 :** Nature & Technique of Macro-economics, Macro-Statics & Macro-dynamics.

**(a) National Income** – Concepts, Components, Measurements & Problems in Measurements.

**(b) Fiscal policy-** Objectives and Instruments; Fiscal Policy in Developed and Developing Economics, (Mundell-Fleming open economy model.)

**UNIT 2 :** Inflation: Concept, Types and Theories of inflation (Demand Pull and Cost-Push Inflation), Phillips Curve.

**UNIT 3 :** Classical Theory of Employment-Say’s Law of markets, Price-wage flexibility of full-employment; Keynesian Theory of Income and Employment.

**UNIT 4 :** Consumption Function: The Absolute Income Hypothesis, the Relative Income Hypothesis, the Permanent Income Hypothesis and other factors influencing consumption, Investment Multiplier, Savings-Investment Equilibrium, Investment and its determinants.

**UNIT 5 :** New Classical Macroeconomics-The new classical critique of micro foundations, the new classical approach; Policy implications of new classical approach-empirical evidence.

#### Basic Reading List :

1. G. Ackley Macro Economic Theory
2. Martin Baley National Income and Price Level
3. Edward Shapiro Macro Economics
4. J. M. Keynes The General Theory of Employment, Interest and Money.
3. K. C. Rana and Macro-Economics Analysis  
K. N. Verma (S. Nagin & Co., Delhi)
6. P.C. Bhattachary Central Banking in a Developing Economy.

#### Additional Reading List :

1. H. G. Muller Readings in Macro-economic Theory.
2. G. N. Halm Monetary Theory
3. Joseph E. Stiglitz Economics, W.W. Norton & Company, New York, London.
4. Samuelson & Economics, Tata McGraw-Hill Publishing Company Ltd.,  
Nordhaus New Delhi.



## M. A. – I SEMESTER

### **PAPER III : MAEC103 STATISTICAL METHODS FOR ECONOMIC ANALYSIS**

#### **PREAMBLE**

The main objective of this paper is to train the students to use the techniques of statistical analysis, which are commonly applied to understand and analyse economic problems. The paper deals with simple tools and techniques, which will help a student in data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

**UNIT 1 :** Index Number : Meaning and importance of index number, construction of index numbers, Problems involved, Laspayer's and Fisher's Index Numbers. Factor Reversal test and time Reversal Test. Circular Test of Consistency. Fixed base and Chain base Index Numbers. Base shifting and splicing of Index Numbers, Time Series : Components of Time series, Measurement of trend by moving average method and the method of least squares. Curve fitting by mathematical equations.

**UNIT 2 :** Correlation and Regression : Meaning , assumptions and limitations of simple correlation and regression analysis; Pearson's product moment and Spearman's rank correlation coefficients and their properties; concept of the least squares and the lines of regression; Standard error of estimate; Partial and multiple correlation and regression (applications only).

**UNIT 3 :** Elementary Sampling Theory: Basic concept of sampling-random and non-random sampling; simple Random Sampling, Stratified Sampling, p.p.s. Sampling.

**UNIT 4 :** Probability: Definition and importance, various concepts of events, simple numerical exercises based on the addition theorem, the multiplication theorem, conditional probability and Baye's theorem, mathematical expectation, Bernouli's Theorem.

**UNIT 5 :** Theoretical Frequency Distribution: Properties of Binomial, Normal and Poisson distribution. Simple Numerical Exercises, Tests of significance-Problems based on 't', chi-square and z-test.

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

1. Chiang, A. C. (1986) Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
2. Monga, G. S. (1972) Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
3. Mustafi, C. K. (1992) Operations Research: Methods and Practice, Wiley Eastern, New Delhi.
4. Nagar, A. L. and R. K. Das (1993) Basic Statistics. Oxford University Press, New Delhi.
5. D. N. Elhance Fundamentals of Statistics.
6. S. P. Gupta Statistical Methods (Sultan Chand & sons)
7. Sukhatme, P. V. and B.V. Sukhatme,(1970) Sampling Theory of Survey with Applications, Iowa State University Press, Ames.





**Additional Reading List :**

1. Allen, R.G.D. (1974) *Mathematical Analysis for Economists*, Macmillan Press and ELBS. London.
2. Yamane, Taro (1975) *Mathematics for Economists*, Prentice Hall of India, New Delhi.
3. Hadley, g. (1962) *Linear Programming*, Addison Wesley Publishing co.,  
Massachusetts.
4. Yule & Kendall *An Introduction to the Theory of Statistics.*
5. A. L. Bowley *Elements of Statistics.*
6. Dixon and Massey *Introduction to Statistical Methods.*
7. Knut Sydsaeter & Malhematics for Economic Analysis, Pearson Education, India.  
Peter J. Hammond  
(2007)



## M. A. - II SEMESTER

### **PAPER VI : MAEC201 MICRO ECONOMICS-II : THEORY OF DISTRIBUTION AND WELFARE ECONOMICS**

#### **PREAMBLE**

The paper deals with the micro and macro theories of distribution, welfare economics, general equilibrium in closed and open systems and analysis of economic behaviour under uncertainty.

- UNIT 1 :** Distribution- Determination of rent, wages, interest and profit; Neo-classical approach- Marginal productivity theory; Elasticity of technical substitution, technical progress and factor shares; Theory of distribution in imperfect product and factor markets; Product exhaustion theorem; Macro theories of distribution-Ricardian; Kalecki and Kaldor's.
- UNIT 2 :** General Equilibrium-Partial and general equilibrium, Walrasian excess demand and input-output approaches to general equilibrium, existence, stability and uniqueness of equilibrium and general equilibrium, coalitions and monopolies; Production without consumption-one sector model, homogeneous functions, income distribution.
- UNIT 3 :** Classical Welfare Economics : The principle of Compensating variation, Hicksian types of consumer's surplus, Slutsky's approach to measurement of consumer's surplus, The concept and the conditions of Pareto Optimality, Pareto optimality in the General Equilibrium system. Compensation criteria, contributions of barone, Hicks and Kaldor, Scitovsky's criterion.
- UNIT 4 :** New Welfare Economics : Social Optimum, Community indifference map, Samuelson's utility possibility curve, Begrson's Concept of Welfare and its Measurement, Social Welfare Function.
- UNIT 5 :** Problems of non-market interdependence, externalities in production and consumption, External economics and diseconomies, Problems of Public Goods and negative spillovers, The Problem of Market Failure, uncertainty and non-existent and incomplete markets; Theory of Second Best-Arrow's impossibility theorem, Rawl's theory of justice, equity-efficiency trade off.

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

- |     |                    |  |
|-----|--------------------|--|
| 1.  | Gould & Lagear     | Micro Economics                                      |
| 2.  | Richard A. Blas    | Micro Economic Theory                                |
| 3.  | Paul, A. Samuelson | Economics  |
| 4.  | J. R. Hicks        | Value and Capital                                    |
| 5.  | R. H. Lelftwich    | The Price system and Resource Allocation.            |
| 6.  | W. J. Baumol       | Economic Theory & Operations Analysis                |
| 7.  | Joan Robinson      | The Economics of Imperfect Competition.              |
| 8.  | A. E. A.           | Readings in Price Theory.                            |
| 9.  | E. H. Chamberlin   | The Theory of Monopolistic Competition               |
| 10. | J. M. Joshi        | Theory of Value, Distribution and Welfare Economics. |

#### **Additional Reading List :**

- |    |                 |                                    |
|----|-----------------|------------------------------------|
| 1. | Milton Friedman | Price Theory – A Provisional Text. |
| 2. | W. J. L. Ryan   | Price Theory                       |



*[Handwritten signature]*



3. K. E. Boulding            Economic Analysis, Volume I.
4. A. Koutsoyiannis        Modern Micro Economics
5. Choudhary, Kalyanjit Modern Micro Economic Theory, Pragati Publication Delhi.  
Roy (1999)
6. Joseph E. Stiglitz Economics, W.W. Norton & Company, New York, London.



*[Handwritten signature]*



## M. A. - II SEMESTER

### **PAPER VII: MAEC202 MACRO ECONOMICS II**

#### **PREAMBLE**

The prime objective of this paper is to make student well conversant with monetary and banking operations that facilitate the process of globalisation.

**UNIT 1 :** Evaluation of money : Evolution and classification of money, Functions of money, Monetary Standards.

**UNIT 2 :** Demand for Money: Flow and Stock Equilibrium, Stock and Flow of Funds Accounts and their uses for Macro-Economic Analysis, Transaction, Cash-Balance versions, Keynesian Approach, Theories of M. Friedman, Patinkin, Baumol and Tobin.

**UNIT 3 :** Supply of Money: Components and determinants, High powered money, Money multiplier, Money supply in India.

**UNIT 4 :** Commercial Banking : Origin, functions, Types of banks, Credit creation, New trends in commercial banking, Banking sector reforms in India.

**UNIT 5 :** Monetary Policy and Central Banking : Objective and Instruments of Monetary Policy, Central bank – functions, credit control and its methods.

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

1. Edward Shapiro      Macro Economics
2. J. M. Keynes        The General Theory of Employment, Interest and Money.
3. G. N. Halm          Monetary Theory
4. P.C. Bhattacharyay    Central Banking in a Developing Economy.
5. Samuelson & Nordhaus      Economics, Tata McGraw-Hill Publishing Company Ltd., New Delhi.
6. Gupta, S. B. Monetary Economics – Institutions theory and policy, S. Chand & Company, N. Delhi.

#### **Additional Reading List :**

1. H. G. Muller        Readings in Macro-economic Theory.
2. Joseph E. Stiglitz    Economics, W.W. Norton & Company, New York, London.
3. Crowther Geoffrey    An Outline of Money, Universal Book Stall, New Delhi.
4. Sayers, R. S. Modern Banking : Seventh Edition, Oxford University Press, London.



## M. A. – II SEMESTER

### **PAPER VIII : MAEC203 ECONOMICS OF GROWTH**

#### **PREAMBLE**

Units incorporated in this paper are devoted to the theories of growth. The other important issues in the context of growth such as infrastructure-linkages, role of international trade, importance of domestic macroeconomic policies, investment criteria, and relevance of planning have been included in the units of this paper.

- UNIT 1 :** Concepts of Economic Growth & Economic Development, Measurement of Economic Growth; Stationary State and Steady State Growth; Determinants of Economic Growth; Basic Requirements for Economic Growth; Vicious Circle of Poverty, Circular causation, International Trade as Engine of Growth.
- UNIT 2 :** Choice of Techniques and appropriate Technology, Capital intensive versus Labour intensive techniques, Elementary Idea of Cost-Benefit Analysis, Technical Progress-Hicksian view, the capital controversy.
- UNIT 3 :** Theories of Economic Growth: Classical growth theory; Marxian model; Schumpeter's Theory; The Harrod-Domar analysis and Mahalonobis growth model. (4-sector)
- UNIT 4 :** Neo-classical growth theories: Models of Solow, and Meade ; Models of Mrs Joan Robinson and N. Kaldor.
- UNIT 5 :** Rostow's stages of Economic Growth, Balanced verses Unbalanced Growth.

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

1. Lewis, W. A. Theory of Economic Growth.
3. Meir, Gerald M. Leading Issues in Economic Development
4. Higgins, B. Economic Development.
5. Leibenstein, H. Economic Backwardness & Economic Growth.
6. Rostow, W. W. Theory of Economic Growth.
7. Goel R. L. Economics of Development and Planning.
8. Gylfason Principles of Economic Growth.
9. Chopra, Kanchan Operationalising Sustainable Development.
10. Mishra, S. K. & Economics of Development and Planning. Puri, V. K.
11. Debraj Ray Development Economics, YMCA Library Building, Jai Singh Road, New Delhi.
12. Bakul H. Dholakia & Theory of Economic Growth and Technical Progress: Ravindra H Dholakia An Introduction, Macmillan, India (2003)

#### **Additional Reading List :**

1. Nurkse, R. Problems of Capital Formation in under-developed Countries.
2. Kindlebrger, C. P. Economic Development.
3. Solow, Robert M. Growth Theory
4. Kaushik Basu (1998) Analytical Development Economics, Oxford India, New Delhi.
5. Joseph E. Stiglitz Stability with Growth, Oxford University Press, New Delhi.



## M. A. – III SEMESTER

### **PAPER XI : MAEC301 PUBLIC FINANCE**

#### **PREAMBLE**

Role and functions of the Government in an economy have been changing with the passage of time. The term 'Public Finance' has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures while budgetary policy is an important part to understand the basic problems of use of a resources, distribution of income, etc. There are vast array of fiscal institutions — tax systems, expenditure programmes, budgetary procedures, stabilization instruments, debt issues, levels of government, etc. which raise a spectrum of issues arising from the operation of these institutions. Further, the existence of externalities, concern for adjustment in the distribution of income and wealth, etc. require political processes for their solution in a manner which combines individual freedom and justice.

**UNIT 1 :** Public Finance: Nature and scope of Public Finance. Positive vs. Normative public Finance. Concept of Market failure, Role of Government in the Economic Activity- Allocation, Distribution and Stabilisations, Public, Private and Merit Goods, Recent Development in Public Goods Theory.

**UNIT 2:** Public Expenditure: Objectives, Allocation, Distribution and Stabilization; Wagner's Law of increasing state activities; Peacock-Wiseman Hypothesis. Pure theory of public expenditure. Effects of public expenditure on production, growth, distribution and stabilization.

**UNIT 3 :** Public Revenue: Principles of taxation; Effects of taxation on production, growth, distribution and allocation of resources. Incidence of taxation- Trade-off between equity and efficiency, Benefit and ability to pay approaches in taxation, Taxable capacity, Double taxation.

**UNIT 4 : (a)** Fiscal Policy: Fiscal policy for stabilisation- automatic vs. discretionary stabilisation, Alternative measures of resource mobilization and their impact on growth, distribution and prices, Balanced budget multiplier, Compensatory finance; Functional finance.

**(b)** Public Debt: Taxes versus loans, Sources of public debt, Effects of public debt on economic growth, Burden of public debt, Public debt management.

**UNIT 5 :** Federal Finance: Theory and problem of federal finance; Division of functions and resources.

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

1. R. A. Musgrave The Theory of Public finance
2. R. A. Musgrave & Peggy B. Musgrave Public Finance in Theory and Practice.
3. A. R. Prest Public Finance in Theory and Practice
4. R. J. Chelliah Fiscal Policy in underdeveloped countries
5. R. N. Bhargava The Theory and Working of Union Finance in India
6. P. K. Bhargava Centre-State Resource Transfers in India.
7. A. K. Jain Taxation of Income in India
8. Baidya Nath Misra Economics of Public Finance.
9. Inu Jain Resource Mobilization and Fiscal Policy in India.



10. M. Srivastava Fiscal Policy and Economic Development in India.
11. P. K. Bhargava India's Fiscal Crisis
12. S.K. Singh (2008) Public Finance in Theory & Public. S. Chand, New Delhi.

**Additional Reading List :**

1. J. F. Due Government Finance
2. John Cullis & Philip Jones Public Finance & Public Choice. OPU, New York.  
(1998)
3. Harvey S. Rosen (2008) Public Finance, McGraw Hill, Irwin.



## M. A. – III SEMESTER

### PAPER XII : MAEC302 ECONOMICS OF DEVELOPMENT & PLANNING

#### PREAMBLE

The study of economic development has gained importance because of sustained interest of the developing countries in uplifting their economic conditions by restructuring their economies to acquire greater diversity, efficiency and equity in consonance with their priorities. While few success stories can be counted, many have grappled with chronic problems of narrow economic base, inefficiency and low standard of living. For this and other reasons, there have been many approaches to economic development.

**UNIT 1 :** Theories of Development and Development Process, Lewis' Theory of Unlimited Supply of Labour, Ranis-Fie Model; Leibenstein's Critical Minimum Effort Thesis; Nelson's Low Level Equilibrium Trap; Rosenstein Rodan's Theory of Big-Push; Myrdal's-Backwash Effects, Boeke's Dualism and Arrow's Learning by Doing.

**UNIT 2 :** Sustainable Development: Meaning; objectives and issues (valuing resources and the future) environmental, natural resources & other related issues; Natural capital and equity.

**UNIT 3 :** Economic Planning: Theory of economic planning; types of planning; problem of allocation of resources in a planned and mixed economy; uses and limitations of planning models; Problems of resource mobilization and price stability.

**UNIT 4 :** Objectives of Planning: Objectives, approaches, priorities and problems; Trade off between growth and social justice; Conflicts between policy objectives and their reconciliation.

**UNIT 5 :** Process of Planning: Planning machinery-the structure and organisation of the planning commission, National Development council, State Planning Boards; Process of plan formulation.

#### Basic Reading List :

- |     |                                 |   |   |
|-----|---------------------------------|---|---|
| 1.  | W. A. Lewis                     | : | Development Planning                                      |
| 2.  | A. Rudra                        | : | Indian Plan Models  |
| 3.  | B. A. Chansarkar                | : | Models for Planning in India                              |
| 4.  | P. B. Desai                     | : | Planning in India   |
| 5.  | Alak Ghosh                      | : | New Horizons in Planning                                  |
| 6.  | Pranab Mukherjee                | : | Beyond Survival-Emerging Dimensions of the Indian Economy |
| 7.  | Ashoka Rudra                    | : | Indian Plan Models  |
| 8.  | Tarlok Singh                    | : | India's Development Experience                            |
| 9.  | Charan D. Wadhva (ed)           | : | some Problems of India's Economic Policy                  |
| 10. | P. K. Bhargava                  | : | Essays in Indian Economic Planning                        |
| 11. | Anil Kumar Jain                 | : | Economic Planning in India.                               |
| 12. | Rudder Dutt & K. P. M. Sundaram | : | Indian Economy  |
| 13. | P. R. Brahmananda               | : | Planning for a Futureless Economy                         |
| 14. | Planning Commission             | : | Five Year Plans (different plans)                         |



*[Handwritten signature]*





## M. A. – III SEMESTER

### **PAPER XIII: MAEC303 INDIAN ECONOMIC POLICY**

#### **PREAMBLE**

The objective of this Paper at the postgraduate level would be to sharpen the analytical faculty of the student, by highlighting an integrated approach to the functioning aspects of the Indian economy, keeping in view the scope for alternative approaches. Such an analysis is essential because the Indian economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working is imperative if the student is to comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up. The emphasis of the paper is on overall social, political and economic environment influencing policy decisions. To develop all these themes, the course is divided into specific units.

- UNIT 1 :** Basic features of the Indian Economy, Basic Economic indicators and their Importance. Planning: Objectives, approaches, priorities and problems; Problems of resource mobilization and price stability.
- UNIT 2 :** National Income: Growth and composition; Contribution of different sector & growth pattern Poverty in India- concepts, incidence & extent of poverty in India, Inequality and Social Justice; Human Development Index, Gender Development Indices.
- UNIT 3 :** Agriculture: Land relations and land reforms; technological aspects, rural credit; pricing of agricultural produce; Rural Development Programmes in India. New Agricultural strategy.
- UNIT 4 :** (a) Industry: Industrial policy : Growth and pattern of industrialisation; small-scale sector; Productivity in industrial sector, Public Sector enterprises and their performance; Problem of sick units in India; Privatisation and disinvestment debate.  
(b) Labour and employment: Progress of Industrial relations in India, Employment Policy, unemployment scenario, Labour market reforms.
- UNIT 5 :** Foreign Trade: Salient features of India's foreign trade; Trends in foreign trade in the recent past, Balance of payment, Trade Reforms, Foreign investments.

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

1. C. D. Wadhva (ed.) : Some Problems of India's Economic Policy
2. J. N. Bhagwati & Padma Desai : Planning for Industrialization
3. Alakh Ghosh : Indian Economy-Its Nature and Problems.
4. A. K. Jain : Economic Planning in India
5. Bimal Jalan : The Indian Economics Crisis: The Way Ahead.
6. Bawa, R. S. and P. S. Raikhy (Ed.) (1997) : Structural Changes in Indian Economy. Guru Nanak Dev University Press, Amritsar

#### **Additional Reading List :**

1. V. M. Dandekar : Agriculture Volume I & II.
2. I.M.D. Little and Joshi : India: Macroeconomics and Political Economy.



*Handwritten signature*



3. Report on currency and Finance (Annual Publication), RBI
4. Economic Survey (Annual)-Government of India.
5. India Year Book (Annual)-Government of India.
  
7. UNDP Report (Annual)



## M. A. – IV SEMESTER

### PAPER XVI : MAEC401 INTERNATIONAL ECONOMICS

#### PREAMBLE

The course provides a deep understating about the broad principles and theories, which tend to govern the free flow of trade in goods, services and capital — both short-term and long-term — at the global level. Besides, preparing the students about the relevance and limitations of these principles, the contents of the paper spread over different modules, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade to North and South with particular reference to India. The study of the paper under the present era of globalization will train the students about the likely consequences on income, employment and social standards and possible policy solutions as the world will move into the 21<sup>st</sup> century.

**UNIT 1 :** International Trade : Interregional and International trade, International trade and growth, Production Possibility Curve, Community Indifference Curves, Offer Curves.

**UNIT 2 :** Absolute and Comparative Advantage, Theory of comparative Cost Advantage, Theory in terms of Opportunity Costs, The Hechscher-Ohlin Theory, The Leontief's paradox, The Rybczynski Theorem, Trade and Imperfect Competition.

**UNIT 3 :** Reciprocal Demand, Terms of Trade, Gains from Trade, Factors affecting terms of trade. Terms of Trade and Economic Development, Singer and Prebisch thinking on terms of trade and underdeveloped economies.

**UNIT 4 :** (a) Determination of rate of exchange under conditions of inconvertible paper currencies-Purchasing power parity and balance of payment theories. Traditional, Absorption and monetary approaches for adjustment in the balance of payments, Foreign Trade Multiplier, Fixed versus Flexible exchange rates; fluctuations in exchange rates-causes and consequences.

(b) International Reserves, Optimum Currency Areas Theory (Mundell & Magnifico) and impact in the developed and developing countries.

**UNIT 5 :** Free trade versus Protection. Theory of tariff: effects of tariff in terms of partial equilibrium and general equilibrium approaches. Concepts of effective tariff and optimum tariff. Quotas: effects of quotas, dumping, State trading. A general theory of customs union. Tariff versus quotas.

#### Basic Reading List :

1. Charles P. Kindleberger : International Economics
2. Bo Sodersten : International Economics
3. P. T. Ellsworth : The International Economy
4. Wesserman & Hultman : Modern International Economics.
5. H. G. Johnson : International Trade and Economic Growth
6. H. G. Mannur : International Economics
7. M. C. Vaish and Sudama Singh : International Economics.
8. Pilbeam, Keith (1998) : International Finance, Palgrave.



*[Handwritten signature]*



**Additional Reading List :**

- |    |                    |   |  |
|----|--------------------|---|--|
| 1. | Lawrence, W. Towle | : | International Trade & Commercial Policy. |
| 2. | Salderstan         | : | Introduction to International Economics. |
| 3. | D. Salvator        | : | International Economics.                 |
| 4. | Von meerhaeghe     | : | International Economics.                 |



## M. A. – IV SEMESTER

### PAPER XVII: MAEC402 INDIAN PUBLIC FINANCE

#### PREAMBLE

This paper combines a through understanding of fiscal institutions with a careful analysis of the issues which underline budgetary policies in general and Indian experience in particular.

- UNIT 1 : Public Expenditure :** Expenditure on revenue account and capital account; Development and non-development expenditure; Plan and non-plan expenditure; General trend of Government of India expenditure; Expenditure of State Governments; Fiscal Responsibility and Budget Management Act 2003 (key features); Key features of State finances.
- UNIT 2 : (a) Union Government Taxes :** Direct and Indirect Taxes; Sufficiency Issue; The problems of tax compliance and tax evasion, The effect of unaccounted money on social and economic system.
- (b) State Government Taxes :** Sources of state revenues, Value Added Tax (VAT), Central Sales Tax (CST) and Goods and Services Tax (GST), Major trends of State Revenue.
- UNIT 3 : Local Finance in India :** Local bodies in India; Powers of Municipal Corporation; Functions of municipal corporations; Powers and functions of Village Panchayats, Panchayat Samitis and Zila Parishads; State Finance Commissions and Local Finance.
- UNIT 4 : Deficit Financing :** Various concepts of deficits, Why deficit financing, Advantages and risk of deficit financing, Modes of deficit financing; and deficit financing in India-present policy.
- UNIT 5 : Indian Federal Finance :** Federal financial structure after Independence, Division of functions, Division of resources between Centre and States; Financial imbalance mechanism of financial adjustments; Gadgil Formula; Pranab Formula; Finance Commissions (FCs) and their recommendations (last 3 FCs); Review of Centre-State financial relations in India.

#### Basic Reading List :

1. Bagchi, A. (2006) 'Readings in Public Finance', Oxford University Press.
2. Srivastava, D.K. (ed.) (2000) 'Fiscal Federalism in India : Contemporary challenges'; NIPFP, New Delhi.
3. Sury, M.M. (1998) 'Fiscal Federalism in India', Indian Tax Institute, Delhi.
4. Sury, M.M. (ed.) (2008) 'Taxation in India : 1925 to 2007', New Century, Delhi.
5. Hajela, T.N. (2009) 'Public Finance', Ane Books Pvt. Ltd., New Delhi.
6. Srivastava, D.K. (ed.) (2004) 'State Level Fiscal Reforms in India, vol. I & vol. II, Deep & Deep Publications, New Delhi.
7. Sudipto Mundle (ed.) 'Public Finance', Oxford University Press, New Delhi.
8. Vital, B.P.R. and Sastry, M.L. (2001) 'Fiscal Federatism in India', Oxford University Press, New Delhi.
9. Edgardo, M. Favaro and Lahiri, Ashok K. (2004) 'Fiscal Policies and Sustainable Growth in India', Oxford University Press, New Delhi.
10. Government of India Economic Survey
11. R.B.I. Bulletin, R.B.I., Mumbai.



## M. A. – IV SEMESTER

### **PAPER XVIII: MAEC403 FINANCIAL INSTITUTION AND MARKETS**

#### **PREAMBLE**

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

- UNIT 1 :** Nature and Role of Financial System, Money and finance, Financial Intermediaries, The structure of the financial system, Functions of the financial sector, Financial system and economic development, Equilibrium in Financial Markets, Risk and financial assets, types of risks, risk-return trade-off, Valuation of Securities.
- UNIT 2 :** Theories of interest rate - Level of interest rates-The Classical Theory, The Loanable Funds Theory, The Keynes Theory, Theories of Term-structure of Interest rates- The Expectation Theory, Liquidity Premium Theory, Market Segmentation Theory, Determinants of General Structure of Interest Rates, Important concepts related to interest rates.
- UNIT 3 :** Banking Institutions - Commercial Banks – Growth and structure of commercial banks, Assets and liabilities of banks, Volume and types of credit, Concept of lending and portfolio choice, Cooperative banks – Features, types, structure and growth of cooperative banks, Central bank and banking institutions.
- UNIT 4 :** Non-banking financial Intermediaries – Definition and types – provident funds, insurance companies, mutual funds, housing finance companies, merchant banks, venture capital funds, credit rating agencies and their growth in India, effects of NBFCs on the economy, Measures taken to promote and regulate their operations.
- UNIT 5 :** Financial Market – Role and structure, Money Market and Capital Market – their instruments such as Call Money Market, Treasury Bills Market, Commercial Bills market, Commercial Papers and Certificate of Deposits, Discount market, Government Securities Market, Industrial Securities Market - Primary and Secondary Securities markets, Markets for shares, debentures, derivatives, futures and options, Important Institutions – SEBI, IRDA, Stock Exchanges, etc.

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

1. Bhole, L. M. : Financial Institutions and Markets
2. Goldsmith, R. W. : Financial Structure and Development
3. Khan, M. Y. : Indian Financial System
4. Prasad. K. N. : Development of India's Financial System.
5. Machiraju, H. R. : International Financial Markets in India
6. Shaw, E. S. : Financial Deepening in Economic Development
7. Rangaranjan, C. : Indian Economics: Essays on Money and Finance
8. RBI (1983) : Functions and Working of RBI



9. Sayers, R. S. : Modern Banking
10. Bhatt, R. S. : Unit Trust of India and Mutual Funds

**Additional Reading List :**

1. Chandler L. V. : The Economics of Money and Banking  
and S. M. Goldfeld
2. RBI (1985) : Report of The Committee to Review the Working of the  
Monetary System
3. Brahmananda, P. R. :IMF Loan and India's Economic Future
4. Kindleberger, C. P. :A History of Financial Crisis Manias, Panics and Crashes



# OPTIONAL PAPERS

## M. A. – I SEMESTER

### **PAPER A : MAEC104 ELEMENTARY MATHEMATICS FOR ECONOMIC ANALYSIS**

#### **PREAMBLE**

The emphasis of this paper is on understanding economic concepts with the help of mathematical methods rather than learning mathematics itself. Hence in this paper a student will be initiated into various economic concepts, which are amenable to mathematical treatment.

**UNIT 1 :** Basic Mathematics: Elementary Concepts of algebra, trigonometry and analytical & coordinate geometry.

**UNIT 2 :** Differentiation :Concept of function and types of functions; Limit, continuity and derivative; Rules of differentiation, Interpretation of revenue, cost, demand, supply functions; rules of partial differentiation and interpretation of partial derivatives; Problems of maxima and minima in single and multivariable functions; Simple problems in market equilibrium.

**UNIT 3 :** Integration : Concept of integration; simple rules of integration; Definite integrations application to consumer's surplus and producer's surplus.

**UNIT 4 :** Determinants and Matrices: Basic properties of determinants. Solution of simultaneous equations through Cramer's rule; concept of matrix-their types, simple operations on matrices, matrix inversion and rank of a matrix, Concept of vector-its properties; concept of quadratic forms- Eigen roots and Eigen vectors; Introduction to input-output analysis.

**UNIT 5 :** Linear Programming: Basic concept, Formulation of a linear programming problem-Its structure and variables; Nature of feasible, basic and optimal solution; Solution of linear programming through graphical and simplex method; Statement of basic theorems of linear programming; Formulation of the dual of a programme and its interpretation; Concept of duality and statement of duality theorems.

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

1. Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS. London.
2. Chiang, A. C. (1986) Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
3. Yamane, Taro (1975) Mathematics for Economists, Prentice Hall of India, New Delhi.
4. Monga, G. S. (1972) Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
5. Hadley, g. (1962)Linear Programming, Addison Wesley Publishing co., Massachusetts.
5. Matrix algebra : a programmed introduction.
6. 7. . . . Dorf, C.
8. . . .

#### **9. Additional Reading List**

1. Mustafi, C. K. (1992) Operations Research: Methods and Practice, Wiley Eastern, New Delhi.
2. Knut Sydsaeter & Mathematics for Economic Analysis, Pearson Education, India.  
Peter J. Hammond





# OPTIONAL PAPERS

## M. A. – I SEMESTER

### **COURSE B : MAEC104 DEMOGRAPHY**

#### **PREAMBLE**

The main objective of this paper is to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country. The paper also enlightens the students on the quantitative and the qualitative aspects and characteristics of the population through various demographic techniques. In recent times, gender characteristics of the population have acquired importance and these have also been included in the framework of study. Migration and urbanization are the characteristics of structural change taking place in a society. Their study is essential to understand the dynamics of this change. The paper exposes the students to sources of population and related characteristics as also to the rationale, need and evolution of population policy.

**UNIT 1 :** Theory of optimum population; Stages of demographic transition. Population and Economic Development: Inter-relationship between population and economic development; population growth and unemployment; population and human capital formation.

**UNIT 2 :** Demographic Measurements: Mortality measures; infant mortality; measurement of fertility, gross and net reproduction rates.

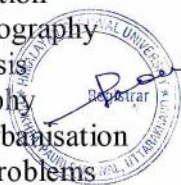
**UNIT 3 :** Population Projection: Life-table; logistic curve; components methods; Naptiality and its measurement.

**UNIT 4 :** International aspects of Population: World population; unequal distribution of population and world resources.

**UNIT 5 :** Demographic Profile in India: Sources of population data in India, census, 1991 population census in India. Growth rate of population; birth and death rates; life expectancy; density; rural-urban ratio; sex ratio literacy; fertility patterns; mortality; poverty profile. Growth of population in India-Inter-State variations; migration trends. Population explosion and India's population policy. Family welfare programmes in India.

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

1. G. W. Barclay : Techniques of Population Analysis
2. Kingslay Davis : Population of India and Pakistan
3. P. M. Hamfer et al. : The Study of Population
4. M. Spiegelmen : Introduction to Demography
5. J. J. Spenglar, et al. : Demographic Analysis
6. A. Bose, et al. : Studies in Demography
7. A. Bose : Studies in India's Urbanisation
8. S. N. Agarwal : India's Population Problems
9. Ashok Mitra : India's Population: Problem of quality and Control
10. World Bank : India's Population Policy: History and Future.



# OPTIONAL PAPERS

## M. A. – I SEMESTER

### **PAPER C: MAEC104 REGIONAL ECONOMICS**

#### **PREAMBLE**

Intra-national economic analysis has, till recently, been almost totally space-free. The competitive world of the Classical economists with its simplistic assumptions of free mobility of factors of production and the total absence of transport costs was for obvious reasons devoid of the special dimension.

Revival of interest in economic development since the fifties has led to a sea change in all this. It is being increasingly recognised that market forces do not result automatically in regionally balanced development of economies, and this pinches all the more if the average level of living is already abysmally low, as is the case with many developing economies. To intervene effectively and meaningfully, to pull up economically and socially the less developed regions, it is necessary to understand the dynamics of regional development. These arguments become much more valid in the case of large nations like India which are also federal democracies.

The paper begins with an elucidation of the terms and concepts. It then goes on to unravel as to what is where, why and how. The questions are discussed not only in regard to firms but also in regard to households. Besides discussing the micro and the macro aspects of the issue, the issues of interregional trade and of regional growth are also gone into. Further, students are given a broad overview of the techniques of regional analysis. The paper also contains a section on the regional aspects of the Indian economy including the Indian experience in regional policy formulation and implementation.

**UNIT 1 : Basic Concepts and Location of Firms :** Why Regional Economics? What is a region? Different types of regions; Regional Income; Problems of estimation; Indicators of regional development. One market one input case; More generalized versions; Locational interdependence; Hotelling phenomena; General equilibrium; Uncertainty; Maximising vs. satisficing.

**UNIT 2 : (a) Spatial Price Theory :** Price equilibrium in geographically separated and interlinked markets; Market area boundaries; Reilly's law; Models of pricing under free entry; Spatial monopoly and Price discrimination; Spatial monopolistic competition.

**(b) Spatial Macro Economics :** Inter-regional income models; Inter-regional business cycles; Interregional trade and factor movements; Regional balance of payments; Export base models; Demand growth models; Regional multiplier.

**UNIT 3 : (a) Regional Growth :** Neo-classical growth models — Cumulative causation model; Center-periphery model; Growth pole analysis; Convergence and divergence of disparities in per capita regional income.

**(b) Techniques of Regional Analysis :** Regional and interregional input-output analysis; Attraction model; Gravity model; Shift-share analysis; Impact studies.

**UNIT 4 : Regional Policy :** People prosperity versus place prosperity; Formulation of interregional objectives; Consistency between national and regional objectives; Alternate regional policy measures; Historical evidence.



**UNIT 5 : (a) Inter-regional Differentials in India's Development :** Agriculture, Industry, Physical infrastructure, Social Sector.

**(b) Regional Policy in India :** The pre-1970 era identification of backward regions; Concerted policy measures; Liberalization and regional policy.

**Basic Reading List :**

1. Chand, M. and V.K. Puri (1983) Regional Planning in India, Allied Publishers, New Delhi.
2. Hoover, E.M. (1974) An Introduction to Regional Economics, Alfred A. Knopf, New York.
3. Isard, W. (1960) Methods of Regional Analysis, MIT Press, Cambridge, Mass.
4. Nair, K.R.G. (1982) Regional Experience in a Developing Economy, Wiley-Eastern, New Delhi.
5. Richardson, H.W. (1969) Regional Economics, Weidenfield and Nicolson, London.
6. Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy : Inter-State Perspectives, Bookwell, Delhi.

**Additional Reading List :**

1. Beckman, M. (1968) Location Theory, Random House, London.
2. Bhalla, G.S. and Y.K. Alagh (1979) Performance of Indian Agriculture: A District-wise Study, Sterling, New Delhi.
3. Dholakia, R.H. (1985) Regional Disparity in Economic Growth in India, Himalaya Publishing House, Bombay.
4. Friedman, J. and W. Alonso (Eds.) (1975) Regional Policy, Readings in Theory and Application, MIT Press, Cambridge, Mass.
5. Glasson, J. (1975) An Introduction to Regional Planning : Concepts, Theory and Practice, Hutchison, London.
6. Hansen, N.M. (1974) Public policy and Regional Economic Development; the Experience in Nine Western Countries, Ballinger, Massachusetts.
7. Lefeber, L. (1968) Allocation in Space, North-Holland, New York.
8. National Bureau of Economic Research (1957) Regional Income, Princeton University Press, Princeton.
9. Rao, H. (1984) Regional Disparities and Development in India, Ashish Publishing House, New Delhi.
10. Richardson, H.W. (1972) Input-Output and Regional Economics, Weidenfield and Nicolson, London.
11. Richardson, H.W. (1973) Regional Growth Theory, John Wiley, New York.
12. Seth, V.K. (1987) Industrialisation in India: A Spatial Perspective, Commonwealth Publishers, New Delhi.
13. Siebert, H. (1969) Regional Economic Growth : Theory and Policy, International Textbook Company, Scranton.
14. Williamson, J.G. (1985) 'Regional Inequality and the Process of National Development,' Economic Development and Cultural Change, Vol. 13, No. 4, part II, July.

# OPTIONAL PAPERS

## M. A. – I SEMESTER

### **PAPER D: MAEC104 HISTORY OF ECONOMIC THOUGHT**

#### **PREAMBLE**

This course is essential for a student who aspires for advanced training in economics. Contemporary economic science has evolved over many centuries. The evolution of economic ideas in each instance was as much a response to immediate economic problems and policy issues as much as it was a self-conscious attempt to refine earlier analysis by correcting mistakes and filling in the gaps in analysis. Economic ideas did not evolve in isolation, but were an integral and important part of the evolution of modern social thought. Prevailing ideas of science, scientific rigour and measurement played a significant role in the shaping of economic science at each stage of its evolution. This course, tracing the history of economic thought, would enable the student to understand how contemporary economics came to be what it is.

- UNIT 1 : Early Period :** Economic thought of Plato and Aristotle — Doctrines of Just cost and Just price — Mercantilism: main characteristics; Thomas Mun — Physiocracy: natural order, primacy of agriculture, social classes, Tableau Economique, taxation, Turgot — Economic ideas of Petty, Locke and Hume.
- UNIT 2 : The Classical System :** Adam Smith- Division of labour, Theory of value and distribution; David Ricardo- Theory of value and distribution, T.R. Malthus-Theory of population and the theory of Glut, J.S. Mill-Laissez faire and protection, J.B.Say-The law of markets, K.Marx- Theory of value; Theory of capitalist competition.
- UNIT 3 : The historical schools :** Subjectivism and Marginalism: H.H. Gossen; W.S. Jevons; G. Cassel, The Austrian School: K. Menger; Bohm-Bawerk. L. Walras: General equilibrium analysis, The Mathematical School: A. Cournot; F.V.Edgeworth; I.Fisher, The American contribution: J.B. Clark; A. Walker; J.A. Schumpeter.
- UNIT 4 : Neo classicism and After :** A. Marshall and his system of equilibrium, K. Wicksell & the Swedish School, Economics of welfare: A.C. Pigou, A.P. Learner, V. Pareto. J. M. Keynes & his policies; Post-Keynesian and Neo-Keynesian approaches, Neo-walrasian approach to general equilibrium.
- UNIT 5 : Indian Economic Thought :** Early economic ideas: Kautilya, Valluvar; Modern economic ideas: Naoroji, Ranade, R.C. Dutt and M.N. Roy; Economic ideas of Gandhi: Village, Swadeshi, place of machine and labour, cottage industries, trusteeship; Early approaches to planning (The national planning committee); Gadgil: co-operation as a way of life and strategy of development; J.K. Mehta: Wantlessness.

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

1. Smith, A. An Enquiry into the Nature & Causes of the Wealth of Nations.
2. Ricardo, D. Principles of the Political Economy and Taxation.
3. St. Clair, O. A Key to Ricardo.



4. Saraffa, P, (ed) Works of David Ricardo.
5. Wicksteed Commonsense of Political Economy.
6. Roll, E.A History of Economic thought (Feber & Feber).
7. Schumpeter, J.A. A History of Economic Analysis (George Allenand Udwin).
8. Meek, R.L. The Economics of Physiocracy.
9. Walras, L.Elements of Pure Economics.
11. P.N. Ghosh & R. Ghosh Concise History of Economic Thought.
12. D.H. Taylor A History of Economic Thought.
13. Lewis H. Haney A History of Economic Thought (Macmillan).
14. Charles Gide & Charles Rist A History of Economic Doctrines.
15. Phillip Charles Newman The Development of Economic Thought (Prentice Hall).
16. Frank A. Neft Economic Doctrine (McGraw Hill).
17. William A. Scott. The Development of Economics (Application Century-Crifts).
18. Alexander Gray The Dev. of Economic Doctrines (Longmans).
19. Edmund Whittaker A History of Economic Ideas (Longman Green).
20. John M, McConnel Basic Teaching of the Great Economist (Berns and Boole).
21. S. Howard Patterson (ed.) Readings in the History of Economic Thought (McGraw Hill).
22. H.W. Spiegel (ed.) The Development of Economic Thought.
23. E. Heimann History of Economic Doctrines.
24. J.F. Bell A History of Economic Thought.



*[Handwritten signature]*



# OPTIONAL PAPERS

## M. A. – II SEMESTER

### **PAPER E : MAEC204 AGRICULTURAL ECONOMICS**

#### **PREAMBLE**

The objective of this course is to provide a detailed treatment of issues in agricultural economics to those intending to specialize in this area. Its objective is to familiarize students with policy issues that are relevant to Indian agricultural economics and enable them to analyze the issues, using basic micro-economic concepts.

**UNIT 1 : (a)** Agricultural Economics: Meaning, Nature and Scope, Role of agriculture in economic development.

**(b)** Agricultural Inputs: Seeds, Fertilizers, Irrigation, Agricultural credit-sources in India and their comparative importance.

**UNIT 2 : (a)** Agricultural Production: Laws of returns in relation to agriculture; Technological changes and green revolution; Mechanization of agriculture and green revolution in India, Blue revolution & white revolution in India.

**(b)** Supply Function: Response of production to prices and non-price incentives; Cobweb models; Nature of supply curves.

**UNIT 3 :** Agricultural Prices: Relation between cost and price, Profit maximization in agricultural, Agricultural price policy in India and the role of Commission for Agricultural Cost & Prices, Dual Prices; Agricultural taxation and subsidies in India.

**UNIT 4 :** Farm size and productivity-returns to scale and size of farm, small v/s large farms, relationship between farm size and productivity, Pattern of holdings in India and Farm-size policy, Agricultural marketing.

**UNIT 5 : (a)** Changes in agriculture at international level, New Agricultural Policy, Capital Formation and Infrastructural changes in Indian agriculture.

**(b)** Agriculture and External Sector: International trade in agricultural commodities, The World Trade Organisation and its effects on Indian agriculture, Issues in liberalization of domestic and international trade in agriculture, Role of MNCs.

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

1. R. L. Cohon : Economics of Agriculture
2. E. O. Heady : Economics of Agriculture
3. C. B. Mamoria : Agricultural Problems in India
4. J. W. Mellor : The Economics of Agricultural Development
5. P. C. Joshi : Land Reforms in India-Trends and Perspectives.
6. R. N. Soni : Agricultural Economics.
7. A. S. Kahlon and D. S. Tyagi : Agricultural Price Policy in India.
8. G. S. Bhalla (Ed.) : Economic liberalization and Indian agriculture.
9. G. D. Agarwal & P. C. Agarwal : Economic Problems of Indian Agriculture



10. A. N. Agarwal : Indian Agriculture (latest edition)  
11. Lekhi, R.K & Singh : Agricultural Economics, Kalyani Publishers.  
Joginder (2001)

**Additional Reading List :**

1. T. W. Schultz : Transforming Traditional Agriculture  
2. C. H. Hanumantha Rao : Technological changes and distribution of  
gains in India agriculture  
3. Govt. of India : Five-year-plans.  
4. APJ Abdul Kalam (1998) : INDIA 2020, Penguin Books India, New  
Delhi.



# OPTIONAL PAPERS

## M. A. – II SEMESTER

### **PAPER F : MAEC204 INDIAN ECONOMIC THOUGHT**

#### **PREAMBLE**

Cultural values are an integral part of socio-economic wellbeing. This paper, therefore, incorporate the thoughts of various renowned Indian personalities of the ancient era to the modern one to understand socio-economic paradigm shift and its complexities.

A detailed study of the economic ideas of the following Indian thinkers:

- (i) Kautilya
- (ii) Mahatma Gandhi.
- (iii) J. K. Mehta.
- (iv) V. K. R. V. Rao.
- (v) Amratya Sen.



A handwritten signature in blue ink, consisting of stylized cursive letters.





# OPTIONAL PAPERS

## M. A. – II SEMESTER

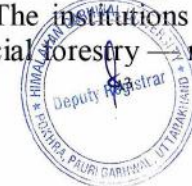
### **PAPER G : MAEC204 ENVIRONMENTAL ECONOMICS**

#### **PREAMBLE**

This course is meant to provide some insights into the application of economic theory in the design and implementation of public policy related to the management of environment and social sectors. The course finds roots in welfare economics, national income accounting, macroeconomic policies and trade and development.

Modules incorporated in this paper are devoted to issues of environmental economics, environmental and social services and the problem of valuation of these services, and designing of instruments and institutions for the management of environment. The models of optimal use of natural resources, macroeconomic issues, sustainable development, environmental resource problems in India and the economics of health and education constitute the other areas of the modules of this paper.

- UNIT 1 : *Welfare Economics, Social Sectors and Environment*** : Pareto optimality and competitive equilibrium; Fundamental theorems of welfare economics; Externalities and market inefficiency—externalities as missing markets; property rights and externalities, non-convexities and externalities; Pareto optimal provision of public goods—Lindahl's equilibrium, preference revelation problem and impure and mixed public goods, common property resources. Introduction to Kuznet Curve.
- UNIT 2 : *Measurement of Environmental Values*** : Use values, Option values and non-use values; Valuation methods—Methods based on observed market behaviour; Hedonic property values and household production models (travel cost method and household health production function), Methods based on response to hypothetical markets, contingent valuation methods.
- UNIT 3 : *The Theory of Environmental Policy*** : Environmental externalities—Pigouvian taxes and subsidies, marketable pollution permits and mixed instruments (the charges and standards approach), Coase's bargaining solution and collective action; informal regulation and the new model of pollution control, Monitoring and enforcement of environmental regulation, Environmental institutions and grass root movements; Global environmental externalities and climatic change—Tradable pollution permits and international carbon tax, Trade and environment in WTO regime. Introduction to Kyoto Protocol.
- UNIT 4 : *Economics of Natural Resource Management and Sustainable Development*** : Theories of optimal use of exhaustible and renewable resources; Environmental and development trade off and the concept of sustainable development; Integrated environmental and economic accounting and the measurement of environmentally corrected GDP; Macroeconomic policies and environment.
- UNIT 5 : *Environmental and Natural Resource Problems in India*** : Mechanism for environment regulation in India; Environmental laws and their implementation; Policy instruments for controlling water and air pollution and forestry policy; People's participation in the management of common and forest lands; The institutions of joint forest management and the joint protected area management; Social forestry—rationale and benefits.



### Basic Reading List :

1. Baumol, W.J. and W.E.Oates : The Theory of environmental Policy, (2<sup>nd</sup> Edition) (1988) Cambridge University Press, Cambridge.
2. Bromely, D.W. (Ed.) (1995): Handbook of Environmental Economics, Blackwell, London.
3. Hanley, N., J.F. Shogern and B.White (1997) : Environmental Economics in Theory and Practice, Macmillan.
4. Hussen, A.M. (1999) : Principles of Environmental Economics, Routledge, London.
5. Kolstad, C.D. (1999) : Environmental Economics, Oxford University Press, New Delhi.

### Additional Reading List :

1. Arrow, K.J. (1970) : 'The Organization of Economic Activity : Issues Pertinent to Choice of Market versus Non-market Allocation' in Public Expenditure and Policy Analysis, (Ed.), Haveman, R.H. and J. Margolis, Markham, Chicago.
2. Baland, J.M. and J.P. Plateau (1994) : Halting Degradation of Natural Resources : Is There a Role for Rural Communities, Oxford University Press, Oxford.
3. Bhattacharya, R.N. (Ed.) (2001) : Environmental Economics : An Indian Perspective, Oxford University Press, New Delhi.
4. Chopra, K. (1998) : Valuation of Bio-diversity within Protected Areas : Alternative Approaches and a Case Study, Institute of Economic Growth, Delhi.
5. Chopra, K. and S.C. Gulati (2000) : Migration and the Management of Common Property Resources : A Study in Western India, Sage, New Delhi.
6. Crones, R. and T. Sandler (1989) : The Theory of Externalities and Public Goods, Cambridge University Press, Cambridge.
7. Dasgupta, P.S. and G.M. Heal (1985) : Economic Theory and Exhaustible Resources, Cambridge University Press, Cambridge.
8. Fisher, A.C. (1981) : Resource and Environmental Economics, Cambridge University Press, Cambridge.
9. Jeroen, C.J.M. van den Bergh (1999) : Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd., U.K.
10. Larsen, B. and A. Shaw (1994): Global Tradable Carbon Permits, Participation Incentives, and Transfers, Oxford Economic Papers, Vol. 46.
11. Markandya, A. and M.N. Murty (2000) : Cleaning up the Ganges : Cost-Benefit Analysis of Ganga Action Plan, Oxford University Press, New Delhi.
12. Mehta, S.S. Mundle and U.Sankar (1995) : Controlling Pollution : Incentives and Regulation, SAGE, New Delhi.
13. Oastrom, E. (1990) : Governing the Commons : The Evolution of Institutions for Collective Actions, Cambridge University Press, Cambridge.
14. Pearce, D.W. and R. Turner (1991) : Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore.
15. Sankar, U. (Ed.) (2001) : Environmental Economics, Oxford University Press, New Delhi.
16. Schultz, T.W. (1971) : Investment in Human Capital, Free Press, New York.



17. Sengupta, R.P. (2001) : Ecology and Economics : An Approach to Sustainable Development, Oxford University Press, New Delhi.
18. Smith, V.Kerry (1996) : Estimating Economics Values for Nature : Methods for Non-market Valuation, Edward Elgar, Cheltenham, U.K.
19. Tietenberg, T. (1994) : Environmental Economics and Policy, Harper Collins, New York.
20. United Nations (1993) : Integrated Environmental and Economic Accounting, United Nations, New York.
21. Whalley, J. and R. Wigle (1997) : 'The International Incidence of Carbon Taxes,' in Tietenberg, T.(Ed.) Economics of Global Warming, 1997, Edward Elgar, U.K.



# OPTIONAL PAPERS

## M. A. – II SEMESTER

### **PAPER H : MAEC204 GENDER ECONOMICS**

#### **PREAMBLE**

Gender biases in societal practices and development policies have resulted in persistent gender inequalities. It is increasingly being realized that mitigating such inequalities and enhancing women's capabilities and entitlements are crucial to the overall development of the country. This course "Gender Economics" would provide students an understanding of the nature of the economic role of women and their contribution to the national economy on the basis of a scientific and non-sexist analysis. The units incorporated in this course provide an analysis of issues at the theoretical level and also with regard to specificity of issues prevailing in the Indian context.

**UNIT 1 : (a) Introduction to Gender Studies :** Importance and concepts of women studies — Women in patriarchal and matriarchal societies and structures, patrilineal and matrilineal systems and relevance to present day society in India; Economic basis and functioning of patriarchy in developed and LDCs, particularly India; Gender bias in the theories of value, distribution, and population.

**(b) Demographic Aspects :** Demography of female population: Age structure, mortality rates, and sex ratio — Causes of declining sex ratios and fertility rates in LDCs and particularly India — Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources, and their impact on female mortality and fertility, economic status, and in work participation rate.

**UNIT 2 : (a) Women in Decision Making :** Factors affecting decision making by women; property rights, access to and control over economic resources, assets; Power of decision making at household, class, community level; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India; Role of kinship in allocating domestic and social resources.

**(b) Conceptualization of Women's Work :** Concept and analysis of women's work: Valuation of productive and unproductive work; visible and invisible work; paid and unpaid work; economically productive and socially productive work — Economic status, private property, and participation of women in pre-industrial and industrial societies — Female contribution to National Income.

**UNIT 3 : (a) Women and Labour Markets :** Factors affecting female entry in labour market; Supply and demand for female labour in developed and developing countries, particularly India; Studies of female work participation in agriculture, non-agricultural rural activities, informal sector, cottage and small-scale industries, organized industry, and services sector; Wage differentials in female activities; Determinants of wage differentials; gender, education, skill, productivity, efficiency, opportunity; Structures of wages across regions and economic sectors.



**(b) Women, Technology and Environment :** Impact of technological development and modernization on women's work participation in general and in various sectors such as agriculture, non-agriculture rural activities, small and cottage industries and organized industry — Female activities and ecological and environmental concerns: the two way relationship — Role of new technologies for helping women — Provision of information and training for simple harvesting of economic services.

**UNIT 4 : Social Security and Social Protection for Women :** Social security of women: entitlements, ensuring economic independence and risk coverage, access to credit and insurance markets; Role of voluntary organizations, self help groups in providing social security; Labour market biases and gender discrimination; effectiveness of collective bargaining; Review of legislation for women's entitlements, protection of property rights, social security — Schemes for safety net for women; Need for female labour unions; affirmative action for women and improvement in their economic and social status.

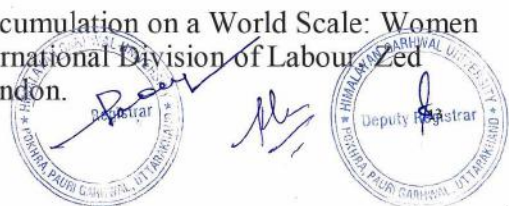
**UNIT 5 : Gender Planning, Development Policies and Governance :** Gender and development indices; Mainstreaming gender into development policies; Genderplanning techniques; Gender sensitive governance; Paradigm shifts from women's well being to women's empowerment; Democratic decentralization (panchayats) and women's empowerment in India.

**Basic Reading List :**

- |    |  |  |
|----|--|--|
| 1. | Boserup E. (1970)  | Women's Role in Economic Development, George Allen and Unwin, London.  |
| 2. | Desai, N. and M.K. Raj. (Eds.) (1979)                                | Women and Society in India, Research Centre for Studies, SNDT University, Bombay.  |
| 3. | Government of India (1974)   | Towards Equality — Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi. |
| 4. | Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999)                 | Gender, Population and Development, Oxford University Press, New Delhi.  |
| 6. | Srinivasan K. and A.India :  | Towards Population and Development   |
| 7. | Venkateswaran, S.Environment, Development and the Gender Gap, (1995) | Sage Publications, New Delhi.  |
| 8. | Wazir, R. (2000)   | The Gender Gap in Basic Education : NGOs as Change Agents, Sage Publications, New Delhi.   |

**Additional Reading List :**

- |    |  |
|----|--|
| 1. | Kabeer, N. and R.Institutions, Relations and Outcomes : A Subrahmanyam (Ed.) Framework and Case Studies for Gender-(1999) aware Planning, Kali for Women, New Delhi. |
| 2. | Mies, M. (1986/1998)Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour, Zed books, London.                                  |



3. Agnihotri, S.B. (2000) Sex ratio in Indian Population: A Fresh Exploration, Sage Publications, New Delhi.
4. Gupta, J.A. (2000) New Reproductive Technologies, Women's Health and Autonomy, Indo Dutch Studies on Development Alternatives, Sage Publications, New Delhi.
5. Young K., et. al. (Eds.) (1987) Serving Two Masters, Routledge & Kegan Paul, London.
6. Dwyer, D. and J. Bruce (Eds.) (1988) A Home Divided : Women and Income in the Third World, Stanford University Press, Stanford.
7. Redcliff, N. and E. Mingione, (Eds.) (1985), Beyond Employment : Household, Gender and Subsistence, Basil Blackwell, Oxford.
8. Sen, A.K. (1990) 'Gender and Cooperative Conflicts' in Tinker (Ed.) Persistent Inequalities : Women and World Development, Oxford University Press, New York.
9. Papola, T.S. and A.N. Sharma (Eds.) (1999), Gender and Employment in India, Vikas Publishing House, New Delhi.
10. Baud, I.S.A. (1992) Forms of Production and Women's Labour : Gender Aspects of Industrialization in India and Mexico, Sage Publications, New Delhi.
11. King M. and M.A. Hill (Eds.) (1993) Womens' Education in Developing Countries : Barriers, Benefits and Politics, John Hopkins, Baltimore.
12. Dantwala, M.L., H. Sethi and P. Visaria (1998) Social Change Through Voluntary Action, Sage Publications, New Delhi.
13. Narasimhan, S. (1999) Empowering Women : An Alternative Strategy from Rural India, Sage Publications, New Delhi.
14. Purushothaman, S. (1998) The Empowerment of Women in India : Grassroots Women's Networks and the State, Sage Publications, New Delhi.



# OPTIONAL PAPERS

## M. A. – III SEMESTER

### **PAPER I: MAEC304 INDUSTRIAL ECONOMICS**

#### **PREAMBLE**

In the contemporary world with globalization and liberalization more and more attention is being given to industry. This course intends to provide knowledge to the students on the basis issues such as productivity, efficiency, capacity utilization and debates involved in the industrial development of India. The objective is to provide a through knowledge about the economics of industry in a cogent and analytical manner, particularly in the Indian context.

**UNIT 1 :** Industrialization and its importance; problems of industrialization in the developed and developing economies.

**UNIT 2 :** Location of Industry: Different theories of location; factors affecting location of an industry; localization and decentralization of industries; diversification and integration of industrial units.

**UNIT 3 :** Project Appraisal: Cost-benefit analysis; net present value and internal rate of return criteria.

**UNIT 4 :** Industrial Finance: Types of finance-equity debentures, public deposits, loans from banks and institutional finance. The financial ratios and their analysis.

**UNIT 5 :** Indian Experience: Industrial policy; industrial progress under the Plans; growth of public enterprises; problems of management; efficiency and pricing in public enterprises; industrial finance; problems of small scale and cottage industries; growth of concentration and monopoly; multinationals; industrial sickness; industrial relations; workers' participation in management.

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

1. S. C. Kuchhal : The Industrial Economy of India.
2. B. N. Dutta : Economics of Industrialization.
3. J. S. Ba in : Industrial Organizations
4. Alak Ghosh : Indian Economy-Its Nature and Problems
5. C. N. Vakil (ed.) : Industrial Development of India.
6. J. N. Bhagwati & : Planning for Industrialization.
7. R. R. Barthwala : Industrial Economics.
8. P. J. Devine, et al. : An Introduction to Industrial Economics.
9. L. C. Gupta : the Changing Structure of Institutional Finance in India.
10. Dalip S. Swamy : Multinational Corporations and the World Economy.
11. V. B. Singh : Multinational Corporations and India.



# OPTIONAL PAPERS

## M. A. – III SEMESTER

### **COURSE J : MAEC304 ECONOMICS OF INFRASTRUCTURE**

#### **PREAMBLE**

The important role infrastructure plays in a country's development need not be reiterated. In case of developing countries, lack of adequate infrastructure has been held as a major obstacle to growth. Of the various categories of infrastructure, the category of social overhead capital has gained particular prominence. The contents of the paper 'Economics of infrastructure' exposes the student wholly to issues involved in development of infrastructure in developing countries like India.

**UNIT 1: Introduction :** Infrastructure and economic development — Infrastructure as a public good; Social and physical infrastructure; Special characteristics of public utilities. The peak-load, Off-Load Problem, Dual Principle Controversy; Economics of scale of Joint supply; Marginal Cost Pricing vs. Other methods of pricing in public utilities; Cross-subsidization — free prices, equity and efficiency.

**UNIT 2: Transport Economics :** 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; Inter-modal condition in the Indian Situation.

**UNIT 3: Communications :** Rate-making in Telephone Utilities. Principles of Decreasing Costs in Telephone Industry. Characteristics of Postal Services. Criteria for Fixation of Postal Rates. Measurement of Standards of Service in Telephone and Postal Utilities.

**UNIT 4: Energy Economics :** Primacy of Energy in the Process of Economic Development. Factors Determining Demand for Energy; Effects of Energy Shortages. Energy Conservation. Renewable and Non-conventional Sources of Energy. Energy Modelling. The Search for an Optimal Energy Policy in the Indian Context.

**UNIT 5: (a) Electricity, Gas and Water Supply :** Bulk Supply and Pricing of Electricity. The Relative Economics of Thermal, Hydel and Nuclear Power Plants. The Case for a National Power Grid. Financing Water Utilities. Urban and Rural Water Supply. The Exploitation of Natural Gas. Pricing Problem.

**(b) Social Infrastructure :** Organization and Financing of Supply of Social Services. Private vs. Public Sector Financing; Recent debate about the fixation of prices of social services. Development of social services in the successive Indian Plans.

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

1. Crew, M.A. and P.R. : Public Utility Economics, McMillan, London. Kleindorfer (1979)
2. National Council of Applied :India Infrastructure Report : Policy Implications for Economic Research Growth and Welfare, NCAER, New Delhi (NCAER) (1996),
3. Parikh, K.S. (Ed.) (1999) : India Development Report — 1999-2000 Oxford, New Delhi.
4. Nelson, J.R. (1964) : Marginal Cost Pricing in Practice, Prentice-Hall, Englewood-Cliff



5. Philips, A. and O.E. Williamson (Eds.) (1967) : Prices : Issues in Theory, Practice and Public Policy, University of Pennsylvania Press, Philadelphia.
6. Kneafsey, J.T. (1975) : Transportation Economic Analysis, Lexington, Torouts.
7. Jha, R., M.N. Murty and S. Paul (1990) : On Fixing Prices for Postal Services in India, National Institute of Public Finance and Policy, New Delhi.
8. Government of India (1980) : Report of the Committee on Power (Rajadhyaksha Committee), New Delhi.
9. Pachauri, R.K. (Ed.) (1980) : Energy Policy for India, Macmillan Co. of India, New Delhi.
10. Eckstein, O. (1958) : Water Resource Development, Harvard University Press, Cambridge.
11. Turvey, R. and D. Anderson :Electricity Economics, John Hopkins University (1977) Press, Baltimore.
12. Goyal, S.K. (Ed.) (1985) : Public Enterprises, Indian Institute of Public Administration, New Delhi.
13. Naik, J.P. (1975) : Equality, Quality and Quantity, Allied Publisheers, Bombay.



# OPTIONAL PAPERS

## M. A. – III SEMESTER

### **COURSE K: MAEC304 ECONOMICS OF HEALTH & EDUCATION**

#### **PREAMBLE :**

This paper is an introduction to the field of economics of health and education. Economics of health and education is an application of microeconomics with vast and ever growing literature. The understanding of these concepts is needed for an analysis of health and education system and policies.

**UNIT 1 : Economics of Health :** Concept, dimensions and indicators; Determinants of health status; Disease burden and its measurement; Economic appraisal in health care-Cost-benefit and cost effectiveness approaches; Environment and health; Human capital and health, The demographics of health : aging, obesity, and disability.

**UNIT 2 : India's Health care system :** Health care Reform, Public and Private expenditure on health, Health planning and management; National policy on Health; Health programmes and infrastructure, Financing of health programmes in India, Primary health care and health for all; Community health care. Expenditure on health during post-reform period; Health, poverty and economic growth in India; International health organizations-WHO and other United Nations agencies.

**UNIT 3 : Health Care markets :** Uncertainty and the welfare economics of Medical Care, Health Insurance, Hospitals and the theory of non-profits, Employer provision of health care, uninsurance : Causes and Consequences; Technological change and Health Care, Information asymmetries in health insurance markets, Externalities in health care markets.

**UNIT 4 : Concept of Economics of education :** Educational production function; Education, productivity and income; Educational indicators; Education and economic development; Human development - concept and measurement; Educational costs and benefits-Educational cost functions, cost-benefit model; Educational planning and manpower; NGOs and Human Resource Development.

**UNIT 5 : India's educational system :** Problems and suggestions; Human capital in India; National policy on education; Financing of education in India; Expenditure on education during post-reform period.

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

- |                                     |   |  |
|-------------------------------------|---|--|
| 1. Mark Blaug                       | : | Economics of Education: Selected Readings, vol. I & II |
| 2. Schultz, T.W.                    | : | Investment in Human Capital                            |
| 3. Ritzen, J.M.M.                   | : | Education, Economic Growth and Income Distribution.    |
| 4. Folland, Goodman, and Stano      | : | The Economics of Health and Health Care.               |
| 5. Thomas E. Getzen                 | : | Health Economics.                                      |
| 6. Mahbubul Haq                     | : | Quality of Life.                                       |
| 7. Martha Nussbaum & Amartya Sen    | : | Quality of Life.                                       |
| 8. Park and Park                    | : | Textbook of Preventive and Social Medicine             |
| 9. Human Development Report – 2007. | : |  |



10. Phelps : Health Economics, 3<sup>rd</sup> edition.
11. National Human Development Report –2001.
12. Report on National Commission on Macroeconomics and Health –2005.
13. Economic Survey –2007-08.



# OPTIONAL PAPERS

## M. A. – III SEMESTER

### **COURSE L : MAEC304 ECONOMICS OF INSURANCE**

#### **PREAMBLE**

The vital role of insurance in the task of risk-bearing and risk-elimination in the economic affairs has not been appreciated adequately in our country. Given that the element of risk or uncertainty is a universal and fundamental phenomenon in our economic life, the importance of insurance as a means of reducing uncertainty and risk in regard to personal and business activities cannot be overemphasized.

The role of insurance sector in mobilizing a country's saving for channeling them into capital formation and thus contribute to a country's economic development is also documented. There is a wide spread recognition that insurance, particularly life insurance, is a prominent segment of applied economics. Insurance industry is an important constituent of financial services industry in India and is a major investment institution and prominent player in the capital market. However, in our country, study of the subject of insurance has largely remained neglected.

With the opening of the insurance sector for private Indians and foreign players, the interest in the subject has been kindled. This course on Insurance Economics attempts to give a fairly comprehensive view of the subject to the postgraduate students in Economics and pave the way for possible future expansion of the teaching of an important branch of economics.

- UNIT 1 : Introduction** : Economic security; Human quest for economic security through time; Exposure to losses; Role of insurance; Definition of insurance; Risk pooling and risk transfer; Economic and legal perspectives, Social vs. private insurance; Life vs. non-life insurance; Classification of life, health and general insurance policies.
- UNIT 2 : Risk and Risk Management** : Fundamentals of uncertainty and risk; Pure risk and speculative risk; Expected utility and decision making under uncertainty; Expected utility and the demand for insurance; Moral hazard and insurance demand; Concept of risk management; Essentials of risk management; Elements of risk management — Risk assessment; Risk control and risk financing.
- UNIT 3: Insurance and Economic Development** : Risk management and insurance in economic development, Insurance institutions as financial intermediaries; Insurance institutions as investment institutions; Insurance institutions in Indian capital market; Regulations governing investments of insurance institutions in India; IRDA rules in this regard.
- UNIT 4 : (a) Essentials of Life and Health Insurance** : Fundamentals of life and health insurance; Functions of life and health insurance; Selection and classification of risks; Basics of premium construction; Valuation and distribution of surplus; Individual health insurance; Uses, Types of evaluation; Principles of underwriting of life and health insurance; Group insurance and superannuation (pension) schemes; Set-up and management of insurance companies.



**(b) Essentials of General Insurance :** Definition of general insurance; Types of general insurance; Importance of general insurance; Importance of general insurance in a country's economic development; Concept of short-term risk; Fundamentals of the following concepts — Common law, Equity, Proposal/Accedence, Indemnity, Insurable interest, Contribution subrogation, Representation; Utmost good faith, Material fact, Physical hazard, Moral hazard; Policy endorsements conditions/warranties; Selection of risks; Inspection of risks; Rating and calculation of premiums; Tariffs and non-tariffs; Marketing of general insurance; Technology development and general insurance.

**UNIT 5 : (a) Planning for Wealth Accumulation and Retirement Needs :** Wealth accumulation planning; Life cycle planning; Planning for accumulation, objectives; Purchase of insurance and accumulation planning; Investments — Tax-advantaged and tax non-advantaged; Essentials of individual retirement planning; Analysis of retirement; Income needs; Retirement planning strategies; Investing for retirement, Pension plans; Basic principles of pension plans; Pension plans in India; Estate Planning; Process of estate planning; Estate planning tools; Life insurance for estate liquidity.

**(b) Regulation of Insurance :** Regulation of insurance; Purpose of government intervention in markets; Theories of regulation; Insurance regulation in India; Insurance Regulation and Development Authority (IRDA).

**Basic Reading List :**

1. Bailey, R. (Ed.) (1999) : Underwriting in Life and Insurance, LOMA, Atlanta, Ga.
2. Bhole, L.M. (1990) : The Indian Financial System, Tata McGraw Hill, New Delhi.
3. Black, K. Jr. and H.D. Skipper Jr. (2000) : Life and Health Insurance, Prentice Hall, Upper Saddle River, New Jersey.
4. Finsinger, J. and M.V. Pauly (Eds.) (1986) : The Economics of Insurance Regulation : A Cross National Study, Macmillan, London.
5. Head, G.L. and S. Horn II (1991) : Essentials of Risk Management, Volume I, Insurance Institute of America, Malvern, Pa.
6. Tacchino, K.B. and D.A. Little (1993) : Planning for Retirement Needs, The American College, Bryn Mawr, Pa.

**Additional Reading List :**

1. Yaari. M.E. (1965) : 'Uncertain Life Time, Life Insurance and the Theory of Consumer,' Review of Economic Studies, Volume 32.
2. Williams Jr., C.A. M.L. Smith and P.C. Young (1995) : Risk Management and Insurance, McGraw Hill, New York.
3. Wu, C. and P. Colwell (1988) : 'Moral Hazard and Moral Imperative,' Journal of Risk and Insurance, Volume 55, No. 1.
4. Outreville, J.F. (1990) : The Economic Significance of Insurance Markets in Developing Countries, The Journal of Risk and Insurance, Volume 57,



*[Handwritten signature]*



No. 3

5. United Nations Conference on Trade and Development (1987) : The Promotion of Risk Management in Developing Countries, UNCTAD, Geneva.
6. Black, K. Jr. and H.D. Skipper Jr. (2000) : Life and Health Insurance, Prentice Hall, Upper Saddle River, New Jersey.
7. Insurance Institute of India : General Insurance (IC-34), Mumbai.
8. Government of India (1998) : Old Age and Income Security (OASIS) Report (Dave Committee Report), Government of India, New Delhi.
9. Ivers, J.I. III and E.T. Johnson (Eds.) (1991) : Readings in Wealth Accumulation Planning, The American College, Bryn Mawr, Pa.
10. Insurance Regulation and Development Authority (2001) : IRDA Regulations, New Delhi.
11. Meier, K.J. (1988) : The Political Economy of Regulation : The Case of Insurance, The State University of New York Press, Albany, N.Y.
12. Peltzman, S. (1976) : Towards a More General Theory of Regulation, Journal of Law and Economics. Vol. 19, No. 2.
13. Stigler, G.J. (1971) : The Theory of Economic Regulation, Bell Journal of Economics, Vol. 7.



# OPTIONAL PAPERS

## M. A. – IV SEMESTER

### **COURSE M: MAEC304 ECONOMETRICS**

#### **PREAMBLE**

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

The Course also covers various econometric methods applicable to different topics in economics and those needed for applied economic research. An introductory module on multivariate methods has also been included in the course which constitutes an important tool for analysis in multivariable data in development-related studies.

**UNIT 1 :** Meaning, Objectives, Nature and Scope of Econometrics, Relationship with Mathematical Economics, Economics and Statistics. The raw material of Econometrics-time series and cross-section data. Methodology of Econometrics.

**UNIT 2 :** **The Theory of Classical Least Squares :** The OLS method, Assumptions of the OLS. Desirable properties of the estimates, Properties of the OLS estimates, Best, Linear, Unbiased estimates, Standard errors of the OLS estimates, Tests or significance of these estimates, Coefficient of Determination and test of its significance.

**UNIT 3 :** **Problems of the Single Equation Model :**

- i) Misspecification in variables-Specification bias.
- ii) Errors in variables, concept of Dummy variable and proxy variable.
- iii) Heteroscedasticity.
- iv) Multicollinearity, its consequences, Methods to detect multicollinearity, solutions.
- v) Autocorrelation, its consequences, Testing the inter-dependence of regression disturbances-Durbin Watson Test, Treatment of the first order Markov-Scheme.
- vi) Problems of lagged variables-Distributed lag model.

**UNIT 4 :** **Simultaneous Equations Model :**

- a) Jointly dependent variables, simultaneous equation bias, predetermined variables, structural form, reduced form and final form.
- b) The identification problem: Rank and order conditions of identifiability (without proof)
- c) Methods of estimation with properties, reduced form estimation and indirect least squares, two stage least squares, An informal introduction to the methods of limited information and full information maximum likelihood, comparison of alternative estimation methods.

**UNIT 5 :** Econometric Models-Problems involved in construction, Interpretation and forecasting.



**Basic Reading List :**

1. Tinbergen : Econometrics
2. Tintner : Econometrics
3. Goldberger : Econometric Theory
4. Hood & Koopmans : Studies in Econometric Methods
5. Koutsoyiannis : Theory of Econometrics.
6. Maddala, G.S. : Introduction to Econometrics, Wiley India Pvt. Ltd., New Delhi.
7. Gujarati, Damodar N. : Basic Econometrics, McGraw-Hill Publication.

**Additional Reading List :**

1. J. Johnston : Econometric Methods
2. Klein L. R. : A Text book of Econometric Methods
3. Christ : Econometric Methods and Models
4. Dilip M. Nachane (2006) : Econometrics, Oxford University Press, New Delhi.
5. Greene, William H. : Econometric Analysis, Pearson Education (Singapore) Pte. Ltd., Delhi.
6. Wooldridge : Introductory Econometrics : A Modern Approach, Thomson South-Western.

**Note:** At least 50% of the questions shall be based on numerical problems. Use of calculators is permitted.





# OPTIONAL PAPERS

## M. A. – IV SEMESTER

### **PAPER N: MAEC404 LABOUR ECONOMICS**

#### **PREAMBLE**

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

**UNIT 1 :** Labour : Characteristics of labour, role of labour in economic development employment and unemployment mobility of labour. Methods of recruitment and placement; the role of Employment service organisation.

**UNIT 2 :** Productivity: Meaning and measurement; factors affecting productivity. Rationalization.

**UNIT 3 :** Wages: Theories of wage rate determination; methods of wage payment; minimum wage; living wage and fair wage; wage differentials; wages and wageboards; bonus systems; profit sharing; National wage policy; co-ordination of price, incomes and wage policy in India.

**UNIT 4 : (a)** Industrial Relations: Industrial disputes and industrial peace; methods of settlement and prevention of industrial disputes; industrial relations in India; workers participation in management.

**(b)** Trade Unions: collective bargaining and wage theory; Trade union movement in India; problems and limitations.

**UNIT 5 : (a)** Social Security: Meaning and evolution; social assistance and social insurance; social security and labour welfare in India.

**(b)** Labour Policy: Labour policy in India and need for manpower planning.

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

1. R. A. Lester : Economics of Labour
2. J. T. Dunlop (ed.) : The Theory of Wage Rate Determination
3. J. R. Hicks : The Theory of Wages.
4. G. C. Hallen : Dynamics of Social Security
5. I. L. O. : Approaches to Social Security
6. I. L. O. : Problems of Wage policyming Asia.
7. T. N. Bhagoliwala : Economics of Labour and social Welfare.
8. S. C. Pant : Indian Labour Problems.
9. Report of the National Commission on Labour (1969).
10. Indian Labour Journal (Monthly).



# OPTIONAL PAPERS

## M. A. – IV SEMESTER

### **PAPER O : MAEC404 ECONOMICS OF LAW**

#### **PREAMBLE**

In order to understand the basic tools and methods of economic analysis both at the micro and macro levels, it is imperative to understand the basic provisions of law relating to consumer activities, business organizations, environment, custom duties, public sector undertakings, direct foreign investment and the law relating to international organizations and vice versa. However, economists have often taken for granted the various legal provisions which affect the economic behaviour which is not true. In order to meet this requirement, this course is essential and has been designed in a way that the students of economics would be able to comprehend the basic economic issues affecting the economy along with the related legal provisions. This would enable the economists to frame their models that are closer to reality, besides making them understand the consequences of legal rules, primarily as an exercise in applied microeconomics, macroeconomics, industrial and international economics.

- UNIT 1: Introduction** : Economic analysis of law — Introduction to legal reasoning, Efficiency; Markets and efficiency; Market failure; Coase theorem and related ideas, welfare economics; Compensation principles; Social welfare function; Maximization problem; Nature of economic reasoning; Economic approach to law — History and criticism.
- UNIT 2:** (a) **An Introduction to Law and Legal Institutions** : The Civil Law and the Common Law Traditions; The institutions of the federal and State Court systems; The nature of legal dispute, how legal rules evolve.  
(b) **Law Relating to Consumer Activities** : Bargain theory; Economic role of contract; Economic theory of contract; Remedies as incentives, formation, defences and performance excuses; Duress; Bargaining power and unconscious ability; Defining tort law, economics of tort liability; Tort liability and economic models; Economics of accidents, fault, victim; fault and strict liability; Function of damages; Consumer protection; Consumer courts.
- UNIT 3 : Law of Business Organizations** : Structure of firm — Kinds, Corporations, Corporate vest, Capital, Shares, Debentures, Insiders' trading, Antitrust, RBI, IRDA, MRTP, Role of SEBI, Economics of mergers, Amalgamations and takeovers.
- UNIT 4 : Macroeconomics and Law** : Law and distribution of income and wealth; Inequality; Contract theory of Distributive justice; Economic and social costs of poverty; Wealth distribution by Liability Rules; Taxation and efficiency; Personal and corporate taxation; Progressive principle; Economics of federalism; Freedom of Inter-state trade and commerce; National and global environmental problems and international environmental agreements — their legal and economic implications; Economics of social sector, disinvestment in PSUs.
- UNIT 5 : International Aspects** : GATT/WTO — TRIPS and TRIMS; Export-import policy; Custom duties; MNCs and Direct foreign investment; FEMA.



*[Handwritten signature]*



**Basic Reading List :**

1. Bouckaert, B. and G. De Geest (Ed.) (1999) : Encyclopaedia of Law and Economics, (Volume I to V), Edward Elgar Publishing Ltd., U.K.
2. Cooter, R.D. and T.S. Ulen, (2000) : Law and Economics, (3rd Edition), Addison Wesley, New 3. York.
3. Dan-Schmidt, K.G. and T.S. Ulen (Ed.) (2000) : Law and Economic Anthology, Addison Wesley, New York.
4. Oliver, J.M. (1979) : Law and Economics, George Allen and Unwin, London.
5. Posner, R.A. (1998) : Economic Analysis of Law, (5th Edition), Little Brown, Boston.

**Additional Reading List :**

1. Coase, R.H. (1960) : 'The Problem of Social Cost,' Journal of Law and Economics, Vol. 3, Chicago.
2. Posner, R.A. (1998) : 'Values and Consequences : An Introduction to the Economic Analysis of Law,' Chicago Law and Economics Working Paper.
3. Samuels, W.J. (1971) : 'Interrelations Between Legal and Economic Process,' Journal of Law and Economics, Vol. 14, Chicago.
4. Zerbe, R.O. (2000) : Economic Efficiency in Law and Economics, Edward Elgar Publishing Co., U.K.
5. Spitzer, M. and E. Hoffma (1999) : 'A Reply to Consumption Theory, Production and Ideology in the Coase Theory,' S. California Law Review, Vol. 53.
6. Ayres, I. And R. Gevtne (1989) : 'Filling Gaps in Incomplete Contracts : An Economic Theory of Default Rules,' Yale Law Journal, Vol. 99.
7. Lando, H. (1997) : 'An Attempt to Incorporate Fairness into an Economic Model of Tort Law,' International Review of Law and Economics, Vol. 17.
8. Renner, S. (1999) : Inflation and the Enforcement of Contracts, Edward Elgar Publishing Ltd., U.K.
9. Verma, G.P. (1993) : State Liability in India : Retrospect and Prospect, Deep and Deep Publications, New Delhi.
10. Divan, S. and A. Rosencronz (2001) : Environmental Law and Policy in India, (2<sup>nd</sup> Edition), Oxford University Press, New Delhi.
11. Government of India (1997) : Report of Disinvestment Commission, New Delhi.
12. Gupta, K.R. (Ed.) (1996) : World Trade Organization (Successor to GATT) and India, Atlantic Publishers and Distributors, New Delhi. Economics 205
13. Apte, P.G. (1998) : International Financial Management, (2nd Edition), Tata McGraw Hill Publishing Co. Ltd., New Delhi.
14. Cornish, W.R. (1997) : Intellectual Property : Patents, Copyrights, Trade Marks and Allied Rights, (2nd Edition), Universal Law Publishing Co. Pvt. Ltd., Delhi.
15. Mittal, O.P. (1999) : Indian Patents Law, Taxmann Allied Services Pvt. Ltd., New Delhi.
16. Watal, J. (2001) : Intellectual Property Rights in the WTO and Developing Countries, Oxford University Press, New Delhi



# OPTIONAL PAPERS

## M. A. – IV SEMESTER

### **PAPER P : MAEC404 INTERNATIONAL ECONOMIC INSTITUTIONS**

#### **PREAMBLE**

The paper is designed to trace the historical process of globalization. The units mainly cover the functions and the structure of the institutions that govern the global economy.

#### **UNIT 1 : Bretton Woods Institutions :**

- i) International Monetary System : Pre and Post Washington consensus, Bretton-Wood System, Regional cooperation, IMF, its origin, purpose; The IMF's Lending Resources; The Establishment of special Drawing Rights; Allocation of special Drawing Rights; Second Amendment to the Fund Articles; International Liquidity; Conditionality and Fund Landings; IMF and Developing Countries.
- ii) IBRD & its affiliates (IDA & IFC) : Objectives and functions; IBRD and Developing Countries.

**UNIT 2 : WTO :** Historical background, GATT, Uruguay round and WTO, Structure, Objectives, Functions. Trade policy, WTO and Economic Reforms in India.

**UNIT 3 : Economic Integration :** European union, Origin, organization and objectives, The European Snake and formation of Euro, EEC and Developing Countries, Rationale and economic progress under custom union and FTAs (SAARC/SAPTA and ASEAN regions), European Common Market.

**UNIT 4 : ADB :** Origin, membership, objectives, functions, ADB and India.

**UNIT 5 :** Other international economic fora (OECD, OPEC, UNCTAD, ECOSOC) : Structure and functions.

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

1. Brahmananda, P.R. (1982) : IMF Loan and India's Economic Future, Himalaya Publishing House, Bombay.
2. Crocker, A. (1982) : International Money: Issues and Analysis, The English Language Book Society, Nelson, London. Economics 189
3. Mackinnon, R.J. (1979) : Money in International Exchange, Oxford University Press, Oxford.
4. Niehans, J. (1984) : International Monetary Economics, John Hopkins University Press, New York.
5. Sharma, K. K. (1983) : International monetary system, Meenakshi Prakashan, Meerut.
6. Tew, Brian : International monetary corporation
7. Fleming, J. Marcus (1964) : The I.M.F, its form and functions, Published by the IMF.
8. Fratianni, Michele (1978) : One Money for Europe, London.
9. Herbin, J. (1977) : Flexible Exchange Rates and Stabilization Policy.
10. Magnifico, G. (1973) : European Monetary Unification, London.



11. Sharma, K.K. (1969) : Recent Development in the International Monetary System.
12. Tew, Brain (1977) : Evolution of International Monetary System 1945-77.

**Additional Reading List :**

1. Yeager, L.B. (1976) : International Monetary Relations : Theory, History and Policy, Harper and Row, New York.
2. Hirsch, Frea (1976) : "Is there a New International Economic Order."
3. Hirsch, Hrea Hirsch (1977) : Alternatives to Monetary Disorder, New York.
4. Shuster, M.R. (1973) : The Public International Law of Money.
5. Tew, Brain (1970) : International Monetary Cooperation, London.
6. Triffin, Robert : The Evolution of International Monetary System.



# PRACTICAL & VIVA-VOCE

## M. A. – I SEMESTER

### **PAPER V : MAEC105 PRACTICAL : RESEARCH METHODOLOGY**

#### **PREAMBLE**

This practical paper is designed to make the student well conversant with entire process of research work. The main aim is to clarify concepts like formulations of a research proposal and to equip the student with appropriate tools for correct interpretation.

**UNIT 1 :** Meaning and Significance of Social Science Research, Difficulties in Social Research, Difference between Social Research and Research in Physical Sciences, Scientific Methods.

**UNIT 2 :** Research Process and Formulation of a Research Proposal.

**UNIT 3 :** Data Collection: Nature of Data (primary & secondary data), Methods of Primary data Collection: observation, interview techniques and questionnaire.

**UNIT 4 :** Concepts of Hypothesis; Null and Alternative Hypothesis; Elementary Sampling Theory: Basic concept of sampling-random and non-random sampling; simple Random Sampling, Stratified Sampling.

**UNIT 5 :** Report writing.

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

1. Lundberg. George A : Social Research.
2. Karmel and Polasek : Applied Statistics for Economists.
3. Kumar, Ranjeet : Research Methodology.
4. Tandon, B.C. : Social Research.
5. Goode & Hatt : Methods in social Research.
6. Mishra, R.P. : Research Methodology.
7. Ranjeet Kumar : Research Methodology : A step by step guide for Beginners
8. Young, P.V. : Scientific Social Surveys and Research.



# PRACTICAL & VIVA-VOCE

## M. A. – II SEMESTER

### **PAPER X: MAEC205 PRACTICAL:**

#### **COMPUTER APPLICATION IN ECONOMIC ANALYSIS**

##### **PREAMBLE**

The direction towards the knowledge society shall be resting on the application of increasing use of Information Technology. Economics being an empirical science, computers have emerged as the pivotal instruments of economic analysis, research and forecasting. Therefore, the economists must be equipped with computer based skills and tools, which this course provide. This will not only enhance their employability but also prepare them for carrying out quality to research.

##### **UNIT 1 : Introduction to Computer And Peripherals :**

(a) Definition and their applications, characteristics (speed, accuracy, versatility, Power of Remmebring no feeling no IQ), Evaluation and generations, Basic Computer organization (Input Unit, Output Unit, Storage Unit ALU, CU, CPU), System Concepts, Input/output Devices: Keyboard, Mouse, Scanner, Optical Scanner Sand Reader with MI Character, Recogonization/Printers & its types, Plotters, Video display(Alphanumeric Graphic & Light Pen VTDS)

(b) Primary and Secondary Storage Devices: Ranking criteria for any storage unit, Storage Location, Addresses, Capacity, Primary Storage Devices CRAM, ROM, and PROM, EPROM, Cache Memory, Registers Definitions and their functions, Definition of Sequential and Random Access Storage Device and their names, Magnetic Disk, Floppy Disk, Optical Disk. Basic concepts of MS Office.

**UNIT 2 : Computer Fundamentals and Concepts :** Definitions of Hardware, Software, Firmwares; Relationship between Hardware and Software and its description; Definition of operating System and its function with diagrammatic description, Computer Programmer and Languages: Purpose Programme planning, Algorithm (Characteristics, Example), Flow chart (Definition and Description, Symbols, Rules, Example, Advantage of the limitations in brief); Definitions of code, coding, Programme, Input, Output; Computer Languages: Short Notes on Machine, Assembly

& High Level Languages with Descriptions, Advantages and Limitations, Characteristic of good Language; Brief Study of System Software e.g. Compilers, Interpreters, Assemblers.

**UNIT 3 : Data Processing Concept :** Data Processing & Hierarchy: Definition of (Data, Information, Processing, Field, Record, File); File Organization (sequential Files:- Definition, Advantages and Disadvantages), Direct Files, Indexed Sequential Files) File Utilities with names of all operations. Database Management System [DBMS Definition (including DDL & DML), Database System Applications, Database Structuring Techniques (study of List, Tree, Network, Relational Structures)]; Advantages and Limitations of Database System, Short notes on Entity Relation Model, Database Users, Database Administrator; Computer Networking.

**UNIT 4 : Statistical Processing Techniques and Methods :** Entering & tabulating data in MS Excel and other softwares such as SPSS, Minitab, Systat etc. Use of software packages in analyzing data, obtaining results and presenting them in meaningful and interpretable forms. The application must include use of the softwares for time and frequency series.



*[Handwritten signature]*



**UNIT 5 : Application in Economic Analysis:** Regression methods and techniques; Regression analysis; Data validation; Trends and cyclicity forecasting; System modeling and description; System equation; Specification; Error and correction strategies, Statistical modeling and descriptive statistics; Distribution functions; Regression statistics.

**Basic Reading List :**

- |    |  |   |  |
|----|--|---|--|
| 1. | Sanders, D.H. (1988)                     | : | Computers Today, McGraw Hill (3 <sup>rd</sup> Edition), New York.                      |
| 2. | Sinha, P.K. (1992)                       | : | Computer Fundamentals, BPB Publications, New Delhi.                                    |
| 3. | Rajaraman, V.(1996)                      | : | Fundamentals of Computers, Prentice Hall of India, New Delhi.                          |
| 4. | Lipschultz, M.M. and S.Lipschultz (1982) | : | Theory and Problems of Data Processing, Schum's Outline Series, McGraw Hill, New York. |
| 5. | Levin, R.I. and C.A. Kirkpatrick (1975)  | : | Quantitative Approaches to Management (3 <sup>rd</sup> Edition), McGraw Hill.          |
| 6. | Mirsky, L. (1955)                        | : | Introduction to Linear Algebra, Oxford University Press.                               |

**Additional Reading List :**

- |    |                            |   |   |
|----|----------------------------|---|---|
| 1. | Ingrilligator, M.D. (1978) | : | Econometric Models, Techniques and Applications, Prentice Hall, Englewood Cliffs, NJ. |
| 2. | Wood, M.B. (1983)          | : | Introducing Computer Security, Broadman Associates, Delhi.                            |





# PRACTICAL & VIVA-VOCE

## M. A. – III SEMESTER

### PAPER XV: MAEC305 PRACTICAL

(Assignment : at least of 3000 words handwritten on current issues in consultation with the faculty of department)

## M. A. – IV SEMESTER

### PAPER XX: MAEC405 VIVA-VOCE

(Dissertation in consultation with the faculty of department in at least of 5000 words and Viva-Voce)



----- XXXXX -----