M.A. – Economics

Exam.-2017

UNIVERSITY OF KOTA
MBS Marg, Swami Vivekanand Nagar,
Kota - 324 005, Rajasthan, India
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M.A. –ECONOMICS (Prev.) - 2017

Paper - I- MICROECONOMIC ANALYSIS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

Basic Concepts:

Basic Economic Problems- Choice and Scarcity; Deductive and Inductive methods of Analysis; Positive and Normative Economics; Static & Dynamic Analysis; Economic Models; Characteristics of Equilibrium and Disequilibrium Systems.

Demand Analysis:

Theories of demand - utility; indifference curve (income and substitution effects, Slutsky theorem, ordinary and compensated demand curve), Revealed preference theory; Uncertainity Theory ; Revision of demand theory by Hicks; Elasticities (price, cross and income) of demand, elasticity of supply; Cobweb theorem; lagged adjustment in interrelated markets.

Unit II

Theory of Production and Costs:

Production function- short run and long run; law of variable proportions and returns to scale; Isoquants - Least cost combination; Economies of scale; Elasticity of substitution; Euler's theorem; Technical progress and production function; Cobb-Douglas function and its properties; Traditional and modern theories of costs.

Unit III

Price and Output Determination:

Price and output determination under different markets : perfect competition-short run and long run equilibrium of the firm and Industry, supply curve; Monopoly - short run and long run equilibrium, price discrimination, monopoly control and regulation; Monopolistic competition-General and Chamberlin approaches to equilibrium, equilibrium of the firm and the group with product differentiation and selling costs, excess capacity under monopolistic competition, Oligopoly-Non collusive (Cournot, Bertrand, Edge worth, Chamberlin, kinked demand curve and Stackelberg's solution) and collusive (Cartels and price leadership) models.

Unit IV

Distribution:

Neo-classical approach-Marginal productivity theory; Euler's Theorem, Product exhaustion theorem; Elasticity of technical substitution, technical progress and factor shares; Theory of distribution in perfect and imperfect product and factor markets:

Determination of rent, wages, interest and profit; Macro theories of distribution - Ricardian, Marxian, Kalecki and Kaldor's.

Unit V

Welfare Economics:

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

Suggested Readings:

* Kreps, David M.(1990), A course in Microeconomic Theory, Princeton University Press, Princeton.
* Koutsoyiannis, A. (1979), Modern Microeconomics, (2nd Edition), Macmillan Press, London.
* Sen, A. (1999), Microeconomics: Theory and Application, Oxford University Press, New Delhi.
* Varian, H.(2000), Intermediate Microeconomics.
* H.L.Ahuja Advanced Economic Theory
* एच.एल.आहूजा. उच्चतर आर्थिक सिद्धान्त
* J.M. Joshi and Rajendra Joshi, Microeconomic Theory - An Analytical Approach, New Age Publishers, New Delhi.
* M.L. Jhingan : Microeconomic Theory (Hindi & English version)

Paper II-MACROECONOMIC ANALYSIS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

National Income and Accounts:

Definition of national income, different concepts used in national income Accounting, national income deflator; relationship between per capita income and economic welfare.

Consumption Function:

Keynes' psychological law of consumption- short run and long-run consumption function: Empirical evidence on Consumption function; Income - consumption relationship-absolute income, relative income life cycle and permanent income hypotheses.

Unit II

Investment Function:

Marginal efficiency of investment and level of investment; Marginal efficiency of capital and investment- long run and short run; The accelerator and investment behavior-impact of inflation; Influence of policy measures on investment-empirical evidence.

Supply of Money:

RBI approach to money supply; High powered money and money multiplier; budget deficits and money supply; money supply and open economy; control of money supply.

Unit III

Demand for Money

Classical approach to demand for money- Quantity theory approach, Fisher's equation, Cambridge quantity theory, Keynes's liquidity preference approach-transaction, precautionary and speculative demand for money-aggregate demand for money; Derivation of LM curve.

Neo-classical and Keynesian Synthesis:

Neo-classical and Keynesian views on interest; The IS-LM model; Extension of IS-LM model with government sector; relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices.

Unit IV

Post-Keynesian Demand for Money:

Post- keynesian approaches to demand for money- Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory; Crisis in Keynesian economics and the revival of monetarism. Macroeconomics in an Open Economy: Mundell-Fleming model- Asset markets, expectations and exchange rates; Monetary approach to balance of payments.

Unit V

Theory of Inflation:

Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation; Philips curve analysis-Short run and long run; Samuelson and Solow- the natural rate of unemployment hypothesis; Tobin's modified Philips curve; Adaptive expectations and rational expectations; Policies to control inflation.

Business Cycles:

Theories of Schumpeter, Kaldor, Samuelson and Hicks, Goodwin's model; Control of business cycles-relative efficacy of monetary and fiscal policies.

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:

* Ackley, G.(1978), Macroeconomics: Theory and Policy, Macmillan, New York.
* Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
* Dornbusch, R. and F. Stanley (1997), Macroeconomics, Mc Graw Hill, Inc., New York.,
* Romer, D.L. (1996), Advanced Macroeconomics, Mc Graw Hill Company Ltd. New York.
* Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
* एच एल आहूजा, समष्टि अर्थशास्त्र
* एम.सी.वैश्य, समष्टि अर्थशास्त्र
* M.C. Vaish, Macroeconomics
* Rana and Verma , Macroeconomics (Hindi & English)
* M.L. Jhingan : Microeconomics
* एम.एल. झिंगन : समष्टि अर्थशास्त्र

Paper III- QUANTITATIVE METHODS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

Mathematical Methods:

Concept and types of functions, Rules of differentiation, Interpretation of revenue, cost, demand, supply functions, Elasticities and their types, Multivariable functions, concept and types of production functions, Rules of partial differentiation and interpretation of partial derivatives, Problems of maxima and minima in single and multivariable functions, Unconstrained and constrained optimization in simple economic problems, Simple problems in market equilibrium, Concept of integration, Simple rules of integration, Application to consumer's surplus and producer's surplus.

Determinants and their basic properties, Solution of simultaneous equations through Cramer's rule, Concept of matrix - their types, simple operations on matrices, matrix inversion, Solution of simultaneous equations.

Unit II

Introduction to input-output analysis, Difference equation- Solution of first order difference equation, Application in lagged market equilibrium model. (Cobweb Model).

Linear programming - Basic concept, formulation of linear programming problem - Its structure and variables, Nature of feasible, basic and optimal Solution, Solution of linear programming through graphical and simplex method, Formulation of the dual of a programme, Concept of game, Strategies - simple and mixed, Value of a game, Saddle point solution.

Unit III

Statistical Methods :

Measurement of Central Tendency, Dispersion and Skewness:
Meaning, assumptions and limitations of simple correlation and regression analysis, Pearson's product moment and Spearmans's rank correlation coefficients and their properties, Concepts of the least squares and The lines of regression.

Unit IV

Classical and empirical definitions of probability, Laws of addition and multiplication conditional probability and concept of interdependence, Bay's theorem and its application. Binomial, Poisson and Normal distributions. Analysis of Time series and Index number.

Unit V

Basic Concepts of Sampling - random and non- random sampling, Simple random, stratified random and p.p.s. sampling, Concept of an estimator and its sampling distribution, Desirable properties of an estimator Formulation of statistical hypotheses - Null and alternative, Goodness of fit, Confidence intervals and Level of significance, Hypothesis testing based on Z,t, X^2 (Chi-square) and F tests, Type 1 and Type 2 errors.

Basic Reading List :

* Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
* Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
* Gupta, S.C. (1993), Fundamentals of Applied Statistics, S.Chand & Sons, New Delhi.
* Handry, A.T. (1999), Operations Research, Prentice Hall of India, New Delhi.
* Speigal M.G. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
* Taha, H.A. (1997), Operations Research : An Introduction (6th Edition) Prentice Hall of India Pvt. Ltd., New Delhi.
* Yamgne, Taro (1975), Mathematics for Economist, Prentice Hall of India, New Delhi.
* कैलाशनाथ नागर, सांख्यिकी के मूल तत्व (एम.ए. संस्करण), मीनाक्षी प्रकाशन मेरठ
* Mehta, B.C. and G.M.K. Madnani, Mathematics for Economists.
* Gupta, S.P. (2011), Statistical Methods
* लक्षमीनारायण नाथूरामका, अर्थशास्त्र में गणित के प्रयोग, कॉलेज बुक हाउस, जयपुर

Paper IV
INDIAN ECONOMIC POLICY

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

Economic Development and its Determinants :

Approaches to economic Development and its measurement- sustainable development, Role of State, market and other institutions, Indicators of development- PQLI, Human Developments Index (HDI), Gender development indices.

Planning in India :

Objectives and strategy of planning, Failures and achievements of Plans, Developing grass-root organizations for development-Panchayats, NGOs and Pressure groups.

Unit II

Demographic Features, Poverty, Unemployment and Inequality :

Broad demographic features of Indian Population: Rural- urban migration, Urbanization and civic amenities, Poverty, Unemployment and Inequality, Problems of black money.

Infrastructure:

Economic infrastructure- Irrigation, Power, Transport, Social infrastructure - Education and Health, Regional imbalance, Issues and Policies in financing infrastructure development.

Unit III

The Agricultural Sector:

Institutional Structure - land reforms in India, Technological change in agriculture - pricing of agricultural inputs and output, Terms of trade between agriculture and industry, Agricultural finance policy, Agricultural marketing and warehousing, Issues in food security - policies for sustainable agriculture.

The Industrial Sector:

Industrial Policy; Public Sector enterprises and their performance, Problems of sick units in India, Privatization and disinvestment debate, Growth and pattern of industrialization, Small-sector Industries, Productivity in industrial sector, Exit policy- issues in labour market reforms. Approaches for employment generation.

Unit IV

Public Finance :

Fiscal Federalism - Centre-state financial relations, Finances of central government, Finances of state governments, Parallel economy, Problems relating of fiscal policy, Fiscal sector reforms in India.

Money, Banking and Prices:

Analysis of price behaviour in India, Financial sector reforms, Review of monetary policy of RBI, Money and capital markets, Working of SEBI in India.

Unit V

External Sector :

Structure and direction of foreign trade, Balance of payments, Issues in export-import policy and FEMA, Exchange rate policy, Foreign capital and MNCs in India, The progress of trade reforms in India.

Economic Reforms:

Rationale of internal and external reforms, Globalization of Indian economy, W.T.O. and its impact on the different sectors of the economy, Need for and issues in good governance, Issues in competition and Safety nets in Indian economy.

Basic Reading List :

* Ahluwalia, I.J. and I. M.D. Little (Eds.) (1999), India's Economic Reforms and Development (Essays in honour of Mahmohan Singh, Oxford University Press, New Delhi.
* Bardhan, P.K. (9th Edition) 19990, The Political Economy of Development in India, Oxford University Press New Delhi
* Bawa, R.S. and P.S. Raikh (Ed.) (1997) Structural Changes in Indian Economy, Guru Nanak Dev University Press Amritsar.
* Datt, R.(Ed.) (2001), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.
* Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.
* Jalan. B. (1996), India's Economic Policy - Preparing for the Twenty first Century, Vking, New Delhi.
* Joshi, V. and I.M.D. Little (1999) India Macro Economics and Political Economy, 1964-1991, Oxford University Press, New Delhi.
* लक्ष्मीनारायण नाथूरामका, भारतीय अर्थव्यवस्था, कॉलेज बुक हाउस, चौड़ा रास्ता जयपुर।
* Dutt R. and KPM sundharm, Indian Economy, S. Chand and Company New- Delhi (Hindi and Enlgish edition) Recent Edition.
* Misra & Puri : Indian Economy.(2012) Recent Edition

M.A. (FINAL) ECONOMICS - 2017

Paper V - Public Economics

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

Nature and scope of Public Finance, Role of Government in the economy and scope of fiscal action. Optimal budgeting.

Theory of public expenditure on social goods. Effects of public expenditure on production and distribution. Private and social goods.

Unit II

Public Revenue : Taxation: Canons of Taxation. Justice in Taxation, equi-absolute, equi-proportional classifications of Government budget. major trends in public expenditure in India (Growth and composition).

Unit III

Taxation- The incidence of taxation under Monopoly and perfect Competition. Effects of commodity taxation on production via relative price and resource allocation. Effects of direct taxation on production in taxes. Overall progressiveness of the whole tax system.

Salient features of the Indian Tax System, major taxes, main trends in the revenues of the Central and State Governments in India, Major changes in the tax structure if a developing economy with special reference to India. Non-tax revenues. Profits from Public Enterprises.

Unit IV

Public Debt abd Federal Finance - Theory of public dept. Economic effects of large public dept.

Loans and savings as source of finance for development Internal and external public dept. of India.

Theory of Federal finance. Financial relations between the Central and State Governments in India. Major criteria for allocation of Central transfers in the Reports of the finance Commission. N.D.C. formula for plan Allocation. Main recommendations of latest Finance Commission.

Unit V

Fiscal policy for developing economies: Arguments and prospects for resource mobilization by direct an indirect taxation. Borrowing as means of financing Recent fiscal policy of India.

Salient feature of State finances in Rajasthan :Growth and distribution of revenue and expenditure under major economic head in State budgets.

Books Recommended:

1. Musgrave, R.A. : The Theory of Public Finance, 1959
2. Musgrave, R.A. & P. Musgrave : Public Finance in Theory & Practice.
3. Gandhi, V.P. Some Aspects of India's Tax Structure, Vore & Co., Mumbai
4. Bhargave, R.N. Indian Public Finance.
5. Prem Prakash Sharma : Principle of Public Finance, Hindi Granth- Academy, Jaipur (Hindi)
6. Ganguly, S. : Public Finance.
7. Tilak Narain Hajela : Principle of Public Finance (Hindi)
8. Bhatia H.L. : Public Finance. (Hindi & English)
9. Houghton, R.W. : Public Finance : Selected Readings.

Paper VI - Economics of Growth and Development

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

Structural features and process of change, Major growth factors-Factor inputs, factors productivity and import substitution, Denison's Estimates. Human capital formation and the role education. The role of information technology in development.

Unit II

Growth models : Classical (Ricardo, Marx), Neo – Classical, Harrod-Domar and Sollow

Balanced V/s Unbalanced growth, Dual economy models

Unit III

Planning model : Mahalanobis Input-Output model. Two gap model, Planning : Objectives, resource constraints - Financial resources and saving rate. Foreign Exchange, Balance of payments. Plan formulation techniques-capital-output rations, projection of demand, Input output coefficients, Material balance.

Unit IV

Project selection techniques, Cost-benefit analysis-Appraisal criteria accounting prices.

Planning process and plan implementation with reference to India. Plan allocation to State Rajasthan : Gadgil formula. Instruments for plan implementation in a mixed economy.

Unit V

Indian Planning and performance of the Indian economy since 1951 : Agricultural, industrial and aggregate income growth rates. Saving rate and Capital formation. Poverty and Inequality, Unemployment in India, Planning and Problem of development in Rajasthan.

Books Recommended :

1. Lewis W.A. Development Planning.
2. Meir, G.L. : Leading Issues in Economic Development
3. Kuznets, S. : Modern, Economic Growth in U.S. Economy.
4. P. Bardhan and T.N. Srinivasan : Poverty and Income Distribution in India
5. Todaro, M.P. Economic for a Developing World.
6. Thirllwall, A.P. Growth and Development.
7. एम.एल. झिंगन – विकास एवं नियोजन का अर्थशास्त्र

Paper VII - International Trade & Finance

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

The Theory of free Trade, Comparative Advantages, Ricardo, Haberler and Heckscher - Ohlin, Factor- price equalization.

Economic expansion and international trade. Effects of growth on production consumption and terms of trade. Empirical verification of trade models, New theories about determinations of trade in human capital, Product cycle and Influence of technology.

Unit II

Reciprocal demand and offer curves, General equilibrium of production, consumption and trade. Gain from trade.

The Theory of Trade restrictions, Tarriffs and Quotes, Optimum tariff, customs union. Trade theory and developing economics. .Reasons for rejection of free trade-Infant industry, Market distortions external economic and Balance of payment arguments.

Unit III

Trade problems of developing countries- Commodity prices, Non- Tariff Barriers to Trade, Technology transfer, International trade institutions-GATT, UNCTAD and

WTO, Regional economic co-operation among developing countries, Indian trade policy and problems.

Unit IV

Balance of payments. Determination of exchange rate. Fixed and flexible exchange rates. Balance of payments and national income. Multiplier and Backwash effects. Price effects of exchange rate changes-Elasticity approach and Absorption approach.

Unit V

Capital movements-Short term and Long term. Euro-currency markets, Transnational corporations in transfer of capital and technology. Role of World Bank.

Books Recommended:

1. Chacoliades, M.: International Trade : Theory and Policy.
2. Kindleberger : International Economics (5th Ed.)
3. B. Soderstne . : International Economics.
4. Vaish and Sudhama Singh : International Economics. (Hindi & English)
5. Kundu and Ray : International Economics.
6. Salvatore. D. : International Economics.
7. H.G. Mannur : International Economics - Theory and policy Issues (Vikas).
8. Salvatore's D. : Theory an Practice of International Economics.(Hindi & English)
9. Rana & Verma : International Economics.
10. के.डी. स्वामी–अंतर्राष्ट्रीय अर्थशास्त्र (Hindi & English)
11. M.L. Jhingan: International Economics. (Hindi & English)

M.A. Optional Paper
Paper 01- INDUSTRIAL ECONOMICS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

Framework and Problems of Industrial Economics

Concept and organization of a firm - ownership, control and objectives of the firm, passive and active behaviour of the firm.

Market Structure

Seller's concentration; Product differentiation , Entry conditions, Economies of scale, Market structure and profitability, Market structure and innovation, Theories of industrial location -Weber and Sargeant Florence, Factors affecting location.

Unit II

Market Conduct

Product pricing - Theories and evidence, Investment expenditure -- Methods of evaluating investment expenditure, theories and empirical evidence on Mergers and acquisitions (M & As) and diversification.

Market Performance

Growth of the firm - Size and growth of a firm, Growth and profitability of the firm, Constraints on growth, Productivity, Efficiency and capacity utilization - Concept and measurement.

Unit III

Indian Industrial Growth and Pattern

Classification of industries, Industrial policy in India - Role of Public and private sectors, Recent trends in Indian industrial growth, MNC's and transfer of technology, Liberalization and privatization, Regional industrial growth in India, Industrial economic concentration and remedial measures, Issues in industrial proliferation and environmental preservation, Pollution Control policies.

Unit IV

Industrial Finance

Owned, external and other components of funds, Role nature, Volume and types of institutional finance - IDBI,IFCI,SFCs, SIDC, commercial banks, etc., Financial statement - Balance sheet, Profit and loss account, assessment of financial soundness, ratio analysis.

Project Appraisal

Cost-benefit analysis - New Present Value (NPV) and Internal Rate of Return (IRR), criteria-balancing private and social returns.

Unit V

Industrials Labour

Structure of industrial labour, Employment dimensions of India Industry, Industrial legislation, Industrial relations, Exit-policy and Social security, Wages and problem of bonus - Labour market reforms.

Current Problems of Selected Industries

Iron and Steel Cotton textiles, Jute, Sugar, Coal, and engineering goods, Development of small-scale and cottage industries in India.

BASIC READING LIST

* Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
* Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd, Delhi.
* Cherunilam, F. (1994), Industrial Economics : Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
* Desai, B. (1999) Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.

* Divine, P.J. and R.M. Jones et. al. (1976), An Introduction to Industrial Economics, Geroge Allen and Unwin Ltd., London.
* Hay, D. and D.J. Morris (1979), Industrial Economics : Theory and Evidence, Oxford University Press New Delhi.
* Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.
* Singh, A. and A.N. Sadhu (1988), Industrial Economics, Himalaya Publishing House, Mumbai.

M.A. Optional Paper
Paper 02- LABOUR ECONOMICS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

Unit I

Labour Markets

Nature and characteristics of labour in developing countries-like India, Paradigms of labour market analysis markets - Classical neo-classical and dualistic economy, Demand for labour in relation to size and pattern of investment, Choice of technologies and labour policies, Supply of labour in relation to growth of labour force, Labour market policies, Mobility and productivity of labour, Rationalization, Methods of recruitment and placement, Employment service organization in India.

Unit II

Employment

Employment and devolvement relationship - Poverty and unemployment in developing countries, Unemployment - Concept, Types and Measurement, Particularly in India, Impact of rationalization technological change and modernization on employment in organized private industry, Public sector and employment in agricultural sector, Analysis of educated unemployment, Employment policy in Five Year Plans and its evaluation.

Unit III

Wage Determination

Classical, neo-classical and bargaining theories of wage determination, Concepts of minimum wage, living wage and fair wage in theory and practice, Discrimination in labour markets, Wage determination in various sectors-rural urban, Organized-unorganized and in informal sectors, Non-wage component of labour remuneration, Inflation-wage relationship at micro and macro levels, Productivity and wage

relationship, Analysis of rigidity in labour markets, Asymmetric information and efficiency of labour markets in wage determination. National wage policy, Wages and Wage Boards in India, Bonus system and profit sharing.

Unit IV

Industrial Relations

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

Unit V

State and Labour

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

BASIC READING LIST

* Datt, G. (1996), Bargaining Power, Wages and Employment: An Analysis of Agricultural Labour markets in India, Sage Publications, New Delhi.
* Hejela, P.D. (1998), Labour Restructuring in India : ACrituque of the New Economic Policies, Commonwealth Publishers, New Delhi.
* Jhabvata. R. and R.K. Subrahmanya (Eds.) (2000), The Unorganised Sector : Work Security and Social Protection, Sage Publications, New Delhi.
* Lester, R.A. (1964), Economics of Labour (2nd Edition), Macmillan, New York
* McConnell, C.R. and S.L. Bure (1986), Contemporary Labour Economics, Mcgraw-Hill, New York.
* Papola, T.S. P.P. Ghosh and A.N. Sharma (Eds.) (1993), Labour Employment and Industrial Relation in India, B.R. Publishing Corporation, New Delhi.
* Rosenberg M.R. (1988), Labour Markets in Low Income Countries in Chenery, H.B. and T.N. Srinivasan, (Eds.) The Handbook of Development Economics, North-Holland, New York.
* Venkata Ratnam, C.S. (2001), Globalization and Labour- Management Relations : Dynamics of Change, Sage Publications/Response Books, New Delhi.
* T.N. Bhagoliwal, Labour Economics and Industrial Relations. (Hindi & English edition)

M.A. Optional Paper
Paper 03- MATHEMATICAL ECONOMICS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Theory of Consumer Behaviour

Cardinal and ordinal utility, Ordinal utility maximization, Slutsky equation, Compensated demand functions, Income, Substitution and Price effects, Separable and additive utility functions, Homogeneous and homothetic utility functions, consumer's surplus; Theory of revealed preference and Linear expenditure systems;

UNIT II

Theory of Production

Production function - Homogeneous and non-homogeneous; Properties of Cobb-Douglas and CES production functions. Simple derivation of short and long run cost functions, Producer's equilibrium, Constrained optimization of producer, Input demand functions, Adding up theorem.

UNIT III

Price and output determination in perfect competition, monopoly and dupoly.

UNIT IV

Market Equilibrium & Trade Cycle Products

Single market equilibrium - Marshallian and Walrasian equilibrium conditions, Lagged market equilibrium conditions , Stability of equilibrium.

Multiplier and Accelerator, Trade Cycles of Samuelson and Hicks

UNIT V

Growth Models

Harrod Domar Model , Solow and Meade growth models with technical Progress.

Concept of game - Two person Zero-sum game, Pay off matrix, pure and mixed strategies, Maximum and minimax solutions. Saddle point solution, Linear programming - Primal and dual problem, Simplex method, Input-output analysis-Static and open systems, Hawkins-Simon conditions.

BASIC READING LIST

* Allen, R.G.D. (1976), Mathematical Economics, Macmillan London,
* Henderson, J.M. and R.E. Quandt (1980), Microeconomics Theory : A Mathematical Apporoach, McGraw Hill, New Delhi.

* Mehta and Madnani , Mathematics for Economics
* B.C. Mehta, Mathematical Economics / Microeconomics
* Chiag, A.C., Fundamental Methods of Mathematical Economics.

M.A. Optional Paper
Paper 04 ECONOMETRICS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Basic Econometrics

Nature, meaning and scope of econometrics, Simple and general linear regression model - Assumptions, Estimation (through OLS approach) and properties of estimators, Gauss-Markov theorem, Concepts and derivation of R^2 and adjusted R^2, Concept and analysis of variance approach and its application in regression analysis

UNIT II

Problems in Regression analysis

Nature and test, consequences and remedial steps of problems of Heteroscedasticity, Multicollinearity and Auto-correlation, Problems of specification error, Errors of measurement.

UNIT III

Regressions with Qualitative Independent Variables

Dummy variable technique - Testing structural stability of regression models comparing to regressions, interaction effects, seasonal analysis, piecewise liner regression, use of dummy variables, regression with dummy dependent variables.

UNIT IV

Dynamic Econometric Model

Atutoregressive and distributed lag models - Koyck model partial adjustment model, Adaptive expectations, Instrumental variables, Problem of auto correlation- Application; Alomon approach to distributed -Lag models

UNIT V

Introduction and examples, The simultaneous equation bias and inconsistency of OLS estimators. The identification problem, Rules of identification - order and rank conditions, Methods of estimating simultaneous equation system, Recursive methods and OLS, Indirect least squares (ILS), 2SLS, 3SLS and ML methods - Applications.

BASIC READING LIST

* Baltagi, B.H. (1998) Econometrics, Springer, New York.
* Gujarati, D.N. (1995), Basic Econometrics, (2nd Edition), McGraw Hill, New Delhi.
* Kmenta, J. (1997), Elements of Econometrics (Reprint Ed.), Univ.of Michingan Press, New York.
* Koutsoyiannis, A. (1977), Theory of Econometrics (2nd ed.), The Macmillan Press Ltd. London.
* Maddala, G.S. (ed.) (1993), Econometrics Methods and Application (2Vols), Aldershot U.K.
* G.M.K. Madnani, Introduction to Econometrics
* जी. एम. के मदनानी- अर्थमिती : अवधारणा एवं अनुप्रयोग

M.A. Optional Paper
Paper 05 DEMOGRAPHY

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Population and Development

Meaning and scope of demography, Components of population growth and their interdependence, Measures of population change, Structure, Distribution and sources of population data, Theories of population -Malthus, Optimum theory of population, Theory of demographic transition, Population development.

Structure of Population

Population trends in the twentieth century , Population explosion - Threatened or real, Distant or imminent, International aspects of population growth and distribution, Pattern of age and sex structure in more developed and less developed countries, Determinants of age and sex structure, Demographic effects of sex and age structure, Economic and social implications , Age pyramids and projections - Individual aging and population aging.

UNIT II

Fertility, Nuptiality and Mortality

Importance of study of fertility - Total fertility rate, Gross reproduction rate and net reproduction rate, Levels and trends of fertility in more and less developed countries, Factors affecting fertility - Socioeconomic factors, Economic status, Health Education, Nutrition, Caste, Religion, Race, Region, Rural-Urban and status of husband and wife,

Nuptiality- Concept and analysis of marital status, Single mean age at marriage, Synthetic cohort methods, Trends in age at marriage, Mortality - Death rates crude and age-specific., Mortality at birth and infant mortality rate, Levels and trends in more and less developed countries, Sex and age partern of mortality, Factors for decline in mortality in recent past, Life table - Construction and uses, Concepts of stable population, Methods of population projection.

UNIT III

Migration and Urbanization

Concept and types - Temporary, internal and international, International migration - Its effect on population growth and pattern, Factors affecting migration, Theories of migration related to internal migration; Urbanization - Growth and distribution of rural-urban population developed and developing countries.

UNIT IV

Demographic Data Base in India

Study of census in India-Methodology and characteristics of census, Nature of information collected in 1971,1981,1991, and 2001 census in India, National Family Health Survey 1 and 2 and Rapid Household Survey, Changing characteristics of population in India, Population growth rates trends and regional variations in sex ratio, Age structure of population, Foetal, Infant and child mortality rates, Maternal mortality rates, Life expectancy, Appraisal of Kerala model Pattern of Migration and Urbanization in India.

UNIT V

Population and Development with Reference to India

Population, Economy and Environment linkages-Population, Health, Nutrition, Productivity nexus, Population and Human development issues, Culture and fertility, Education and fertility, Demography and household economic behaviour.

Population Policy in India

Evolution of population policy in India - The shift in policy from population control to family welfare to women empowerment, Family planning strategies and their outcomes, Reproductive health maternal nutrition and child health policies, Population and strategies for human development of different social groups, Social impact of new reproductive technologies and their regulation, The new population policy, Tasks before the National Population Commission

BASIC READING LIST

* Agarwala S.N. (1972), India's Population Problem, Tata McGraw- Hill co., Mumbai
* Bose, A. (1996), India's Basic Demorgraphic Statistics, B.R. Publishing Corporation, New Delhi
* Bogue. D.J. (1971), Principles of Demography, John Wiley New York
* Choubey, P.K. (2000), Population Policy in India, Kanishka Publications, New Delhi
* Coale A.J. and E.M. Hoover (1958), Population Growth and Economic Development in Low Income Countries, A Case Study of India's Prospects, Princeton University Press, Princetor
* Gulati,S.C. (1988), Fertility in India : An Econometric Study of a Metropolis, Sate New Delhi

M.A. Optional Paper
Paper 06 AGRICULTURAL ECONOMICS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Agriculture and Economic Development

Nature and scope of agricultural and rural economics, Traditional agriculture and its modernization, Role of agriculture in economic development, Interdependence between agriculture and industry.

Diversification of Rural Economic Activities

Livestock economics - Livestock resources and their productivity, Problems of marketing, White revolution, Fishery and poultry development, Forestry horticulture and floriculture, Issues and problems in rural industrialization and development of agro-base industries.

UNIT II

Economics of Rural Infrastructure

Use of land, water and energy, Rural transport communication, banking extension services, role, modes and problems of rural electrification; Rural social infrastructure, - Education and health and information dissemination

Agricultural Production and Productivity

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

UNIT III

Land Reforms and Land Policy

Principles of land utilization, Land distribution - Structure and trends Land values and rent, Land tenures and farming systems - Peasant, Capitalist, Collective and State farming, Tenancy and crop sharing - Forms incidence and effects, Land reform measures and performance : Women and land reforms, Problems of marginal and small farmers.

Rural Labour Market

Rural labour supply, Interlocking of factor markets, Mobility of labour and segmentation in labour markets, Marginalisation of rural labour Nature, extent and trends in rural

unemployment, Agricultural wages in India, Male-female wage differences, Non-agricultural rural employment-Trends and determinants.

UNIT IV

Rural Finance

Role of capital and rural credit, Organized and unorganized capital market, Rural savings and capital formation, Characteristics and sources of rural credit- Institutional and non-institutional, Reorganization of rural credit - Co-operatives, Commercial banks, Regional rural banks, Role of NABARD.

Cooperation in India

Cooperative movement : Genesis and growth of cooperative sector, Agricultural cooperation in India, Problems and prospects of cooperative institutions.

Agricultural Prices

Marketing and state policy, Regulated markets, and marketable surplus, Behaviour of agricultural prices - Cobweb model, State policy with respect to agricultural marketing, Warehousing, Prices, Taxation and crop insurance, Terms of trade between agricultural and non-agricultural prices, India and public distribution system.

UNIT V

Agricultural Growth in India

Recent trends in agricultural growth in India, Inter-regional variations in growth of output and productivity, Cropping pattern shifts, Supply of inputs – Irrigation, power, seed and fertilizers pricing of inputs and role of subsidies, Distribution of gains from technological change, Role of Public investment and capital formation in Indian agriculture.

Agriculture and External Sector

International trade in agricultural commodities, and features of agri-business, Globalization of Indian economy and problems and prospects of Indian agriculture, Impact of World Trade Organisation on Indian agriculture.

BASIC READING LIST

* Bhaduri , A. (1984), The Economic Structure of Backward Agriculture, Macmillan Delhi.
* Bilgrmai, S.S.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
* Dantwala, M.L. et. al (1991), Indian Agricultural Development Since Independence, Oxford & IBH, New Delhi.
* Gulati, A. and T. Kelly (1999), Trade Liberalisation and Indian Agriculture, Oxford University Press, New Delhi.
* Joshi, P.C. (1975), Land Reforms in India, Trends and Prospects, Allied Publishers Bombay.
* Kahlon, A.S. and Tyagi D.S. (1983),Agriculture Price Policy in India, Allied publishers, New Delhi.
* Rao, C.Hd. Hanumantha (1975), Agricultural Growth, Rural and Environmental Degradation in India, Oxford University Press, New Delhi.
* Rudra, A. (1982), Indian Argicultural Economics: Myths and Reality, Allied Publishers, New Delhi.

* Saini, G.R. (1979), Arme Size, Resource Use Efficiency and Income Distribution, Allied Publishers, Publishers New Delhi
* ए.एन अग्रवाल, कृषि का अर्थतंत्र

M.A. Optional Paper
Paper 07 SURVEY METHODS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Sample Survey: Principle of sample survey Stages of a survey. Practical problem in planing execution and analysis of survey. Random number tables and their use in simple random and probability proportional to size Selection to size selection. Expectation, Concept of sampling errors and standard errors, Non-sampling errors, Mechanical handing of data coning

UNIT II

Critical Study of the sample design and questionnaires of the NSS consumer expenditure survey, The Rural Credit Survey and the Annual Survey of Industries.

UNIT III

Sampling designs : Simple random sampling, with replacement and without replacement. Stratified sampling, Two stage sampling, Estimation of mean and standard errors, proportional optimal and Neo-mens at location. Relative efficiency of WR and WTR, SRS and stratified sampling, Systematic sampling, cluster sampling, cost functions.

UNIT IV

Tests of significance - Large sampling test for mean proportions and variance. Small Sample test based on t, x^2 (chi-square) and F distributions Analysis of variance-one and two way classification.

Regression analysis with one two explanatory variables

UNIT V

Multiplicative and additive models, Growth Educations, Estimation of regression parameter and their standard errors. Concept of Multicollinearity and Autocorrelation. Interpretation of estimated structural equation with all the summary statistics viz.

Standard errors and coefficient of determination. The problem of curve fitting, Fitting of liner, exponetial and prarbolic trend curves.

Books for References :

1. Sukhtme, P.V. others: Sampling Theory of Survey with application.
2. Cochrane : Sampling Techniques.
3. Murti, M.N. Sampling Methods.
4. Taro yamene : Statistics.
5. Des Raj. : Sample Design.
6. Rao P. and Miller : Applied Economics.
7. Gupta and Kapoor : Fundamentals of Applied Satatistics, Vol, I and II

M.A. Optional Paper
Paper 08 INDIAN BANKING SYSTEM

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Indian Banking System as on the eve of Bank Nationalisation, Structure and Development of Commercial Banking in India Since 1969, Branch Expansion Programme and Policy. Deposit Mobilisation and Sectorial Allocation of Bank Credit. Concept of Social and Mass Banking, priority sector advances and advances to neglected sections. Diversification of banking business, productivity of Banking Sector Regional disparities in commercial banking development.

UNIT II

Internationalisation of India banking - Deregulation Liberalisation competition and Modern Technology. Problems and Challenges of Commercial Banks in India, Financial Sector Reforms in India.

Human Resource Development in Banks Present State and future needs of personal management Recruitment Training and Appraisal of Banks employees.

UNIT III

Rural Banking - An overview of the Progress of main Credit Co-operative Institutions. Regional Rural Banks and its importance in changing environment Multi - Agency Approach in Rural Financing. NABARD. Structure of Development Banks in

India. Overall Achievements and short coming of term lending with special reference of IFCI,IDBI, UTI and LIC.

UNIT IV

Money and capital markets in India. Main feature instruments and recent trends. RBI's monetary policy- Its objectives and efficacy in India, Impact of RBI's Monetary Policy on Economic Growth and Stability.

UNIT V

Overall Review of the present regulatory and Supervisory system and need for its strengthening in future. Banking Rajasthan.

Books for References :

1. S.B. Gupta, Monetary Economics.
2. S.G. Panandiker, Banking in India.
3. S.K. Muranjan : Modern Banking in India.
4. K.N. Raj : The Monetary policy of RBI
5. RBI, Functions and Working

M.A. Optional Paper
Paper 09 HISTORY OF ECONOMIC THOUGHT

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Mercantilism, Physiocrates - Quenay's tableau economique concept of surplus - growth (theory - Taxation and role of Government)

Classical school, Adam Smith : The invisible hand doctrine, Wealth of Nation Laissez faire, labour profit and wages, Modern revival of Adam Smith Critiques of Adam smith.

UNIT II

Malthus theory of population and theory of under consumption Richardo-Principle of political economy and taxation - distribution theory differentiations. Differences with Say on Determination of value-modern revival and interruptions (Sraffa).

UNIT III

Critics of the classical school Sisamondi. List and the nationalist school. Restatement of the classical positions, Senior and the four postulates. J.S.Mull-Four

proposition and capital Demand and supply bifurcation the wage fund. Rehabilitation by cairness stationary state version-non-competing groups.

UNIT IV

Evolution of socialist thought- Utopian. Socialism, Saint Simon Oweri Blance. Fourier, Proudhon. Scientific Socialist.

Karl Marx - Efforts at scientific socialism, Organic composition of capital. Breakdown of Capitalism - Reserve army of labour - critiques of Marx, Modern revival Marxian Economics. The German Historical School and the development of Marginalism. The Neo-classical school Marshall.

UNIT V

Twenteith century economic thought - main features only the rise of keynesianism, the rise of Mathematical Economics, dynamics and Econometric. Critical valuation of the Developement of Economic thought.

Books Recommended

1. Haney, History of Economic Thought
2. Eric Rol, History of Economic Thought.
3. Gride and Rist, History of Economic Doctrine.
4. M.C. Vash, History of Economic Thought. (Hindi & English)

M.A. Optional Paper
Paper 10 ENVIRONMENTAL ECONOMICS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words. Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : 40

UNIT I

Fundamentals of Environmental Economics - Ecosystem Definition and role of Economics, Scope of Environmental Economics, Basic theory of Environmental Economics, Environmental Quality as a public good.Environmental problems in Developed and developing economies. Natural Resource. Economies and Conservation of Natural Resources.

UNIT II

Environmental Pollution - Types of pollution. Air pollution Atmosphere types of air pollutions. Sources of air pollution, Effects of Air pollution on Vegetation, agriculture, forest, animal, social and human being. Global consequence of air pollution. Radiation and space pollution

UNIT III

Water Pollution: Source of water pollutants, Industrial commercial domestic and agriculture pollutants, Effects of water pollution, agriculture, vegataion, animals and

human being water treatments. Impact and use, Global Polluter, Impact of pesticides and fertilizers on environment and health, Impact of air, land and water pollution agriculture. Agriculture without pollution.

UNIT IV

Important Concepts and Issues in Environmental Protection - Cost Benefit Analysis, The environmental costs of economic growth Limits to Growth, Environmental Issue in Developed and Developing Economics. The Concept of Sustainabale development, Indian philosophy of sustainable development, View of Ancient Indian Thinkers, Jain Philosophy, Gandhian Philosophy and Deen Dayal Upadhya's concept of Ekatma Arthniti,

UNIT V

Sustainable Development strategies for Agriculture, Industry, Forestry, Natural resources, Deserts, Energy Production and Fisheries. Brief study of International Organisations in the field of Environment and Development - World Commission and Environment and Development (W C E D) World Bank and Worked Wide Fund (WWF) Environmental Policy of Govt. of India And Rajasthan.

Books for Reference:

1. Karpagam M., Environmental Economics Sterling Publishers Pvt. Ltd.
2. Simonis, E. Udo : Ecology and Economics Policy
3. Pearce, D.W. Environmental Economics, Longman.
4. Katyal Timmya and Statke, Environmental Pollution, Anmol Publication, New Delhi
5. Chand Attar: Environment Challenges, UDH Publishers, Delhi
6. Seneca, Joseph J. & Michael K. Taussing : Environmental Economics, Prentice Hall Incs. (New Jercy)
7. Dowing Paul, B.: Environmental Economics and policy. Iatte Brown and company, Boston.
8. Robert Dorfman and Nency S. Dorman Economics of Environment W.W. Notron Longon (1972)
9. John a. Butlin : The Economics of Environmental and Natural Resources.
10. Tisdell,Clem:Sustainable Development:Differing Perspective of Vol.No.pp.333-384 (1988)
12. Sekor Singh (ed.): Environmental Policy in India, Indian Institute of Public Administration, New Delhi. 17 Nasthawat, Shastri and vyas,

Optional Paper

Paper 11- COMPUTER APPLICATION IN ECONOMICS

Duration : 3 hours Max. Marks – 100

Note : The question paper will contain three sections as under –

Section-A : One compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part. Total marks : 10

Section-B : 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words.

Total marks : 50

Section-C : 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted.

Total marks : 40

UNIT I

Introduction to Computers

Evolution of computers; Computer fundamentals; Components of a personal computer system; Input output devices; Types of computers and their applications; Operating system; Application software;

Hardware, Software and Types of Software; Operating System-Definitions & Functions; Computer Languages; Machine, Assembly and High-Level Languages; Compilers and Interpreters.

UNIT II

Business Data Processing

Data and Information: Meaning, Types, Data Storage Hierarchy; Database Concepts;; Data base Management System, Data Base Structuring Techniques, Advantages and Limitations of Database System;

Information Technology in Business: Internet, Intranet, LAN, MAN, WAN, WWW, E- Mail, Search Engines; Computer Networking and Resource Sharing;

UNIT III

Text Processing & Spreadsheet Software

Meaning, Features of a Good Word Processor; MS-Word: Introduction to parts of a WORD Windows; Creating, Opening and Inserting Files; Editing a Document File; Page Setting and Formatting the Text; Saving and Printing the Document

Spreadsheet: Meaning, Overview, Overview and Application areas;

Features of MS-Excel; Entering Information. Saving workbooks and Formatting, Spreadsheet Functions; Statistical functions in excel; Creating Graphs; Printing Worksheets and Graphs.

UNIT IV

Statistical Processing Techniques and Methods

Summarizing and analysis of data; Descriptive Statistics; Comparison of means; Correlation and Regressing analysis; Estimation of Growth Rates; An overview of Techniques used in Research-Univariate, Bivariate and Multivariate analysis; Trends Forecasting; Testing the significance of parameters.

UNIT V

IT Application in commerce, finance & economics :

E-Commerce: Meaning and Definitions; E-Commerce, E-Business and E- Transaction; E-Commerce Vs. Traditional Commerce; Scope of E-Commerce; Business Models of ECommerce-B2B and G2B; On line Shopping and Malls; Web Advertising; Electronic Trading and marketing; Electronic payment System.

Electronic Transactions- Security, Digital Electronic, Digital Certificate; Encryption, Signature, Authentication and Validation of Transaction Processing; debit Cards, Credit Cards; Electronic Funds Transfer, On Line Banking.

Use of internet in economic research, online resources and databases on economy.

Basic Reading List

* Sinha, P.K. (1992), Computer Fundamental, BPB Publications, New Delhi.
* Marketing Research by Kinnear and Taylor, McGrawhill.
* Gupta, S.C. and V.K. Kapoor (1983), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.
* Huda, R.P.,
* Koutsoyanis, A, An Introduction to Econometrics,
* Intrilligator, M.D. (1978), Econometric Models, Techniques and Applications, Prentice Hall,Englewood Cliffs
* N.J.Greenstein, Marilyn and Fein Man, M. Todd, Electronic Commerce: Security, Risk Management, and Control, Tata McGraw Hill, New Delhi.

Additional Reading List

* Rajaraman, V. (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.
* Lipschultz, M.M. and S. Lipschultz (1982), Theory and Problems of Data Processing, Schum's Outline Series, McGraw Hill, New York.
* David Whiteley, E-Commerce: Strategy, Technologies and Applications, Tata McGraw Hill, New Delhi.

Optional Paper-12: Dissertation

(to be offered by regular collegiate students having secured 55% marks at M.A. (Prev.) Exams.