

ECONOMICS
M.A. PREVIOUS AND M.A. FINAL EXAMINATION - 2020-21

At Post-graduate level. Candidates required to study ten compulsory papers during two years period. There shall be five compulsory papers in M.A. previous and five compulsory papers in M.A. final examinations. So, there shall be ten compulsory papers in the post-graduate examination. Each paper shall carry 100 marks. Candidate shall have to secure 36 percent marks in aggregate of all papers in order to pass the M.A. previous and M.A. final Examination.

M.A. Previous

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| Paper I | Micro Economics (0337) |
| Paper II | Macro Economics (0339) |
| Paper III | Quantitative Methods (0341) |
| Paper IV | Indian Economic Policy (0343) |
| Paper V | Demography (0349) |
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M.A. Final

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| Paper I | Economics of Growth and Development (0338) |
| Paper II | International Trade and Finance (0340) |
| Paper III | Public Economics (0342) |
| Paper IV | Economics of Social Sector and Environment (0344) |
| Paper V | Agricultural Economics (0350) . |
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M. A. (Previous) Economics

PAPER - I
MICRO ECONOMICS
(Paper Code-0337)

UNIT-1 Introduction, Basic Concepts and Demand Analysis Basic Economic Problem- Choice and Security, Deductive and Inductive Methods of Analysis, Positive and Normative Economics, Economic Models, Characteristics of Equilibrium and Disequilibrium Systems. Elasticities (price, Cross, Income) of demand-theoretical aspects and empirical estimation, elasticity of supply ;

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theories of demand-utility, Indifference Curve, Income and substitution effects, Slutsky theorem, compensated demand curve and their application, revealed preference theory, revision of demand theory of Hicks ; characteristics of goods approach consumer's surplus, elementary theory of price determination - demand and supply equilibrium.

UNIT-2 Theory of Production and Costs- Production Function - Short period and long period, law-of variable proportions and returns to scale, isoquants - least cost combination of inputs, returns to factor, Economics of scale, elasticity of substitution, Euler's theorem, technical progress and production function cob-Douglas, CES, production functions and their properties. Marginal analysis as an approach to price and output determination, supply curve; Monopoly-short run and long run equilibrium price determination, Welfare aspects monopoly control and regulation.

UNIT-3 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 and imperfect Competition, Criticism of monopolistic competition. Oligopoly-Non-Collusive (Cournot, Bertrand, Edgeworth, Chamberlin; Kinked demand curve) and Collusive (Carter and merger, price leadership and basic point price system) models.

UNIT-4 Critical evaluation of marginal analysis, Baumol's sales revenue maximisation model, willamsan's model of managerial discretion, morris model of managerial enterprises. Full cost pricing rule, Bains limit pricing theory and its recent developments, including styles, labinis model, and behavioural model of the firm. Neo-classical approach of distribution welfare economics and general equilibrium Marginal Productivity theory, Product Exhaustion theorem, Elasticity of Technical Substitution, technical progress and factor shares, theory of distribution in imperfect product and factor markets, Determinants of rent, wages, interest and profit.

UNIT-5 Pigovian welfare economics, Pareto optimum conditions value-judgment, social welfare function; compensation principle, inability to obtain optimum welfare- imperfections, market failures decreasing costs uncertainty and non-existent and incomplete markets. Partial and General equilibrium, Walrasian Excess Demand and input- output approaches to general equilibrium, existence, stability and uniqueness of equilibrium and general equilibrium.

BASIC READING LIST:

1. Kraps, David M. (1990) a course in micro economics theory princeton university press, Princeton.
2. Kout sayiannis; A (1979) modern Microeconomics (2nd Edition), macmillan press, London.

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3. Layard, PRG and P.W. Watters (1978), Micro economic theory, McGraw Hill, New York.
4. San A (1999) Micro economics theory and Applications, Oxford University Press, New Delhi;
5. Stigler, G. (1996) theory of Price (4th edition), Prentise Hall of India, New Delhi.
6. Varian, H (2000) Micro economics Analysis, W.W. Norton, New York.
7. Baumol W.J., (1982) Economic theory and operations Analysis, perntice Hall of India, New Delhi.
8. Handersan, J.M. and R.E. Quandt (1980) Micro economics theory - A Mathematical approach, Mc Graw Hill New Delhi.
9. Hirshleifer, J. And A Glazer (1997), Price theory and Application, Prentise Hall of India, New Delhi.
10. Health fields and wibs (1987) An introduction to cost and production function, Macmillan, London.

**COMPULSORY PAPER
PAPER- II
MACRO ECONOMICS
(Paper Code-0339)**

UNIT-1 National Income and accounts - Concepts of National Income and National Product. Problems of Measurement, Circular Flow of Income in two, three and four sector economy; different forms of national income accounting, Social accounting, input-output accounting and flow of funds and balance of payment accounting. Consumption Function - Keynes psychological law of consumption - implications of the law; short run and long-run consumption function, Empirical evidence on consumptions function; Income-consumption relationship Absolute income, Relative income, Life cycle and Permanent income hypotheses.

UNIT-2 Investment Function - Marginal efficiency of capital and investment - long run and short run; The accelerator and investment behavior, Saving and Investment equality, Multiplier; concept of Multiplier; Super Multiplier. Supply of Money - money supply determination, demand determined money supply process, 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-3 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; 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. New-classical and Keynesian, views on interest: The IS-LM model; Derivation of IS curve; Derivation of LM curve; General equilibrium of Product and money market.

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UNIT-4 Theory of Inflation - Classical, Keynesian and Monetarist approaches to inflation; Structuralism theory of inflation; Philips curve analysis - Short run and long run, Philips curve; The Natural rate of unemployment hypothesis; Tobin's modified Philips curve; Adaptive expectations and rational expectation; Policies to control inflation. Business Cycles - Theories of Schumpeter, Kaldor, Samuelson and Hicks, Control of, business cycles.

UNIT-5 Monetary and fiscal policies - Types of Monetary Policy; Instruments of monetary Policy; Relative effectiveness of monetary and fiscal policies. Macro Economic Policies Development - Role of Monetary and fiscal Policies in India, New classical Macro economics.

PRACTICE BOOKS:

1. Markley, G. (1978), Macroeconomics; Theory and Policy; Macmillan, New York.
2. Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2vols) Exford University Press, London.
3. Branson, W.A. (1989), Macroeconomics Theory and Policy, (3rd Edition), Harper and Row, New York.
4. Aornbusch, R. and .F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York.
5. Hall, R.E. and J.B. Taylor (1986), Macroeconomics, W.W. Norton, New York.
6. Heijdra, B.J. and V.P. Frederick (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
7. Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd. New Delhi.
8. Romer, DL. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
9. Scarte, B.L. (1977), Cycles, Growth and Inflation; McGraw Hill, New York.
10. Shapiro, E. (1996), Macroeconomic Analysis', Galgotia. Publications, New Delhi.
11. Surrey, MJC (Ed) (1976), Macroeconomics Themes, Oxford University Press, Oxford

**COMPULSORY PAPER
PAPER - III
QUANTITATIVE METHODS
(Paper Code-0341)**

UNIT-1 Concept and types of production functions-Cobb-Douglas production function; 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 method; concept of game; strategies - simple and mixed; value of game ; saddle point solution; simple applications, limitations of the game theory.

UNIT-2 Skewness : Symmetrical and asymmetrical distribution; measurement of skewness - Karl Pearson's of coefficient Skewness, Bowley's coefficient of skewness; meaning, assumptions and limitations of simple correlation; measurement of correlation coefficient.. Karl Pearson's coefficient of

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correlation and spearman's rank correlation; probable error and standard error in correlation; regression analysis, regression lines regression equations, regression coefficient, correlation and regression, partial correlation and multiple correlation; multiple regression analysis (up to three variables) standard error of the estimates.

UNIT-3 Interpolation and extrapolation, methods of fitting a parabolic curve direct binomial expansion method. Newton's advancing difference method and Lagrange's method; Association of attributes, meaning and types of association, consistency of data, in association. Theory of probability, various types of events, addition and multiplication theorems, conditional probability and concept of inter dependence.

UNIT-4 Index Number - Type of index number, Fisher's ideal index number, Reversibility test, Cost of living index, Time series data Analysis - Components of time series. Short period and long period trend line; moving average method.

UNIT-5 Census and sample methods of statistical inquiry: Deliberate and 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 levels of significance, hypothesis testing based on z, t, χ^2 (Chi-square) and F tests, Type-1 and Type-2 errors.

QUANTITATIVE METHODS :

1. Allen, R.G.D. (1974): Mathematical Analysis for Economics, Mcmillan Press and ELBS, London.
2. Chiang, A.C. (1986): Fundamental methods of Mathematical Economics, Mc Graw Hill, New York.
3. Gupta S.C. (1993): Fundamental of Applied Statistics S. Chand & Sons, New Delhi.

COMPULSORY PAPER PAPER - IV INDIAN ECONOMIC POLICY (Paper Code-0343)

UNIT-1 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 Development 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-2 Demographic Features, Poverty and inequality, broad demographic features of Indian population, rural-urban migration, urbanization and civic

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amenities, poverty and Inequality. Resource Base and' Infrastructure Energy - Social infrastructure, education and health.

UNIT-3 The Agriculture-Sector-Institutional Structure, land reforms in India, technological change in agriculture, pricing of agricultural inputs and outputs. Terms of trade between agriculture and industry, agricultural finance policy. The Industrial Sector, Industrial Policy, public sector enterprises and their performance, problem of sick units in India. Privatization. and disinvestment debate, growth and pattern of industrialization, small-scale sector, productivity in industrial sector.

UNIT-4 Public Finance - Fiscal Federalism, Centre-state financial relations, finances of central government, finances of state government, parallel economics, problems relating to fiscal sector reforms in India, Money, Banking and prices - Analysis of price behavior in India, Financial sector reforms, Interest rate policy, Review of monetary policy of RBI.

UNIT-5 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 Indian. Economic Reforms - Rational of internal and external reforms: Globalization of Indian economy, W.T.O. and its impact on the different sectors of the economy.

REFERENCES:

1. Ahulwalia, I.J. and I.M.D. Litle (Eds.) (1999): India's Economic Reforms and Development (Essays honor of Mariohar Singh), Oxford University Press, New Delhi.
2. Bardhan, P.K. (9th Edition) (.1999): The Political Economy of Development India, Oxford University Press, and New Delhi.
3. Bawa, A.S. and Raikhy (Ed.) (1997): Structural change in Indian Economy, Guru Nanak Dev University Press, Amritsar.
4. Brahmananda, P.A. and V.A. Panchmukhi (9th Eds.) (2001): Development Experience in Indian Economy: Inter-state Perspectives, Bookwell, Delhi.
5. Chakravarty, S. (1987): Development Planning: The Indian Experience, Oxford University Press, New Delhi.
6. Dantwala, M.L. (1996): Dilemmas of Growth: The Indian Experience, Sage Publication, New, Delhi.

**COMPULSORY PAPER
PAPER - V
DEMOGRAPHY
(Paper Code-0349)**

UNIT-1 Meaning, Scope and importance of demography sources of demographic data, Tools of demographic analysis, measurement of population growth and population pyramid; Theories of population - Malthus theory, Socio-cultural and economic theories of population, Biological theories of population, Theory of optimum population, Theory of demographic transition.

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UNIT-2 Fertility - meaning and definition of fertility, Measurement of fertility - child woman ratio, crude birth rate, corrected birth rate, General fertility rate, Age specific fertility rate, Total fertility rate, Gross reproduction rate, and Net reproduction rate, calculation of fertility rates, determinants of fertility, Trends fertility in India.

UNIT-3 Mortality and morbidity - Importance of mortality data causes of death, meaning of morbidity, Differentials in mortality and morbidity, measurement of mortality crude death rate, Age-specific death rate, Infant mortality rate, Standardized death rate and maternal mortality rate, calculation of mortality rates, Trends in mortality in India, life table.

UNIT-4 Migration and urbanization, Population projection, growth of population in India, population and economic development, population explosion in India, Demographic characteristics of developing countries. Population Policy of India.

UNIT-5 Women empowerment - Economic status, Women in decision making, Women and labour market; Women work participation: Concept and analysis of women's work, structure or wages across regions and economic sector's, Determinants of wage Differentials, Gender and education.

REFERENCES:

1. Agrawal S.N. (1972), India's Population Problem, Tata McGraw-Hill Co. Bombay.
2. Bose, S. (1996), India's Basic Demographic Statistics, B.A. Publishing Corporation, New Delhi.
3. Bogue, D.J. (1971), Principles of Demography, Hon Wiley, New York
4. Handry, A.T. (1999): Operations Research, Prentice Hall of India, New Delhi.
5. Speigal, M.R. (1992): Theory and problems of statistics, Mc Graw Hill Book Co., London.
6. Taha, H.A. (1997): Operations Research: An Introduction (6th editian), Prentice Hall of India Pvt. Ltd.; New Delhi.
7. Yamans, Tare (1975): Mathematics for Economics, Prentics Hall af India, New Delhi.
8. Mathur, P.N. & R. Bhardwaj (Eds.) 1967: Economic Analysis in input-output Research, Input Output, Research Association of India, Pune.
9. Kathari, C.R. (1992): An introduction to. Operations Research Vikas Publishing House, New Delhi.
10. Hadley, G.(1962): Linear Programming, Addison Wesley Publishing Co. Massachusetts.
11. Chou a (1975): Statistical Analysis Halt, Rainhart and Winstan, New York.

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**COMPULSORY PAPER
PAPER - I
ECONOMICS OF GROWTH AND DEVELOPMENT
(Paper Code-0338)**

- UNIT-1** Economic Growth: Economic growth and development, Factors affecting economic growth, Capital, labor and technology. Measuring economic development, development gap. Common characteristics of developing economics. Obstacles to economic development: Human development index and other indices of development, Quality of life index, Food security. Human Resource Development.
- UNIT-2** Theories of development- Ricardo, Karl marx, Schumpeter and Harrod-Domar model, Neoclassical model- solow, Meade. Mrs John Robinson and kaldor model. Technology progress and economic growth - Hick, Hayek learning by doing, Production function approach to economic development.
- UNIT-3** Approaches to development - Vicious circle of poverty, circular causation unlimited supply of labour, big push theory, theory of critical minimum effort, Balanced and unbalanced growth, Low income euilibrium trap, Ranis-fie model.
- UNIT-4** Problems of Development- Measuring poverty and income inequalities in developing countries. Nature and causes of poverty and income inequality. Capital formation, Capital output ratio, Human Capital formation in developing countries. Role of State in economic development.
- UNIT-5** Allocation of resources - Need for investment criterion in developing countries. Marginal rate of resource criteria, the rate of turn over criterion, the time series criterion, and cost benefit Analysis, Project evaluating and UNIDO guide lines. Shadow prices, Input-output Analysis.

BASIC READING LIST:-

Adelman, I (1961), Theories of Economic Growth and Development Stanford University press, Stanford.

**COMPULSORY PAPER
PAPER - II
INTERNATIONAL TRADE AND FINANCE
(Paper Code-0340)**

- UNIT-1** Theory of International Trade: The pure theory of international trade- Theories of absolute advantage, Opportunity cost, Modern theory of international trade, Theorem of factor price equalization, Heckscher-Ohlin theory of trade, Kravis and Linder theory of trade, Factor intensity reversals; Stapler-Samuelson and Rybczynski theorems, Empirical testing of comparative costs and H.O. theories, Economic growth and international trade.

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- UNIT-1** Economic Growth: Economic growth and development, Factors affecting economic growth, Capital, labor and technology. Measuring economic development, development gap. Common characteristics of developing economics. Obstacles to economic development: Human development index and other indices of development, Quality of life index, Food security. Human Resource Development.
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- UNIT-3** Approaches to development - Vicious circle of poverty, circular causation unlimited supply of labour, big push theory, theory of critical minimum effort, Balanced and unbalanced growth, Low income equilibrium trap, Ranis-fie model.
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- UNIT-5** Allocation of resources - Need for investment criterion in developing countries. Marginal rate of resource criteria, the rate of turn over criterion, the time series criterion, and cost benefit Analysis, Project evaluating and UNIDO guide lines. Shadow prices, Input-output Analysis.

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Adelman, I (1961), Theories of Economic Growth and Development Stanford University press, Stanford.

COMPULSORY PAPER
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INTERNATIONAL TRADE AND FINANCE
(Paper Code-0340)

- UNIT-1** Theory of International Trade: The pure theory of international trade- Theories of absolute advantage, Opportunity cost, Modern theory of international trade, Theorem of factor price equalization, Heckscher-Ohlin theory of trade, Kravis and Linder theory of trade, Factor intensity reversals; Stapler-Samuelson and Rybczynski theorems, Empirical testing of comparative costs and H.O. theories, Economic growth and international trade.

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UNIT-2 Measurement of gains-Measurement of gains from trade and their distribution, concepts of terms of trade- their uses and limitations, Determination of terms of trade, its empirical relevance and policy implications for less-developed countries, Welfare implications. The theory of intervention (Tariffs, quotas and non-tariff barriers), Economic effects of tariffs and quotas on national income, output, employment, terms of trade, income distribution, Balance of payments on trading partners both in partial and general equilibrium analysis, The political economy of non-tariff barriers and their implications, Nominal effective and optimum test of tariffs their measurement, impact and welfare implications.

UNIT-3 Balance of payments - Meaning and components of balance of payments, Equilibrium and disequilibrium in the balance of payments, The process of adjustment under systems of gold standard, Fixed exchange rates and flexible exchange rates, Expenditure-reducing and expenditure-switching policies and direct controls of adjustment, Policies for achieving internal and external equilibrium simultaneously under alternative exchange rate regimes, foreign trade multiplier. Determination of national income and output, Relative merits and Demerits of fixed and flexible exchange rates.

UNIT-4 The theory of regional blocks-Forms of economic co-operation, Reforms for the emergence of trading blocs at the global level, static and dynamic effects of a customs union and free trade area, Rationale and economic progress of SAARC / SAPTA and ASEAN regions, Problems and prospects of forming a customs union in the Asian region, Regionalism (EU, NAFTA), Multilateralism and WTO, Rise and fall of gold standard and Breton-woods system, Need, adequacy and determinants of international reserves, Conditionality clause of IMF, Emerging international monetary system Reforms of the International Monetary System, India and developing countries.

UNIT-5 Theory of short-term capital movements and East-Asian crisis and lessons for developing countries; international trade and financial institutions-functions of GATT/WTO (TRIPS, TRIMS), UNCTAD, IMF, World Bank and Asian Development Bank- Their achievements and failure WTO and World Bank from the point of view of India. Trade policies in India- Trade Problems and trade policies in India during the last five decades, Recent change in the direction and composition of trade and their implications, Rational and impact of trade reforms since 1991 on balance of payments, problems of India's international debt, working and regulations of MNCs in India. Export policies.

BASIC READING LIST:

1. Bhagwati, J. (Ed). (1981) : International Trade, Selected Readings, Cambridge, University Press, Massachusetts.
2. Carbaugh, R.J. (1999), International Economics, International Thomson Publishing; New York.
3. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
4. Dana, M.S. (2000), International Economics: Study, Guide and Work Book, (5th Edition), Routledge Publishers, London.

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5. Dunn, R.M. and J.H. Mutti (2000), International. Economics, Routledge, London.
6. Kenen, P.B. (1994), the International Economy. Cambridge University Press, London.
7. Kindleberger. C.P. (1973), International Economics and International Economic Policy: A Reader, McGraw Hill International, and Singapore.
8. Krugman, P.R and M. Obstfeld (1994), International Economics: Theory and Policy, Glenview, Foresman.

**COMPULSORY PAPER
PAPER - III
PUBLIC ECONOMICS
(Paper Code-0342)**

UNIT-1 Role of Government in organized society, Government in a mixed economy, Public and Private goods, principles of maximum social advantages, Taxation- different forms, principles of taxation, shifting, effects and incidence of taxation, Indian taxes- personal income tax, excise duty, central excise and custom duties, taxes on land and agriculture, taxable capacity.

UNIT-2 Public Expenditure - Different forms of expenditure, economic effect of public expenditure on production and distribution, public expenditure and economic growth in developing countries, Wagner's law of increasing state activities, Wiseman Peacock hypothesis, pure theory of public- expenditure, structure and growth of public expenditure in India.

UNIT-3 Public Debt- different sources of public debt, Redemption of public debt, economic effects of public debt, Burden of public debt. Classical view of public debt, principles of debt management and repayment of public debt, growth of public debt in India.

UNIT-4 Fiscal policy - Objectives of fiscal policy in under-developed countries, economic stability and fiscal policy, fiscal policy and full employment, balanced budget multiplier, functional finance.

UNIT-5 Finance Commission - Twelfth Finance Commission Report - only, Analysis of Central and State Government Budgets, Financial Administration, Budget and budgetary procedure in India, Gadgil formula, federal finance, principles of federal finance in India.

BASIC READING :

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

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COMPULSORY PAPER
PAPER - IV
ECONOMICS OF SOCIAL, SECTOR AND ENVIRONMENT
(Paper Code-0344)

UNIT-1 Welfare Economics - Definition of Welfare Economics, Criterion of Social welfare, Bentham's Criterion, Cardinality Criterion. The Pareto optimality Criterion, Kaldor Hicks Compensation Criterion, The Bergson Criterion. The problem of second best. Social welfare function, Maximization of Social Welfare. Welfare Maximization in Perfect Competition.

UNIT-2 Environmental Economics - Definition of Environmental economics, Public Goods, Private goods. Market Failure and Public goods. Theory of Externalities-Economics and Diseconomies. External Costs, Marginal social cost, Marginal private cost. Pigouian Taxes and Subsidies Environmental Values use value, Option value, and non use value. International Carbon Tax. Environment and W.T.O. Macro-economic policy and Environment

UNIT-3 Pollution - Classification of Pollution, Control of Pollution, Air Pollution Control, Water, Pollution Control, Pollution Control Strategies, Cost-benefit analysis of pollution; Environmental Laws. Protection of Environment. Environment and Development, Sustainable Development. Population Growth and Environment.

UNIT-4 Resources - Classification of resources, Renewable resources, Non renewable resources, Optimal use of resources, Land resources, Forest resources, Social forestry, people's participation in the management of common and forest lands Energy Efficiency and environment. Energy Taxation-subsidies for Biomass, Automobile Fuels.

UNIT-5 Education - Economics of Education, The Return of education, Expenditure on education, The productivity of education. Human capital, Human capital vs Physical capital. Demand production Benefit of education, Educational Planning. Education, and Labour Market. Poverty Unemployment and Education. Health Economics Determinants of health, dimension of health care, Malnutrition. The concept of human life. Inequalities in health-Care and Gender Perspectives.

BASIC READING:

1. Baumol, W.J. and W.E. Oates (1988): The Theory of Environmental Policy, (2nd Edition), Cambridge University Press, Cambridge.
2. Berman, P. (Ed.)(1995) : Health Sector Reform in Developing Countries : Making health development sustainable, Boston: Harvard Series on Population and International Health.
3. Blaug, M. (1972): Introduction to Economics of Education J Penguin, London. (15)



4. Bromely, D.W. (Ed.) (1995): Handbook of Environmental Economics, Blackwell, and London.
5. Cohn, E. and T. Gaske (1989) : Economics of Education, Pergamon Press, London.
6. Fisher, A.C. (1981): Resource and Environmental Economics, Cambridge University Press, Cambridge.
7. Hanley, N.J.F. Shogren and B. White (1997): Environmental Economics in theory and-Practice, Macmillan.
8. Hussen, A.M. (1999): Principles of Environmental Economics, Routledge, London.
9. Jeroen, C.J.M. van den Bergh (1999): Handbook of -Environmental and resource Economics, Edward Elgar Publishing .Ltd: U.K:
10. Madhu Raj - Environmental Economics.
11. Steve Baker - Environmental Economics. .
12. D.W. Pearce - Environmental Economics.
13. John Vaizey - The Economics of Education.

**COMPULSORY PAPER
PAPER - V
AGRICULTURAL ECONOMICS
(Paper Code-0350)**

UNIT-I Nature and scope of Agricultural economics- Traditional and Modern agriculture, role of agriculture in economic development. Problems in rural industrialization, development of Agro-based industries, interdependence between agriculture and industry. Green revolution. Agricultural production, Production function analysis, cost concept in agricultural product, farm budgeting, Resource use and efficiency in Agricultural sector.

UNIT-II Land use, Principles of land utilization, land distribution, Land values and rent, Land reform measures and performance, Land tenures and farming systems, problems of marginal and small farmers. Rural Labour supply, Mobility of labour and labour market in agriculture sector. Nature of employment in rural sector Agriculture wages in India. Male-Female wage difference in agriculture.

UNIT-III Rural Finance - Role of rural capital and rural credit, Rural capital and capital formation, Characteristics and source of rural credit, Institutional and non institutional rural credit, Rural Banks, Commercial Banks,. Regional Rural Banks and Rural credit Co-operatives Societies. Agricultural prices- Agricultural markets, Behavior of agricultural prices, agricultural. Markets and agricultural marketable surplus. Taxation, crop insurance, state policy and Agricultural price policy.

UNIT-IV Agricultural Growth in India - Recent trends, inter-regional variation in growth of agricultural product, cropping pattern, factors affecting productivity, pricing of inputs, role of subsidies, role of technology and input of irrigation in Agricultural sector. Problems and prospects of Globalization and W.T.O. in India Agricultural commodities.

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UNIT-V Infrastructure - Infrastructure and economic development, the structure of Transportation costs, Demand for transportation, Cost function in the transport Sector, Telephone utilities, role of postal services, Demand for Energy, Energy conservation, Renewable and Non-conventional Sources of Energy.

REFERENCES:

1. Bhahacharjee, J.P. - Studies. in Indian Agricultural Economics.
2. Rao, V.K.R.V.- New Challenge before Indian Agriculture.
3. Mellor, J.W. - The Economics of Agricultural Development.
4. Bhadure, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, Delhi.
5. Bilgrami, S.A.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
6. Dantewada, M.L. Et. a, (1991), Indian Agricultural Development Since independence, Oxford & BH, New Delhi.
7. Government of India (1976), Report of the National Commission of Agriculture, New Delhi.
8. Government of India, Economic Survey (Annual), New Delhi.
9. Gulati, A. and T. Kelly (1999), Trade Liberalization and Indian Agriculture, Oxford University Press, New Delhi.
10. Joshi, P.C. (1975), Land Reforms in India: Trends and Prospects. Allied Publishers, Bombay.
11. Kahlon, A. S. and Tyage D.S. (1983), Agriculture Price. Policy in India, Allied Publishers, New Delhi.
12. Rao, C.H.I.Hanumanth (1975), Agricultural Growth, Rural Poverty. and Environmental Degradation in India, Oxford University Press, New Delhi.
13. Reserve Bank of India, Report on Currency and Finance (Aual), Mumbai.
14. Rudra,A. (1982), Indian Agricultural Economics, Myths and Relaiity, Allied Publishers, New, Delhi.
15. Saini, G.R. (1979), Farm Size, Resource Use Efficiency and income Distribution, Allied Publishers, New Delhi.

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