क्रमांक : 2295 / अका. / 2014           रायपुर, दिनांक : 24 / 12 / 2014

## || अधिसूचना ||

ऐसे विद्यार्थी जिन्होंने एम.ए. (पूर्व) अर्थशास्त्र की परीक्षा वर्ष 2014 में स्वाध्यायी छात्र के रूप में उत्तीर्ण की है, उन्हें एम.ए. (अंतिम) अर्थशास्त्र की परीक्षा सत्र 2015 स्वाध्यायी में शामिल होने हेतु 4 अनिवार्य एवं 1 वैकल्पिक प्रश्नपत्र का चुनाव करना होगा जिसका विवरण इस प्रकार से है :

टीप : सत्र 2014 के पूर्व, एम.ए. पूर्व अर्थशास्त्र की परीक्षा उत्तीर्ण परीक्षार्थी पात्रता प्राप्त कर एम.ए. अंतिम की परीक्षा में प्रविष्ठ हो सकेंगे।

## A. Compulsory Papers Group

Paper-I :    Micro Economics Analysis/Economics of Growth and Development.
Paper-II :   Macro Economics Analysis/International Trade and Finance.
Paper-III:   Quantitative Methods/Public Economics.
Paper-IV:   Indian Economic Policy/Economics of Social Sector and Environment.

## Optional Papers Group (Any one Group)

एम.ए. पूर्व में जिस वैकल्पिक ग्रुप का चयन कर परीक्षा उत्तीर्ण की गई है, उसी वैकल्पिक ग्रुप से ही दूसरे विषय का चयन एम.ए. अंतिम की परीक्षा हेतु की जानी आवश्यक है।

Group A :   Industrial Economics / Labour Economics.
Group B :   Mathematical Economics / Econometrics.
Group C :   Demography / Agricultural Economics.
Group D :   Financial Institutions and Markets / History of Economic Thought.
Group E :   Computer Application in Economics Analysis / Welfare Economics.

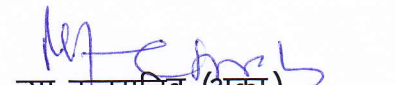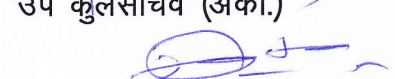टीप :   सुलभ संदर्भ के लिए वर्ष 2014 का पाठ्यक्रम विवरण संलग्न है।

कुलसचिव

पृ. क्रमांक : 2296 / अका. / 2014        रायपुर, दिनांक : 24 / 12 / 2014

प्रतिलिपि :

1. आयुक्त, उच्च शिक्षा, ब्लॉक–सी–30, द्वितीय तल, इन्द्रावती भवन, नया रायपुर
2. प्राचार्य, समस्त सम्बद्ध महाविद्यालय को,
3. अध्यक्ष, विश्वविद्यालय अध्ययनशाला,
4. समस्त विभागीय अधिकारी,
5. कुलपति के सचिव / कुलसचिव के निजी सहायक,

पं. रविशंकर शुक्ल विश्वविद्यालय, रायपुर को सूचनार्थ एवं आवश्यक कार्यवाही हेतु अग्रेषित।

उप कुलसचिव (अका.)

# SYLLABUS OF ANNUAL EXAM
## ORDINANCE NO. 13
### Master of Arts Examination

1.  The Examination for the degree of master of Arts shall consists of two parts

    (a)  The Previous Examination, and

    (b)  The Final Examination.

2.  A candidate who after taking his Bachelor's degree of the University or an examination of any statutory University in India which has been recognised by the University and has completed a regular course of study in the teaching department of the University or in a College in the subject in which he offers himself for examination for one academic year shall be admitted to the Previous Examination for the degree of Master of Arts.

    A candidate after passing a graduate examination under 11 +3 scheme or any other examination recognised by the University as equivalent there to shall be eligible for admission to a post-graduate course of studies where graduation is minimum qualification only after passing. one year Bridge Course prescribed for the purpose. This shall apply to students graduation in 1991 main examination.

3.  A candidate who after passing the M. A. Previous Examination of the University,has Completed a regular course of study for one academic year in a teaching department of the University or in a collegies shall be admitted to the Final Examination for the degree of master of Arts in the subject in which he/she passed the Previous Examination.

    A candidate who has passed the Previous. Examination for the degree of Master of Arts of another University may also be admitted to the Final Examination for the degree of Master of Arts after obtaining necessary permission from the Kulpati, provided that he offered for his Previous Examination a course of study of an equivalent standard with almost identical syllabus as required for one Previous Examination of the University and has attended a regular course of study for one academic year in a College affiliated to the Unitersity or a teaching department of the. University.

4.  Besides regular students and subject to other compliance with this Ordinance, exe=students and non-collegiate candidates shall be eligible for admission to the Examination as per provisions of Ordinance No.6 relating to Examination (General).Provided that in the subject where field work or practical work is prescribed only such candidates will be permitted to appear as non-collegiate candidates as have obtained permission of the Head of the University Teaching Department or Principal of the College teaching such subject.

    Provided that non-collegiate candidates-shall be permitted to offer only such subjects/ papers as are thought to' the regular students at any of the University Teaching Department or College. .

5.  The subject of the examination shall be one of the following:

    (i)    English

    (ii)   Hindi.

    (iii)  Economics

    (iv)   Political Science

    (v)    History

(vi)    Philosophy

(vii)   Sanskrit

(viii)  Mathematics

(ix)    Linguistics

(x)     Geography

(xi)    Sociology

(xii)   Anthropology

(xiii)  Classics

(xiv)   Ancient Indian Hostory, Culture and Archeology

(xv)    Public Administration

(xvi)   Defence Studies

(xvii)  Statistics

(xviii) Social Work

A candidate securing 60% or more marks in the M.A. Previous Examination will be eligible to offer dissertation in lieu of one of the, optional papers for the Final. A regular candidate can offer dissertation with the permission of the Professor and the Head of Department of his Institution, while a private candidate will have to secure the prior permission in writing of anyone of the Professors of the subject working in an institution within the jurisdiction of the University and will work under supervision of that Professor after obtaining prior permission of the University to that effect.

6.  A candidate who has passed the M. A. Examination of the University inany subject shall be allowed to present himself for the M.A. Examination in qny,one or more of the optional papers in tha1 subject not taken by him at the said examination and is successful will be given a certificate to that effect.

    No Candidate shall be allowed to offer more than two additional papers in any one year.

7.  For both the Previous and Final Examination a candidate will be declared successful If he/she obtains atlesast 36% of the aggregate marks in the, subject. In subject, in which both Theory and Practical Examinations are held the examinee must pass separately-in the Practical Examination obtaining not less than 36% marks.

8.  No division wil'l be assigned on the result of the Previous E'xamination, The division in which a candidate is placed shall be determined on the basis of aggregate of marks obtained in both the M. A. Previous and. the M.A. Final Examination.

9.  Successful candidate who obtain 60% or more of the aggregate marks shall be    placed in the First Division, those obtaining less than 60% but not less than 48% in the Second. Division and all other successful candidates obtaining less than 48% in the Third Division.

10. Candidates who have passed .the M.A. Examination of the University in any,    subject in Third or Second Division and desire to appear at the.M.A. Examination in the sa.me subject for improving division without attending a regular course of study in a college affiliated to the University or in a teaching Department of the University be alIowed to appear at the aforesaid examination as non-collegiate student on the following Conditions:-

    (i).    There shall be only two Divisions for such candidates the First Division and Second Divsion. The marks required for obtaining these divisions shall be sameas

prescribed in the Ordinance i. e. examinees who .are successful in Final of fhe Examination and ha.ve obtained 60% or more aggregate of the marks in Previous and Final Examination taken together shall be placed in the First Division and examinees who are successful in Final Examination and have obtained less than 60% but not lessthan 48% of aggregate marks Previous and Final Examinations taken together shall be placed in the Second Division.

(ii) The result of the candidates obtaining less than 48% of the aggregate marks in Previous and Final of the examination taken together shall not be declared.

(iii) Candidates shall be option to appear at both the Previous and Final Examinations in one and the same year and for being successful at the examination, the candidates shall obtain 48% of the aggregate marks.Provided that such candidates who up to appear in Previous and Final Examinations separately shall have to obtain minimum aggregate required for the Previous Examination but he will have to obtain atleast 48% in the aggregate of Previous and Final Examinations taken together or else his result will be cancelled.

(iv) The syllabus for the examination shall be the same as prescribed for the year in which the examination is held.

(v) Not more than two attempts shall be allowed to such a candidate. Failure or non-appearance at the examination after permission has been accorded by the University, shall be counted as an attempt.Provided however such candidates who up to appear at the Previous and Final examination separately will be allowed only one attempt at the previous examination and two attempts at the Final Examination.

(vi) Candidates who wish to avail the opportunity given in foregoing paras will have to apply for permission as required in theOrdinance relating to admission of Non-collegiate students to the. University examinations, alongwith requisite registration fee.

(vii) In case, a student improves his division under provision of this para, the fresh Degree will be issued after canceling his first Degree.

11. Transitory Provisioll; The reblaced Ordinance relating to Master of Arts Examination shall remain effecting till the examination of 1991, and this new Ordinance shall be Applicable from the examination 1992.

# USE OF CALCULATORS

The students of Degree/P.G. classes will be permitted to use Calculator in the examination-hall on the. Following conditions as per decision of the standingCommittee of the Academic Council at its meeting held on 31-1-1986.

1. Student will bring their own Calculators.

2. Calcultors will not be provided either by the University or examination centres.

3. Calculators with memory and following variables be permitted; +, sqare, reciprocal, expotential log, square root, trignometric functions viz. sine, cosine tangent etc. factorial summation, xy, yx and in the light of objectivge approval of merits and demerits of the viva only Will be allowed.

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# ECONOMICS

## M.A. PREVIOUS AND M.A. FINAL EXAMINATION - 2014

At post-graduate level. Candidates required to-study eight papers compulsory and two papers optional during two years period. Viva-voce examination be treated as a compulsory paper for M.A. final examination, This be treated as the eleventh paper of the course structure There shall be four papers compulsory and one paper optional in M.A. previous and M.A. final examinations. Viva-voce shall be treated as sixth paper in M.A. final. So there shall be eleven papers in the post-gradute 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.

A Candidate securing 60% marks or more marks in M.A. Previous Examination will be eligible to offer dessertation in lieu of one optional paper of M.A. final Examination.

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## COMPULSORY PAPERS GROUP

**Paper I**      Micro Economics Analysis (0337) /

Economics of Growth and Development (0338)

**Paper II**     Macro Economics Analysis (0339) / International Trade and Finance (0340)

**Paper III**    Quantitative Methods (0341) / Public Economics (0342)

**Paper IV**     Indian Economic Policy (0343) /

Economics of Social Sector and Environment (0344)

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## OPTIONAL PAPERS GROUP PAPER V-ANY ONE GROUP FROM THE FOLLOWING

**Group (A)**    Industrial Economics(0345)/LabourEconomics (0346)

**Group (B)**    Mathematical Economics (0347) / Econometrics (0348)

**Group (C)**    Demography (0349) / Agricultural Economics (0350) .

**Group (D)**    Financial Institutions and Markets (0351) /History of Economic Thought (0352)

**Group (E)**    Computer Application in Economic Analysis (0353) /Welfare Economics (0354)

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### Paper VI      For M.A. Final Examination: Viva-Voce

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## M.A. COMPULSORY PAPER - GROUP - I
### PAPER - I
## MICRO ECONOMIC ANALYSIS
### (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-theoratical aspects and empirical estimation, elasticity of supply ; 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 equilibirium.

**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 cobbdauglas, 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 Compotition, Criticism of monopolostic competition.

Oligopoly-Non-Collusive (Cournot, Bertrand, Edseworth, 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 revenus 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 syles, 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 Tachnical 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-judgement, social welfare function; compensation principle, inability to obtain .optimum welfare- imperfections, market failurs 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 princation university press, Princeton.

2. Kout sayiannis; A (1979) modern micro.economics (2nd Edition), macmillan press,

London.

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 adition), Prentise Hall of India, New Delhi.
6.  Varian, H (2000) Micro economics Analysis, W.W. Norten, New York.
7.  Baumol W.J., (1982) Economic theory and operations Analysis, perntice Hall of lndia, New Delhi.
8.  Handersan, J.M. and R.E. Quandy (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 (1'987) An introduction to cost and production function, Macmillan, London.

## M .A. - COMPULSORY PAPER - GROUP - I
### PAPER - I
## ECONOMICS OF GROWTH AND DEVELOPMENT
### (Paper Code-0338)

**UNIT-1**  Economic Growth: Economic growth and development, Factors affecting economic growth, Capital, labour and technology. Measuring economic development, development gap. Common charactristics of developing economics. Obstacles to economic development: Human development index and other indices of develpment, 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 koldar 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 crition, the rate of turn over criterion, the time series criterion, and cost benefit Analysis, Project evaluation 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 - GROUP II
### PAPER- II
## MACRO ECONOMIC ANALYSIS
### (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 behaviour, Saving and Investment equality, Multiplier; concept of Multiplier; Super Muliplier.

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 Keynisian economics and the revival of monetarism. New-classical and Keynesian, views on interest: The IS-IM model; Derivation of IS curve; Derivation of IM curve; General equilibrium of Product and money market.

**UNIT-4** Theory of Inflation - Classical, Keynesian and Monetarist approaches to inflation; Structuralist 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.) (20()), Macroeconomics and the Real World (2vols) Exford University Press, London.
3. Branson, W.A. (1989), Macroeconomics Theory and Policy, (3rd Edition), Harper and Raw, 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.

# M.A. COMPULSORY PAPER - GROUP II
## PAPER -II
## INTERNATIONAL TRADE AND FINANCE
### (Paper Code-0340)

**UNIT-1** Theory of International Trade: The pure theory of international trade- Theories of absoluty 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; Stopler-Samuelson and Rybczynski theorems, Empirical testing of comparative costs and H.O. theories, Economic growth and international trade.

**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 implicatations 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 disequilium 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 theoy of regional blocks-Forms of economic co-operation, Reforms for the emergence of trading blocks at the global level, static and dynamic effects of a customs union and free trade area, Rationale an 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 Bretton-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 devevloping countries.

**UNIT-5** Theory of short-term capital movements and East-Asian crisis and lessons for developing countries; international trade and financial instructions- 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 Rriadings, Cambridge, Univercity Press, Massachusetts.
2.   Carbough, R.J. (1999), International Economics, International Thompson 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.
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 - GROUP III
## 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 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 dirnct binomial expansion method. Newton's advancing difference method and lagranges 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 estimater; formulation of statistical hypotheses - null and alternative; goodness of fit. Confidence intervals and levels of significance, hypothesis testing based on z, t, $x^2$ (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.

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 introductian (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-autput Research, Input Output, Research Association of India, Pune.
9. Kathari, C.R. (1992): An introductian to. Operations Research Vikas Publishing House, New Delhi.
10. Hadley, G.(1962): Linear Programming, Addisan Wesley Publishing Co. Massachusetts.
11. Chou a (1975): Statistical Analysis Halt, Rainhart and Winstan, New Yark.

## COMPULSORY PAPER - GROUP III
## PAPER -III
# PUBLIC ECONOMICS
### (Paper Code-0342)

**UNIT-1** Role af Government in organised society, Government in a mixed economy, Public and Private goods, principles of maximum social advantages, Taxation- different forms, principles af taxation, shifting, effects and incidence af 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 Peacbck hypothesis, pure theory af 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,functianal finance.

**UNIT-5** Finance Commission - Twellth Finance Commission Report - only, analysis of central and state government budgets, financial administration, budget and budgetary procedure in India, Gadgil formula, federal finance, principles af federal finance in India.

### BASIC READING :
1. Atkinsan, A.B: and J.E. Siglitz (1980), Lectures an Public Economics, Tata McGraw Hili, New Yark.
2. Auerbach, A.J. and M. Feldstern (Eds.), Handbook of Public Ecanamics, Vol. 1, North Holland, Amsterdam.

## COMPULSORY PAPER - GROUP IV
## 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 amentities, 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. Privatisation. and disinvestment debate, growth and pattern of industrialisation, 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 behaviour 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 India.Economic Reforms - Rational of internal and external reforms: Globalisation 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): Dilemmans of Growth: The Indian Experience, Sage Publication, New, Delhi.

## M.A. COMPULSORY PAPER - GROUP IV
## PAPER - IV
## ECONOMICS OF SOCIAL, SECTOR AND ENVIRONMENT
### (Paper Code-0344)

**UNIT-1** Welfare Economics - Definition of Welfare economics, Criterion of Social welfare, Benthem's Criterion, Cordinalist 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 Compition.

**UNIT-2** Enviromental Economics - Definition of Environmental economics, Public Goods, Private goods. Market Failure and Public goods. Theory of Externalities-Economics and Diseconomics. 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, Reneweble resources, Non renewable resources, Optimal use of resources, Land resources, Forest resources, Social forestry, people's partipation 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 Phyical capital, Demand producation Benifit of education, Educational Planning. Education, and Labour Market. Poverty Unemployment and Education. Health EconomicsDeterminants of health, dimention of health care, Malnutrition. The concept of human life. Inequilities 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 Coutries : 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. Shoge'rn 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 - Environmenta1 Economics.
13. John Vaizey - The Economics of Education.

## OPTIONAL PAPER - GROUP-A
### PAPER - V
### INDUSTRIAL ECONOMICS
#### (Paper Code-0345)

**UNIT-1**  Concept and organisation of a firm-ownership, control and objectives of the firm. Passive and active beheviour of the firm, sellers concemtration, product differentiation, entry conditions, economics of scale, market structure and profitability, market structure and innovation, theories of industrial location-Vebler and Sargent Florence, Factors affecting the location.

**UNIT-2**  Growth of the firm - Size and growth of a firm, growth and profitability of the firm, constraints on growth, productivity, efficiency and capacity utilisation, concept and measurment in Indian situation, classification of industries, industrial policy in India. Role of Public and Private Sectors, Recent trends in Indian industrial growth, MNCs

and transfer of technology, Liberalisation and privatisation, Regional industrial growth in India, Industrial Economic Concentration and Remedial Measures, Pollution control policies.

**UNIT-3** Owned, external and other components of funds, Nature volume and types of institutional finance-IDBI, IFCI, SFCs, SIDC, Commerical banks etc. Financial statement-Balance sheet, Profit and loss account, Assessment of financial soundness, Ratio analysis, Cost-benefit analysis, Net present value (NPV) and Internal rate of return (IRR), Private and social returns.

**UNIT-4** Structure of industrial labour, Employment dimensions of Indian industry, Industrial legislation, Industrial relations, Exit policy and social security, wages and problem of bonus, labour market reforms.

**UNIT-5** Iron and Steel; Cotton textiles Jute, Suger, Coal, Cement and engineering goods, Development of Small-Scale and Cottage industries in India.

**REFERENCES:**

1. Ahluwalia,I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
2. Bartliwal, R.R. (1985): Industrial Economics: Wiley Eastern Ltd., New Delhi.
3. Cherunilam, F. (1994): Industrial Economics, Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
4. Desai, B. (1999), Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.
5. Divine, P.J. and R.M. Jones et. al. (1976): An Introduction to industrial economics, George Allen and Unwin Ltd., London.
6. Government of India, Economic Survey (Annual).
7. Hay, D. and D.J. Morris (1979), Industri1 Economics: Theory and Evidence, Oxford University Press, New Delhi.
8. Kuchhal, S.C. (1980): Industrial Economy 'of india (5th Edition), Chaitanya Publishing House, Allahabad.
9. Reserve Bank of India, Report on Currency and Finance (Annual).
10. Singh, A. and A.N. Sadhu (1988): Industrial Economics, Himalaya Publishihg House, Bombay.

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OPTIONAL PAPER - GROUP-A

PAPER - V

# LABOUR ECONOMICS

**(Paper Code-0346)**

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**UNIT-1** Labour Market - Nature and characteristics of labour markets in India; Labour market analysis - 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 recrurment and placement, Employment Exchange organization in India.

**UNIT-2** Employment and development relationship - poverty, unemployment - concept, types and measurement, Impact of rationalization, technological change and Modernisation on employment in organised private industry, public sector and employment in agricultural sector; analysis of educated unemployment, employment Policy in five year plans, its evaluation.

**UNIT-3** Wage Determination Classical neoclassical and bargaining theories of wage determination; concepts of minimum wage, living and fair wage in theory and practice. Discrimination in labour markets, Wage determination in various sectors rural, urban, organised and in informal sectors Non-wage component of labour remuneration; Infla-

tion-wage relationship of micro and macro levels ; productivity and wage relationship. An 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.

**UNIT-4** 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. Current trends in collective bargaining, Role of judical activism;- Labour legislation in Indian labour laws and practices in relation to international labour standards.

**UNIT-5** State and Labour - State and social security of labour, Concept of social security and its evolution. Receive 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 base in treatment of labour; Preceeding state and its effect on working of labour markets; Labour market reforms. Need of safety, net, measures imparting flexiblity in labour markets; Second National Commission on Labour: Globalization and labour markets.

**BASIC READING LIST:**

1.    Hajela P.D. (1998), Labour Restructiring in India: A Critiqre of the New Economic Policies, Commonweath Publishers, New Delhi.

2.    Jhabvala, R.and R.K. Subrahmanya (Eds.) (2000). The Unorganised Sector: Work Security and Socail Protection,' Sage Publication, New Delhi.

3.    Lester, R.A. (1964), Economics of Labour. (2nd Edition), Macmillan,New York.

4.    Me Connell, C.R and S.L. Brue (1986). Contemporary Labour Economecs, MeGraw-Hill, New York.

5.    Papola, T.S.P.P. Ghosh and A.N. Sharma (Eds.) 1993, Labour Employment and    Industrial Relations in India, B.R Publishing Corporation New Delhi.

6.    Rosenberh M.R (1998), Labour Markets in Low Income Countries in Chenery, H.B. and T.N. Srinivasan, (Eds.). The Handbook of Development Economics, North-Holland, New York.

7.    Venkata Ratnam, C.S. (2001), Globlisation and Labour- Management Relations: Dynamics of change, Sage publication Response Books, New Delhi.

<center>OPTIONAL PAPER - GROUP B</center>
<center>PAPER - V</center>
<center>MATHEMATICAL ECONOMICS</center>
<center>(Paper Code-0347)</center>

**UNIT-1  Theory of Consumer Behavior**
Cardinal and ordinal utility; Ordinal utility maximization; Slutsky, Equation, compensated demand functions, income, substitution, and price effects; Concept of elasticities- generalization to invariable case; Separable and additive utility functions; homogeneous and homeostatic utility functions; constant elasticity of substitution (CES) and indirect utility functions; duality theorem; consumer's surplus. Theory of revealed preference and index numbers; Linear expenditure system; Treatment of demand for durable goods; Emprirical demand functions; Consumer behaviour under risk and uncertainty.

**UNIT-2  Price Determination in Various Markets:**
Price determination in perfect competition, monopolistic competition, duopoly, olgopoly and monopsony; Pricing of factors of production; bilateral monopoly.

**UNIT-3  Market. Equibrium:** Single market equilibrium - Marshalling and Walrasian. Equilibrium conditions; Lagged market equilibrium; Multi - market equilibrium-General equilib-

rium systems of Walras and Debreu; Conditions; of stability of Equilibrium.

**UNIT-4 Determination of Income and Fluctuations in income :**

Classical and Keynes' macro system; Static and dynamic multiplier; Determinates of investment; Accelator; Trade cycle model of Simulation and Hicks, Goodwin, Kalecki and Philips; Stablisation policy; Rational expectations and economic policy; Lucas's model.

**UNIT-5 Growth Models**

Horrod problem, Neo classical model of growth; Solow and meade growth models with technical progress; optimal growth; and golden rule of accumulation, Turnpke theorem; Endogenous growth.

**Game Theory and Linear Programming and input-output Analysis**

Concept of game - Two - person zero - sum game, pay- off matrix, Pure ad mixed strategies. Maximum and minimax solutions, Saddls point solution; Non constant sum game; Prisoner's Delemma; Linear 'programming - Primal and dual problem, Simplex method; Transport and Storage problems and other applications of ( linear programming in Economics; Input - output analysis - Open and closed systems, Hawkins - Sminon conditions; Leontief's dynamic system; Testing constancy of planning models.

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**OPTIONAL PAPER - GROUP - B**

**PAPER - V**

**E C O N O M E T R I C S**

**(Paper Code-0348)**

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**UNIT-1 Basic Econometrics**

Nature, meaning and scope of econometrics; Simple and general linear regression model- Assumptions, Estimation (through OLS approach) and properties of estimators; Gauss-Maukov theorem; Concepts .and derivation of $R^2$ and adjusted $R^2$; Concept and analysis of variance approach and its application in regression Analysis; Estimation of non-linear equations - parabolic, exponential, geometrix, hyperbolic, modified exponential; Gomertz and logistic functions.

**UNIT-2 Problems in Regression Analysis**

Nature, test, consequences and remedial steps of problems of heteroscedasticity; Multicollinearity and auto-correlation; Problems of specification error; Errors of measurement regressing with Qualitative Independent Variables Dummy variable technique - Testing structural stability of regression models comparing to regressions, interaction effects, seasonal analysis, piecewise linear regression, use of dummy variables, regression with dummy dependent variables; The LPM, Logit, Probit and Tobit models - Applications.

**UNIT-3 Dynamic Econometric Model**

Autoregressive and distributed lag models - Koyak model, Partial adjustment model adaptive expectations; Instrumental variables; Problem of auto-correction- Application; Almon approach to distributed-lag models; Error correlation mechanism, Causality test, Granger test and Sim's test.

**UNIT-4 Simultaneous Equation Models**

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.

**Time Series Analysis-** Stationarity, unit roots, co-integration-spurious regression, Dickey-Fuller test, Engle-Granger test, Random walk model, Forecasting with ARIMA

modelling; Box-Jenkins methodology; Vector autoregression; Problems with VAR modelling - Applications; Time varying parameters and Kalman filter.

**UNIT-5 Panel Data Techniques**

Panel data techniques - Random coefficients model; Fix effects model; Random Effect model.

Multivariate probability distribution, marginal and conditional probability distribution, multivariate normal distribution and its properties; Hotelling T-scale; Discriminant analysis.

**BASIC READING LIST:**

1. Amemiya, T. (1985), Advanced Econometrics, Harvard University Press, Cambridge,Mass.
2. Baltagi, B.H. (1996), Econometrics, Springer, New York. .
3. Dongherty, C. (1992), Introduction to Econometrics, Oxford University Press, New York.
4. Goldberger, A.S. (1998), Introductory Econometrics, Harvard Univershy Press, Cambridge, Mass.
5. Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
6. Hill R.C., E.G. William and G.G. Judge (1997), Undergraduate Econometrics, Wiley, NewYork. .
7. Kennedy. P. (1998), A Guide to Econometrics (4th Edition), MIT Press, New York.
8. Kmenta, J. (1997), Elements of Econometrics (Reprint Edition), University of Michigan Press, New York.
9. Koutsoyiannis, A. (1997), Theory of Econometrics (2nd ed.), the Macmillan Press Ltd.,London.
10. Krishna, K.L. (Ed.) (1997), Econometric Applications in India, Oxford University Press, New Delhi.
11. Maddala, G.S. (Ed.) (1993), Econometrics Methods & Application (2 Vols.), Aldershot U.K.
12. Theil, H. (1981), Introduction to Econometrics, Prentice Hall of India, New Delhi.

**OPTIONAL PAPER GROUP - C**

**PAPER** - V

**D E M O G R A P H Y**

**(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 populatioln, Biological theories of population, Theory of optimum population, Theory of demographic transition.

**UNIT-2** Fertility - meaning and defination 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 couses 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 urbanisation, 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 rogions and economic sector's, Determinants of wage Differentials, Gender and education.

**REFERENCES:**

1. मिश्रा, जे.पी., जनांकिकी, साहित्य भवन पब्लिकेशन्स, आगरा ।
2. Agrawal S.N. (1972), India's Population Problem, Tata Mc Graw-Hill Co. Bombay.
3. Bose, S. (1996), India's Basic Demographic Sta\istics, B.A. Publishing Corporation, New Delhi.
4. Bogue, D.J. (1971), Principles of Demograptly, Hon Wiley, New York. .
5. Chenery H. and T.N. Srinivasan (Eds.)1989, Hand book of Development Economics Vol.1 & 2 Elesevier, Amsterdam
6. Choubey, P.K. (2000), Population Policy in India, Kanishka Publications, New Delhi.
7. Coale A.J. and E.M. Hoover (1958), Population Growth and Economic Development Princeton.
8. Gulati, S.C. (1988), Fertitiy in India: An Econometric Study of a Metropolis, Sage New Delhi.
9. Simon, J.L. (1992), Population and Development on Poor Countries, Prnceton University Press.
10. Srinivasan: K. (1 9 98), Basic Demographic Techniques and Applications, Sage; New Delhi.
11. Srinivasan, K. and A. Shariff (1998), India: Towards Population andd Demographic Goals, Oxford University Press, and New Delhi.
12. Sryrock, H.et. al (1973), The Methods and Materials of Demography, US -Department of Commerce, Washington, D.C. .
13. United Nations (1973), The Determinants and Consequences of Population Trends, Vol.1 UNO Publications, New York.
14. Boserup E. (1970), Women's Role in Economic Development, George Allen and Unwin, London.
15. Desai, N. and M.K. Raj. (Ed.) (1979), Women and Society in India Research Centre for Women Studies,SNDT University, Bombay.
16. Government of India (1974), Towards Equality-Report of the Committee on the Status ofWomen in India: Department of Social Welfare, Ministry of Education.and Social Welfare, New Delhi.
17. Krishnaraj, M.R.M. Sudarshan and A. Shariff (1999), Gender, Population and Development Oxford University Press, New Delhi.
18. Seth, M. (2000), Women and Development: The Indian Experience, Sage Publications, New Delhi.

## OPTIONAL PAPER GROUP - C
## PAPER – V
## AGRICULTUR ECONOMICS
### (Paper tode-0350)

**UNIT-I** Nature and scope of Agricultural economics- Traditional and Modern agriculture, role of agriculture in economic development. Problems in rural industrilization, development of Agro-based industries, interdepedence between agriculture and industry. Green revolution. Agricultural production, Production fuction analysis, cost concept in agricultural product, farm budgting, 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 Agricultur wages in India. Male-Femele wage difference in agriculture.

**UNIT-III** Rural Finance - Role of rur.al capital and rural credit, Rural capital and capital formation, Charactristics and source of rural credit, Institutional and non institutional rural credit, Rural Banks, Commercial Banks,. Regional Rural Banks and Rural credit Co-opretives Socities. Agricultural prices-Agricutural markets, Behaviour of agricultural prices, agricultural. MarKets and agricutural marketable surplus. Taxation, crop insurence, 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 Agricutural sector.Problems and prospects of Globlisation and W.T.O. in India Agricutural commodities.

**UNIT-V** Infrastructure - Infrastructure and economic development, the structure of Transportation costs, Demand for transpotration, Cost function in the transport Sector, Telephone utilities, role of postal services, Demand for Energy, Energy conservation, Renewable and Non-conventionl 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. Dantwala, M.L. Et. a, (1991), Indian Agricultural Development Since independence,Oxford & BH, New Delhi.
7. Government of India (1976), Reporty of the National Commision of Agriculture, New Delhi.
8. Government of India, Economic Survey (Annual), New Delhi.
9. Gulati, A.and T. Kelly (1999), Trade Liberaliation 'and Indian Agriculture, Oxford University Press, New Delhi.
10. Joshi, P.C. (1975), Land Reforms in India: Trends and. Prospects. Alled 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 Relaity, Alled Publishers, New, Delhi.
15. Saini, G.R. (1979), Farm Size, Resource Use Efficiency and income Distribution, Allied Publishers, New Delhi.

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**OPTIONAL PAPER - GROUP - D**

**PAPER - V**

# FINANCIAL INSTITUTIONS AND MARKETS

**(Paper Code-0351)**

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**UNIT-1** Nature and Role of Financial System: Money and finance - Money and near-money.Financial intermediation and financial intermediaries - The structure of the financial Development. Equilibrium-Equilibrium in Financial Markets - Financial system and Economic Development Criteria to evaluate assets; Risk and financial assets types of' risk, return on assets, risk - Valuation of securities.

**UNIT-2** Structure of Interest Rates: Theories of interest rates determination. Level of interest

rates, long period and short period rates. Term structure of Interest rates. Spread between lending and deposit rates, administered interest rates, appropriate interest rate policy.

**UNIT-3** The Central Bank, Commercial Banks. Monetary Policy- The aims and objectives of the monetary policy in developed and developing countries. Instruments of monetary policy - Proliferation of banking and non-bank financial intermediaries, Effectiveness of monetary policy - Credit creation and its control, profitability and efficiency of banks; development banks - role and functions ; investment banking and merchant. Booking, financial sector reforms in India.

**UNIT-4** Non-bank financial intermediaries: Role and structure of money maket and capital market - Call money market, Treasury bill market, commerical bill market including. Commerical paper and certificate of deposits, discount market - Government securities market- Markets for derivatives ; futures and options, and other derivatives; types, uses and pricing of .derivatives, Primary and secondary market for securities ; SEBI, its impact on the working of capital market in India, IRDA and its role in financial markets.

**UNIT-5** Interntional Financial Markets : Nature, organization and participants- Exchange rates since 1973 - Risk hedging and futures in exchange rates - International Financial flows, forms and volume - risk and fall of Brettonwood institutions International Liquidity - Post Maastricht developments- Reform in international money systems for developing countries. - Lendig operation of World Bank and its affiliates- Working of IDA and IFC, The Theory of optimum currency areas - Growth of Regional Financial Institutions.

**BASIC READING LIST:**

1. Bhole, L.M. (1999): Financial Institutions and markets, Tata McGraw Hill Company Ltd., New Delhi.
2. Bhole, L.M. (2600): L. Indian Financial System, Chugh Publications, Allahabad.
3. Edminster, R.O. (1986): Financial Instructions, Markets and Management McGraw Hill, New York.
4. Goldsmith, R.O. (1969): Financial Structure and Development, Yale, London.
5. Hanson, J.A. and S. Kathuria (Eds.) (1999): India: A Financial Sector for the Twenty first Century, Oxford University Press, New Delhi.
6. Harker, P.T. and S.A. Zenios (2000), (Ed.), Performance of Financial Institutions, Cambridge University Press, Cambridge.
7. Johnson, H.J. (1993) : Financial Institution and Markets, McGraw Hill, New York.
8. Khan, M.Y. (1996): Indian Financial System, Tata McGraw Hill, New York.
9. Machiraju, M.R. (1999): Indian Financial Systems, Vikas Publishing House, New Delhi.
10. Ohlosn, J.A. (1887): The Theory of Financial Market and Institution, North Holland, Amsterdam.
11. Prasad K.N. (2001): Development of India's Financial System, Sarup & Sons, New Delhi.
12. Robinson, R.I. and D. Wrightman (1981) : Financial Markets, McGraw Hill, London.
13. Smith, P.F. (1978): Money and Financial Intermediation: The Theory and Structure of Financial System Prentice Hall, Englewood - Cliffs, New Jersey.

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**OPTIONAL PAPER - GROUP - D**

**PAPER - V**

# HISTORY OF ECONOMIC THOUGHT

**(Paper Code-0352)**

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**UNIT-1** Mercantilism, Physiocrates, Adam Smith, Malthus and David Ricardo.

**UNIT-2** Nationalist School- Friedrich List, Historical School- Roscher Schmoller, Early Socialist- Saint Simon, Sismondi and Utopian School.

**UNIT-3** Scientific Socialism- Karl Marx, Development of Socialistic Thought after Marx, Restatement of Classism- John Stuart Mill, The Mathematical School-Javons, Walras and Hicks.

**UNIT-4** Austrian School- Menger, Wieser, Bohm Bawerk and Development of Marginalism, Cambridge School of Thought specially Marshall and Pigou, Institutional School-Veblon and Metchell.

**UNIT-5** The New Political Economy of Keynes and Indian School of Thought- Gokhale, Mahatma Gandhi, And Pt. Jawahar Lal Nehru.

**REFERENCE:**
1. Gide and Rist- History of Economic Thought.
2. Eric Roll- History of Economic Thought.
3. T.N. Hajela- History of Economic Thought.
4. V.C. Sinha and G.C. Singhai – Aarthic Vicharo Ka Itihas.

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**OPTIONAL PAPER - GROUP - E**
**PAPER - V**
**COMPUTER APPLICATION IN ECONOMIC ANALYSIS**
**(Paper Code- 0353)**

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**UNIT-I** Introduction to computer and peripherals : Basic componets of computer - CPU input-Output device, Keyboard, Mouse and Scanner, Video Display, Printer and Plotters, Data storage and retrieval, hard disk, floppy disk and CD ROM : Types of computers and their applications, computers networking and resource sharing hardware, Software and firmware, examples and techniques in programming languages elementary knowledge only.

**UNIT-II** Data Processing, Techniues and Algorithms Concepts of date, record and file : types of data and data structure, data analysis, file handling and operations like opening, Appending and cascading, closing and attribute control; data storage and retrieval; data Operations algorithmas like sorting, merging, joining and bifurcation database concepts and opration on database, DBMS and RDBMS.

**UNIT-III** Statistical Processing Techniques and Methods Series; tables; Graphs and Object time and fraquency series; regression methods and technique regression analysis data veledation, trends and cyclecity forecasting system modeling and discripition; system quation; specification; error and correction strategies; Statstical modelling and discriptive statistic, distribition functions, regression statistics.

**UNIT-IV** IT application commerce, Online Banking ATM's Electronic Stock Exachange Electronic Trading data Sharing and decimation; electronic Transation; Documents delivery; authentication and validation transaction processing.

**UNIT-V** I.T. Application to Commerce Electronic Trading and Marketing; On line shopping and malls, B2B, B2C, and G2B models and their applications; Document and transaction security and digital signature, integrated transation on mobile platforms.

**BASIC READING LIST**
1. Rajasekaran, S. (1986): Mumerical Methods in Sciency and Engineering, A.H. Wheeler, Allahabad.
2. Sanders, D.H. (1988): Computers Today, McGraw hill (3rd Edition), New York.
3. Sinha, P.K. (1992): Computers Fundamentals, BPB Publications, New Delhi..
4. Rajaraman, V. (1996): fundamental of Computers, prentice Hall of India, New Delhi
5. Lipschultz, M.M. and S. Lipschults (1982) : Theory and Problems of Data Processing Schum, s Outline Series, McGraw hill, New York.

## OPTIONAL PAPER - GROUP - E
## PAPER - V
## W E L F A R E   E C O N O M I C S
### (Paper Code-034)

**UNIT-1** Benthamite Approach to Aggregate Welfare, optimum Resource Allocation and Welfare Maximization, Assumption of Uniform Income - Utility Function of Individuals, Questions of Income Distribution, Issue of Interpersonal Comparisons of Utility, Marshallian Welfare Economics; Consumer's Surplus, Measurement of Consumer's Surplus - Difficulties involved, Criticism.

**UNIT-2** Principle of Compensating Variation: Hicks's Four Consumer's Surpluses; Concept of consumer's surplus; consumer's surplus and tax-bounty analysis.

**UNIT-3** Pareto Optimality - Optimum exchange conditions, the production optimum, the Consumption optimum, concept of contract curve; top "level" optimum, infinite number of non-comparable optima vs. unique social optimum; compensation criteria - contributions of Barone, Kaldor and Hicks.

**UNIT-4** The Scitovsky double criterion; concept of community indifference map, Samuelson's utility possibility curve, value judgements and Welfare economics, Bergson's social welfare function, Arrow's possibility theorem.

**UNIT-5** Divergence between private and social costs; problems of Non market interdependence; externalities of production and consumption; external economics and diseconomics ; problem of public goods; Pigovian welfare economics; secondbest optima; Marginal cost pricing; cost benefit analysis, interdependent utilities, attempts to develop dynamic welfare analysis.

**BASIC READING LIST:**

1.   Arrow, K.J. (1951): Social Choice and Individual Values: Yale University Press, New Haven.
2.   Baumol, W.J. (1965) :. Welfare Economics and the Theory of the State (Second Etfition), Longmans, London.
3.   Baumot, W.J. (Ed.) (2001) : Welfare Economics, Edward Elgar Publishing Ltd. U.K.
4.   Broadway, R: W. and N. Bruce (1984): Welfare Economics, Basil Blackwell, and Oxford.
5.   Duesenberry, J.S. (1949): Income, Saving and the theory of Consumer Behaviour, Harvard University Press, Cambridge, Mass.
6.   Feldman, A.M. (1980) : Welfare Economics and Social Theory, Martinus Nijhbff, Boston,
7.   Graaff J. de. V. (1957): Theoretical Welfare Economics, Cambridge University Press, Cambridge.
8.   Little, I.M.D. (1939): A Critique of Welfare Economics (2nd Edition), Oxford University, Press Oxford.
9.   Marshall, A. (1946): Principles of Economics, Macmillan, London.
10.  Myint. H. (1948): Theories of Welfare Economics, longmans, London.
11.  Ng. Y.K. (1979): Welfare Economics, Macmillan, London.
12.  Nicholas, B. (Ed.) (2001): Economic theory and the Welfare State, Edward Elgar Publishing Ltd. U.K.
13.  Pigou, A.C. (1962): The Economics of Welfare (4th Edition), Macmillan.
14.  Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
15.  Samuelson, P.A. (1947): Foundations of Economic Analysis, Harvard University Press, Cambridge, Mass.

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