

M.A. Economics
Under Choice Based Credit System

Note: Complete M.A. (Economics) Course carries 100 credits and each paper carries 5 Credits (4 Lectures + 1 Tutorial).

SEMESTER-I

Core Papers	Credits
PAPER-I : MICRO ECONOMIC ANALYSIS-I (ECO-101)	5(4L+1T)
PAPER-II : MACRO ECONOMIC ANALYSIS-I (ECO-102)	5(4L+1T)
PAPER-III : BASIC QUANTITATIVE METHODS-I (ECO-103)	5(4L+1T)
Elective Papers	
Any two papers selecting one paper from each group:	
GROUP A	
(i) ECONOMICS OF AGRICULTURE-I (ECO-104-A) (i)	5(4L+1T)
(ii) COMPUTER APPLICATIONS FOR ECONOMISTS-I (ECO-104-A) (ii)	5(4L+1T)
(iii) ECONOMICS OF POPULATION (ECO-104-A) (iii)	5(4L+1T)
GROUP B	
(i) MATHEMATICAL ECONOMICS-I (ECO-105-B) (i)	5(4L+1T)
(ii) ECONOMICS OF GROWTH AND DEVELOPMENT-I (ECO-105-B) (ii)	5(4L+1T)
(iii) ECONOMICS OF INFRASTRUCTURE (ECO-105-B) (iii)	5(4L+1T)

SEMESTER-II

Core Papers	Credits
PAPER-I: MICRO ECONOMIC ANALYSIS-II (ECO-201)	5(4L+1T)
PAPER-II: MACRO ECONOMIC ANALYSIS-II (ECO-202)	5(4L+1T)
PAPER-III: BASIC QUANTITATIVE METHODS-II (ECO-203)	5(4L+1T)
Elective Papers	
Any two papers selecting one paper from each group:	
GROUP A	
(i) ECONOMICS OF AGRICULTURE-II (ECO-204-A) (i)	5(4L+1T)
(ii) COMPUTER APPLICATIONS FOR ECONOMISTS-II (ECO-204-A) (ii)	5(4L+1T)
(iii) ECONOMICS OF ENVIRONMENT (ECO-204-A) (iii)	5(4L+1T)
GROUP B	
(i) MATHEMATICAL ECONOMICS-II (ECO-205-B) (i)	5(4L+1T)
(ii) ECONOMICS OF GROWTH AND DEVELOPMENT-II (ECO-205-B)(ii)	5(4L+1T)
(iii) ECONOMIC ADMINISTRATION WITH SPECIAL REFERENCE TO INDIA (ECO-205-B) (iii)	5(4L+1T)

SEMESTER-III

Core Papers	Credits
PAPER-I : EVOLUTION AND STRUCTURE OF INDIAN ECONMOY-I (ECO-301)	5(4L+1T)
PAPER-II : PUBLIC ECONOMICS-I (ECO-302)	5(4L+1T)
PAPER-III : PUNJAB ECONOMY (ECO-303)	5(4L+1T)
Elective Papers	
Any two papers selecting one paper from each group:	
GROUP A	
(i)THEORY OF STATISTICS-I (ECO-304-A) (i)	5(4L+1T)
(ii) INTERNATIONAL ECONOMICS-I (ECO-304-A) (ii)	5(4L+1T)
(iii)COMPARITIVE ECONOMIC SYSTEMS-I (ECO-304-A) (iii)	5(4L+1T)
GROUP B	
(i) ECONOMETRICS-I (ECO-305-B) (i)	5(4L+1T)
(ii) MATHEMATICAL ECONOMICS-I (ECO-305-B) (ii)	5(4L+1T)
(iii) MONEY AND BANKING-I (ECO-305-B) (iii)	5(4L+1T)
(iv) POLITICAL ECONOMY OF DEVELOPMENT-I (ECO-305-B) (iv)	5(4L+1T)

SEMESTER-IV

Core Paper	Credits
PAPER-I:EVOLUTION AND STRUCTURE OF INDIAN ECONMOY-II (ECO-401)	5(4L+1T)
PAPER-II: PUBLIC ECONOMICS-II (ECO-402)	5(4L+1T)
PAPER-III: RESEARCH METHODOLOGY (ECO-403)	5(4L+1T)
Elective Papers	
Any two papers selecting one paper from each group	
GROUP A	
(i) THEORY OF STATISTICS-II (ECO-404-A) (i)	5(4L+1T)
(ii) INTERNATIONAL ECONOMICS-II (ECO-404-A) (ii)	5(4L+1T)
(iii) COMPARITIVE ECONOMIC SYSTEMS-II (ECO-404-A) (iii)	5(4L+1T)
GROUP B	
(i) ECONOMETRICS-II (ECO-405-B) (i)	5(4L+1T)
(ii) MATHEMATICAL ECONOMICS-II (ECO-405-B) (ii)	5(4L+1T)
(iii)MONEY AND BANKING-II (ECO-405-B) (iii)	5(4L+1T)
(iv) POLITICAL ECONOMY OF DEVELOPMENT-II (ECO-405-B) (iv)	5(4L+1T)

COURSE STRUCTURE:

M.A. Economics is four semester full time programme. According to the Choice Based Credit System, this course is organized over two years, each year consisting two semesters: - the summer semester and winter semester. The course has 100 credits. The programme of study consists of 20 courses; each course is having 5 Credit. Each of these course carry 80 marks, of which 56 marks for external and 20 marks for internal assessment. 55 teaching hours are assigned to each course per semester

INTERNAL ASSESSMENT

The division for internal assessment is given as under

- 1) 50 percent weightage is given to mid semester test.
- 2) 25 percent weightage is given to attendance.
- 3) 12.5 percent weightage is given to assignment.
- 4) 12.5 percent weightage is given to class attitude.

ECO-101: MICRO ECONOMICS ANALYSIS -I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of the paper is to rigorously and comprehensively equip the students with theoretical concepts, Methodology and process of reasoning involved in analyzing economic behavior of individuals, firms and markets using, in general, a static and partial equilibrium framework.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Introduction and Basic Concepts: Basic economic problem-choice and scarcity; deductive and inductive methods of analysis; Equilibrium: existence, stability and uniqueness. Partial and general equilibrium, static and dynamic equilibrium. Role and significance of assumptions in economic analysis: Economic models.

Demand Analysis : Indifference curve analysis : price, income and substitution effects; Slutsky theorem, compensated demand curve; Revealed preference theorem; Revision of demand theory by Hicks; Recent development in demand analysis, Linear expenditure systems; Constant elasticity demand function; Dynamic versions of demand principle and Houthaker and Taylor's Dynamic Model.

UNIT-II

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 factors; Economies of Scale; Elasticity of substitution; Technical progress and production function; Cobb-Douglas, CES and translog production functions and their properties.

Theories of Costs and Firm's Equilibrium: Traditional and modern theories of costs; Derivation of cost functions from production functions. Marginal analysis as an approach to firm's equilibrium; short-run and long-run equilibrium of the firm and industry under perfect and imperfect competition. Price and output determination under perfect competition, under monopoly and under discriminating monopoly.

BASIC READING LIST

1. Kreps, David M.: Course in Micro-economic Theory, Princeton University Press Princeton, 1990.
2. Koutsoyiannis, A :Modern Micro-economics (2nd Edition), Macmill Press, London, 1979
3. Layard, P.R. and A.W.Walters :Micro-economics Theory, McGraw Hill, New York, 1978.
4. Sen, A. :Microeconomics: Theory & Applications, Oxford University Press, New Delhi, 1999.
5. Stigler, G. :Theory of Price (4th Edition), Prentice Hall of India, New Delhi, 1996.
6. Varian, H. :Micro-economic Analysis, W.W.Norton, New York, 2000.

ADDITIONAL READING LIST

1. Baumol, W.J: Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi 1982.
2. Hirshleifer, J.and: Price, Theory and Applications, Prentice Hall India, New A. Glazer Delhi 1997.
3. Green, H.A.G.: Consumer Theory: Penguin, Harmondsworth 1971.
4. Henderson, J.M& R. E. Quandt: Micro-economic Theory: A Mathematical Approach, McGraw Hill, New Delhi, 1980.
5. Da Costa, G.C : Production, Prices and Distribution. Tata McGraw Hill, New Delhi, 1980.

ECO-102: MACRO ECONOMIC ANALYSIS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Macroeconomics is the branch of economics that studies the behavior and performance of an economy as a whole. It establishes the functional relationship between the large aggregates. After the great depression of 1930s, the analysis of aggregates such as aggregate production, employment and price level has assumed great significance. And to understand the nature of overall economic problems such as recession, boom, depression, unemployment, inflation, instability, stagnation etc. a priori understanding of macroeconomic theoretical structure is considered essential. Macro economics now is not only a scientific method of analysis, but also a body of empirical economic knowledge.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective sections of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

National Income and Theories of Full Employment: Circular flow of income in two-three and four sector economy; Different forms of national income accounting-social accounting, input output, flow of funds accounting and balance of payments accounting, Classical and Keynesian theories of full employment.

Theories of Consumption and Investment: Keynes' psychological law of consumption and empirical evidence, income-consumption relationship-relative income hypothesis, life cycle hypothesis, permanent income hypothesis and consumption under uncertainty; Marginal efficiency of capital and investment, accelerator and investment behavior; neoclassical theory of investment.

UNIT-II

Money, Interest and Income: Neo-classical and Keynesian views on interest; IS-LM Model and extensions of IS-LM models with labour market and flexible prices; Post-Keynesian approaches to demand for money; Patinkin and the real balance effect; approaches of Baumol and Tobin; Friedman and modern quantity theory.

Theory of Inflation: Classical and monetarist approaches to inflation; structuralist theory of inflation; Philips curve analysis-short-run and long-run Philips curve; Samuelson and Solow the natural rate of unemployment hypothesis. Tobin's modified Philips curve. Theory of Business Cycles: Samuelson, Hicks and Goodwin's Model.

RECOMMENDED READINGS

1. Ackley, G. : Macro-economics: Theory and policy, Macmillan, New York, 1978.
2. Blackhouse, R.and A. Salansibjectives : Macro-Economics and the Real World (eds.) (Two volumes), OUP, London, 2000
3. Branson, W.A and Row, New : Macro-economic Theory and Policy (3rd Edition), Harper York, 1989.
4. Dornbusch, R.F. : Macro-economics (Seventh Stanley and Richard edition), McGraw-Hill Startz: Publishing Company Ltd., New Delhi.2000.
5. Hall, R, E and J.B : Macro-economics. W.W. Norton, New York, 1986.
6. Jha, R. and Willey E : Contemporary Macro-economics: Theory & Policy. Eastern New Delhi, 1991.
7. Shapiro, E. : Macro Economics Analysis, Golgotia Publications, New Delhi, 1996.
8. Surrey, M.J.C (ed.) : Macro Economics Themes. Oxford University Press, Oxford, 1976.

ECO-103: BASIC QUANTITATIVE METHODS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of this paper is to train the students in the use of mathematical and statistical tools in analyzing economic problems. The course content contains simple tools and techniques, thought necessary for data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C. The use of simple calculator is allowed.

UNIT-I

Matrices: Definition and types. Elementary operations. Rank of a matrix, Inverse of matrix .Concept of determinants and its properties. Solution of simultaneous equations by Cramer's rule and matrix inverse method. Application of simultaneous equations in Economics.

Concepts of Geometric mean, Harmonic mean and their applications, Measures of Dispersion, Co-efficient of variation, Lorenz curves and their uses.

UNIT-II

Correlation and Regression: Measures of correlation. Karl Pearson's coefficient of correlation. Spearman's rank correlation coefficient. Discrete and continuous variable cases. Linear regression, Least square regression lines. Partial and Multiple-correlation and regression analysis. Theory of Attributes: Elementary idea, association of attributes.

RECOMMENDED READING:

1. Alpha c. Chiang : Fundamental Methods of Mathematical Economics, Ch.4-12.
2. J.P. Lewis : An Introduction to Mathematics for Students of Economics. Ch. 7-24.
3. D.S. Huang : An Introduction to the Use of Mathematics.
4. F.E.Croxton & D.J.Cowden : Applied General Statistics
5. S.P. Gupta : Statistical Methods, S. Chand and Co; New Delhi.
6. Sancheti & Kapoor : Business Mathematics, S. Chand and Co., New Delhi.
7. Suranjan Saha : Business Mathematics and Statistics.
8. Joshi and Aggarwal : Mathematics for Studies of Economics.

SUPPLEMENTARY READINGS

1. P.H. Daus and : Algebra with Application to W.M.Wryburn.,Business Economics
2. P.G.Hoel : Elementary Statistics.
3. Ya-Lun Chow : Statistical Analysis (2nd ed.), pp, 78-114.

ECO- 104-A (i): ECONOMICS OF AGRICULTURE-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The focus of this course is to introduce students to issues associated with agricultural finance, agricultural markets, food security and international trade in agricultural commodities, and also to expose students to the recent developments in Indian agriculture. The objectives are to equip students to analyse and critically assess issues, policies and programmes in these areas.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Economics of agriculture: Meaning and scope.

Factors affecting agricultural development: technological, institutional and general. Interdependence between agriculture and industry.

Approaches to agricultural development: Lewis; Ranis-Fei; Schultz; Mellor and Boserup.

UNIT-II

Systems of farming: Peasant farming, state farming, collective farming and co-operative farming.

Land reforms: The theoretical issues; ownership vs. tenancy cultivation. Large farms vs. small farms, causes for persistence of small farms in developing economies. objectives of land reforms and role of land reforms in economic development.

Concept of production function: input-output; input-input and product-product relationship in farm production.

Risk and uncertainty in agriculture: Difference between risk and uncertainty, types of uncertainty in agriculture and measures for meeting risk and uncertainty in agriculture.

Instability of agriculture: Types and measures for reducing instability of agriculture.

RECOMMENDED READINGS

- 1) H.C.Taylor : Outlines of Agricultural Economics Macmillan, New York..
- 2) D.O. Black: Introduction of Economics of Agriculture, Macmillan, New York
- 3) Charan. D. Wadhva : Some problems of India's Economic Policy, Tata McGraw-Hill,
- 4) Francis R. Frankel : India's Green Revolution: Economic Gains and Political Costs, Oxford University Press , Bombay.
- 5) T. W. Schultz : Transforming Traditional Agriculture, Layall Book Depot, Ludhiana
- 6) J.W. Mello : The Economics of Agriculture Development, Vohra and Co., Mumbai
- 7) E. Boserup : The Conditions of Agricultural Growth, Alne Publishing Company
- 8) W. A. Lewis : Economic Development with Unlimited Supplies of Labour, The Manchester School of Economic and Social Studies.
- 9) R. Ranis& C. H. Fei : A Theory of Economic Development, American Economic Review.
- 10) R. N. Soni : Leading Issues in Agricultural Economics, Sohan Lal Nagin Chand and Co., Jalandhar.

ECO- 104-A (ii):COMPUTER APPLICATIONS FOR ECONOMISTS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES :

The objectives of the paper is to rigorously and comprehensively equip the students with theoretical and practical concepts of computer relating to economic analysis

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Computer Fundamentals : Basic Computer Organization. Evolution of computers; steps in problems solving on a computer and basic computer terminology: input and output devices, storage devices.

Introduction to Software : Computer software and its types. Planning a computer program. computer programming languages. Operating system-functions and types; Commonly used DOS Commands, Broad Structure of a Statistical/ econometric package.

UNIT-II

Algorithm and Interpretation of Result: Simple Karl Pearson's Correlation; Two Variable regression, Multivariate Regression. Analysis of Variance.

Multiple Regression Analysis: Meaning, objectives, Research design of multiple regression analysis, assumptions, method and algorithm of estimation and overall model fit; Interpretation of regression output, validation of results.

BASIC READINGS

1. V. Rajaraman : Fundamentals of Computers, P-III
2. P.K.Sinha : Computer Fundamentals, BPB.
3. E. Balaguruswamy : Computer Oriented Statistical and Numerical Methods. Macmillan.
4. Johan Methew : Numerical Methods, P-III Manuals of various packages.

ECO-104 A (iii): ECONOMICS OF POPULATION

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The main objectives of this paper is to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country. The study of Quantitative and Qualitative composition of population is also required to understand the dynamics of population growth. Migration and urbanization are the characteristics of structural changes taking place in the economy.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Theories of Population: Malthus, Optimum, Marxian, Leibenstein, Becker, Demographic Transition Theory and Optimum Population Theory.

Population and Economic Development: Utilization of Resources (Boserup Thesis) Technology and Production of Food, Population and Environment.

Population Structure and Characteristics: Impact of Population Growth on the Age and Gender Structure. Aging of Population.

Fertility: Concepts of Fertility Transition. Measurement of Fertility and Fertility Differentials in India.

Mortality: Components and Measurement. Mortality Differentials in India.

UNIT – II

Migration: Concepts, Types, Measurement, Migration Selectivity, Causes and Consequences (Economic and Demographic) of Migration.

Migration in India: Causes and Trends, Migration Differentials in India: Rural-Urban, MaleFemale.

Urbanization: Concepts, Determinants and Consequences. Trends of Urbanization in India. Growth and Structure of Indian Population.

Literacy: Literacy Transition in India, Pattern of Literacy and Literacy Differentials in India.

Economic Composition of Indian Population: Work Force Participation and Occupational Structure.

Population in Estimation of India: Census, Sampling and Vital Registration Methods. Population Policy in India since Independence.

ESSENTIAL READINGS

1. Aggarwal, ASN (1972) : India's Population Problem. Tata McGraw Hills Co. Bombay.
2. Becker, G (1960) : An Economic Analysis of Fertility in Demographic Change and Economic Change in Developed Countries (edited by National Bureau of Economic Research), Princeton University Press, Princeton.
3. Boserup, E (1981) : Population and Technological Change. University of Chicago Press, Chicago.
4. Bouge, D J (1971) : Principles of Demography, John Wiley, New York.
5. Bose, Ashish (1978) : India's Urbanization. Tata McGraw Hills Publishing Co. Ltd., New Delhi.
6. Coale, A & Hoover, E (1958) : Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects, Princeton University Press, Princeton.
7. Chenery, H & T N (1989): Handbook of Development Economics, Vol. 1 Srinivasan & 2, (eds.) Elsevier, Amsterdam.
8. Chandna, R C (2000) : A Geography of Population: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
9. Cox, Peter R (1979) : Demography, Vikas Publishing House, New Delhi.

ECO- 105-B (i): MATHEMATICAL ECONOMICS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

This course is designed to equip students to understand the economic concepts and theories by using mathematical tools and techniques to refine the verbal logic. Modern algebraic tools allow convenient handling of simultaneous equations in the context of linear programming, game theory and input-output analysis. This course has been accordingly designed to include various mathematical techniques/methods/models related to the different parts of economic theory like consumer theory, theory of production, pricing, trade cycles, growth models etc.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Theory of Consumer Behaviour: Utility function-Behavioral postulates, nature and existence, demand function, compensated demand function, ordinal and cardinal utility maximization, Slutsky equation for a few and more commodities, traditional and modern derivation and its interpretation, elasticities, linear expenditure function and indirect utility function, Roy's identity, choice and risk, Von- Neuman utility function, Intertemporal utility maximization, revealed preference theory- the weak and strong order axioms, integrability problem, the composite commodity theorem.

Production Analysis: Homogenous and homothetic production functions, elasticity of substitution, Cobb- Douglas and CES production functions, Output and profit maximization, cost minimization traditional and modern approach, duality in production.

UNIT-II

Market Equilibrium: Price and output determination under perfect competition, monopoly and price discrimination, oligopoly and duopoly, Cournot-Nash equilibrium. Collusion and Stackleberg model.

Commodity market and factor market equilibrium, existence and uniqueness of equilibrium, stability of equilibrium, dynamic equilibrium with lagged adjustment, the cobweb model. Multi-market equilibrium. Walras's law and the existence of general equilibrium (without proof)

BOOKS RECOMMENDED

- 1) Henderson, J.M & Quandt, R.B. (1980) : Micro Economic Theory: A Mathematical Approach 3rd ed.).
- 2) Allen, R.G.D. (1974): Mathematical Economics. Silberberg, E. (1978): The Structure of Economics -A Mathematical Analysis.
- 3) Lancaster, V. (1965) : Mathematical Economics
- 4) Taka- Yama, A . (1974): Mathematical Economics.
- 5) Kogiku, K.C. (1971) : Micro Economic Models.
- 6) Chiang, A.C. (1984) : Fundamental Methods of Mathematical Economics (3rd ed)
- 7) Dorfman, R., Samuelson. P. and Sallow, R. (1968): Linear Programming and Economic Analysis.
- 8) Quirk, J. and Saposnik, R. (1968): Introduction to General Equilibrium Theory and Welfare Economics.
- 9) Intriligator, Michel d. (1971) : Mathematical Optimization and Economic Theory. Green, H.A.J (1971) : Consumer Theory
- 10) Varian, H.R. (1978) : Mathematical Analysis Nehar, Phillips, A. (1971): Economic: Microeconomic Models.
- 11) Mahesh Chand & Anand V.K. (1981) : Economic Theory –A Mathematical Approach.

ECO-105-B (ii): ECONOMICS OF GROWTH AND DEVELOPMENT-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The main objectives of this course is to look at the process of growth and development in terms of its characteristics such as structural transformation, pattern of distribution of income, its inter-sectoral interface. In addition, it also aims to take up issues pertaining to the emerging global scenario and the debate concerning the planning vs. marketism which is so vital for development theorists and practitioners.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Growth, Development and Under-development: Measurement of development; per capita income, purchasing power parity income, PQLI, HDI; Problems of international comparison. Economic development and structural change: theories of Kuznets and Chenry.

Economic Development and Institutions: Market and state. Theories of institutional change and economic development: Schumpeter, North. Dependency theory of development: Paul Baran, Andre Gunder Frank and Samir Amin.

UNIT-II

Resources for Development: Domestic and external. Population and development: theory of demographic transition. Theory of big push: Rosenstein-Rodin; Murphy, Shleifer and Vishny.

Theory of Growth: Harold -Domar, Kaldor and Mirrlees. Neoclassical theory of growth: Meade, Solow, Uzawa's Two Sector Model.

BOOKS RECOMMENDED

1. Aggarwal, A. N. and S. P. Singh (eds.) (1977) : The Economics of Underdevelopment, Third Impression, Oxford University Press, New Delhi.
2. Arrow, Kenneth (1962) : The Economic Implications of Learning by Doing, *Review of Economic Studies*, June, pp. 155-173.
3. Chenery, Hollis and Moises Syrquin (1975): Patterns of Development : 1950-70, Oxford University Press.
4. Eicher, Carl and Lawrence Witt (1970) : Agriculture in Economic Development, Vora & Co., Publishers Pvt. Limited, Bombay.
5. Kuznets, S. (1966) : Modern Economic Growth, Rate Structure and Spread, Vakils, Feffer and Simons Private Limited, Bombay.
6. Meier, Gerald M. and James E. Rauch (2000) : Leading Issues in Economic Development, Oxford University Press, New York.
7. Ranis, Gustav and John C. H. Fei (1961): A Theory of Economic Development, *American Economic Review*, September pp. 533-65.
8. Ray, Debraj (2004) : Development Economics, Seventh Impression, Oxford University Press, Delhi.
9. Robert Lucas (1988) : On the Mechanics of Economic Development, *Journal of Monetary Economics*, July.
10. Romer, Paul M. (1986) : Increasing Returns and Long Run Growth, *Journal of Political Economy*, October.

ECO-105 B (iii): ECONOMICS OF INFRASTRUCTURE

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Investment in infrastructure is part of the capital accumulation required for economic development and may have an impact on socioeconomic measures of welfare. Infrastructure yield indirect benefits through the supply chain, land values, small business growth, consumer sales and social benefits of community development and access to opportunity.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

Infrastructure and Economic development – Infrastructure as a public good; Social and physical infrastructure; Special characteristics of public utilities. The peak-load, Off-peak load problem, Dual principle controversy.

The structure of transport costs and location of economic activities. Demand for transport models of freight and passenger demand. Cost functions in the transport sector. Principles of pricing. Special problems of individual modes of transport; Intermodel condition in the Indian situation. Rate-making in telephone utilities.

Primacy of energy in the process of economic development. Factors determining demand for energy; Effect of energy shortages. Energy conservation, Renewable and non-conventional sources of energy, Energy modeling, Energy policy in the Indian context. Bulk supply and pricing of electricity. National power grid. Financing water utilities. Urban and rural water supply.

UNIT-II

Organization and financing of supply of social services. Private vs. public sector financing; Recent debate about the fixation of prices of social services. Development of social services in the successive Indian plans.

Education and economic growth. Approaches to education planning. Social demand. Rate of return and manpower balance approaches. Structure of higher education and problems of its financing in India; Human resources and human capital development. The issues in education policy.

Determinants of health – poverty, malnutrition, illiteracy and lack of information; Economic dimensions of health care – Demand and supply of health care; Financing of health care and resource constraints; Inequalities in health – class and gender perspectives; Institutional issues in health care delivery.

SUGGESTED READINGS

- 1) Berman, P. and M.E. Khan (1993), *Paying for India's Health Care*, Sage Publications, New Delhi.
- 2) Centre for Monitoring Indian Economy (1996), *India : Energy Sector*, CMIE, Mumbai.
- 3) Eckstein, O. (1958), *Water Resource Development*, Harvard University Press, Cambridge.
- 4) Fariss, M.T. and R. Sampson (1975), *Public Utilities*, Houghton Mifflin, Boston.
- 5) Goyal, S.K. (Ed.) (1985), *Public Enterprises*, Indian Institute of Public Administration, New Delhi
- 6) Jha, R., M.N. Murty and S. Paul (1990), *On Fixing Prices for Postal Services in India*, National Institute of Public Finance and Policy, New Delhi.
- 7) Indian Council of Social Sciences Research (ICSSR) (1976), *Economics of Infrastructure*, Vol. VI, New Delhi.
- 8) McMohan, W.W. (1999), *Education and Development : Measuring the Social Benefits*, Oxford University Press, Oxford.
- 9) National Council of Applied Economic Research (NCAER) (1996), *India Infrastructure Report : Policy Implications for Growth and Welfare*, NCAER, New Delhi.
- 10) Norton, H.S. (1971), *Modern Transport Economics*, C.E. Merrill, London.
- 11) Panchamukhi, P.R. (1980), *Economics of Health : A Trend Report in ICSSR, A Survey of Research in Economics*, Vol. VI, Infrastructure, Allied, Delhi.

ECO-201: MICRO ECONOMIC ANALYSIS -II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES :

The objectives of the paper is to rigorously and comprehensively equip the students with theoretical concepts, methodology and process of reasoning involved in analyzing economic behavior of individuals, firms and markets using, in general, a static and partial equilibrium framework.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Price and output Determination: Monopolistic competition-General and Chambering Approach; Equilibrium of the firm and group with product differentiation and selling costs, excess capacity under monopolistic competition, on-collusive oligopoly-Cornet, Bertrand, Edge worth, Chamberlin and Stackable Models; Kinked demand curve model and price rigidity. Collusive oligopoly-cartels and price leadership models.

Alternative Theories of the Firm: The marginality controversy and critical analysis of marginal analysis, Hall and Hitch Report and average cost pricing principles. Alternative theories of the firm-Baume's sales revenue maximization model; Marries model of managerial enterprise; willianson's model of managerial discretion; Theories of limit pricing-Bain's Theory, Sylos-Labini's Model.

UNIT-II

Distribution: Neo-Classical approach-marginal productivity theory; product Exhaustion theorem; modern version of marginal productivity theory, Factor pricing under imperfect product and factor markets-determination of wages. Macro theories of distribution-Riparian, Marxian, Kellick and Kaldor's.

Welfare Economics: Ionian welfare economics; Pareto's unanimity rule and optimal conditions; value judgment; Caldor-Hicks compensation Principle, Social Welfare function; Bergson-Samuelson; Raul's Theory of second best-Arrow's impossibility theorem.

BOOKS RECOMMENDED:

1. Mankiw Gregory N. (1998) : Principles of Economics, 3rd Edition, Thomson, 3rd Indian Reprint (2007).
2. Pindyck, Robert S., Rubinfeld : Micro-Economics, Prentice Hall of India, New Delhi. Daniel, L. and Gupta, P.L. (2006)
3. Maddala, G.S. and Miler Ellen : Micro-Economic Theory and Applications, Tata McGraw Hill.

Further Readings :

1. Boumol, William J. and Blinder : Macroeconomics: Principles and Policy, 9th Edition, Alan S. (2007) Thomson, 1st Indian Edition.
2. Salvatore Dominick (2003) : Microeconomics : Theory and Applications, 4th Edition, Oxford University Press.
3. Koutsoyiannis, A. (1977) : Modern Micro Economics, McMillan Press, London.
4. Ryan, W.J.L. and Pearce, D.W. : Price Theory, McMillan India, New Delhi. (1977)
5. Ferguson, C.E. and Gould, J.P. : Micro Economic Theory (6th Edition), All India Book Seller. (1989)
6. Briet, W. and Hochman, H.M. : Readings in Micro Economics, Dryden Press. (Ed.) (1977)

ECO-202: MACRO ECONOMIC ANALYSIS-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Macro economics analysis establishes the functional relationship between the large aggregates. After the great depression of 1930's analysis of aggregates such as aggregate production employment and price level has assumed great significance and to understand the nature of overall economy problems such as the recession, boom, depression, unemployment, inflation, instability, stagnation etc. a priori understanding of macroeconomic theoretical structure is considered essential. Macro economics now is not only scientific methods of analysis, but also a body of empirical economic knowledge.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective sections of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Micro-foundations of Macro-economics: Formation of expectations; Philips curve and Lucas Island model, policy ineffective theorem; Caplin-Spulber Model; Coordination failure models.

Marco-economics Policy for Stabilization and Growth: Theory of economic policy, policy objectives and conflicts; fixed vs. target approach, monetary policy, fiscal policy and crowding out, policy mix.

UNIT-II

Open Economy Macro-economics: Balance of payments and exchange rate, capital mobility, Mundell-Fleming model-perfect capital mobility under fixed and flexible exchange rates; assets markets, expectations and exchange rates, monetary approach to balance of payments.

Inflation and Monetary Policy: Inflation, money growth and interest rates; dynamic inconsistency of low-inflation monetary policy, Seignorage and inflation. Budget deficit and fiscal policy, Ricardian equilibrium debate, Tax smoothing under certainty and uncertainty.

BOOKS RECOMMENDED:

1. Bo-Sodersten and G. Reed :International Economics, Macmillan Press London, 1994.
2. Makin, A.J.: International Macro-economics, Prentice Hall, London, 2002.
3. Hall, R.E and J.B Taylor: Macro-economics, W.W. Norton, New Your 1986.
- 5.Romer David: Advanced Macro-economics, McGraw-Hill, International Edition, New York, 2001.
- 6.Turnovsky, Steophen,J.: Methods of Macro-economic Dynamics, Prentice Hal of India Pvt. Ltd., New Delhi, 1997
- 7.David K.H. Begg: The Rational Expectations Revolution in Macro- economics: Theories & Evidence, Heritage Publishers, New Delhi, 1982.
- 8.Drazen , Allan :Political Economy in Macro- economics, Orient Longman, New Delhi, 2004
9. Levacic, Rosalind& Alexander, Redman: Macro-economics: An introduction to Keynesian-Neoclassical Controversies, Macmillan India, 2003.
10. Sachs, Jeffery D.& Felip Larrain :Macro-economics in the Global Economy, Prentice Hall, New Jersey, 1993.

ECO-203: BASIC QUANTITATIVE METHODS-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of this paper is to train the students in the use of mathematical and statistical tools in analyzing economic problems. The course content contains simple tools and techniques, thought necessary for data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C. The use of simple calculator is allowed.

UNIT-I

Calculus: Differentiation of function of one variable excluding logarithmic and exponential functions. Successive and partial derivatives. Euler's theorem.

Applications of Derivatives in Economics: Elasticity of demand, Average and marginal functions. Problems of optimization (max. /min.) of one, two variables and constraint functions. Application in discriminating monopoly.

Interpolation: Newton's formula for leading differences, Lagrange's formula and Binomial expansion method.

UNIT-II

Arithmetic and Geometric Progression Elementary idea and their economic applications. Linear Programming: Problem formulation and solution of Linear Programming by graphical method.

Index numbers: Problems and methods of construction index numbers. Chain and fixed based index number. Reversibility tests, cost of living index numbers.

Time Series Analysis : Components of time series, Measurement of trend. Calculation of simple and compound-growth rates.

RECOMMENDED READINGS

- 1.Allen, R. G. D (1983). : Mathematical Analysis for Economists, Macmillan.
2. Chiang, A. C. and K. Wainwright.(2005) : Fundamental Methods of Mathematical Economics. McGraw Hill, 4th edition, McGraw Hill, New York.
- 3.Weber J. E (1982) : *Mathematical Analysis* (Business and Economic Applications) 4th Edition, Harper and Row, New York.
- 4.Yamane, Taro (1972) : Fundamental Methods for Mathematical Economics, Prentice-Hall, New Delhi,.
- 5.Gupta S. P (2014) : Statistical Methods, Sultan Chand & Sons, New Delhi.
- 6.Spiegel, M. R. and Stephens L.J. (2000) : Theory and Problems of Statistics 3rd Edition, Schaum's Series, Tata McGraw Hills, New Delhi,

Further Readings:

- 1.Aggarwal, S.C. and R. K. Rana. (2007) : Basic Mathematics for Economists, V.K. (India) Enterprises, Delhi.
- 2.Kandoi, Balwant (2012) : Mathematics for Business and Economics with Applications, Vol. 1&II,Himalaya, Mumbai.
- 3.Arora, P. N., Sumeet Arora, S. Arora. : Comprehensive Statistical Methods, S. Chand & and(2007)Company Ltd., New Delhi.
- 4.Freund, J. E. (1992) : Mathematical Statistics, Prentice Hall India 5th Edition, New Delhi.
- 5.Gupta, S. C (2012) : Fundamentals of Statistics.
- 6.Aggarwal, S. C. and R. K. Rana. : *Basic Statistics for Economists* (Latest Edition), (2007) V K (India) Enterprises, Delhi.

ECO-204-A (i): ECONOMICS OF AGRICULTURE -II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES :

The focus of this course is to introduce students to issues associated with agricultural finance, agricultural markets, food security and international trade in agricultural commodities, and also to expose students to the recent developments in Indian agriculture. The objectives is to equip students to analyse and critically assess issues, policies and programmes in these areas.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Farm-size and productivity relationship in Indian agriculture: Agricultural Price Policy in India-Instruments and evaluation.

Land reforms in India: abolition of intermediaries, tenancy reforms, ceiling on land holdings, consolidation of holdings and co-operative farming.

Agricultural Marketing and Pricing: Peculiarities of agricultural demand and supply, price-spread and marketing margins and development of agricultural marketing in India.

Marketable surplus: meaning, role of marketable surplus in economic development and factors affecting marketable surplus. Agricultural taxation in India.

UNIT-II

New agricultural strategy and green revolution: problems and prospectus, Problems of agricultural laborers and small farmers. **Rural indebtedness.**

Rural Credit: characteristics and sources-institutional and non-institutional.

Rural employment: magnitude& special employment generating schemes.

Recent trends in Agricultural Growth in India: growth of output and productivity, causes of low agricultural productivity in India. WTO and agriculture in India.

RECOMMENDED READINGS

1. Besley, Timothy : “ How Do Market Failures Justify Interventions in Rural Credit Markets?” The World Bank Research Observer, Vol. 9, No.1 (1994)
2. Bruce L. Gardener and Gordon C. Rausser (Eds.) : Handbook of Agricultural Economics Vol.1 A Agricultural Production, Amersterdam, Elsevier Science B.V., 2002.
3. Bruce L. Gardener and Gordon C. Rausser (Eds.) : Handbook of Agricultural Economics Vol.1 B Marketing, Distribution and Consumption, Amersterdam, Elsevier Science B.V., 2002.
4. Bruce L. Gardener and Gordon C. Rausser (Eds.) : Handbook of Agricultural Economics Vol.2 A Agricultural and Its External Linkages, Amersterdam, Elsevier Science B.V., 2002.
5. Bruce L. Gardener and Gordon C. Rausser (Eds.) : Handbook of Agricultural Economics Vol. 2 B Agricultural and Policy, Amersterdam, Elsevier Science B.V., 2002
6. Ghatak Subrata and Ken Ingersent : Agriculture and Economic Development, Harvester Press Ltd., London., 1984
7. Government of India : Five Year Plan, (Latest), Planning Commission, Government of India, New Delhi.
8. Government of India : National Agricultural Policy, Ministry of Agriculture, Government of India, New Delhi. (Latest).
9. Hoff Karla and Joseph E. Stiglitz : “ Introduction : Imperfect Information and Rural Credit Markets – Puzzles and Policy Perspective” The World Bank Economic Review, Vol.4, No.3 (1990)
10. World Bank : Rejuvenating Indian Agriculture, Washington, World Bank,2006

ECO-204-A (ii): COMPUTER APPLICATIONS FOR ECONOMISTS - II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of the paper is to rigorously and comprehensively equip the students with theoretical and practical concepts of computer relating to economic analysis The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Factor Analysis: Meaning of factor analysis, objectives and research design; assumptions; Procedure of deriving factor and assessing overall fit, interpretation of factor, validation of factors.

Multi Dimensional Scaling: Working of MDS; objectives, Research design of MDS; Assumptions, Procedure of Deriving MDS solution and assessing overall fit; Interpretations of MDS results, validation of MDS solution and assessing overall fit; Interpretations of MDS results, validation of MDS results. The concept of correspondence analysis.

UNIT-II

Multivariate Analysis of Variance: Meaning, assumptions, Procedure of estimation of MANOVA model, interpretation of MANOVA results, Validation of results; the concept of logistic regression.

Multiple Discriminate Analysis: Meaning, objectives, Research Design for discriminate analysis, assumptions, interpretation of results, validations of results.

RECOMMENDED READINGS

1. M.G.Kendal: Multivariate Analysis, PHI
2. Fruchter: Introduction to Factor Analysis, East-West Press.
3. E Balaguruswany: Computer Oriented Statistical and Numerical Methods, Macmillan.
4. Johan Methew: Numerical Methods, PHI.
5. Garret and Wood worth: Statistics in Psychology and Education DEC.

ECO-204 A (iii): ECONOMICS OF ENVIRONMENT

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Environmental economics is a distinct branch of economics that acknowledges the value of both the environment and economic activity and makes choices based on those values. The goal is to balance the economic activity and the environmental impacts by taking into account all the costs and benefits.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Environment-economy-population linkage, environment as a public good, common property resources. Environmental Economics and Ecological Economics Environmental benefits – use value and non-use values, methods of measurement, costs of environmental protection, environment and development trade-off, sustainable development, neo-classical and ecological views, integrated environmental and economic accounting.

UNIT-II

Environmental policies, Pigouvian taxes and subsidies, marketable pollution permits, Coase theorem, environmental regulations – command and control, incentive based, promoting clean technology, energy policy. Global issues – poverty, population and environment, global agreements, trade and environment under WTO regime.

RECOMMENDED READINGS

1. Kolstad, C.D. (1999), Environmental Economics, Oxford, New Delhi.
2. Goodstein, E.S. (2002), Economics and the Environment, John Wiley, New York.
3. Bhattacharya, R.N. (ed) (2001), Environmental Economics : An Indian Perspective, Oxford, New Delhi.
4. Sengupta, R.P. (2001), Ecology and Economics : An Approach to Sustainable Development, Oxford, New Delhi.
5. Kadekodi, G.K. (2004), Environmental Economics in Practice, Oxford, New Delhi.
6. Bogue, D.J. (1971), Principles of Demography, John Wiley, New York.
7. Novell, C. (1988), Methods and Models in Demography, Bellhaven Press, London.
8. Srinivasan, K. (1998), Basic Demographic Techniques and Applications, Sage, New Delhi.
9. Simon, J.L. (1992), Population and Development in Poor Countries, Princeton University Press.
10. Bose, A (1996), India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi.
Agarwala S.N. (1972), India's Population Problem, Tata McGraw-Hill, Bombay.
11. Chaubey, P.K. (2000), Population Policy in India, Kanisha Publications, New Delhi.

ECO-205 B (i): MATHEMATICAL ECONOMICS-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

This course is designed to equip students to understand the economic concepts and theories by using mathematical tools and techniques to refine the verbal logic. The use of calculus has permitted formulation of economic problems in multivariable mode and yield valuable insight about optimizing human behavior. Modern algebraic tools allow convenient handling of simultaneous equations in the context of linear programming, game theory and input-output analysis. Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Macro Economics: The Classical model and the Keynesian model, Hicks-Hansen version of the Keynesian model, the fiscal policy and the balanced budget theorem, liquidity trap and the efficiency of monetary policy, comparative static's in the classical and Keynesian models, stability analysis and the correspondence principle.

Growth models: Harrod-Domar growth model and its stability, the Solow model, basic neo-classical growth models, the golden. Age problem, technical progress and stability of neo-classical models. Trade Cycles: General concepts, Hicks-Samuelson multiplier-accelerator interaction model.

UNIT-II

Linear Programming: Activity analysis interpretation of a linear program, the simplex method and the revised simplex, the dual and its economic interpretation, complimentary slackness conditions, duality

theorems and application of linear programming to the theory of firm. Introduction to non-linear programming, Kuhn-Tucker conditions.

Input-Output analysis: Static open and closed models, viability conditions, activity analysis, interpretation of input-output model, aggregation problem, substitution theorem, cost and price determination.

Game Theory: Two person zero sum non co-operant game, pure and mixed strategies, loner programming formulation of a matrix, methods of solving a game problem, fair game and conversion of linear programming problem, fair game and conversion of linear programming problem into game and conversion of linear programming problem into game problem.

RECOMMENDED READINGS

1. Henderson, J.M & Quandt, R.B. (1980) : Micro Economic Theory:A Mathematical Approach (3rd ed.).
2. Allen, R.G.D. (1974): Mathematical Economics. Silberberg, E. (1978) : The Structure of Economics - A Mathematical Analysis.
3. Lancaster, V. (1965) : Mathematical Economics.
4. Taka- Yama, A . (1974): Mathematical Economics.
5. Kogiku, K.C. (1971) : Micro Economic Models.
6. Chiang, A.C. (1984) : Fundamental Methods of Mathematical Economics (3rd ed)
7. Dorfman, R., Samuelson. P. and Sallow, R. (1968): Linear Programming and Economic (Analysis.
8. Quirk, J. and Saposnik, R. (1968) : Introduction to General Equilibrium Theory and Welfare Economics.
9. Intriligator, Michel d. (1971) : Mathematical Optimization and Economic Theory.
10. Green, H.A.J (1971) : Consumer Theory.
11. Varian, H.R. (1978) : Mathematical Analysis.
12. Nehar, Phillips, A. (1971) : Economic: Microeconomic Models.
13. Mahesh Chand & Anand V.K. (1981) : Economic Theory –A Mathematical Approach.

ECO-205 B (ii): ECONOMICS OF GROWTH AND DEVELOPMENT-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The main objectives of this course is to look at the process of growth and development in terms of its characteristics such as structural transformation, pattern of distribution of income, its inter-sectoral interface. In addition, it also aims to take up issues pertaining to the emerging global scenario and the debate concerning the planning vs. marketism which is so vital for development theorists and practitioners.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Endogenous Models of Growth: Lucas and Romer. Theory of Convergence and divergence: Barro and Sala-i-Martin; Development and migration: Lewis and Todaro.

Resource Allocation: Cost-benefit analysis. Shadow prices. investment criteria . Choice of appropriate technology and employment. Project evaluation.

UNIT-II

Human Capital: Education and R& D, health and nutrition: theory, investment, returns and policy issues. Growth, poverty and inequality: theory, measurement, empirical evidence and interconnections.

Environment and Development: Sustainable development, conservation and use of exhaustible resources: water and minerals. Markets in agriculture: land, labour and credit and their functioning, inter-linkage and policy.

RECOMMENDED READINGS

1. Aggarwal, A. N. and S. P. Singh (eds.) (1977): *The Economics of Underdevelopment*, Third Impression, Oxford University Press, New Delhi.
2. Arrow, Kenneth (1962) : *The Economic Implications of Learning by Doing*, *Review of Economic Studies*, June, pp. 155-173.
3. Chenery, Hollis and Moises Syrquin (1975): *Patterns of Development : 1950-70*, Oxford University Press.
4. Eicher, Carl and Lawrence Witt (1970): *Agriculture in Economic Development*, Vora & Co., Publishers Pvt. Limited, Bombay.
5. Kuznets, S. (1966): *Modern Economic Growth, Rate Structure and Spread*, Vakils, Feffer and Simons Private Limited, Bombay.
6. Meier, Gerald M. and James E. Rauch (2000): *Leading Issues in Economic Development*, Oxford University Press, New York.
7. Ranis, Gustav and John C.H. Fei (1961): *A Theory of Economic Development*, *American Economic Review*, September pp. 533-65.
8. Ray, Debraj (2004): *Development Economics*, Seventh Impression, Oxford University Press, Delhi.
9. Robert Lucas (1988): *On the Mechanics of Economic Development*, *Journal of Monetary Economics*, July.
10. Romer, Paul M. (1986): *Increasing Returns and Long Run Growth*, *Journal of Political Economy*, October.

ECO-205 B (iii): ECONOMIC ADMINISTRATION WITH SPECIAL REFERENCE TO INDIA

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

This paper aims to familiarize students with economic administration economic models of the governance, industrial policies and economic legislations. In addition, the students would be taught about the promotional role of state by referring to various promotional and infrastructural public sector undertakings.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C

UNIT-I

Economic Administration: Nature and Scope

Market Failure: The Rationale for Government Intervention- Traditional and New Right Approach

Misuses of the Theory of Market Failure. State versus Market Debate

Economic Models of Government

Monetary Policy: Concept, objectives, Instruments and Administration

Fiscal Policy: Concept, objectives, Instruments and administration

UNIT-II

Economic Legislation: Rationale, Philosophy and Overview

Industrial (Development and Regulation) Act, 1951

Foreign Exchange Management Act, 1999, Competition Act 2002

Promotional Role of State:- Industrial Finance Corporation of India (IFCI): Organisational Structure, objectives and Role;- Industrial Development Bank of India (IDBI): Organisational Structure, objectives and Role;- Small Industries Development Bank of India (SIDBI): Organisational Structure, objectives and Role.

RECOMMENDED READINGS

1. United Nations : Organisation, Management and Supervision of Public Enterprises in Developing Countries (New York: V.N., 1974)
2. L.K. Jha: Economic Administration in India Retrospect and Prospects (New Delhi: IIPA, 1986)
3. S.C. Kuchhal : Industrial Economy of India (Allahabad:Chaitanya Publishing House, 1989)
4. S.S. Marathey :Regulation and Development (New Delhi:Sage Publishers, 1986.
5. V.V. Ramanadham The Working of Public Sector (Bombay:Allied Publishers, 1965)
6. World Bank ,Bureaucrats in Business – The Economics and Politics of Government Ownership (New York: World Bank, 1995)
7. Stephen J. Beiley Public Sector Economics: Theory, Policy and Practice (London: Palgrave, 2nd ed., 2001)
8. Govt. of India, Five Year Plan Documents
9. Taxmann’s, Economic Laws (New Delhi: Taxmann, Publications (P) Ltd., 2009)
10. S.K. Mishra and V.K. Puri :Indian Economy – Its Development Experience Himalaya Publishing House, New Delhi, 2012)
11. Govt. of India, Economic Survey 2016-17.
12. Richard Whish & David Bailey, Competition Law (Eighth Edition: Oxford University Press, Oxford)
13. Gaurav Datt and Ashwani Mahajan: Indian Economy (S. Chand & Company Pvt. Ltd. New Delhi, 2013)
14. Robert Baldwin, M. Cave and M. Lodge Understanding Regulation: Theory Strategy and Practice (Second Edition: Oxford university Press, Oxford)

ECO-301: EVOLUTION AND STRUCTURE OF INDIAN ECONOMY-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objective of this paper is to acquaint the students with the performance of different sectors of the Indian economy and the policy framework governing them. This will provide them an insight into the past, present and future functioning of the Indian economy and strengthen their analytical capability.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Economic Development during 1857-1947: Evolution of land tenure system. Commercialisation of agriculture. Trend towards market economy. Demographic development. Rural indebtedness. Growth of modern industrial and commercial enterprises and the British policy. Role of foreign capital. Economic consequences of British Rule.

Need for planned economic development: Basic strategy for development of Indian economy under planning. Changes in the strategy of Indian planning. Role of public and private sectors in India.

UNIT-II

Agrarian reforms: New Agricultural strategy and green revolution. Production structure of Indian agriculture. Terms of trade between agriculture and industry. Development of irrigation. Organisation of rural credit.

Nature and extent of industrialization in India: Existing production structure of industry. Industrial policy 1947, 1956 and 1991. Growth of large industrial houses. Small scale industries and their problems.

RECOMMENDED READINGS

1. Acharya Shankar and Rakesh Mohan (Eds.) :(2011) India's Economic Performance and Challenges:Essay's in Honour of Montek S Ahluwalia, New Delhi, Oxford University Press.
2. Brahmananda, P R and Panchmukhi, V R (eds.) : (1987)The Development Process of Indian Economy,Himalya Publishing House, Bombay.
3. Jalan , B (1992) : The Indian Economy - Problems and Prospects, Viking, New Delhi
4. Kapila, Uma (2012-13) : Indian Economy Since Independence, Academic Foundation, New Delhi.
5. Krueger, A.O. (Ed) (2002) : Economic Policy Reforms and the Indian Economy, Oxford University Press, New Delhi
6. Lucas, E B & Papanek, G F (Eds) (1988) : The Indian Economy- Recent Development and Future Prospects, Oxford University Press, New Delhi

ECO-302: PUBLIC ECONOMICS -I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Public Economics is the study of Government policy through the lens of economic efficiency and equity. This course is a brief introduction into public Economics theory. It covers main economic functions of government, including taxation, public expenditure, regulation and social service delivery, and touches upon economic, social, political and administrative aspects of government's involved in economy.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective sections of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Meaning and scope of Public Economics: Changing perspective about the role of the government. Role of Government in a mixed economy; public and private sector: cooperation or competition; Private goods, public goods, and merit goods; Market failure and imperfections: decreasing costs, externalities of public goods

Public Choice & Rationale of Public Policy: Private and public mechanism for allocating resources; Problems of preference revelation and aggregation of preferences; Voting systems; Arrow impossibility theorem. Achieving Social goals: poverty alleviation; provision of infrastructural facilities, removing distributional inequalities and regional imbalances. Sources of Public Revenue.

UNIT-II

Taxation: Impact, shifting and Incidence of Taxation, Modern theory of Incidence of Taxation. Taxable capacity: Meaning and determinants, Theories of taxation: Benefit and ability to pay approaches. Effects of taxation: trade-off between equity and efficiency.

Public Expenditure: Rationale for the growth of public expenditure, Wagner's law of increasing state activities; Wiseman-Peacock hypothesis; Pure theory of public expenditure. Incidence and Effects of Public Expenditure. Planning and Programme budgeting and Zero base budgeting.

RECOMMENDED READINGS

1. Bachanan, J.M. (1968), The Demand and Supply of Public Goods. Rand Mc Nally, Chicago.
2. Mueller, D.C (1979), Public Choice, Cambridge University Press, Cambridge.
3. Stiglitz, J.E.(1986), Economics of Public Sector, Norton, New York, .
4. Atkinson, A.B. and J.E. Sigllizx (1980), Lectures on Public Economics Tata Mc Graw Hill, New York.
5. Auerbach, A.J. and M. Feldstern (eds.) Handbook of Public Economics. Vol. 1, North Holland, Amsterdam.
6. Buchanan, J.M. (1970), The Public Finances, Richard D. Irwin Homewood.
7. Goode, R. (1986), Government Finance in Developing Countries, Tata Mc Graw Hill, New Delhi.
8. Hughton, J.M.(1970) The Public Finance: Selected Readings, Penguin, harmondsworth,
9. Jha, R. (1988), Modern Public Economics, Routledge, London
10. Menutt, P.(1996), The Economics of Public Choice, Edward Elgar, U.K.
11. Musgrave, R.A (1959) , The Theory of Public Finance, McGraw Hill Kogakhusa, Tokyo.

ECO- 303: PUNJAB ECONOMY

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of this paper are to acquaint the students with the performance of different sectors of the Indian economy and the policy framework governing them. This will provide them an insight into the past, present and future functioning of the Indian economy and strengthen their analytical capability.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-1

Structure of Punjab Economy: Nature of Punjab economy after re-organization of Punjab.
Agriculture: Nature and problems of Punjab agriculture: Cropping pattern; Capital formation; Productivity, Land reforms; Agricultural finance; and Rural Indebtedness. Agricultural labour; Role of organizations.

UNIT-II

Industrial Development: Industrial pattern; Major industries; Role of public and private sector, Industrial employment; Occupational Pattern and unemployment; Capital formation. **Tax structure and tax collection in Punjab;** Public Expenditure; Public Debt, Urbanization: Nature and problems; Population and its composition.

RECOMMENDED READINGS

1. Johar, R.S. and J.S. Khana (ed.) Studies in Punjab Economy, Guru Nanak Dev University , Amritsar
2. Bawa, R.S. and P.S. Raikhy, (2000) Punjab Economy: Emerging Issues, Guru Nanak Dev University, Amritsar.
3. Jammu, P.S. (ed.), (2001), Globalization and Punjab, Punjab Academy of Social Science, Literature and Culture.
4. R.N. Soni, Leading Issues in Agricultural Economics, (1997).
5. Johl, S.S. Future of Punjab Agricultural, CRRID, Chandigarh.
6. Johi, S.S and S.K. Ray (Eds.) (2002), Future of Agriculture in Punjab CRRID, Chandigarh.
7. All India Kissan Sabha, (1986) Golden Jubilee Series, New Delhi.
8. Singh, Master Hari,(1980), Agricultural Workers Struggle in Punjab PPH, New Delhi.
9. Surjeet, H.K.S., (1996) The History of the Kisan Sabha, National Book Agency, New Delhi.
10. Singh, Pritam, Political Economy of Punjab.
11. A Report : Agricultural Production: Pattern, Adjustment Programme in Punjab for Productivity and Growth. (Govt. of Punjab, Oct. 2002).

ECO-304 A (i): THEORY OF STATISTICS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objective of this paper is to train the students in the use of statistical tools in analyzing economic problems. The course content contains simple tools and techniques, considered necessary for data collection, presentation, analysis and drawing inferences about various statistical hypotheses. The time-tested method of imparting verbal instructions through lectures would be used. Examples, in so far as possible, would be selected from everyday life/experience. The feedback would be sought through the students writing assignments, tutorials and seminars.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C. The use of simple calculator is allowed.

UNIT-I

Moments and Mathematical expectation. Multiple regression., Partial correlation and multiple correlation. Theory of attributes: Basic ideas, Association of attributes (excluding partial association); Manifold classification and coefficient of mean square contingency.

Curve fitting: Exponential and logarithmic Growth Curves: Gompertz, Logistic and Pareto type. Time series forecasting.

UNIT-II

Probability : Addition& multiplication theorems, Conditional probability, Bay's theorem. General characteristics and applications of Binomial Distribution.General characteristics and applications of Poisson, Normal distributions.

RECOMMENDED READINGS

1. F. E. Croxton & D.J. Cowden. Applied General Statistics Prentice Hall London and Prentice Hall of India.
2. J. N. Kapur & H.C. Sexena: Mathematical Statistics, S. Chand & Co., Pvt. Ltd. New Delhi.
3. S. P. Gupta: Statistics, Sultan Chand & Sons, New Delhi, 2006.
4. M. R. Spegial: Theory and Problems of Statistics.
5. S. C. Gupta & V. K. Kapoor: Fundamental of Applied Statistics, Sultan Chand & Sons , New Delhi.

OTHER BOOKS

1. J. E. Freund & F.J. Willian: Modern Business Statistics, Prentice Hall, Englewood.
2. P. G. Hoel : Elementary Statistics, John Wiley & Sons.
3. P. H. Carmal: Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd. London.
4. J. B. Freund: Mathematical Statistics, Prentice Hall.
5. A.M. Mood & F.A. Graybill: Introduction to the Theory of Statistics. McGraw Hill.

ECO- 304 A (ii): INTERNATIONAL ECONOMICS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The course intends to provide a deep understanding about the broad principles and theories, which tend to govern the free flow of trade in goods, services and capital – both short-term and long-term – at the global level. The contents of the paper spread over different modules, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Pure Theory of International Trade: Classical, comparative cost advantage, opportunity cost and factor-endowments. Theory of factor price equalisation, reciprocal demand, offer curve analysis and determination of international prices.

New Theories of International Trade: economies of scale, intra-industry trade, product differentiation and technology. Gains from trade and their distribution: terms of trade, concepts and measurement. Secular deterioration thesis of terms of trade. Emmanuel's theory of unequal exchange.

UNIT-II

Commercial policy: free trade vs. protection. Theory of tariffs, effects of tariffs; partial and general equilibrium analysis. Optimum and effective rates of tariffs. Stolper Samuelson theorem. Political economy of non-tariff barriers.

Theory of regional economic integration: forms of integration, static and dynamic effects of customs union. Bilateral and multilateral agreements. UNCTAD, GATT and WTO. Regional economic grouping: EU, SAARC and NAFTA.

RECOMMENDED READINGS

1. Bhagwati, J N (1998) : International Trade: Selected Readings, McMillan University Press.
2. Clement Mpfister, R L & Rothwell, K J : Theoretical Issues in International Economics, (1967) Constolete and Company Ltd.
3. James C and Robert, M Dunn, Jr.(2004): International Economics, John Viley & Sons..
4. Jones, R W & Kenen, P B (2003) : Handbook of International Economics, Vol. I, II and III, Elsevier Amsterdam.
5. Krugman P R & Obstfeld Maurice : International Economics- Theory and Policy, (2000) Addison-Wesley.
6. Salvatore, Dominick (2004) : International Economics, John Viley & Sons Inc.
7. Sodersten, B O & Geoffery Reed (1994) : International Economics, McMillan, London.

ECO- 304 A (iii): COMPARATIVE ECONOMIC SYSTEMS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The main objectives of this course is to look at the process of growth and development in terms of its characteristics such as structural transformation, pattern of distribution of income, its inter-sectoral interface. In addition, it also aims to take up issues pertaining to the emerging global scenario and the debate concerning the planning vs. marketism which is so vital for development theorists and practitioners

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Classification of Economic Systems: Modes of production Social formations, Evolution of economic systems.

Economic Systems: Capitalist (including mixed economy) and socialist systems. Peasant mode of production.

UNIT-II

Strategies of Development: European and Indian capitalism, soviet and Chinese socialism.

Private and Social: Property in means of production, Labour remuneration: material and moral incentives, Capital, Commodity production, Surplus-value and price.

RECOMMENDED READINGS

1. Morris Bronstein (1965) : Comparative Economic systems, Richard D. Irwin, Inc. Illinois
2. Maurice Cornforth (1971): Dialectical Materialism, Vol. II, National Book agency, Calcutta.
3. Leontief (1977): Political Economy. National Book Agency. Calcutta.
4. George N. Halm (1968): Economics Systems: A Comparative Analysis, Oxford & IBH Publishing Company, New Delhi.

5. Alec Nove (1977): The Soviet Economic System. George Allen & Unwin Ltd. London.
 6. J. Wilczynski (1970) : The Economics of Socialism. George Allen & Unwin Ltd. London (Chs. 2,4 &6).
 7. A.I.Lenkovsky (1972): Capitalism in India, People's Publishing House, New Delhi.
 8. Paul M. Sweezy (1991): The Theory of Capitalist Development, K.P.Bagchi &Company, Calcutta.
 9. George Dalton: Economic Systems and Society.
 10. Oskar Lange (1965): Problems of Political Economy of Socialism, People's Publishing House, New Delhi.
- .

ECO- 305 B (i): ECONOMETRICS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Application of economic theory needs a reasonable understanding of economic relationships and relevant statistical methods. The econometric theory thus becomes a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with basic theory of econometrics and relevant applications of the methods. The topics covered in the course include various problems faced in estimation of both single equations and simultaneous equation models. Examples, in so far as possible, would be selected from everyday life/experience. The feedback would be sought through the students writing assignments, tutorials and seminars.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Basic Econometrics: Meaning and scope of econometrics. Two Variable Linear Regression Model: assumption; Least squares estimation; Gauss Markov Theorem; Inference in the two variable model; goodness of fit; concept and derivation of R^2 and adjusted R^2 : Concept of analysis; Prediction with two variables; linear regression model.

General Linear Model: General K-Variable Regression ; Model; Matrix formulation of K-variables model; assumptions; Least squares estimation; Properties of least squares estimators; Inference in the K-Variable model; goodness of fit; prediction; Introduction to fitting of restricted regression.

Specification Error: concept of specification error in K-Variable Linear Equation; Tests for parameter consistency; Tests for structural change. Dummy explanatory variables.

UNIT-II

Problems of Regression Analysis: nature test consequences and remedial steps to the problems of Heteroscedasticity, multicollinearity" auto-correlation and Errors of measurement; Aitkin's Generalized Least Squares estimator.

University Time Series Modeling: Introduction to ARMA modeling : Properties of AR,MA and ARMA processes: testing for stationary: Identification, estimation and Testing of ARIMA (1,1,0) processes.

RECOMMENDED READINGS

1. Damodar Gujarati: Basic Econometrics. McGraw Hill, New Delhi, 1965.
2. J. Johnston & J. Dinardo: Econometric Methods, McGraw Hill, New Delhi, 1997.
3. Koutsoyiannis: Theory of Econometrics, Macmillan, New Delhi, 1978.

SUPPLEMENTARY READINGS

1. J. Johnston: Econometric Methods. McGraw Hill, New Delhi, 1992.
2. L.R. Klien : A textbook of Econometrics, Prentice Hall, New Delhi, 1978.
3. G.S. Maddala: Econometrics, McGraw Hill, New Delhi, 1977.
4. K.F. Wallis : Topics in applied Econometrics. Bray Hills, London.
5. Gujarati Damodar (2002) : Basic Econometrics, 4th Ed., McGraw Hill.
6. Kemanta, J. (2008) : Elements of Econometrics (2nd Ed.), Macmillan, New York.
7. Maddala, G. S. (2007) : Introduction to Econometrics (3rd ed.), Wiley India.
8. Koutsoyiannis, A. (1973) : A Theory of Econometrics, Harper & Row, New York.
9. Johnston, J. and D. Nardo (1997) : Econometric Methods, 4t

ECO- 305 B (ii): MATHEMATICAL ECONOMICS-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

This course is designed to equip students to understand the economic concepts and theories by using mathematical tools and techniques to refine the verbal logic. The use of calculus has permitted formulation of economic problems in multivariable mode and yield valuable insight about optimizing human behavior. Modern algebraic tools allow convenient handling of simultaneous equations in the context of linear programming, game theory and input-output analysis. Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C. The use of simple calculator is allowed.

UNIT-I

Theory of Consumer Behaviour: Utility function-Behavioral postulates, nature and existence, demand function, compensated demand function, ordinal and cardinal utility maximization, Slutsky equation for a few and more commodities, traditional and modern derivation and its interpretation, elasticities, linear expenditure function and indirect utility function, Roy's identity, choice and risk, Von- Neuman utility function, Intertemporal utility maximization, revealed preference theory- the weak and strong order axioms, integrability problem, the composite commodity theorem.

Production Analysis: Homogenous and homothetic production functions, elasticity of substitution, Cobb- Douglas and CES production functions, Output and profit maximization, cost minimization traditional and modern approach, duality in production.

UNIT-II

Market Equilibrium: Price and output determination under perfect competition, monopoly and price discrimination, oligopoly and duopoly, the Cournot-Nash equilibrium. Collusion and Stackleberg model.

Commodity market and factor market equilibrium, existence and uniqueness of equilibrium, stability of equilibrium, dynamic equilibrium with lagged adjustment, the cobweb model. Multi-market equilibrium. Walras's law and the existence of general equilibrium (without proof)

RECOMMENDED READINGS

1. Henderson, J.M & Quandt, R.B. (1980) : Micro Economic Theory: A Mathematical Approach (3rd ed.).
2. Allen, R.G.D. (1974): Mathematical Economics.
3. Silberberg, E. (1978) : The Structure of Economics -A Mathematical Analysis.
4. Lancaster, V. (1965) : Mathematical Economics.
5. Taka- Yama, A . (1974): Mathematical Economics.
6. Kogiku, K.C. (1971) : Micro Economic Models.
7. Chiang, A.C. (1984) : Fundamental Methods of Mathematical Economics (3rd ed)
8. Dorfman, R., Samuelson. P. and Sallow, R. (1968): Linear Programming and Economic Analysis.
9. Quirk, J. and Saposnik, R. (1968) : Introduction to General Equilibrium Theory and Welfare Economics.
10. Green, H.A.J (1971) : Consumer Theory.
11. Varian, H.R. (1978) : Mathematical Analysis.
12. Nehar, Phillips, A. (1971) : Economic: Microeconomic Models.
13. Mahesh Chand & Anand V.K. (1981) : Economic Theory -A Mathematical Approach.
14. Madnani, G.M.K: Mathematical Economics.

ECO-305 B (iii): MONEY AND BANKING-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Money and banking constitute important components towards understanding of economics. A clear understanding of the operations of money and banking and their interaction with the rest of the economy is essential to realize how monetary forces operate through a multitude of channels – market, non-market, institutions and among others, the state.. The present course is designed to acquaint the students fully with the changing role of financial institutions in the process of growth and development. Accordingly, the paper on ‘Economics of Money and Banking’ is an optimal integration of monetary theory, banking and non-banking financial institutions, which combines with itself a systematic discussion of the theory, institutions and policy with special reference to India.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Money: Origin, Functions, Kinds; Near Money. Credit: Definition, Kinds. Financial System: Structure, Key services provided by financial system, financial system and economic development.

Theory of Money: Classical quantity theory of money, Keynesian theory; Contribution of Tobin; Modern quantity theory (Friedman's Restatement) and Liquidity theory of money (Radcliffe-Sayers and Gurley-Shaw thesis).

UNIT-II

Supply of Money: Measures of Money supply, H-theory of money supply (High powered money, money multiplier process, factors affecting high powered money).

Commercial Banks: Definition, Classification, functions (including credit creation and its control). Theories of commercial bank innovations in commercial banking services. Unregulated Credit Markets: Role and types.

RECOMMENDED READINGS

1. Bofinger Peter (2001) : Monetary Policy : Goals, Institutions, Strategy and Instruments, Oxford University Press.
2. Dennis Geogrey, E.J. (1981) : Monetary Economics, Longman.
3. Dinlio, A. Eugene (Latest Edition) : Theory and Problems of Money and Banking, International Edition (Schaum's Outline Series).
4. Fabozzi, F. J. and Franco Modigliani (Fourth Edition) (2009) : Capital Markets Institutions and Instruments, Prentice Hall, New Jersey.
5. Howells, Peter and Bain Keith (2002) : The Economics of Money, Banking and Finance, Prentice Hall, Pearson Education Ltd.
6. Khanna, Perminder (2005) : Advanced Study in Money and Banking Theory and Policy Relevance in the Indian Economy, Atlantic Publishers, New Delhi.
7. Kulkarni, G. (1999) : Modern Monetary Theory, Macmillan, New Delhi.
8. Mankiw, N.G. (Fifth Edition) (2008) : Macro-economics, Macmillan Worth Publishers, New York.
9. Mohan Rakesh (2009) : Monetary Policy in a Globalized Economy – A Practitioner's View, Oxford University Press.

ECO- 305 B (iv): POLITICAL ECONOMY OF DEVELOPMENT-I

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of the paper is to rigorously and comprehensively equip the students with theoretical concepts, methodology and process of reasoning involved in economic development under different political systems.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Scientific Socialist World Outlook: World outlook, Idealism and materialism, Metaphysics and dialectics, Laws of dialectics, Categories of philosophy, Theory of cognition.

Dialectical and Historical Materialism: Its theory and method, Dialectical materialism (Materialistic conception of human/social history), Nature and role of contradictions.

Mode of Production and Social Superstructure: Factors constituting and forces governing mode of production, Social superstructure and its elements, Dialectical interaction of base and superstructure, about economic development, socials transition and system transformation.

Development through Social Formations

Historical Social Formations: Rise of private property, classes and the State, Distinguishing features of Primitive Communism/ society, Slavery, Feudalism/serfdom, Capitalism/imperialism and Socialism/communism.

Asiatic Mode of Production: The concept and controversy, Asiatic mode vs. Feudalism, Characteristics of Asiatic mode. Its specific nature.

UNIT-II**Non-Marxian Theories of Development**

Critique of the Bourgeois Economics: Basic assumptions, Theoretical gaps, unscientific theoretical gaps, unscientific theoretical structure, inadequate guide to practice. **Joseph A. Schumpeter;** Nature & process of Capitalist development: Framework of analysis, Prime factors in development, Nature of development, Process of decline/end, A Critique

Transition from Agrarian to Industry Economy**T.W.Schultz; Transformation of Traditional Agriculture:**

The problem, The associative efficiency, Farm size, control and incentives, Role of technological change and investment in human agent, A Critique.

Strategies for Third World Development: Perspectives of Third World capitalism; Indigenous or dependent, Globalisation of dependent capitalism.

Mode of Punjab Economy: Its social implications, Genesis of economic development in Punjab towards industrialization, urbanisation and socialisation.

RECOMMENDED READINGS

- 1) Karl Marx & F. Engels (1977) : Manifesto of the Communist Party, Progress Publishers, Moscow, 2nd edition, pp. 34-74.
- 2) Joseph Stalin (1978) : Dialectical Materialism, National Book Agency, Pvt. Ltd. , Calcutta, pp.5 to 48.
- 3) Maurice Cornforth (1971) : Dialectical Materialism, National Book Agency, Pvt. Ltd. , Calcutta, 3rd edition, Vol. 1, Chs. 2-9, Vol. II, Chs. 3-10.
- 4) John Eaton (1973) : Political Economy, International Publishers, New York, revised edition, Chs. 2-J.A. Schumpeter: Theory of Economic Development & Capitalism, Socialism and Democracy.
- 5) W.W. Rostow (1971) : The Stages of Economic Growth, Cambridge University Press, 2nd edition, Chs. 1,2 and 10.

ECO-401: EVOLUTION AND STRUCTURE OF INDIAN ECONOMY-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of this paper are to acquaint the students with the performance of different sectors of the Indian economy and the policy framework governing them. This will provide them an insight into the past, present and future functioning of the Indian economy and strengthen their analytical capability.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Saving and capital formation in Indian Economy: Commercial banking system. Money and capital markets in India. Development Financial institutions. Main aspects of change in policy.

Infrastructure in Indian economy: energy, power, transport and communication. Urban infrastructure. Private Investment in infrastructure. Natural resources, economic development and environmental degradation.

UNIT-II

Foreign Capital in India: Foreign direct investment and portfolio investment, India's Foreign trade in goods and services . Balance of trade and balance of payments. Commercial Policy. Exchange rate policy. Foreign debt. W.T.O and Indian Economy.

Concentration of economic power, poverty, unemployment, Economic Inequalities, black income, regional imbalances, population, inflation. cover the entire syllabus uniformly and will carry 20 marks.

RECOMMENDED READINGS

1. Acharya Shankar and Rakesh Mohan (Eds.) :(2011) India's Economic Performance and Challenges:Essay's in Honour of Montek S Ahluwalia, New Delhi, Oxford University Press.
2. Brahmananda, P R and Panchmukhi, V R (eds.) : (1987)The Development Process of Indian Economy,Himalya Publishing House, Bombay.
3. Jalan , B (1992) : The Indian Economy - Problems and Prospects, Viking, New Delhi
4. Kapila, Uma (2012-13) : Indian Economy Since Independence, Academic Foundation, New Delhi.
5. Krueger, A.O. (Ed) (2002) : Economic Policy Reforms and the Indian Economy, Oxford University Press, New Delhi
6. Lucas, E B & Papanek, G F (Eds.) (1988) : The Indian Economy- Recent Development and Future Prospects, Oxford University Press, New Delhi

Further Readings :

1. Ahluwalia, I J (1985) : Industrial Growth in India, Oxford University Press, New Delhi
2. Ahluwalia, I.J. & Little, IMD (Eds.)(2008) : India's Economic Reforms & Development (Essays in Honour of Manmohan Singh), Oxford University Press, New Delhi
3. Brahmananda, P R and Panchamukhi, V R(Eds.) : (2001) Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.
4. Buyers, T J (Ed.) (1998) : The Indian Economy: Major Debates since Independence; Oxford University Press, New Delhi.
5. Derez, J and Amartya Sen (2002) : India Development and Participation, Oxford University Press, New Delhi.
6. Economic and Political Weekly : Various Issues.
7. Government of India : Economic Survey (Annual), Ministry of Finance, New Delhi

ECO-402: PUBLIC ECONOMICS-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

Role and functions of the Government in an economy have been changing with the passage of time. The term Public Finance has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures while public economics is an important part to understand the basic problems of use of resources, distribution of income etc. There are vast array of fiscal institutions-tax systems, expenditure programmes, budgetary procedures, stabilization instruments,

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective sections of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Fiscal Policy: objectives of fiscal policy- full employment, anti-inflation, economic growth, redistribution of income and wealth; Interdependence of fiscal and monetary policies; Budgetary deficits and their implications. Balanced budget multiplier.

Fiscal Federalism: Principles of multi-unit finance; Fiscal federalism in India-constitutional provisions regarding assignment of functions and sources of revenue; Finance Commission: Criteria for transfer of resources; Latest Finance Commission Report, Centre-state financial relations in India; Problems and prospects regarding transfer of resources from Union to States and local bodies.

UNIT-II

Public Debt: Classical view of public debt; Compensatory aspect of debt policy; Classification of public debt; effects of public debt. Burden of public debt, Principles of debt management. Methods of debt redemption.

Indian Public Finance: Salient features of Indian tax system, Local Finance, Major taxes in India: central and state governments. direct and indirect taxes, taxation on agriculture, expenditure tax, goods and services tax. Reforms in direct and indirect taxes, Trends in public expenditure and public debt; Fiscal crisis and fiscal sector reforms in India.

RECOMMENDED READINGS

1. Musgrave, R.A and Masgrace. P.B. (1976) : Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tekye.
2. Shoup, C.S.(1970): Public Finance, Aldine, Chicago.
3. Kaldor, N. (1955), An Expenditure Tax, George Allen and Unwin; London.
4. Musgrave R.A and C. Shoup (eds.): Readings in the Economics of Taxation, George Allen and Unwin, London.
5. Barman, K. (1986), Public Debt Management in India, Uppal Publishing House, New Delhi.
6. Buchanan J.M. (1958), Public Principles of Public Debt. A Defence And Restatement. Richaard D Irwin Homewood.
7. Ferguson, J.M.(ed). (1964), Public Debt and Future Generations, North Carolina University Press. Chapel Hill.
8. Sreekantaradhya, B.S (1972), Public Debt and Economic Development in India, New Delhi.
9. American Economic Association (1955), Readings in Fiscal Policy, George Allen and Unwin, London.
10. Government of India (1985): Long Term Fiscal Policy, New Delhi,

ECO-403: RESEARCH METHODOLOGY

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objectives of this paper are - (i) to acquaint the students with the advances in the field of Research Methodology; and (ii) develop research methodological skills for undertaking research in social sciences in general and in a discipline in particular..

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Research: Meaning, objectives, types and Importance, Formulating a Research Problem, Research Design: meaning and need for a research design. Types of Data: Primary and Secondary, Methods of Data Collection, Sampling – definition and need for sampling, random and non-random sampling, sample size and its determination.

UNIT-II

Formulation and testing of hypothesis – concept of hypothesis, and its formulation, null and alternative hypothesis, procedure of hypothesis testing, tests of hypothesis, hypothesis testing of means and differences between means. Hypothesis testing based on z, t and f test.

Analysis of data: content analysis, discriminate analysis, factor analysis. Report writing: Significance of report writing, different steps in writing report, lay out of research report, types of reports, precautions of writing reports and conclusion.

READINGS LIST:

1. John W. Creswell: Research Design: Qualitative and Quantitative Approaches, London, Sage Publications, 1994.
2. S.P.Gupta : Statistical Methods (latest edition), New Delhi, Sultan Chand and Sons, 1987.

3. C.A. Moser and G.Kalton : Survey Methods in Social Investigation, London. The English Language Book Society and Heinemann Educational Books, 2nd edition 1979.
4. Delbert C. Miller : Handbook of Research Design and Social Measurement, London, Sage Publications, 5th edition.
5. David Nachmias and : Research Methods in the Social Sciences, New Chara Nachmias York, St. Martin's Press Inc. 2nd edition.
6. Clarie Seltiz et.Al : Research Methods in Social Relations, New York, Holt Rinehart and Winston.
7. Pauline V. Young : Scientific Social Research and Surveys, India. Asia Publishing House, 4th edition, 2007.
8. William J. Goode and Paul : Methods in Social Research, (USA, Mc Graw K. Hatt Hill Book Company, Ist Indian Reprint, 2006.
9. Norman K.Denzin, Yvonna : The Landscape of Qualitative Research: Theories S.Lincoln (eds.) and Issues. Sage Publications, New Delhi, 2003.
10. Clive Seale, Giampietro : Qualitative Research Practice, Sage Gobo, Jaber I. Gubrium Publications, New Delhi, 2004. & David Silverman (eds.)
11. Dawn Durton (ed.) : Research Training for Social Scientists, Sage Publications, New Delhi, 2000.
12. Royle A.Singleton, Jr. : Approaches to Social Science Research, 1999, and Bruce C. Straits Oxford University Press.
13. Mason, Jennifer : Qualitative Researching, 2002, Sage.Chandrasekhar C.P., : India's Social-Economic Database – surveys of Jandhyala B.G. Tilak selected areas, 2001, Tulika, New Delhi.

ECO-404 A (i): THEORY OF STATISTICS-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES:

The objective of this paper is to train the students in the use of statistical tools in analyzing economic problems. The course content contains simple tools and techniques, considered necessary for data collection, presentation, analysis and drawing inferences about various statistical hypotheses. The time-tested method of imparting verbal instructions through lectures would be used. Examples, in so far as possible, would be selected from everyday life/experience. The feedback would be sought through the students writing assignments, tutorials and seminars.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C. The use of simple calculator is allowed.

UNIT-I

Estimation: Point estimation and interval estimation, Properties of point estimates. Statistical hypothesis: Two-tailed and one-tailed tests. Types I and II Errors: Level of significance. Critical region.

Large and small samples: Tests of significance based on Normal, 't', 'F' and 'Z' distributions. Testing the significance of means, proportions, correlation and regression coefficients and their interpretation.

UNIT-II

Elementary knowledge of quality control and its simple applications. Planning and organization of socio-economic surveys, Preparation of questionnaire, Type of sampling.

Elementary knowledge of Analysis of Variance (one-way and two way classification). Non-Parametric Tests: Chi-square test, and Sign-test.

RECOMMENDED READINGS

1. F.E. Croxton & D.J. Cowden. Applied General Statistics Prentice Hall London and Prentice Hall of India.
2. J.N. Kapur & H.C. Sexena: Mathematical Statistics, S. Chand & Co., Pvt. Ltd. New Delhi.

3. S.P.Gupta: Statistics, Sultan Chand & Sons, New Delhi, 2006.
4. M.R. Spelial: Theory and Problems of Statistics.
5. S.C.Gupta & V.K.Kapoor: Fundamental of Applied Statistics, Sultan Chand & Sons , New Delhi.

OTHER BOOKS

1. J.E. Freund & F.J. Willian: Modern Business Statistics, Prentice Hall, Englewood.
2. P.G.Hoel : Elementary Statistics, John Wiley & Sons.
3. P.H.Carmal: Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd. London.
4. J.B.Freund: Mathematical Statistics, Prentice Hall.
5. A.M. Mood & F.A. Graybill: Introduction to the Theory of Statistics. McGraw Hill. Croxton, F E, Cowden, D J & : Applied General Statistics (3rd Ed.) Klein, S (1970)
6. Anderson, D R, Sweeney, D J & : Statistics for Business and Economics
7. Williams, T A (1987) (3rd Ed.)
8. Goon, Gupta and Dasgupta : Fundamentals of Statistics – Vol. I & II
9. Levin, R I & Rubin, D S (2000) : Statistics for Management (7th Ed.)
10. Hoel, P G & Jesson, R J (1977) : Basic Statistics for Economics and Business
11. Wonnacott, TH & Wonnacott, R J : Introductory Statistics for Business and Economics
12. Freund, John E (1979) : Modern Elementary Statistics
13. Karmel, P H (1970) : Applied Statistics for Economists.
14. Yale, G V & Kendal, M G (1965) : An Introduction to Statistics
15. Beals, R E (1972) : Statistics for Economists – An Introducti

ECO-404 A (ii): INTERNATIONAL ECONOMICS

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 marks

Time Allowed: 3 Hours

External Assessment: 56 marks

Pass Marks: 35%

OBJECTIVES:

The course intends to provide a deep understanding about the broad principles and theories, which tend to govern the free flow of trade in goods, services and capital – both short-term and long-term – at the global level. The contents of the paper spread over different modules, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Foreign Exchange Market: Organization, SWIFT and functions. Exchange Rate: Spot and forward, fixed and flexible, Foreign exchange risks, hedging and speculation, Foreign exchange options and futures, Determination of exchange rate: Mint parity, purchasing power parity, monetary approach and portfolio balance. Optimum currency areas.

Balance of payment: Concepts and components, Equilibrium and disequilibrium in balance of payments. Adjustments under different exchange rate systems. Policy for correcting disequilibrium in balance of payments: expenditure reduction and switching, devaluation and absorption approach, exchange controls and monetary approach.

UNIT-II

International Capital Movement: Long term and short term, portfolio and direct investing public and private flows. Multinational Corporation: causes for foreign investment, effects on the investing and host country. International Transfer Problem. Analysis of foreign aid.

International Monetary system: Gold Standard, Breton Woods system and Post-Breton Woods System. IMF : Functions, Organisation and Lending mechanism. International Liquidity. IBRD, ADB, IFC and IDA.. Recent monetary reforms.

READINGS LIST:

1. Bhagwati, J N (1998) : International Trade: Selected Readings, McMillan University Press.
2. Clement Mpfister, R L & Rothwell, K J : Theoretical Issues in International Economics,
3. (1967) Constolete and Company Ltd.
4. James C and Robert, M Dunn, Jr.(2004): International Economics, John Viley & Sons.Inc.
5. Jones, R W & Kenen, P B (2003) : Handbook of International Economics, Vol. I, II and III, Elsevier Amsterdam.
6. Krugman P R & Obstfeld Maurice : International Economics- Theory and Policy,(2000) Addison-Wesley.
7. Salvatore, Dominick (2004) : International Economics, John Viley & Sons Inc.
8. Sodersten, B O & Geoffery Reed (1994) : International Economics, McMilan, London.

Further Readings:

1. Ellsworth, P T & Clark Leith (1975) : The International Economy, McMilan Press.
2. Mia Mikic (1998) : International Trade, McMilan Press, London.
3. Oded Shenkar &Yadong Luo (2004) : International Business, John Wiley & Sons Inc.
4. Peter H Lindert (1969) : International Economics, N J Princeton University Press.

ECO-404 A (iii): COMPARATIVE ECONOMIC SYSTEM

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 marks

Time Allowed: 3 Hours

External Assessment: 56 marks

Pass Marks: 35%

OBJECTIVES:

The main objectives of this course is to look at the process of growth and development in terms of its characteristics such as structural transformation, pattern of distribution of income, its inter-sectoral interface. In addition, it also aims to take up issues pertaining to the emerging global scenario and the debate concerning the planning vs marketism which is so vital for development theorists and practitioners.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Market Mechanism and Planning: Role in production, distribution exchange and consumption processes. The pattern of State intervention.

Main Economic Problems: Unemployment, poverty, inequality, concentration of economic and political power, inflation, anarchy of production, social waste, technology, labour exploitation, human alienation, etc.

UNIT-II

Class Division: Proletarian, capitalist, Peasant and Middle classes. Economic basis of class hegemony.

Capitalism and Socialism: Theory of convergence of the capitalist and socialist systems, its appraisal.

BASIC READINGS LIST

1. Morries Bronstein (1965): Comparative Economic System, Richard D. Irwin Inc. Illinois.
2. Joan Eaton (1973): Political Economy, International Publishers, New York.
3. Leontief (1977): Political Economy, National Book Agency, Calcutta.

4. George N. Halm (1968) : Economic Systems: A Comparative Analysis, Oxford & IBH Publishing Company, New Delhi.
5. J. Wilczynski (1970): The Economics of Socialism, George Allen & Unwin Ltd., London (Chs. 2,4&6).
6. A.I.Lenkovsky (1972) : Capitalism in India, People's Publishing House , New Delhi. George Dalton: Economic Systems and Society.
7. Oskar Lange (1965): Problems of Political Economy of Socialism, People's Publishing House, New Delhi.

ECO-405 B (i): ECONOMETRICS-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 marks

Time Allowed: 3 Hours

External Assessment: 56 marks

Pass Marks: 35%

OBJECTIVES:

Application of economic theory need a reasonable understanding of economic relationships and relevant statistical methods. The econometric theory thus becomes a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with basic theory of econometrics and relevant applications of the methods.. Besides the time-tested method of imparting verbal instructions through lectures, description and derivation of econometric models would be demonstrated by extensive use of blackboard .Examples, in so far as possible, would be selected from everyday life/experience.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Dynamic Econometric Models: Auto regressive and Distributive Lag Models-Kayak Model, Partial adjustment and adaptive expectation model, Problems of auto-correlation; Almond approach to distributed lag models.

Simultaneous Equation Models: Structural form and reduced form; Concept of identification; Methods for estimation –Indirect Least Squares, Two Stage Least Squares.

UNIT-II

Discrete and Limited Dependent Variables Models: Type of discrete choice models; the linear probability model; Introduction to formulation of regressions with dummy dependent variables- Probit, Legit and Obit models.

Panel Data Techniques: Sources and types of panel data; Fix effects model; Random effect model; Random coefficients model.

Multivariate Analysis: Principle Components; Discriminate Analysis

RECOMMENDED READINGS

1. Damodar Gujarati: Basic Econometrics. McGraw Hill, New Delhi, 1965.
2. J. Johnston & J. Dinardo: Econometric Methods, McGraw Hill, New Delhi, 1997.
3. Koutsoyiannis: Theory of Econometrics, Macmillan, New Delhi, 1978.

SUPPLEMENTARY READINGS

1. J. Johnston: Econometric Methods. McGraw Hill, New Delhi, 1992.
2. L.R. Klein : A textbook of Econometrics, Prentice Hall, New Delhi, 1978.
3. G.S. Maddala: Econometrics, McGraw Hill, New Delhi, 1977.
4. K.F. Wallis : Topics in applied Econometrics. Bray Hills, London.
5. Gujarati Damodar (2002) : Basic Econometrics, 4th Ed., McGraw Hill.
6. Kemanta, J. (2008) : Elements of Econometrics (2nd Ed.), Macmillan, New York.
7. Maddala, G. S. (2007) : Introduction to Econometrics (3rd ed.), Wiley India.
8. Koutsoyiannis, A. (1973) : A Theory of Econometrics, Harper & Row, New York.
9. Johnston, J. and D. Nardo (1997) : Econometric Methods, 4th Western College Publishing.

ECO-405- B (ii): MATHEMATICAL ECONOMICS-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24 Marks

Time Allowed: 3 Hours

External Assessment: 56 Marks

Pass Marks: 35%

OBJECTIVES :

This course is designed to equip students to understand the economic concepts and theories by using mathematical tools and techniques to refine the verbal logic. The use of calculus has permitted formulation of economic problems in multivariable mode and yield valuable insight about optimizing human behavior. Modern algebraic tools allow convenient handling of simultaneous equations in the context of linear programming, game theory and input-output analysis. Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships. This course has been accordingly designed to include various mathematical techniques/methods/models related to the different parts of economic theory like consumer theory, theory of production, pricing, trade cycles, growth models etc.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Macro Economics: The Classical model and the Keynesian model, Hicks-Hansen version of the Keynesian model, the fiscal policy and the balanced budget theorem, liquidity trap and the efficiency of monetary policy, comparative static's in the classical and Keynesian models, stability analysis and the correspondence principle.

Growth models: Harrod-Domar growth model and its stability, the Solow model, basic neo-classical growth models, the golden. Age problem, technical progress and stability of neo-classical models.

Trade Cycles: General concepts, Hicks-Samuelson multiplier-accelerator interaction model.

UNIT-II

Linear Programming: Activity analysis interpretation of a linear program, the simplex method and the revised simplex, the dual and its economic interpretation, complimentary slackness conditions, duality theorems and application of linear programming to the theory of firm. Introduction to non-linear programming, Kuhn-Tucker conditions.

Input-Output analysis: Static open and closed models, viability conditions, activity analysis, interpretation of input-output model, aggregation problem, substitution theorem, cost and price determination.

Game Theory: Two person zero sum non co-operant game, pure and mixed strategies, loner programming formulation of a matrix, methods of solving a game problem, fair game and conversion of linear programming problem, fair game and conversion of linear programming problem into game and conversion of linear programming problem into game problem.

RECOMMENDED READINGS

1. Henderson, J.M. & Quandt, R.B. (1980): Micro Economic Theory: A Mathematical Approach (3rded.).
2. Allen, R.G.D. (1974) : Mathematical Economics.
3. Silberberg, E. (1978): The Structure of Economics- A Mathematical Analysis.
4. Lancaster, V. (1965): Mathematical Economics.
5. Take-Yama, A. (1974) Mathematical Economics.
6. Kogiku, K.C. (1971) : Micro Economic Models.
7. Chiang, A.C. (1984) : Fundamental Methods of Mathematical Economics (3rd ed.).
8. Dorfman, R., Samuelson, P. and Sallow, R. (1968) : Linear Programming and Economic.
9. Quirk, J. and Saposnik, R. (1968) : Introduction to General Equilibrium Theory and Welfare Economics.
10. Intriligator, Michel D. (1971) : Mathematical Optimization and Economic Theory.
11. Green, H.A.J. (1971): Consumer Theory.
12. Varian, H.R. (1978) : Microeconomic Analysis.
13. Nehar, Phillips, A. (1971) : Economic Growth and Development : A Mathematical Introduction.
14. Mehta, B.C. (1987): Mathematical Economics: Microeconomic Models.
15. Mahesh Chand & Anand V.K. (1981) : Economic Theory-A Mathematical Approach.
16. Madnani, G.M.K.: Mathematical Economics.

405-B-(iii): MONEY AND BANKING ECO-II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24marks

Time Allowed: 3 Hours

External Assessment: 56 marks

Pass Marks: 35%

OBJECTIVES :

Money and banking constitute important components towards understanding of economics. A clear understanding of the operations of money and banking and their interaction with the rest of the economy is essential to realize how monetary forces operate through a multitude of channels – market, non-market, institutions and among others, the state. The operation of financial markets and their regulations are to be studied to appreciate their key-role in an economy, especially after the far reaching banking and financial sector reforms in India and elsewhere.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Central Bank: Definition, functions, techniques of monetary management. Reserve Bank of India. Monetary Policy: Concept, goals, targets and indicators, instruments, recent trends in monetary policy of Reserve Bank of India.

Financial Markets: Structure of money market and capital market, problems of money and capital market in India, recent developments in money and capital market in India. Non-Bank Financial Intermediaries: Definition, types, impact on India's economic development, measures taken to control their operations.

UNIT-II

Banking Sector Reforms in India: Review of Narasimham Committee Reports (1991 and 1998), implementation and impact of banking sector reforms. Regulation of Banking System: Free Banking (Laissez-Faire Banking) theory, controversy surrounding regulation of banking system.

International Monetary System: Historical background, Bretton Woods System and its breakdown, contemporary monetary system. Working and lending operations of IMF, IBRD, IDA, IFC, and Asian Development Bank. International Banking: Structural changes. Motivating factors, direction and purpose of lending, alternative organizational formats, control of international banks.

Essential Readings :

1. Bofinger Peter (2001) : Monetary Policy : Goals, Institutions, Strategy and Instruments, Oxford University Press.
2. Dennis Geogrey, E.J. (1981) : Monetary Economics, Longman.
3. Dinlio, A. Eugene (Latest Edition) : Theory and Problems of Money and Banking, International Edition (Schaum's Outline Series).
4. Fabozzi, F. J. and Franco Modigliani (Fourth Edition) (2009) : Capital Markets Institutions and Instruments, Prentice Hall, New Jersey.
5. Howells, Peter and Bain Keith (2002) : The Economics of Money, Banking and Finance, Prentice Hall, Pearson Education Ltd.
6. Khanna, Perminder (2005) : Advanced Study in Money and Banking Theory and Policy Relevance in the Indian Economy, Atlantic Publishers, New Delhi.
7. Kulkarni, G. (1999) : Modern Monetary Theory, Macmillan, New Delhi.
8. Mankiw, N.G. (Fifth Edition) (2008) : Macro-economics, Macmillan Worth Publishers, New York.
9. Mohan Rakesh (2009) : Monetary Policy in a Globalized Economy – A Practitioner's View, Oxford University Press.

ECO-405 B (iv): POLITICAL ECONOMY OF DEVELOPMENT -II

Maximum Marks: 80

Teaching Periods: 55

Internal Assessment: 24marks

Time Allowed: 3 Hours

External Assessment: 56 marks

Pass Marks: 35%

OBJECTIVES:

The objectives of the paper is to rigorously and comprehensively equip the students with theoretical concepts, methodology and process of reasoning involved in economic development under different political systems.

INSTRUCTIONS TO THE PAPER-SETTER

The question paper will consist of three sections: A, B and C. Section A and B will have Four questions from the respective units of the syllabus and will carry 09 marks each. Section C will consist of 10 short-answer type question which will cover the entire syllabus uniformly and will carry 20 marks.

INSTRUCTIONS FOR THE CANDIDATES

The Candidates are required to attempt five questions in all selecting two questions from each of the Section A and B and the entire section C.

UNIT-I

Marxian Political Economy

Basic Analysis of Capitalism: The context, Approach and methodology, Capitalism and commodity production, Labour and Law of value, Commodity fetishism, Surplus-value, socio-economic crisis Contradictions of capitalist development. Third World (late) capitalism,

Analysis of Capitalist Agriculture: Capitalism in general and capitalism in agriculture,. Its essence, manifestations and consequences, Its limitations and contradictions.

Process of Market Mechanism and Planning: Nature of market mechanism, Evolution of planning, Aims and forms of planning, Interaction of planning and market mechanism.

Nature and Process of Development

Nature of Capital Accumulation : Primitive capital (its) accumulation and its methods, Methods of capitalist accumulation and its limits, Methods of primitive social (its) accumulation and its limits, Features of socialist accumulation and its problems.

Process of Reproduction: Nature of reproduction, Forms of reproduction, Simple and expanded reproduction, Process of capitalist reproduction and its crisis, Process of socialist reproduction and its implications.

UNIT-II

Imperialism and the Third World

Transition of Imperialism: Origin of capitalism, Rise of monopoly capitalism, context of Imperialism, Marxian and non-Marxian approaches, Lenin on Imperialism, Colonialism and neo-Colonialism, Methods of Neo-colonialism, Forces against Imperialism/Neo-colonialism.

Third World Underdevelopment: Imperialism and the Third World, Mode of underdevelopment, Methods and process of exploitation, Structure of Imperialist globalisation, Dependent development in the Third World.

Capitalist Social Planning: The State and capitalist social planning. Its essence, purpose, substance and mode, it's alternative.

Transition of Socialism

Dialectics of Transition: General consideration, Basic pre-requisites, Aims of post-revolutionary society (of socialism/communism).

Debate(S) on Transition: Need of a transition (al) period, Economic policies and tasks, Strategy of development.

Post-Revolutionary Society: Characteristics of post-capitalist society, Problems of transition, Structure of production relations under capitalism and socialism.

RECOMMENDED READINGS

1. Karl Marx & F. Engels (1977) : Manifesto of the Communist Party, Progress Publishers, Moscow, 2n edition, pp. 34-74.
2. John Eaton (1973) : Political Economy, International Publishers, New York, revised edition, Chs. 2-11.
3. Paul M. Sweezy (1991) : The Theory of Capitalist Development, K.P. Bagchi & Co., New Delhi, 1st Indian reprint, Chs. 1,2,4,5,6,8,9,14,15 & 17.
4. E. Preobrazhensky (1965) : The new Economics, Oxford University Press, London, Chas 1&2.
5. J. WEilczynski (1982) : The Economics of Socialism, S. Chand & Co. Ltd., New Delhi, 1st ed., Chs. 1 to 15.
6. V.I. Lenin (1978) : Imperialism: The Highest Stage of Capitalism. Progress Publishers, Moscow. 17th ed., Chs 1 to 10 or Lenin's Collected Works, Vol. 22.
7. Ranjit Sau (1978) : Unequal Exchange: Imperialism and Underdeveloped, Oxford University press, Delhi.

8. Paul M. Sweezy & Charles Bettelheim (1972) : On the Transition to Socialism, Monthly Review Press, New York & London. 2nd edition.
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