

PG DEPARTMENT OF ECONOMICS

SYLLABI

For

MA Economics

Programme Code: MAECO

Session: 2023-24



MATA GUJRI COLLEGE, SRI FATEHGARH SAHIB

AN AUTONOMOUS COLLEGE

REACCREDITED 'A' GRADE BY NAAC

**AFFILIATED TO PUNJABI UNIVERSITY, PATIALA & APPROVED BY AICTE,
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Programme M.A. Economics

Programme Objectives (POs)

Deep insight about the key indicators of economics which help the students to know about the working of economic variables, business cycles, international economic indicators to make international economic comparisons, working of economic policies and their impact at micro and macro level. It also helps the students to know about the functioning of production sector viz. agriculture, industry and services and their effect on household sector. It also equips the students with knowledge to make them more logical and realistic.

Programme Specific Outcomes (PSOs)

The Programme will help the students to develop a realistic view which make them competitive globally. It will enhance their overall knowledge and help them to fetch jobs both in public and private domain. The students can compete easily for different jobs like economic services, insurance sector, banking and other private jobs. It also helps to equip more knowledge about business environment and to start their own venture and help them self employment.

Programme Structure

The M.A. Economics Programme is a two-year Programme divided into four semesters. A student is required to complete 120 credits for the completion of Programme and the award of degree.

| Part | Year | Semesters |
|------------------|-------------|----------------------------|
| Part – I | First Year | Semester I, Semester II |
| Part – II | Second Year | Semester III , Semester IV |

COURSE CREDIT SCHEME

| Semester | Core Courses | | | Elective Course | | | Total Credits |
|-------------------------------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|
| | No. of papers | Credits (L+T) | Total Credits | No. of papers | Credits (L+T) | Total Credits | |
| I | 3 | 15+3 | 18 | 02 | 10+2 | 12 | 30 |
| II | 3 | 15+3 | 18 | 02 | 10+2 | 12 | 30 |
| III | 3 | 15+3 | 18 | 02 | 10+2 | 12 | 30 |
| IV | 3 | 15+3 | 18 | 02 | 10+2 | 12 | 30 |
| Total Credits for the Course | | | 72 | | | 48 | 120 |

- For each Core and Elective Course, there will be 5 lecture hours of teaching per week (worth 5 credits) and 1 hour of tutorial class (worth 1 credit).

PAPER SCHEME

- Duration of examination of each paper shall be 3 hours.
- Each paper shall be of 100 marks, out of which 70 marks, shall be allocated for semester examination and 30 marks for internal assessment.

DIVISION OF INTERNAL ASSESSMENT:

The internal assessment of a student shall be marked according to the following pattern:

- 50 per cent weightage given to Mid Semester Tests (Best of Two) (15 marks)
- 20 per cent weightage given to Attendance (6 marks)
- 20 per cent weightage given to Assignment/ Seminar/ Co-Curricular activities/ Class tests/ NSS/ NCC (6 marks)
- 10 per cent weightage given to Class Behavior (3 marks)

FULL COURSE DETAIL**CORE COURSES**

| Course Code | Course | Theory | Tutorial | Credits |
|----------------------|--|---------------|-----------------|----------------|
| MAECO 101 | Micro Economic Analysis- I | 05 | 01 | 06 |
| MAECO 102 | Macro Economic Analysis- I | 05 | 01 | 06 |
| MAECO 103 | Basic Quantitative Methods-I | 05 | 01 | 06 |
| MAECO 201 | Micro Economic Analysis- II | 05 | 01 | 06 |
| MAECO 202 | Macro Economic Analysis- II | 05 | 01 | 06 |
| MAECO 203 | Basic Quantitative Methods-II | 05 | 01 | 06 |
| MAECO 301 | Evolution and Structure of Indian Economy-I | 05 | 01 | 06 |
| MAECO 302 | Public Economics-I | 05 | 01 | 06 |
| MAECO 303 | International Economics-I | 05 | 01 | 06 |
| MAECO 401 | Evolution and Structure of Indian Economy-II | 05 | 01 | 06 |
| MAECO 402 | Public Economics-II | 05 | 01 | 06 |
| MAECO 403 | International Economics-II | 05 | 01 | 06 |
| Total Credits | | 60 | 12 | 72 |

* All the core courses are compulsory for the students.

ELECTIVE COURSES

| Groups | Course Code | Course | Theory | Tutorial | Credits |
|------------------|--------------------------|---|---------------|-----------------|----------------|
| Group I | MAECO-104-A (i) | Economics of Agriculture | 05 | 01 | 06 |
| | MAECO-104-A (ii) | Computer Application for Economics-I | | | |
| | MAECO-104-A (iii) | Economics of Population | | | |
| Group II | MAECO-105-B (i) | Mathematical Economics –I | 05 | 01 | 06 |
| | MAECO-105-B (ii) | Economics of Growth and Development-I | | | |
| | MAECO-105-B (iii) | Economics of Infrastructure-I | | | |
| Group III | MAECO-204-A (i) | Economics of Industry | 05 | 01 | 06 |
| | MAECO-204-A (ii) | Computer Application for Economics-II | | | |
| | MAECO-204-A (iii) | Economics of Labour | | | |
| Group IV | MAECO-205-B (i) | Mathematical Economics –II | 05 | 01 | 06 |
| | MAECO-205-B (ii) | Economics of Growth and Development-II | | | |
| | MAECO-205-B (iii) | Economic Administration with Special Reference to India | | | |
| Group V | MAECO-304-A (i) | Theory of Statistics-I | 05 | 01 | 06 |
| | MAECO-304-A (ii) | Punjab Economy | | | |
| | MAECO-304-A (iii) | Comparative Economic Systems-I | | | |
| Group VI | MAECO-305-B (i) | Econometrics-I | 05 | 01 | 06 |
| | MAECO-305-B (ii) | Environmental Economics | | | |
| | MAECO-305-B (iii) | Money and Banking | | | |

| | | | | | |
|-------------------|--------------------------|-----------------------------------|-----------|-----------|-----------|
| Group VII | MAECO-404-A (i) | Theory of Statistics-II | 05 | 01 | 06 |
| | MAECO-404-A (ii) | Political Economy of Development | | | |
| | MAECO-404-A (iii) | Comparative Economic Systems-II | | | |
| Group VIII | MAECO-405-B (i) | Econometrics-II | 05 | 01 | 06 |
| | MAECO-405-B (ii) | Economics of Health and Education | | | |
| | MAECO-405-B (iii) | Research Methodology | | | |
| | | Total Credits | 40 | 08 | 48 |

*The Student can opt any one course from each of the Group.

Total Credits = (Core Courses) 72 + (Elective Courses) 48 = 120

M. A. Economics Programme (Semester Wise)
Syllabus
For the Academic Year (2023-24)

Semester I

| CODE | PAPER | TITLE | Credits | Internal | External | Total |
|-------------|----------------|---------------------------------------|---------|----------|----------|-------|
| MAECO-101 | CORE PAPER I | Micro Economic Analysis- I | 06 | 30 | 70 | 100 |
| MAECO-102 | CORE PAPER II | Macro Economic Analysis- I | 06 | 30 | 70 | 100 |
| MAECO-103 | CORE PAPER III | Basic Quantitative Methods-I | 06 | 30 | 70 | 100 |
| MAECO-104-A | ELECTIVE I | Any one elective course from Group I | 06 | 30 | 70 | 100 |
| MAECO-105-B | ELECTIVE II | Any one elective course from Group II | 06 | 30 | 70 | 100 |

Semester – II

| CODE | PAPER | TITLE | Credits | Internal | External | Total |
|-------------|---------------|--|---------|----------|----------|-------|
| MAECO-201 | CORE PAPER IV | Micro Economic Analysis- II | 06 | 30 | 70 | 100 |
| MAECO-202 | CORE PAPER V | Macro Economic Analysis- II | 06 | 30 | 70 | 100 |
| MAECO-203 | CORE PAPER VI | Basic Quantitative Methods-II | 06 | 30 | 70 | 100 |
| MAECO-204-A | ELECTIVE I | Any one elective course from Group III | 06 | 30 | 70 | 100 |
| MAECO-205-B | ELECTIVE II | Any one elective course from Group IV | 06 | 30 | 70 | 100 |

M. A. Economics
Syllabus
For the Academic Years (2023-24)

Semester III

| CODE | PAPER | TITLE | Credits | Internal | External | Total |
|-------------|-----------------|---|---------|----------|----------|-------|
| MAECO- 301 | CORE PAPER VII | Evolution and Structure of Indian Economy-I | 06 | 30 | 70 | 100 |
| MAECO-302 | CORE PAPER VIII | Public Economics-I | 06 | 30 | 70 | 100 |
| MAECO- 303 | CORE PAPER IX | International Economics-I | 06 | 30 | 70 | 100 |
| MAECO-304-A | ELECTIVE I | Any one elective course from Group V | 06 | 30 | 70 | 100 |
| MAECO-305-B | ELECTIVE III | Any one elective course from Group VI | 06 | 30 | 70 | 100 |

Semester – IV

| CODE | PAPER | TITLE | Credits | Internal | External | Total |
|-------------|----------------|--|---------|----------|----------|-------|
| MAECO- 401 | CORE PAPER X | Evolution and Structure of Indian Economy-II | 06 | 30 | 70 | 100 |
| MAECO-- 402 | CORE PAPER XI | Public Economics-II | 06 | 30 | 70 | 100 |
| MAECO- 403 | CORE PAPER XII | International Economics-II | 06 | 30 | 70 | 100 |
| MAECO-404-A | ELECTIVE I | Any one elective course from Group VII | 06 | 30 | 70 | 100 |
| MAECO-405-B | ELECTIVE II | Any one elective course from Group VIII | 06 | 30 | 70 | 100 |

MAECO-101
MICRO ECONOMIC ANALYSIS-I

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course Objectives: The Course is intended to provide a good understanding and base to the students in applying the concepts and methods of micro economics in the practical field. The emphasis will be on thinking like an economist and the course will illustrate how micro economics concept can be applied to analyse real life situations.

Course Outcome: To introduce the students to the basic Microeconomics concepts like deductive and inductive methods of analysis, static and dynamic equilibrium, demand, recent development in demand analysis, Theory of Production and Cost and forms of markets. To enable the students to apply the theories in analyzing real world Micro issues.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 Problems-Choice and Scarcity; Deductive and Inductive Methods, Equilibrium: Existence, Stability and Uniqueness. Partial and General Equilibrium, Static and Dynamic Equilibrium. Role and Significance of Assumptions in Economic Analysis.

Demand Analysis: Indifference Curve Analysis: Price, Income and Substitution Effects; Slutsky Theorem and 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 Houthakker 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, Monopoly and Discriminating Monopoly.

SUGGESTED READINGS

1. Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green: Microeconomic Theory
2. Henderson, J.M& R. E. Quandt: Micro-economic Theory: A Mathematical Approach, McGraw Hill, New Delhi, 1980.
3. Hirshleifer, J.and: Price, Theory and Applications, Prentice Hall India, New A. Glazer Delhi 1997.
4. Jeffrey M. Perloff: Microeconomics: Theory and Applications with Calculus, 7th edition 2016.
5. Karl E. Case, Ray C. Fair and Sharon E. Oster: Principles of Microeconomics 12th edition 2017.
6. Koutsoyiannis, A.: Modern Micro-economics, Macmill Press, London, 2003.
7. Mankiw, G.: Principles of Microeconomics, Cengage Learning, 8th edition 2015.
8. Stigler, G.: Theory of Price (4th Edition), Prentice Hall of India, New Delhi, 1996.
9. Varian, H.: Intermediate Micro Economics, WW Norton & Co. New York, 9th edition 2014.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-102
MACRO ECONOMIC ANALYSIS-I

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course Objectives: Macroeconomics is the branch of economics that studies the behavior and performance of an economy as a whole. After the great depression of 1930s, the analysis of aggregates such as aggregate production, employment and price level has assumed great significance. 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.

Course Outcome: It provides the knowledge to the students for the basic models of macro economics. This course introduces the students to the basic Macroeconomics concepts like National income and Theories of full employment, Theories of Consumption and Investment, Money, Interest and Income and Theories of Inflation.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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

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 Accounting, Flow of Funds Accounting and Balance of Payments Accounting, Classical and Keynesian theories of Employment.

Theories of Consumption and Investment: Keynes' Psychological Law of Consumption and empirical evidence, Income-Consumption Relationship-Relative Income Hypothesis, Life Cycle Hypothesis and Permanent Income Hypothesis, Marginal Efficiency of Capital and Investment, Accelerator and Investment Behavior and Neo-classical 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 and Friedman's Restatement of Quantity Theory of Money.

Theory of Inflation: Classical and Monetarist approaches to Inflation; Structuralist Theory of Inflation; Philips Curve Analysis- short-run and long-run Philips Curve, The Natural Rate of Unemployment; Modified Philips Curve- James Tobin's Modification and R.M. Solow's Modification, Theory of Business Cycles: Samuelson, Hicks and Goodwin's Model.

SUGGESTED READINGS

1. Ackley, G.: Macro-economics: Theory and policy, Macmillan, New York, 1978.
2. Branson, W.A and Row, New: Macro-economic Theory and Policy (3rd Edition), Harper York, 1989.
3. Dornbusch, R.F. :Macro-economics (Seventh Stanley and Richard Edition), McGraw-Hill Startz: Publishing Company Ltd., New Delhi.2000.
4. Hall, R, E and J.B :Macro-economics. W.W. Norton, New York, 1986.
5. Jha, R. and Willey E: Contemporary Macro-economics: Theory & Policy. Eastern New Delhi, 1991.
6. Shapiro, E.: Macro Economics Analysis, Golgotia Publications, New Delhi, 1996.
7. Surrey, M.J.C (ed.): Macro Economics Themes. Oxford University Press, Oxford, 1976.
8. Romer., D.: Advanced Macroeconomics, 2001 (4th edition), McGraw-Hill, New York.
9. Natrass, Nicoli and Varma, G. Visakh: Macroeconomics Simplified: Understanding Keynesian and Neoclassical Macroeconomic Systems, Sage India, 2014.
10. Errol D'Souza, Macroeconomics, Pearson Education.
11. Robert J. Gordon, Macroeconomics, PHI Learning Private Limited, Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-103
BASIC QUANTITATIVE METHODS-I

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

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

Course Outcome: It makes students familiar with the use of statistical tools in analyzing Economics problems and provides deeper insight about the Matrices, concept of determinant, concepts of Geometric mean, Correlation and Regression.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 marks. Use of simple calculator is allowed.

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

Matrices: Definition and types, operation of Matrices, Rank of a matrix and Inverse of matrix. Concept of determinant 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 Analysis, Least square regression lines. Partial and Multiple Correlation and Multiple Regression analysis.

Theory of Attributes: Meaning, types and methods of association of attributes.

SUGGESTED READINGS

1. Alpha C. Chiang: Fundamental Methods of Mathematical Economics, Ch.4-12.
2. F. E. Croxton & D. J. Cowden: Applied General Statistics, Prentice-Hall, Inc. 3rd edition 1967.
3. J.P. Lewis: An Introduction to Mathematics for Students of Economics. Ch. 7-24
4. Joshi and Aggarwal: Mathematics for Students of Economics, New Academic Publishing Co. 2017.
5. S.P. Gupta: Statistical Methods, S. Chand and Co. New Delhi, 2002.
6. Sancheti & Kapoor: Business Mathematics, S. Chand and Co., New Delhi, 2014.
7. Suranjan Saha: Business Mathematics and Statistics, Kalyani Publishers, 13th edition 2017.
8. T.R.Jain: Mathematical Methods for Economics, VK Global Publications Pvt. Ltd.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 104-A (i)
ECONOMICS OF AGRICULTURE

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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 analyze and critically assess issues, policies and programmes in these areas.

Course outcome: To introduce to students to issues associated with Agriculture economics including system of farming and approaches to agricultural development, concepts of production, Risk and Uncertainty in Agriculture, Farm-Size and productivity relationship in Indian Agriculture, Agriculture Marketing and Pricing and Marketable Surplus.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 marks. Use of simple calculator is allowed.

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. Factor affecting agricultural development: Technological, Institutional and General.

System of Farming: Peasant Farming, State Farming, Collective Farming and Co-Operative Farming.

Approaches to agricultural development: Lewis, Schultz, Mellor and Boserup.

Concept of Production Function: Input-output; Input-Input and Product-Product relationship in farm production.

Risk and Uncertainty in Agriculture: Types and measures for meeting risk and uncertainty in agriculture. Instability of agriculture: types and measures for reducing instability of agriculture.

UNIT-II

Farm-size and Productivity relationship in Indian Agriculture: Agriculture price policy in India Instruments and evaluation.

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, WTO and Agriculture in India.

SUGGESTED READINGS

1. Charan. D. Wadhva: Some problems of India's Economic Policy, Tata McGraw-Hill,
2. D.O. Black: Introduction of Economics of Agriculture, Macmillan, New York
3. E. Boserup: The Conditions of Agricultural Growth, Alne Publishing Company
4. Francis R. Frankel: India's Green Revolution: Economic Gains and Political Costs, Oxford University Press, Bombay.
5. H.C. Taylor: Outlines of Agricultural Economics Macmillan, New York.
6. J.W. Mello: The Economics of Agriculture Development, Vohra and Co., Mumbai

7. R. N. Soni: Leading Issues in Agricultural Economics, Sohan Lal Nagin Chand and Co., Jalandhar.
8. R. Ranis & C. H. Fei: A Theory of Economic Development, American Economic Review.
9. T. W. Schultz: Transforming Traditional Agriculture, Layall Book Depot, Ludhiana
10. W. A. Lewis: Economic Development with Unlimited Supplies of Labour, The Manchester School of Economic and Social Studies.
11. S. S. Reddy, P.R. Ram, T.V. N. Sastry and I.B. Devi (2019), Agricultural Economics 2Ed, Oxford University Press.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 104-A (ii)
COMPUTER APPLICATIONS FOR ECONOMICS-I

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course Objectives: Aims of Computer Application is provides students with an opportunity to develop understanding of the basic operations of computer system and computer applications software. Meanwhile, they also develop the skill of using computer applications software for solving problems.

Course Outcome: By learning the subject students are able to solve their research problems by using the economics tools in various computer software. They will become good analyst of their research.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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, Objective, Research design of multiple regression analysis, assumptions, method and algorithm of estimation and overall model fit; Interpretation of regression output, validation of results.

SUGGESTED READINGS

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

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-104 A (iii)
ECONOMICS OF POPULATION

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course Objectives: The main objective of this paper is to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country. The 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.

Course Outcome: By learning the course it will enhance knowledge to explain demographic changes in the world and their major determinants. The students can evaluate the use of demographic concepts and population theories to understand contemporary socio-economic issues and current affairs. It also assesses the relationship between demographic change and policy.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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, Male/Female. 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.

SUGGESTED 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 Srinivasan, (1989): Handbook of Development Economics, Vol. 1 & 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.
10. Easterlin, R A (1968): Population, Labour Force and Long Swings in Economic Growth: National Bureau of Economic Research, New York.
11. Ghosh, B N (ed.): Studies in Population and Economic Development, Deep and Deep Publications, New Delhi.
12. John, R Weeks (2002): Population: An Introduction to Concepts and Issues (7th Edition), Wadsworth Publishing Company, New York.
13. Todaro. M. and Smith. S. C., Economic Development, Pearson Education, 2017
14. Govt. of India: Census Report, 2011.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 105-B (i)
MATHEMATICAL ECONOMICS-I

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course Outcome: students become able to measure the effect of change and discover techniques to improve their decision making process. They can make economic dynamics and solve problems through adjustment with time and a new dimension of scientific, logical and critical thinking, that will assist their mind to solve personal, professional and social problems and guide their to take decisions.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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, 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)

SUGGESTED 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. Intriligator, Michel d. (1971): Mathematical Optimization and Economic Theory.
11. Green, H.A.J (1971): Consumer Theory.
12. Varian, H.R. (1978): Mathematical Analysis.
13. Nehar, Phillips, A. (1971): Economic: Microeconomic Models.
14. Mahesh Chand & Anand V.K. (1981): Economic Theory –A Mathematical Approach.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-105-B (ii)

ECONOMICS OF GROWTH AND DEVELOPMENT-I

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course Objectives: The main objectives of this course are to look at the process of growth and development in terms of its characteristics such as structural transformation, pattern of distribution of income, and 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. market which is so vital for development theorists and practitioners.

Course Outcome: It provides the framework to understand the society or an economy's Growth, Development and Under-development, Economic Development and Institutions, Resources for Development, Theory of Growth.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 Chenery.

Economic Development and Role of Institutions, Schumpeter's Theory of Institutional Change, Myrdal Theory of Backwash Effects, 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: Harrod & Domar model and Kaldor model, Neo-classical Theories of Growth - Meade and Solow model.

SUGGESTED 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.
11. Gerald. M. Meier, James E. Rauch,(2005), *Leading Issues in Economic Development*, (8th Edition) Oxford University Press, Oxford.
12. Thrilwal (2000), *Growth and Employment*, 6th edition, Affiliated East West Press, New Delhi.
13. M.P. Todaro and S.C. Smith, *Economic Development*, Twelfth Edition, Pearson Education

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-105 B (iii)
ECONOMICS OF INFRASTRUCTURE

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course Outcome: On completion of this course student should understand key issues and problems with respect to regulation, governance and policies for infrastructure sector. They are be able to apply key principles, concepts and tools relevant to the economic regulations of infrastructure industries.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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

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; Economies of scale of joint supply.

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; Intermode condition in the Indian situation. Rate-making in telephone utilities. Principles of decreasing costs in telephone industry.

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 modelling, Energy policy in the Indian context. Bulk supply and pricing of electricity. The relative economics of thermal, hydel and nuclear power plants. National power grid. Financing water utilities. Urban and rural water supply. The exploitation of natural gas. Pricing problem.

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. The case for universal and free primary education: Structure of higher education and problems of its financing in India, Human resources and human capital development. The issues in education policy: Health dimensions of development.

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.
12. Parikh, K.S. (Ed.) (1999), *India Development Report – 1999-2000*, Oxford, New Delhi.
13. Barun Kumar De, *Infrastructure Economics*, Vrinda Publication
14. Sandeep Goyal and B.S. Sergi, (2020), *Towards a Theory of 'Smart' Social Infrastructures at Base of the Pyramid: A Study of India*, Cambridge University Press

MAECO-201**MICRO ECONOMIC ANALYSIS –II**

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course outcome: To introduce the students to the basic Microeconomics concepts like demand, elasticity, utility and recent developments in the theory of demand. To enable the students to apply the theories in analyzing real world Micro issues. To introduce the students to the Microeconomics concepts like Price and Output Determination, Alternative Theories of the Firm, Distribution and Welfare Economics.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 Chamberlin Approach; Equilibrium of the firm and group with product differentiation and selling costs, excess capacity under monopolistic competition, Collusive and non-Collusive oligopoly oligopoly-Cournot, Bertrand, Edgeworth, Chamberlin and Stackable Models; Kinked demand curve analysis and price rigidity. 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-Baumol sales revenue maximization model: Marris model of managerial enterprise, Williamson's model of Managerial Decision. 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: Pigouvian 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.

SUGGESTED READINGS

1. Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green: Microeconomic Theory
2. Henderson, J.M& R. E. Quandt: Micro-economic Theory: A Mathematical Approach, McGraw Hill, New Delhi, 1980.
3. Hirshleifer, J.and: Price, Theory and Applications, Prentice Hall India, New A. Glazer Delhi 1997.
4. Jeffrey M. Perloff: Microeconomics: Theory and Applications with Calculus, 7th edition 2016.
5. Karl E. Case, Ray C. Fair and Sharon E. Oster: Principles of Microeconomics 12th edition 2017.
6. Koutsoyiannis, A. :Modern Micro-economics, Macmillan Press, London, 2003
7. Mankiw, G.: Principles of Microeconomics, Cengage Learning, 8th edition 2015.
8. Stigler, G.: Theory of Price (4th Edition), Prentice Hall of India, New Delhi, 1996.
9. Varian, H.: Intermediate Micro Economics, WW Norton & Co. New York, 9th edition 2014.
10. R. S. Pindyck, D. L. Rubinfeld, P. Metha. (2018). Microeconomics, Pearson Education India.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-202
MACRO ECONOMIC ANALYSIS-II

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course outcome: It provides the knowledge to the students for the basic models of macro economics are introduced to analyse the economic fluctuations. The functioning of the economy as a whole is analyzed from the point of view of competing schools of Macroeconomic thoughts. To introduce the students to the Macroeconomics concepts like Micro-foundation of macro-economics, macro-economic policy for stabilization and growth, open economy macro-economic and inflation and monetary policy.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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

Micro-Foundations of Macro-economics: Formation of Expectations; Philips Curve and Lucas Island Model, Policy Ineffective Theorem; Caplin-Spulber Model, Coordination Failure Models.

Macro-Economic Policy for Stabilization and Growth: Theories of Economic policy, policy objectives and conflicts; fixed vs. target approach, Monetary policy, Fiscal policy and Crowding out and 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.

SUGGESTED READINGS

1. David K.H. Begg: The Rational Expectations Revolution in Macro- economics: Theories & Evidence, Heritage Publishers, New Delhi, 1982.
2. Drazen , Allan: Political Economy in Macro- economics, Orient Longman, New Delhi, 2004.
3. Froyen, Richard T.: Macroeconomics: Theories and Policies, 10th edition 2017.
4. Hall, R.E and J.B Taylor: Macro-economics, W.W. Norton, New Your 1986.
5. Levacic, Rosalind& Alexander, Redman: Macro-economics: An introduction to Keynesian-Neoclassical Controversies, Macmillan India, 2003.
6. Makin, A.J.: International Macro-economics, Prentice Hall, London, 2002.
7. Natrass, Nicoli and Varma, G. Visakh: Macroeconomics Simplified: Understanding Keynesian and Neoclassical Macroeconomic Systems, Sage India, 2014.
8. Romer David: Advanced Macro-economics, McGraw-Hill, International Edition, New York, 2001.
9. Sachs, Jeffery D. & Felip Larrain: Macro-economics in the Global Economy, Prentice Hall, New Jersey, 1993.
10. Turnovsky, Steophen J.: Methods of Macro-economic Dynamics, Prentice Hal of India Pvt. Ltd., New Delhi, 1997.
11. D. N. Dwivedi, Macroeconomics: Theory and Policy, McGraw Hill Education.
12. Richard T. Froyan, Macroeconomics: Theories and Policies, Pearson Education India.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-203**BASIC QUANTITATIVE METHODS-II**

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

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

Course Outcome: It makes students familiar with the use of statistical tools in analyzing Economics problems and provides deeper insight about the Calculus, Applications of Derivatives in economics, Interpolation, Arithmetic and Geometric Progression, Linear Programming, Index Numbers and Time series 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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 marks. Use of simple calculator is allowed.

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

Calculus: Differentiation of function of one variable, Logarithmic, Exponential Functions and Successive Derivatives, Partial Derivatives and Euler's theorem.

Applications of Derivatives in Economics: Elasticity of demand, Average and marginal functions. Optimization (maximization and minimisation) of One Variable and Applications of discriminating monopoly.

Interpolation and Extrapolation: Newton's Formula for leading differences, Binomial Expansion Method and Lagrange's Method.

UNIT-II

Arithmetic and Geometric Progressions: Elementary idea and their Problems.

Linear Programming: Problem formulation and solution of Linear Programming by graphic method.

Index Numbers: Problems and Methods of construction of Index Numbers, Chain and Fixed based index numbers, Reversibility tests and Cost of Living Index Numbers.

Time Series Analysis: Components of Time Series and Measurement of Secular Trend and Seasonal Variations.

SUGGESTED READINGS

1. Aggarwal, S. C. and R. K. Rana.: Basic Statistics for Economists (Latest Edition), V K (India) Enterprises, Delhi 2007.
2. Aggarwal, S.C. and R. K. Rana: Basic Mathematics for Economists, V.K. (India) Enterprises, Delhi. 2007
3. Allen, R. G. D: Mathematical Analysis for Economists, Macmillan. 1983.
4. Arora, P. N., Sumeet Arora, S. Arora.: Comprehensive Statistical Methods, S. Chand & Company Ltd., New Delhi. 2007
5. Chiang, A. C. and K. Wainwright.: Fundamental Methods of Mathematical Economics. McGraw Hill, 4th edition, McGraw Hill, New York, 2005.
6. F. E. Croxton & D. J. Cowden: Applied General Statistics, Prentice-Hall, Inc. 3rd edition 1967.
7. Freund, J. E.: Mathematical Statistics, Prentice Hall India 5th Edition, New Delhi. 1992
8. Gupta S. P: Statistical Methods, Sultan Chand & Sons, New Delhi. 2014
9. Joshi and Aggarwal: Mathematics for Students of Economics, New Academic Publishing Co. 2017.
10. Kandoi, Balwant: Mathematics for Business and Economics with Applications, Vol. 1&II, Himalaya, Mumbai. 2012.
11. S.P. Gupta: Statistical Methods, S. Chand and Co. New Delhi, 2002.
12. Sancheti & Kapoor: Business Mathematics, S. Chand and Co., New Delhi, 2014.
13. Spiegel, M. R. and Stephens L.J. (): Theory and Problems of Statistics 3rd Edition, Schaum's Series, Tata McGraw Hills, New Delhi, 2000
14. Suranjan Saha: Business Mathematics and Statistics, Kalyani Publishers, 13th edition 2017.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-204-A (i)**ECONOMICS OF INDUSTRY**

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course Objectives: The main objective of this course is to introduce students to issues related with Industrial Structure, market performance, capacity utilization, diversification, challenges to profit maximization, Industrial location, industrial pricing and the problems faced by the Indian Industries and settlement of Industrial disputes in India. The objectives are to equip students to analyse and critically assess issues, policies and programmes in these areas.

Course Outcome: It makes students familiar with the basic concepts of industry, industrial capacity, concept of diversification, Organizational forms and theories of Firm, profit maximization modes by O. Williamson, R. Marris, Cyret and March, Location of Economic Activities and Current Problems of Industrial Sector.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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: Definition and concepts; Plant, firm, industry, Market, Market Structure, Market power, Market Conduct and Market performance.

Industrial Capacity: concept and measurement of capacity utilization. Concept of diversification, merger and acquisition, optimum size of firm and constraints to size.

Organizational forms and theories of Firm: forms of Industrial organization: ownership management and control, passive and active behavior of firm.

Neo classical theory of firm and challenges to the profit maximization: O. Williamson, R. Marris, Cyret and March.

UNIT-II

Location of Economic Activities: Theories of A. Weber, Sargent Florence. Industrial pricing: Theory and Practice-cost oriented pricing, competition oriented pricing and pricing in public enterprises.

Types of Financial requirements and sources of industrial financés. Foreign capital in Industrial Sector: Role of MNCs and foreign collaborations.

Current Problems of Industrial Sector: Industrial Sickness and problems of small scale industries in India. Industrial disputes: Causes and machinery for settlement.

SUGGESTED READINGS

1. Ahluwalia, I.J.: Industrial Growth in India, Oxford University Press, New Delhi, 1985.
2. Dhar, P.K.: Indian Economy Its Growing Dimensions Kalyani Publishers, New Delhi, 2007.
3. Dutt, Ruddar and Sundharam K.P.M. Indian Economy, S. Chand and Company Ltd., 2009.
4. Golder, B. Technology Acquisition and Productivity Growth: A Study of Industrial Firms in India, Working paper, Institute of Economic Growth, Delhi, 1995.
5. Mishra, S.K. and Puri, V.K.: Indian Economy, Himalya Publishing House, New Delhi, 2008.
6. Mookherjee, Dilip: India Industry, Policies & Performances. Oxford University Press, Delhi, 1995.
7. Nayyar Deepak (ed): Industrial Growth and Stagnation, 1994.
8. Koutsoyiannis, A. :Modern Micro-economics, Macmillan Press, London, 2003.
9. Louis Philips, Applied Industrial Economics, Cambridge University Press
10. M. Fujita and Jacques-Francois Thisse, Economics of Agglomeration: Cities, Industrial Location, and Globalization, Cambridge University Press
11. Martin, S. (1988). Industrial economics: Economics analysis and public policy.
12. Scherer, F. M., & Ross, D. (1990). Industrial market structure and economic performance. Houghton Mifflin.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-204-A (ii)

COMPUTER APPLICATIONS FOR ECONOMICS-II

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course Objectives: Aims of Computer Application is provides students with an opportunity to develop understanding of the basic operations of computer system and computer applications software. Meanwhile, they also develop the skill of using computer applications software for solving problems.

Course Outcome: By learning the subject students are able to solve their research problems by using the economics tools in various computer softwares. They will become good analyst of their research.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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, Objective and research design; assumptions ; Procedure of deriving factor and assessing overall fit, interpretation of factor, validation of factors.

Multi Dimensional Scaling: Working of MDS; Objective, 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, Objective, Research Design for discriminate analysis, assumptions, interpretation of results, validations of results.

SUGGESTED 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.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-204-A (iii)
ECONOMICS OF LABOUR

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course Objectives: The main objective of this paper is to theoretical as well as empirical issues of industrial labour with special reference to India. It covers issues pertaining the wage theories, employment policies, trade unions and collective bargaining to the globalized economy and social security measures.

Course Outcome: students are able to know the basic mechanisms of the labour market, in particular how unemployment and wage and productivity differences can arise as equilibrium phenomena. They are able to read and understand project reports and journal articles that make use of the concepts and methods that are introduced in the course.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 to Labour Economics: Meaning, Nature and Scope, Evolution of Labour Economics, Changing Dynamics of Labour Economics. Labour: Concept, Distinct Features of Labour as a Factor Input, Relationship between Labour Economics and Labour Problems.

Labour Market: Concept, Nature and Characteristics of Labour Market; Differences between Labour Market and Commodity Market. Labour Market Imperfections: Classical, Neo-Classical and Modern Approaches to Labour Market. Analysis of Demand and Supply Forces: Demand for Labour Relating to Choice of Technology, Supply of Labour in Relation to Growth of Labour Force. Labour Market Policies: Exit Policy, Globalization and Labour Market.

UNIT- II

Employment and Wage Determination: Modern Concept of Employment, Employment and Economic Development, New Dimensions of Employment. Employment Models: Classical, Neo Classical Keynesian and Modern. Wage: Concept, Theories of Wage: Classical, Neoclassical and Modern, Wage Differentials and Wage Discrimination.

Labour Relations and Trade Unions: Growth, Pattern, Structure and Achievements of Labour Unions in India, Causes of Industrial Disputes, Their Settlement and Prevention Mechanism. Labour Legislation in India: Indian Social Security Measures: Meaning and the Need and Present Status of Social Security in India.

SUGGESTED READINGS

1. Bellante, D. and M. Jackson, (1983), Labour Economics, McGraw-Hill, New York.
2. Bhagoliwal, T. N (1998), Economics of Labour and Industrial Relations, Sahitya Bhavan Agra.
3. Borjas, G.J. (2009), Labour Economics, McGraw-Hill, New York.
4. Hunter and Mulvey, (1983), Economics of Labour, Macmillan.
5. Lester, R.A. (1975), Economics of Labour, McMillan, New York.
6. Mittal A.C and Sanjay Prakash Sharma (2005), Labour Economics, RSBA Jaypur
7. Reynolds L.G. (1998), Labour Economics and Labour Relations, Prentice Hall, USA.
8. Smith S.W. (1994), Labour Economics, Routledge, London.
9. Tyagi, B.P. (2009), Economics of Labour & Social Welfare, Sage Publication, New Delhi

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-205-B (i)
MATHEMATICAL ECONOMICS-II

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course Outcome: students become able to measure the effect of change and discover techniques to improve their decision making process. They can make economic dynamics and solve problems through adjustment with time and a new dimension of scientific, logical and critical thinking, that will assist their mind to solve personal, professional and social problems and guide them to take decisions.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 marks. Use of simple calculator is allowed.

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, linear 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.

SUGGESTED 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.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

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

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course Objectives: The main objectives of this course are to look at the process of growth and development in terms of its characteristics such as structural transformation, pattern of distribution of income, and 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. market which is so vital for development theorists and practitioners.

Course Outcome: It provides the framework to understand the society or Endogenous models of growth by Lucas and Romer, theory of convergence and divergence, Development and migration, resource allocation, human capital, Growth, poverty and inequality and Environment and Development

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 Models of Growth.

Convergence and Divergence: Theory of Convergence and divergence by Barro and Sala-i-Martin.

Development and Migration: Lewis and Todaro Model of Migration.

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.

Sustainable Development: Introduction, Conditions for Sustainable Development and Policies for Sustainable Development.

Environment and Development: Main issues, Environment as Necessity and Luxury and Scope of Environmental Degradation.

SUGGESTED 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. Ranis, Gustav and John C.H. Fei (1961): A Theory of Economic Development, *American Economic Review*, September pp. 533-65.
7. Ray, Debraj (2004): *Development Economics*, Seventh Impression, Oxford University Press, Delhi.
8. Robert Lucas (1988): On the Mechanics of Economic Development, *Journal of Monetary Economics*, July.
9. Romer, Paul M. (1986): Increasing Returns and Long Run Growth, *Journal of Political Economy*, October.
10. Gerald. M. Meier, James E. Rauch, (2005), *Leading Issues in Economic Development*, (8th Edition) Oxford University Press, Oxford.
11. Thirlwal (2000), *Growth and Employment*, 6th edition, Affiliated East West Press, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-205 B (iii)

Economic Administration with Special Reference to India

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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.

Course Outcome: At the completion of the course the students will be able to Analyze the basic concepts in economic administration, process of new economic policy and also Understand how planning takes place at the national, state and local levels along with the various institutions involved in the process of planning. They can describe the factors of public undertakings, Industrial policy resolutions and the impact of new economic policy.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 Policy Resolutions, 1956 and New Industrial Policy, 1991, 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.

SUGGESTED 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. Marathe 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)
15. John Vickers and George Yarrow Privatization: An Economic Analysis (The MIT Press Cambridge, Massachusetts London, England, 1997)

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-301

EVOLUTION AND STRUCTURE OF INDIAN ECONOMY-I

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course Outcome: Improvement in the understanding of the student about the performance of different sectors of the Indian economy by providing an insight into the past, present and future functioning of the Indian 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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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, Commercialization 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. Cottage and Small Scale industries: Their Problems and Measurement.

SUGGESTED 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, Himalaya 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.
7. Agarwal A.N. (2017), Indian Economy, Wiley Eastern Ltd., New Delhi.
8. Dhingra, I C (2016), Indian Economy, Sultan Chand & Co, New Delhi.
9. Kapila, Uma (2017) Indian Economy since Independence. Academic Foundation New.
10. Misra S. K. and Puri V. K. (2017) Indian Economy. Himalayan Publishing House.
11. Reserve Bank of India, Report on Currency and Finance, (Annual)
12. Ruddar Dutta and Sundaram (2017) Indian Economy, S. Chand & Co. New Delhi.
13. Acharya Shanker, Martens Annemie (Eds) (2011), India's Economy: Performance and Challenges, Oxford University Press, New Delhi.
14. Collection of Essays from EPW, Global Economic and FinancialCrisis, Orient Blackswan, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-302
PUBLIC ECONOMICS –I

Maximum Marks: 100
Internal Assessment: 30 Marks
External Assessment: 70 Marks

Credits: 5L+1T
Time Allowed: 3 Hours
Pass Marks: 35%

Course 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 the economy.

Course Outcome: Students are provided with the understanding of the 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 units of the syllabus and will carry 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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

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 and 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 and 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.

SUGGESTED READINGS

1. Bachanan, J.M. (1968), *The Demand and Supply of Public Goods*. Rand Mc Nally, Chicago.
2. Herber, B.P. (2006), *Modern Public Finance*, AITBC Publishers, New Delhi.
3. Lekhi, R.K. (2000), *Public Finance*, Kalyani Publishers, New Delhi.
4. Mueller, D.C (1979), *Public Choice*, Cambridge University Press, Cambridge.
5. Stiglitz, J.E.(1986), *Economics of Public Sector*, Norton, New York,
6. Atkinson, A.B. and J.E. Sigllizx (1980), *Lectures on Public Economics* Tata Mc Graw Hill, New York.
7. Auerbach, A.J. and M. Feldstern (eds.) *Handbook of Public Economics*. Vol. 1, North Holland, Amsterdam.
8. Buchanan, J.M. (1970), *The Public Finances*, Richard D. Irwin Homewood.
9. Goode, R. (1986), *Government Finance in Developing Countries*, Tata Mc Graw Hill, New Delhi.
10. Hughton, J.M.(1970) *The Public Finance: Selected Readings*, Penguin, harmondsworth,
11. Jha, R. (1988), *Modern Public Economics*, Routledge, London
12. Menutt, P.(1996), *The Economics of Public Choice*, Edward Elgar, U.K.
13. .Musgrave, R.A (1959) , *The Theory of Public Finance*, McGraw Hill Kogakhusa, Tokyo.
14. Stieglitz, J. E. (2000), *Economics of Public Sector*, W. W. Norton and Co., New York.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 303
INTERNATIONAL ECONOMICS-I

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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.

Course Outcome: Provides 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.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 Modern Theory of Factor-Endowments, Theory of Factor Price Equalisation, Theory of Reciprocal Demand, Offer Curve Analysis.

New Theories of International Trade: Economies of Scale, Intra-Industry Trade, Product Differentiation and Technology, Gains from Trade and Income distribution, Terms of Trade: concepts and measurements, Secular Deterioration Thesis of Terms of Trade and 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.

SUGGESTED READINGS

1. Mannur, H G, (2011), International Economics, Vikas Publishing House, New Delhi.
2. Bhagwati, J N (1998): International Trade: Selected Readings, McMillan University Press.
3. Clement Mpfister, R L & Rothwell, K J: Theoretical Issues in International Economics, (1967) Constolete and Company Ltd.
4. Sodersten, B O & Geoffery Reed (1994): International Economics, McMillan, London.
5. James C and Robert, M Dunn, Jr.(2004): International Economics, John Wiley & Sons..
6. Jones, R W & Kenen, P B (2003): Handbook of International Economics, Vol. I, II and III, Elsevier Amsterdam.
7. Krugman P R & Obstifeld Maurice (2017), International Economics- Theory and Policy, Addison-Wesley Longman Pvt. Ltd., Delhi.
8. Salvatore, Dominick (2016), International Economics, Prentice Hall Upper Saddle River N.J., New York.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-304- A (i)
THEORY OF STATISTICS-I

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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 tools and techniques 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.

Course Outcome: Trains the students in the use of statistical tools in analyzing economic problems by simple statistical tools and techniques.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 marks. Use of simple calculator is allowed.

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

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 and Multiplication Theorems, Conditional Probability and Bayes Theorem.

Probability Distributions: Properties and applications of Binomial Distribution, Poisson Distribution and Normal Distribution.

SUGGESTED 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. Speigal: Theory and Problems of Statistics.
5. S. C. Gupta & V. K. Kapoor: Fundamental of Applied Statistics, Sultan Chand & Sons , New Delhi.
6. J. E. Freund & F.J. Willian: Modern Business Statistics, Prentice Hall, Englewood.
7. A.M. Mood & F.A. Graybill: Introduction to the Theory of Statistics. McGraw Hill.
8. Yogish, S.N., Statistical Methods for Economics, Mangala Deep Publication, Jaipur.
9. T.R. Jain, Basic Statistics for Economists, V.K. Publications Pvt. Ltd.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 304-A (ii)
PUNJAB ECONOMY

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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.

Course Outcome: Provides the highlights of the situation and economic conditions of the state Punjab.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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-1

Structure of Punjab Economy: Nature of Punjab economy after re-organization of Punjab.

Agriculture: Nature and problems of Punjab agriculture, extent of agricultural inputs in Punjab, Cropping pattern; Productivity in agriculture; Agricultural finance; and Rural Indebtedness. Agricultural marketing in Punjab

Banking and Finance – Nature, growth, problems and prospects.

UNIT-II

Industrial Development: Need for industrialization, Industrial pattern, Major industries; Industrial employment: Occupational Pattern and unemployment, Industrial Policy of Punjab (1996, 2003, 2009), Capital formation, Tax structure and tax collection in Punjab, Public Expenditure and Public Debt.

Urbanization: Nature and problems; Population and its composition.

SUGGESTED READINGS

1. A Report: Agricultural Production: Pattern, Adjustment Programme in Punjab for Productivity and Growth. (Govt. of Punjab, Oct. 2002).
2. A. S. Dhesi and Gurmail Singh (2007) Rural Development in Punjab, Routledge New Delhi.
3. Bawa, R.S. and P.S. Raikhy, (2000) Punjab Economy: Emerging Issues, Guru Nanak Dev University, Amritsar.
4. Jammu, P.S. (ed.), (2001), Globalization and Punjab, Punjab Academy of Social Science, Literature and Culture.
5. Johl, S.S and S.K. Ray (Eds.) (2002), Future of Agriculture in Punjab CRRID, Chandigarh.
6. Johl, S.S. (1996) Future of Punjab Agricultural, CRRID, Chandigarh.
7. L. Singh and A. Gill (2019) Agriculture Innovation System in Asia: Towards Inclusive Rural Development, Routledge New Delhi.
8. L. Singh and N. Singh (2016) Economic Transformation of a Developing Economy: The Experience of Punjab, India, Springer Nature, Singapore.
9. L. Singh, K.S. Bhangoo and Rakesh Kumar (2019) Agrarian Distress and Farmer Suicide in North India, Routledge New Delhi.
10. Singh, Master Hari,(1980), Agricultural Workers Struggle in Punjab PPH, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 304 – A (iii)
COMPARATIVE ECONOMIC SYSTEMS –I

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course Objectives: The course intends to provide a deep understanding about the broad principles and theories relating to different economic systems. Comparative economics allows us to understand the factor that contributes to quality of Life. Studying different economic systems answers questions regarding how literacy, fertility, life expectancy and poverty might influence the labor force.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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.

SUGGESTED 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. A. 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.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 305 – B (i)
ECONOMETRICS-I

Maximum Marks: 100
Internal Assessment: 30 Marks
External Assessment: 70 Marks

Credits: 5L+1T
Time Allowed: 3 Hours
Pass Marks: 35%

Course 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.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 AR and MA modeling: Properties of AR and MA. ARIMA processes: testing for stationary: Identification, estimation and Testing of ARIMA (1,1,0) processes.

SUGGESTED READINGS

1. Damodar Gujarati: Basic Econometrics. McGraw Hill, New Delhi, 2008.
2. J. Johnston & J. Dinardo: Econometric Methods, McGraw Hill, New Delhi, 1997.
3. Koutsiyannis: Theory of Econometrics, Macmillan, New Delhi, 1978.
4. L.R.Klien: A textbook of Econometrics, Prentice Hall, New Delhi, 1978.
5. Kemanta, J. (2008): Elements of Econometrics (2nd Ed.), Macmillan, New York.
6. Greene. W. H., (2011) Econometrics Analysis, (7th edition), Person, New Delhi.
7. Maddala, G. S. (2007): Introduction to Econometrics (3rd ed.), Wiley India.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-305-B (ii)
ENVIRONMENTAL ECONOMICS

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course Objectives: Environmental Economics provides the deep understanding of some important and controversial issues such as ecological economics, environmental benefits and cost of economic development. It also discusses the resource scarcity and allocation to reach the welfare. Most will includes some microeconomic theory looking at how firms and individuals behave when production and consumption involves externalities. Analysis of policy issues will be as important part of environmental economics.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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.

SUGGESTED 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. Chaubey, P.K. (2000), Population Policy in India, Kanisha Publications, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-305-B (iii)
MONEY AND BANKING

Maximum Marks: 100
Internal Assessment: 30 Marks
External Assessment: 70 Marks

Credits: 5L+1T
Time Allowed: 3 Hours
Pass Marks: 35%

Course 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.

Course Outcome: Enhances the knowledge of students for the operations of money and banking and their interaction with the rest of the economy by using the concepts of terms and evolution of money, banking reforms, international banking.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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: Meaning, Evolution, Types, Functions and Role of Money, Distinction between Money and Near Money.

Financial System: Structure of Financial System and its Role in Economics Development; Money Market and Capital Market in India: Components and Recent Reforms.

Supply of Money: Measures of Money Supply, H-theory of money supply (High powered Money, Money Multiplier Process and Factors Affecting High Powered Money).

Theories of Money: Tobin's Risk Averting Theory of money, Friedman's Modern Quantity Theory of Money (Restatement) and Liquidity Theory of Money; Radcliffe-Sayers and Gurley-Shaw Thesis.

UNIT-II

Central Bank: Definition, Functions, Techniques of Monetary Management (Credit control) and Reserve Bank of India.

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.

Non-Bank Financial Institutions (NBFIs): Definition, Types, Impact on India's economic development and measures taken to control their operations.

International Banking: Structural Changes. Motivating Factors, Direction and Purpose of Lending, Control of International Banks.

SUGGESTED 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. Fabozzi, F. J. and Franco Modigliani (Fourth Edition) (2009): Capital Markets Institutions and Instruments, Prentice Hall, New Jersey.
4. Howells, Peter and Bain Keith (2002): The Economics of Money, Banking and Finance, Prentice Hall, Pearson Education Ltd.
5. Khanna, Perminder (2005): Advanced Study in Money and Banking Theory and Policy Relevance in the Indian Economy, Atlantic Publishers, New Delhi.
6. Kulkarni, G. (1999): Modern Monetary Theory, Macmillan, New Delhi.
7. Mohan Rakesh (2009): Monetary Policy in a Globalized Economy – A Practitioner's View, Oxford University Press.
8. Paul, R.R. (2015): Money, Banking and International Trade, Kalyani Publications, New Delhi.
9. Gupta, Suraj B. (2010), Monetary Economics: Institutions, Theory and Policy, S. Chand & Company, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-401
EVOLUTION AND STRUCTURE OF INDIAN ECONOMY-II

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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. It provides the knowledge to the students about the critical understanding of the economy such as Indian Agriculture, Industrial Development along with the analysis of Balance of Payments in India.

Course Outcome: Makes the students of Economics understand the prevailing condition about infrastructure, capital formation and role of foreign capital in context to Indian 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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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.

Economic Problems in India: Concentration of Economic Power, Poverty, Unemployment, Economic Inequalities and Income, Regional Imbalances, Population and Inflation in India.

SUGGESTED 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.
7. Agarwal A.N. (2017), Indian Economy, Wiley Eastern Ltd., New Delhi.
8. Dhingra, I C (2016), Indian Economy, Sultan Chand & Co, New Delhi.
9. Reserve Bank of India, Report on Currency and Finance, (Annual)
10. Acharya Shanker, Martens Annemie (Eds) (2011), India's Economy: Performance and Challenges, Oxford University Press, New Delhi.
11. Collection of Essays from EPW, Global Economic and Financial Crisis, Orient Blackswan, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-402
PUBLIC ECONOMICS-II

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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.

Course Outcome: Enhances the skills to know the 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 units of the syllabus and will carry 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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

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 and 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.

SUGGESTED READINGS

1. Musgrave, R.A and Masgrace. P.B. (1976): Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tekye.
2. Herber, B.P. (2006), *Modern Public Finance*, AITBC Publishers, New Delhi.
3. Lekhi, R.K. (2000), *Public Finance*, Kalyani Publishers, New Delhi.
4. Shoup, C.S.(1970): Public Finance, Aldine, Chicago.
5. Kaldor, N. (1955), *An Expenditure Tax*, George Allen and Unwin; London.
6. Musgrave R.A and C. Shoup (eds.): *Readings in the Economics of Taxation*, George Allen and Unwin, London.
7. Barman, K. (1986), *Public Debt Management in India*, Uppal Publishing House, New Delhi.
8. Buchanan J.M. (1958), *Public Principles of Public Debt. A Defence And Restatement*. Richaard D Irwin Homewood.
9. Ferguson, J.M.(ed). (1964), *Public Debt and Future Generations*, North Carolina University Press. Chapel Hill.
10. Sreekantaradhya, B.S (1972), *Public Debt and Economic Development in India*, New Delhi.
11. American Economic Association (1955), *Readings in Fiscal Policy*, George Allen and Unwin, London.
12. Stieglitz, J. E. (2000), *Economics of Public Sector*, W. W. Norton and Co., New York.
13. Government of India (1985): *Long Term Fiscal Policy*, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-403
INTERNATIONAL ECONOMICS-II

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course Outcome: Intends to provide a deep understanding about the broad principles and theories, balance of payments, international exchanges, and international capital movement.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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: Fixed and Flexible Exchange Rate, Spot and Forward Market, Foreign Exchange Risks, Hedging, Speculation and Arbitrage.

Theories 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.

Policy for correcting Disequilibrium in Balance of Payments: Expenditure Reduction and Switching, Absorption Approach, Elasticity Approach and Monetary Approach.

UNIT-II

International Capital Movement: Types, Long term and Short term, Factors Affecting International Capital Movements.

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, Bretton Woods System and Post-Bretton Woods System. IMF and IBRD: Functions, Organisation and Lending Mechanism IFC, IDA and MIGA. ADB: Meaning, Functions and Relationships with India;

SUGGESTED 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 Wiley & Sons.Inc.
4. Jones, R W & Kenen, P B (2003): Handbook of International Economics, Vol. I, II and III, Elsevier Amsterdam.
5. Salvatore, Dominick (2016), International Economics, Prentice Hall Upper Saddle River N.J., New York.
6. Sodersten, B. O. & Geoffery Reed (1994): International Economics, McMilan, London.
7. Ellsworth, P T & Clark Leith (1975): The International Economy, McMilan Press.
8. Mia Mikic (1998) : International Trade, McMilan Press, London.
9. Oded Shenkar &Yadong Luo (2004): International Business, John Wiley & Sons Inc.
10. Peter H Lindert (1969): International Economics, N J Princeton University Press.
- 11.Mannur, H G, (2011), International Economics, Vikas Publishing House, New Delhi.
- 12.Krugman P R & Obstifeld Maurice (2017), International Economics- Theory and Policy, Addison-Wesley Longman Pvt. Ltd., Delhi.
- 13.Thomas A. Pugel, International Economics, , McGraw Hill Education.
- 14.Dennis R. Appleyard and Alfred J. Field Jr., International Economics: Trade and Finance, McGraw Hill Education

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-404-A (i)
THEORY OF STATISTICS-II

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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 tools and techniques necessary for data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

Course Outcome: Provides detailed knowledge about the use of statistical tools for estimation and analysis in the field of Research.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 marks. Use of simple calculator is allowed.

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

Estimation: Point Estimation and Interval Estimation, Properties of Point Estimates. Statistical Hypothesis: One-tailed and Two-tailed Tests. Types I and II Errors: Level of Significance and 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, Types of Sampling. Elementary Knowledge of Analysis of Variance (one-way and two way ANOVA). Non-Parametric Tests: Chi-square Test, and Sign Test.

SUGGESTED READINGS

1. F.E. Croxton & D.J. Cowden. (1951) Applied General Statistics Prentice Hall London and Prentice Hall, New York.
2. J.N. Kapur & H.C. Sexena (2010) Mathematical Statistics, S. Chand & Co., Pvt. Ltd. New Delhi.
3. S.P.Gupta: Statistics, Sultan Chand & Sons, New Delhi, 2017.
4. M.R. Spiegel and Stephens, L. J. (2000), Theory and Problems of Statistics, Tata McGraw Hill Publishing Company Ltd., New Delhi.
5. S.C.Gupta & V.K.Kapoor: Fundamental of Applied Statistics, (2014) Sultan Chand & Sons, New Delhi.
6. J.E. Freund & F.J. Willian: Modern Business Statistics, (1969) Prentice Hall, Englewood.
7. P.G.Hoel : Elementary Statistics, (1976) John Willey & Sons Inc.
8. P.H.Karmal: Applied Statistics for Economics, (1970) Sir Issac Pitman and Sons Ltd. London.
9. A.M. Mood & F.A. Graybill: Introduction to the Theory of Statistics. McGraw Hill (1973).
10. Anderson, D R, Sweeney, D J & Williams: Statistics for Business and Economics, Cengage, U.S.A., 2017.
11. Goon, Gupta and Dasgupta : Fundamentals of Statistics – Vol. I (2005) & II (2003), World Press, Calcutta.
12. Levin, R I & Rubin, D S (2013): Statistics for Management, Pearson Education Ltd., New York.
13. Wonnacott, TH & Wonnacott, R J : Introductory Statistics for Business and Economics, (1990) Wiley, U.K.
14. Freund, John E (1979): Modern Elementary Statistics
15. Yule, G. U. & Kendall, M G (1968): An Introduction to Statistics, Charles Griffin and Co. London.
16. Beals, R E (1972): Statistics for Economists – An Introduction, Cambridge University Press.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO- 404-A (ii)
POLITICAL ECONOMY OF DEVELOPMENT

Maximum Marks: 100

Credits: 5L+1T

Internal Assessment: 30 Marks

Time Allowed: 3 Hours

External Assessment: 70 Marks

Pass Marks: 35%

Course 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.

Course Outcome: provides knowledge of the basic concepts of Political Economy in detail along with the transition of Imperialism as well as Socialism.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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

Dialectical and Historical Materialism: Theory and Method, Dialectical Materialism (Materialistic Conception of Human/Social history).

Mode of Production and Social Superstructure: Factors constituting and forces governing Mode of Production, Social Superstructure, Dialectical interaction of Base and Superstructure, 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 and Characteristics of Asiatic mode.

UNIT-II

Basic Analysis of Capitalism: Meaning and Approach of Capitalism and Commodity Production; Labour and Labour Value, Commodity Fetishism, Surplus Value, Socio-economic Crisis; Contradictions of Capitalist Development.

Nature of Capital Accumulation: Meaning, Methods and Problems of Capitalist Accumulation and Socialistic Accumulation.

Imperialism and the Third World Countries: Transition of Imperialism, Origin of capitalism, Rise of monopoly capitalism, context of Imperialism, Marxian and Non-Marxian Approaches and Dependent Development in the Third World Countries.

Transition of Socialism: Dialectics of Transition: General Consideration, Basic Pre-requisites, Aims of Post-revolutionary Society (Socialism/Communism).

SUGGESTED 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.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-404-A (iii)
COMPARATIVE ECONOMIC SYSTEMS-II

Maximum Marks: 100
Internal Assessment: 30 Marks
External Assessment: 70 Marks

Credits: 5L+1T
Time Allowed: 3 Hours
Pass Marks: 35%

Objective: The course intends to provide a deep understanding about the broad principles and theories relating to different economic systems. Comparative economics allows us to understand the factor that contributes to quality of Life. Studying different economic systems answers questions regarding how literacy, fertility, life expectancy and poverty might influence the labor force.

Course Outcome: The course provides student with the knowledge of role of Planning in various economics activities and the solution of economic problems. This course also equip them with the knowledge of concepts of Capitalism and Socialism.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 and 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 and Human Alienation etc.

UNIT-II

Class Division: Proletarian, Capitalist, Peasant and Middle Classes and Economic basis of Class Hegemony.

Capitalism and Socialism: Theory of Convergence of the Capitalist and Socialist Systems and its Appraisal.

SUGGESTED READINGS

1. Morris 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.
7. George Dalton: Economic Systems and Society.
8. Oskar Lange (1965): Problems of Political Economy of Socialism, People's Publishing House, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-405- B (i)
ECONOMETRICS-II

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Objective: 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. 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.

Course Outcome: this course enhances the capabilities of the student by equipping them with the different techniques of data analysis such as autocorrelation, least square penal data techniques as well as multivariate 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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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, Logit 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.

SUGGESTED READINGS

1. Damodar Gujarati: *Basic Econometrics*. McGraw Hill, New Delhi, 2008.
2. J. Johnston & J. Dinardo: *Econometric Methods*, McGraw Hill, New Delhi, 1997.
3. Koutsiyiannis: *Theory of Econometrics*, Macmillan, New Delhi, 1978.
4. L.R.Klien: *A textbook of Econometrics*, Prentice Hall, New Delhi, 1978.
5. Kemanta, J. (2008): *Elements of Econometrics (2nd Ed.)*, Macmillan, New York.
6. Greene. W. H., (2011) *Econometrics Analysis, (7th edition)*, Person, New Delhi.
7. Maddala, G. S. (2007): *Introduction to Econometrics (3rd ed.)*, Wiley India. Jeffrey Wooldridge, *Introductory Econometrics: A Modern Approach*, Cengage Learning.
8. Damodar Gujarati, Dawn Porter and Sangeetha Gunasekar, *Basic Econometrics*, McGraw Hill Education.
9. James H. Stock and Mark W. Watson, *Introduction to Econometrics*, Pearson Education.
10. G. S. Maddala and Kajal Lahiri, *Introduction to Econometrics*, Wiley.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-405-B (ii)
Economics of Health and Education

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Objective: The main objective of the subject is to understand the comprehensive and coherent phenomenon about the development of health and education in the country. This course provides a framework to analyse, among other things, individual choice in the demand for health and education, government intervention and aspects of inequity and discrimination in both sectors. It also gives an overview of health and education in India.

Course Outcome: the course provides students with the insight about the importance of Education and Health in Human Capital Formation, role of International Institutions in governing these two aspects of Human development along with Various Policies and Programmes in Indian 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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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

Health and Human Development: Role of Health and education in Human Development; Importance in poverty alleviation; health and education outcomes.

WHO: Origin, Role and Structure.

Health Care Systems in India: Public and Private and their Developments, Health Challenges Faced by Developing Countries.

Health Programmes: National Health Programmes in India.

UNIT- II

Education as Investment in Human Capital: Importance of education, Private and social rate of return to Education.

Education sector in India: An overview Literacy rates, School Participation, school quality measures. The Gender Gap: Women and Education.

Educational Supply and Demand: The relationship between employment opportunities and Educational Demands.

Education Policy: National Education Policy of India (1968, 1986, 1992) and Recent Developments in Education Policy.

SUGGESTED 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. Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
4. Mc Mohan, W.W. (1999), Education and Development : Measuring the Social Benefits, Oxford University Press, Oxford.
5. William, Jack: Principles of Health Economics for Developing Countries, World Bank Institute Development Studies, 1999.
6. Bhattacharya J. (2013), Health Economics, Palgrave Macmillan, New York.
7. Recent World Development Reports, The World Bank.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.

MAECO-405-B (iii)
RESEARCH METHODOLOGY

Maximum Marks: 100

Internal Assessment: 30 Marks

External Assessment: 70 Marks

Credits: 5L+1T

Time Allowed: 3 Hours

Pass Marks: 35%

Course 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.

Course Outcome: Enhances the Research skills of the students by providing the thorough and step by step detail about research methods, sampling techniques and data analysis in solving various socio-economic problems.

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 13 marks each. Section C will consist of 09 short-answer type questions of 02 marks each which will cover the entire syllabus uniformly and will carry 18 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 and Formulating a Research Problem.

Research Design: Meaning, Types and Need for a Research Design; Basic Principles of Experimental Design.

Sampling: Definition and Need for Sampling, Random and Non-random Sampling, Sampling Error, Distinction between Sample and Universe.

Data Collection: Types of Data: Primary and Secondary and Methods of Data Collection.

UNIT-II

Hypothesis Testing: Formulation and Testing of hypothesis – Concept of Hypothesis, and its Formulation, Null and Alternative Hypothesis, Procedure of Hypothesis Testing, Tests of Hypothesis; Difference between Mean of Two Samples and Standard Deviation of Two Samples, Difference between Proportion of Two Samples. Hypothesis testing based on t, f and z test.

Report Writing: Significance of Report Writing, Different Steps in Writing Report, Lay Out of Research Report, Types of Reports, Mechanics and Precautions of writing reports and conclusion.

SUGGESTED READINGS

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, 2017.
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 and Neil J. Salkind: Handbook of Research Design and Social Measurement, London, Sage Publications, 2002.
5. David Nachmias and Chava Frankfort-Nachmias: Research Methods in the Social Sciences, (2007) Worth Publishers.
6. Claire Selltiz, Lawrence S. Wrightsman and Stuart W. Cook: Research Methods in Social Relations, (1976) 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, 1st Indian Reprint, 2006.
9. 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.
10. Goode W.J and Hatt P. K (2014), Methods in Social Research, McGraw Hill, New York.
11. C R Kothari (2008), Research Methodology: Methods and Techniques, New Age International, New Delhi.

TEACHING LEARNING ACTIVITIES

Debate, Discussions, Quiz, Guest Lectures etc.