

# **PANJAB UNIVERSITY, CHANDIGARH-160014 (INDIA)**

(Estd. under the Panjab University Act VII of 1947—enacted by the Govt. of India)

# **FACULTY OF ARTS**

## **SYLLABI**

FOR

# M.A. ECONOMICS (SEMESTER SYSTEM) EXAMINATIONS, 2012-2013

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## APPLICABILITY OF REGULATIONS FOR THE TIME BEING IN FORCE

Notwithstanding the integrated nature of a course spread over more than one academic year, the regulations in force at the time a student joins a course shall hold good only for the examinations held during or at the end of the academic year. Nothing in these regulations shall be deemed to debar the University from amending the regulations subsequently and the amended regulations, if any, shall apply to all the students whether old or new.

## GUIDELINES FOR CONTINUOUS INTERNAL ASSESSMENT (20%) FOR REGULAR STUDENTS OF POST-GRADUATE COURSES of M.A. Economics (Semester System) (Effective from the First Year Admissions for the Academic Session 2008-2009)

- 1. The Syndicate has approved the following guidelines, mode of testing and evaluation including Continuous Internal Assessment of students :
  - (i) Terminal Evaluation : 80 %
  - (ii) Continuous Assessment : 20 %
  - (iii) Continuous Assessment may include written assignment, snap tests, participation in discussions in the class, term papers, attendance etc.
  - (iv) In order to incorporate an element of Continuous Internal Assessment of students, the Colleges/Departments will conduct **one** written test as quantified below :

25 (reduced to 5)
25 (reduced to 5)
15 (reduced to 3)
25 (reduced to 5)
10 (reduced to 2)

Total :

100 reduced to 20

2. Weightage of 2 marks for attendance component out of 20 marks for Continuous Assessment shall be available only to those students who attend 75% and more of classroom lectures/seminars/workshops. The break–up of marks for **attendance component** for theory papers shall be as under :

Attenda	nce Component		Mark/s for Theory Papers
(a)	75 % and above upto 85 %	:	1
(b)	Above 85 %	:	2

- 3. It shall **not be compulsory** to pass in Continuous Internal Assessment. Thus, whatever marks are secured by a student out of 20% marks, will be carried forward and added to his/her score out of 20%, i.e. the remaining marks allocated to the particular subject and, thus, he/she shall have to secure pass marks both in the University examinations as well as total of Internal Continuous Assessment and University examinations.
- 4. Continuous Internal Assessment awards from the affiliated Colleges/Departments must be sent to the Controller of Examinations, by name, **two weeks before** the commencement of the particular examination on the *proforma* obtainable from the Examination Branch.

## **SPECIAL NOTE :**

- (i) The theory paper will be of 80 marks and 20 marks will be for internal assessment.
- (ii) In the case of Postgraduate Courses in the Faculties of Arts, Science, Languages, Education, Design & Fine Arts, and Business Management & Commerce, falling under the purview of Academic Council, where such a provision of Internal Assessment/Continuous Assessment already exists, the same will continue as before.

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## OUTLINES OF TESTS, SYLLABI AND COURSES OF READING FOR M.A. ECONOMICS (SEMESTER SYSTEM) FOR THE EXAMINATION OF 2012-2013

## Course Structure :

The M.A. in Economics will be a four semester full time programme. The course will be organized over two years, each year consisting of two semesters—the summer semester and the winter semester.

The programme of study consists of sixteen courses out of which **12** are core courses—**compulsory** for all students—and **4** are **elective courses**. Each of these courses will carry 100 marks, of which 20 marks will be for internal assessment and 80 marks for the end semester examinations to be held in December (Semesters I and III) and April (Semesters II and IV). The teaching hours will be 50 per course per semester. The courses will be offered according to the following schedule :

## **SEMESTER-I**

## **All Compulsory Papers :**

MAECO-101	Micro Economics-I	100 Marks
MAECO-102	Contemporary Issues in Indian Economy-I	100 Marks
MAECO-103	Quantitative Methods	100 Marks
MAECO-104	History of Economic Thought	100 Marks

## **SEMESTER-II**

## All Compulsory Papers :

There will be two Compulsory Papers :

MAECO-201	Micro Economics-II	100 Marks
MAECO-202	Contemporary Issues in Indian Economy-II	100 Marks
MAECO-203	International Economics	100 Marks
MAECO-204	Economics of Public Finance	100 Marks

#### **SEMESTER-III**

There will be two compulsory rupers ?					
MAECO-301	Macro Economics-I 100 Marks				
MAECO-302	ECO-302 Economics of Growth and Development-I 100 Marks				
Any two of the following options for Papers MAECO-303 & 304					
	(i)	Economics of Agriculture-I	100 Marks		
	(ii) Economics of Industry-I		100 Marks		
	(iii) Basic Econometrics 100		100 Marks		
	(iv)	Economics of Population	100 Marks		
		OR			
		Economics of Human Resource Development	100 Marks		

## SEMESTER-IV

There will be two Compulsory Papers :					
MAECO-401 Macro Economics-II	100 Marks				
MAECO-402 Economics of Growth and Development-II	100 Marks				
Any two of the following options for Papers MAECO-403 & 404					
<i>Note :</i> Students who opt for Economics of Agriculture-I and/or Economics of Industry-I in semester-III will have to opt for Economics of Agriculture-II and/or Economics of Industry-II in Semester-IV).					
(i) Economics of Agriculture-II	100 Marks				
(ii) Economics of Industry-II	100 Marks				
(iii) Mathematical Economics	100 Marks				
(iv) Economics of Money and Banking	100 Marks				
OR					
Economics of Financial Markets & Institutions	100 Marks				
(v) Advanced Econometrics	100 Marks				

#### SEMESTER-I

#### Paper-MAECO-101 : MICRO ECONOMICS-I

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

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

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### **Pedagogy of the Course Work :**

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT -I

Central Ideas of Economics :

How do People Make Decisions? People : face 'Trade Offs' ; Incur Opportunity Costs and Gain Benefits of Decisions; Think at the Margin and Respond to Incentives. How do People Interact? Specialization and Exchange can make each party 'Better Off' Market often work efficiently, The Invisible Hand; Three Coordination Tasks in the Economy: Which Commodity be Produced and How much of it? Who should produce it and how? Who should Consume and How much of it?

*Methodology of Economics as a Social Science:* Alternative Processes of Construction and Appraisal of Positive Economic Theories.

*Equilibrium:* Concept, Stability, Existence and Uniqueness of Equilibrium. *Types:* Static and Dynamic Equilibrium. Partial and General Equilibrium. *Stability Analysis:* Marshallian and Walrashallian Approaches.

## UNIT-II

Analysis of Consumer Choice under Certainty :

Cardial Analysis, Elasticity of Demand, Revisiting Consumer Equilibrium and Effects of Changes in Relative Prices and Money Incomes through Ordinal Utility Approach and Derivation of 'Marshallian' and 'Compensated' Demand Curves.

*Consumer Surplus:* Hicks' and Marshall's Approach. *Application of Indifference Curves:* Cash Subsidy Vs. Kind Subsidy: Income Leisure Choice; Inter-temporal Choice of Consumption. Revealed Preference Theory and Consistency of Choice.

#### **UNIT-III**

Analysis of Consumer Choice under Uncertainty : Measurement of Risk. Expected Utility and Preferences towards Risk. Why do people gamble (insure)? Risk Return Trade–Off. Reducing Risk.

Analysis of Consumer Behavior under Asymmetric Information : Hidden Actions: Principals, Agents and Moral Hazard. Hidden Characteristics : Adverse Selection Problem. Market and Government Responses to the Problems of Moral Hazard and Adverse Selection.

Empirical Estimation of Demand. From Individual to Market Demand: The Role of Network Externalities: 'Bandwagon' and 'Snob' Effects.

### **UNIT-IV**

Theory of Production and Costs:

Production, Input Choice and Cost with One Variable Input. Law of Returns to Variable Proportions and Choice of Optimum Quantity of an Input. Derivation of Short Run Cost Curves from Productivity Curves of a Variable Factor of Production. Reserve Capacity and the Shape of Short Run Cost Curves.

*Multiple Input Decisions :* The Choice of Optimal Techniques of Production and Factor Combinations. Factor Price Changes: Substitution and Output Effects. Elasticity of Input Substitution. Constant, Increasing and Decreasing Returns to Scale. Expansion Path and derivation of Long Run Cost of Production Curves.

Economies and Diseconomies of Scale: Shape of Short and Long Run Costs Curves: Theory versus Empirical Evidence. Multi Product Firms and Dynamic Changes in Costs: Economies of Scope; The Learning Curve Analysis.

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#### M.A. ECONOMICS (SEMESTER SYSTEM) SYLLABUS

#### **Recommended Readings :**

## Essential Readings :

1.	Mankiw Gregory N. (1998)	:	Principles of Economics, 3 <sup>rd</sup> Edition, Thomson, 3rd Indian Reprint (2007).
2.	Pindyck, Robert S., Rubinfel Daniel, L. and Gupta, P.L. (2006)	:	Micro-Economics, Prentice Hall of India, New Delhi.
3.	Maddala, G.S. and Miler Ellen (2004)	:	Micro-Economic Theory and Applications, Tata McGraw Hill.
Fu	rther Readings :		
1.	Boumol,William J. and Blinder Alan S. (2007)	:	Microeconomics; Principles and Policy, 9 <sup>th</sup> Edition, Thomson, 1 <sup>st</sup> Indian Edition.
2.	Salvatore Dominick (2003)	:	Microeconomics : Theory and Applications, 4 <sup>th</sup> Edition, Oxford Univ. Press.
3.	Koutsoyiannis, A. (1977)	:	Modern Micro Economics, McMillan Press, London.
4.	Ryan, W.J.L. and Pearce, D.W. (1977)	:	Price Theory, McMillan India, New Delhi.
5.	Ferguson, C.E. and Gould, J.P. (1989)	:	Micro Economic Theory (6 <sup>th</sup> Edition), All India Book Seller.
6.	Briet, W. and Hochman, H.M. (Ed.) (1977)	:	Readings in Micro Economics, Dryden Press.

## Paper-MAECO-102 : CONTEMPORARY ISSUES IN INDIAN ECONOMY-I

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **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.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The script would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## UNIT-I

*Growth and Structural Change in the Indian Economy since 1950 :* Nature, Causes and Changes in Sectoral Income Distribution and Occupational Structure. Inter-state Disparities in the Pattern of Development in the Post-Reform Period.

### UNIT-II

*Restructuring of the Economy :* State of the economy in 1990-91. Features and Appraisal of Economic Reform Programme. Second Generation Reforms—Need for Continuity and Priorities for Further Reforms. Poverty and Unemployment in the Post-Reform Period.

#### **UNIT-III**

*Agriculture* : Pattern of Growth of Indian Agriculture since 1950. Deceleration in the 1990s – Causes and Future Challenges. Economic Liberalisation and Emerging Trends in Indian Agriculture.

## UNIT-IV

*Industry :* Trends in Growth and Structure of Indian Industry. Critique of Regulatory Industrial Policy Regime. Deregulation and liberalization of the Private Sector. Privatization—Nature and Extent in India. Impact of New Economic Policy on Indian Industry.

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## **Recommended Readings :**

#### Essential Readings :

1.	Brahmananda, P.R. and Panchmukhi, V. R. (eds.) (1987)	:	The Development Process of Indian Economy, Himalya Publishing House, Bombay.
2.	Jalan, B. (1992)	:	The Indian Economy—Problems and Prospects, Viking, New Delhi.
3.	Kapila, Uma (Ed.) (2007)	:	Indian Economy Since Independence, Academic Foundation, New Delhi.
4.	Krueger, A.O. (Ed.) (2003)	:	Economic Policy Reforms and the Indian Economy, Oxford University Press, New Delhi.
5.	Lucas, E.B. & Papanek, G.F. (Eds.) (1988)	:	The Indian Economy—Recent Development and Future Prospects, Oxford University Press, New Delhi.
Further	Readings :		
1.	Ahluwalia, I.J. (1985)	:	Industrial Growth in India, Oxford University Press, New Delhi.
2.	Ahluwalia, I.J. & Little, IMD (Eds.) (1998)	:	India's Economic Reforms & Development (Essays in Honour of Manmohan Singh), Oxford University Press, New Delhi.
3.	Brahmananda, P. R. and Panchamukhi, V. R. (Eds.) (2001)	:	Development Experience in the Indian Economy : Inter-State Perspectives, Bookwell, Delhi.
4.	Byres, T.J. (Ed.) (1998)	:	The Indian Economy : Major Debate Since Independence, Oxford University Press, New Delhi.
5.	Dreze, J. and Amartya Sen (2002)	:	India Development and Participation, Oxford University Press, New Delhi.
6.	Economic and Political Weekly	:	Various Issues.
7.	Government of India	:	Economic Survey (Annual), Ministry of Finance, New Delhi.

## **Paper-MAECO-103 : QUANTITATIVE METHODS**

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

## **Objectives :**

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

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The script would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## UNIT-I

#### Differentiation and Optimization :

Partial and Total Derivatives, Homogenous Functions, Euler's rule, Finding the Maximum and Minimum of a Function with Two Variables : With and Without a Single Equality Constraint. Simple Economic Applications such as Elasticity and Nature of Commodity, Consumer's and Producer's Optimisation Problems.

#### UNIT-II

*Integration, Differential Equations, Linear Programming :* Indefinite and Definite Integration of a Function with a Single Variable, Method of Substitution. Economic Applications.

*Differential Equations :* Variable Separable Case, Homogenous Case, Standard Linear Differential Equations, Bernoulli's Form, Exact Equations, Linear Differential Equations with Constant Coefficients. *Linear Programming :* Setting up of the Problem, Various Definitions, Solution by Graphical Method.

#### UNIT-III

Time Series, Correlation and Regression, Probability :

*Methods of Trend Measurement :* Quadratic, Exponential, Modified Exponential, Gompertz and Logistic Forms. Measurement of Seasonal Indices : Simple Average, Ratio to Moving Average, Ratio to Trend.

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Multiple and Partial Correlation Involving Three Variables, Multiple Regression with Two Explanatory Variables, Regression Coefficients, Definitions of r,  $r^2$ ,  $R^2$ .

*Probability* : Classical and Axiomatic Definitions, Additive and Multiplicative Rules, Random Variable and Expected Values, Probability Distributions : Cases of Binomial, Poisson, Normal.

## UNIT-IV

#### Statistical Inference and Hypothesis Testing :

Parameters and Estimates, Sampling Distribution of a Statistic, Standard Error, Distribution of Sample Mean, Properties of an Ideal Estimator, Interval Estimation, Confidence Interval.

Basic Terminology of Hypothesis Testing, Large and Small Sample Tests, Tests of Significance of Means, Single Proportion, Difference between Two Proportions, Simple Correlation Coefficient, Regression Coefficient, Tests Involving F and  $\chi^2$  Distributions.

## **Recommended Readings:**

#### Essential Readings:

## Unit I and II:

1.	Chiang, A.C. (1984)	:	Fundamental Methods of Mathematical Economics, McGraw Hill, 3 <sup>rd</sup> Edition.
2.	Allen, R.G.D. (1983)	:	Mathematical Analysis for Economists, Macmillan.
3.	Aggarwal, S.C. and R. K.Rana	:	Basic Mathematics for Economists.

#### Unit III and IV :

1.	Freund, J. E. (1992)	:	Mathematical Statistics, Prentice Hall India, 5 <sup>th</sup> Edition.
2.	Arora, P. N., Sumeet Arora and S. Arora (2007)	:	Comprehensive Statistical Methods, S. Chand & Company Ltd.
3.	Aggarwal, S.C. and R.K. Rana	:	Basic Statistics for Economists, V.K. (India), Enterprises, Latest Edition.
4.	Kandoi, Balwant (2011)	:	Mathematics for Business and Economics with Applications, Himalaya, Mumbai.

## Paper-MAECO-104 : HISTORY OF ECONOMIC THOUGHT

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

## **Objectives :**

Evolution of economic ideas is both a response to contemporary economic problems and a self-conscious attempt to refine earlier ideas to integrate them as a part of current social thought. The objective of this course is to familiarize the students with the historical evolution of economic ideas into the contemporary economics.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

#### **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## UNIT-I

*Nature and Importance of Economic Thought, Mercantilism :* Views on Trade, Money and Prices, Wages and Employment. Physiocracy : Natural Order; Net product and Circulation of Wealth.

## UNIT-II

Adam Smith : Theories of Value, Distribution and Growth; Ricardian Economics : Value Analysis, Theories of Trade and Distribution, Views on Machinery and Employment, Ricardo-Malthus glut controversy.

## UNIT-III

*Marxian Economics* : From Harmony to Class–Conflict, Historical Materialism and Marx's Interpretation of History, Development and Decay of Capitalism.

#### **UNIT-IV**

Essential features of Marginalism. Jevon's Theory of Value. Walras's Theory of General Equilibrium. An Overview of Marshall's Contribution.

Essential Readings :

A.K. Dasgupta (1986)	:	Epochs of Economic Theory, Oxford University Press, New Delhi.
D.C. Collander (Ed.)	:	Neo-classical Economists.
D.P.O. Brien (1975)	:	The Classical Economists, London, Oxford University Press.
Dobb, Maurice (1973)	:	Theories of Value and Distribution since Adam Smith.
E. Mandel (1971)	:	Marxist Economic Theory, Rupa & Co.
Eric Roll (1992)	:	History of Economic Thought, Faber and Faber (Rupa).
Gide, C. and Rist C. (1948)	:	A History of Economic Doctrines, George G. Harap & Co.
Krishna Bhardwaj (1978)	:	Classical Political Economy and Rise to Dominance of Supply and Demand Theories, University Press, India.
M. Blaug (1983)	:	Economic Theory in Retrospect, Vikas Publishing House, 3 <sup>rd</sup> Edition (Cambridge University Pub.).
P. Sweezy (1945)	:	Theory of Capitalist Development, Monthly Review Press.
Samuel Hollander (1987)	:	Classical Economics.
Schumpter, J.A. (1954)	:	History of Economic Thought, Oxford University Press.
Tom Bottomore	:	Dictionary of Marxist Thought, Basic Black Well, 1985.
	D.C. Collander (Ed.) D.P.O. Brien (1975) Dobb, Maurice (1973) E. Mandel (1971) Eric Roll (1992) Gide, C. and Rist C. (1948) Krishna Bhardwaj (1978) M. Blaug (1983) P. Sweezy (1945) Samuel Hollander (1987) Schumpter, J.A. (1954)	D.C. Collander (Ed.)       :         D.P.O. Brien (1975)       :         Dobb, Maurice (1973)       :         E. Mandel (1971)       :         Eric Roll (1992)       :         Gide, C. and Rist C. (1948)       :         Krishna Bhardwaj (1978)       :         M. Blaug (1983)       :         P. Sweezy (1945)       :         Samuel Hollander (1987)       :         Schumpter, J.A. (1954)       :

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## SEMESTER-II

## Paper-MAECO-201 : MICRO-ECONOMICS-II

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

### **Objectives :**

The objective of this 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.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

#### **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

Analysis of Competitive Markets : Profit Maximization and Equilibrium of a Firm and Industry in the Short Run and Long Run under Perfect Competition including the Supply Curve.

Consumers' and Producers' Surplus and Efficiency of Perfect Competition. Welfare Effects of an Excise Tax, Import Tariff, Price controls (supports) and Production Quotas.

*Monopoly* : Sources, Measurement and Welfare Costs and Dynamic benefits of Monopoly Power. Monopoly Price Discrimination. Output and Welfare Comparisons with Single Price Monopoly. Inter-temporal Price Discrimination and Peak Load Pricing. Two part tariffs and Tie-in Sales.

*Public Policy toward Monopolies* : Increasing Competition. Price Regulation. Public ownership of Monopolies.

## UNIT-II

*Monopolistic Competition :* Characteristics. A firm's Short and Long Run Equilibrium with Differentiated Products and Selling Costs (Advertisement). Group equilibrium. The Issue of Excess Capacity under Monopolistic Competition. The debate over Advertising.

*Oligopoly :* Cournot,, Stackellberg and Kinked demand Curve. Price Leadership Models. Collusion and Cartels. Game Theory and Economics of Cooperation: Dominant Strategy and Nash Equilibrium. The Prisoner's Dilemma, Mixed Strategies, Repeated Games, Collusion and Tit-for-Tat Strategy. Public Policy towards Oligopoly. Contestable Markets.

#### UNIT-III

Markets for Factor Inputs: Factor Pricing under Perfect Competition: Demand for a Factor Input when One Input is Variable. Demand for a Factor Input when Several Inputs are Variable. Market Demand for a Factor Supply of Labour. Supply of Labor by an Individual: Trade Off between Work and Leisure. Market Supply Curve.

*Factor Pricing under Imperfect Competition:* Monopolistic Power in Product Market. Monoposonistic Power in Factor Market. Bilateral Monopoly. Competitive Buyer Firm versus Monopoly Union.

## UNIT-IV

Welfare Economics :

Social Welfare Function: Utilitarian, Rawlsian and Bergson-Samuelson Social Welfare Functions and Optimization of Social Welfare.

*General Equilibrium and Efficiency*: Pareto-Optimality Conditions. Perfect Competition and Economic Efficiency. First and Second Theorem of Welfare Economics. Compensation Criteria.

Market Failure and Role of Government under:

Externalities: Externalities and Market Efficiency, Coase, Theorem and Public Policies towards Externalities.

Common Property : Overuse of Common Property, Solving Common Problems.

Public Goods : Types of Public Goods, Markets for Public Goods and Reducing Free Riding. Asymmetric Information.

#### **Recommended Readings :**

#### **Essential Readings** :

1.	Mankiw Gregory N. (1998) :	Principles of Economics; 3 <sup>rd</sup> Edition, Thomson; 3 <sup>rd</sup> Indian Reprint (2007).
2.	Boumol, William J. and Blinder : Alan S. (2007)	Microeconomics : Principles and Policy, 9 <sup>th</sup> Edition Thomson, 1 <sup>st</sup> Indian Edition.
3.	Salvatore Dominick (2003) :	Microeconomics: Theory and Applications; 4 <sup>th</sup> Edition, Oxford Univ. Press.
4.	Pindyck, Robert S., Rubinfel <sup>:</sup> Daniel, L. and Mehta, P.L.	Micro Economics, Prentice Hall of India, New Delhi.
5.	Ferguson. C.E. and Gould J.P. : (1989)	Micro Economic Theory (6 <sup>th</sup> Edition) All India Book Seller.
Furth	ner Readings :	
1.	Maddala, G.S. and Miller Ellen : (1989)	Micro Economic Theory and Application McGraw Hill (2004).
2.	Koutsoyiannis, A. (1977) :	Modern Micro Economics, McMillan Press, London.
3.	Ryan, W.J.L. and Pearce, D.W. : (1977)	Price Theory, McMillan India, New Delhi.
4.	Briet, W. and Hochman, H.M. (Ed.) : (1977).	Readings in Micro Economics, Dryden Press, Hindsala Press.

## Paper-MAECO-202 : CONTEMPORARY ISSUES IN INDIAN ECONOMY-II

Max. Marks Theory Internal Assessment Time Teaching Hours	:	100 80 Marks 20 Marks 3 Hours 50
Objective :	•	50

#### **Objective :**

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.

The time-tested method of imparting verbal instructions through lectures would be used. Examples, in so far as possible, would be selected from everyday life/experience. The feedback would be sought through the students writing assignments, tutorials and seminars.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks ( $10 \times 2 = 20$ ).
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

Development process of the Indian Economy in the post-reform era : Service Sector in India – Growth, Pattern and Future Prospects, Infrastructure Development – Need, Performance and Government Strategy on Infrastructure Development with Special Emphasis on Special Economic Zones (SEZs). Changes in Public Policy with Special Reference to Competition Policy and Consumer Protection Act.

#### UNIT-II

*Financial Sector* : Structure of the Financial System in India. Banking Sector Reforms since 1991. Capital Market – Growth, Problems and Reforms since 1991. Role of Securities Exchange Board of India (SEBI).

## **UNIT-III**

*Public Finance* : Fiscal Imbalances in the Indian Economy – Sustainability of Public Debt and Fiscal Deficits in Central and State Finances. Fiscal Reforms and Budget Management Act, 2003. Need for Expenditure Reforms.

#### **UNIT-IV**

*External Sector* : Trade Policy During Pre and Post Reform Period. Liberalised Exchange Rate Management System. Foreign Direct Investment – Trends and Issues. India and the World Trade Organisation.

## **Recommended Readings :**

## Essential Readings :

1.	Jalan, B. (1992)	:	The Indian Economy – Problems and Prospects, Viking, New Delhi.
2.	Kapila, Uma (Ed.) 2007	:	Indian Economy Since Independence, Academic Foundations, New Delhi.
3.	Kapila, Uma (Ed.) 2007	:	Indian Economy – Performance and Policies, Academic. Foundation, New Delhi.
4.	Krueger, A.O. (Ed.) 200 3	:	Economic Policy Reforms and the Indian Economy, Oxford University Press, New Delhi.
5.	Lucas, E.B. & Papanek , G.F.(Eds.) (1988)	:	The Indian Economy – Recent, Development and Future Prospects, Oxford University Press, New Delhi.
Fur	ther Readings :		
1.	Ahluwalia, I.J. & Little, IMD (Eds.) (1998)	:	India's Economic Reforms & Development (Essays in Honour of Manmohan Singh), Oxford University Press, New Delhi.
1. 2.		:	1
	IMD (Eds.) (1998)	-	of Manmohan Singh), Oxford University Press, New Delhi. The Indian Economy : Major Debate Since Independence,
2.	IMD (Eds.) (1998) Byres, T.J. (Ed.) (1998)	:	of Manmohan Singh), Oxford University Press, New Delhi. The Indian Economy : Major Debate Since Independence, Oxford University Press, New Delhi. Towards Sustainable Growth – Essays in Fiscal and Financial

- Government of India : Economic Survey (Annual), Ministry of Finance, New Delhi.
  - : Aspects of India's Economic Growth and Reforms, Academic Foundation, New Delhi.
- Rangarajan, C. (1998) : Indian Economy : Essays on Money and Finance, UBS, New Delhi.
- 9. Reserve Bank of India : Report on Currency and Finance (Annual), Mumbai.

6.

7.

8.

Nagaraj, R. (2006)

#### Paper-MAECO-203 : INTERNATIONAL ECONOMICS

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

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.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

Theories of International Trade –Theories of Absolute Advantage, Comparative Advantage and Opportunity Costs. Heckscher Ohlin Theory of Trade, Factor Price Equalization. Empirical Testing of Heckscher Ohlin Theory. New Approaches to Trade Theory : The Product Cycle Theory. Technology Gap Theory.

Causes of Emergence and Measurement of Intra-Industry Trade.

## UNIT-II

*Terms of Trade :* Concepts and Measurement of Terms of Trade. The Effects of the Terms of Trade on a Nation's Welfare.

*Theory of Tariff* : Effects of Tariff on Balance of Payments, Terms of Trade, National Income and Income Distribution.

Political Economy of Non-Tariff Barriers. Regionalism and Multilaterism. Various Forms of Economic Integration. The Theory of Customs Union.

## **UNIT-III**

*The Balance of Payments and Adjustments :* Concepts and Components of Balance of Payments. Causes of Disequilibrium in the Balance of Payments. The Process of Adjustment in the Balance of Payment under Gold Standard, Fixed Exchange Rate and Flexible Exchange Rates.

Monetary Approach to the Balance of Payments. Foreign Trade Multiplier.

#### **UNIT-IV**

*Foreign Exchange Markets :* Euro Currency Markets, International Bond Markets. Contemporary Exchange Rate Systems. Foreign Exchange Transaction Forms. Foreign Exchange Arbitrage and Market Hedging. World Trading System—WTO.

#### **Recommended Readings :**

## Essential Readings :

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

#### Further Readings :

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

## Paper- MAECO-204 : ECONOMICS OF PUBLIC FINANCE

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

## **Objective :**

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 budgetary policy 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, debt issues, levels of government etc., which raise a spectrum of issues arising from the operation of these institutions. Further, the existing of externalities, concern for adjustment in the distribution of income and wealth, etc. require political processes for their solution in a manner which combines individual freedom and justice. This paper combines a thorough understanding of fiscal institutions with a careful analysis of the issues which underline budgetary policies in general and Indian experience in particular.

The students would be evaluated at the end of the academic year through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### **Pedagogy of the Course Work :**

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

Scope of Public Finance. Private and Public Goods : Allocation Function, Efficient Provision of Public Goods in a Partial and General Equilibrium Approach. Role of Budget with Special Reference to the Goal of Distribution.

## UNIT-II

Various Approaches of Equity in Taxation; Benefit Principle, Lindahl Theory and Ability to Pay Approach. Incidence analysis in a partial and General Equilibrium Setting. Excess burden. Effects of Taxation on Work Efforts, Savings and investment.

#### **UNIT-III**

Growth and Structure of Public Expenditure. Wagner's Law and Peacock - Wiseman Hypothesis. Pattern of Public Expenditure in India and Recent Reforms in India.

### **UNIT-IV**

Deficit Finance. Issues relating to Public debt : Debt Burden Analysis and Management of Public Debt; Recent Policy in India.

Central State Financial Relations in India.

## **Recommended Readings :**

#### Essential Readings :

1.	Musgrave, R.A. & Musgrave, P. B. (Latest Edition)	:	Public Finance in Theory and Practice, McGraw Hill. International eds.
2.	Brown, C.V. and Jackson, P.M. (1990)	:	Public Sector Economics, 4 <sup>th</sup> edition, Basil Blackwell, Oxford.

3.	M. Govinda Rao and Tapas Sen (1998)	:	Financial Federalism in India, Mac-Millan.
4.	Hemalata Rao (1994)	:	Federal State Financial Relations : Theories and Principles, Ashish Publishing House.
5.	Arun Kumar (1998)	:	Black Economy in India, Penguin.
6.	Houghton, R. W. (ed.) (1970)	:	Public Finance, Harmondsworth, Penguin Books.
7.	Atkinson, A. B. and Stiglitz, J. E. (2007)	:	Lectures on Public Finance, Maiden Head, UK.
8.	Peacock, and Straw, G.K. (1970)	:	The Economic Theory of Fiscal Policy.
9.	Chelliah, R.C. (1996)	:	Sustainable Growth, Essays on Financial and Fiscal Sector Reforms, Oxford University Press.
10.	Raghabendra Jha (1999)	:	Modern Public Economics, Routledge.
11.	Govt. of India, Ministry of Finance	:	9 <sup>th</sup> , 10 <sup>th</sup> and 11 <sup>th</sup> Finance Commission Reports.
12.	Govt. of India, Ministry of Finance (1988)	:	Sarkaria Commission Report on Centre–State Financial Relations.

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#### SEMESTER-III

#### Paper-MAECO-301 : MACRO - ECONOMICS-I

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

Macroeconomics or aggregative economics analysis establishes the functional relationship between the large aggregates. The aggregate analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of the different issues and policies. Macroeconomics now is not only a scientific method of analysis; but also a body of empirical economic knowledge.

The paper entitled "Macro-Economics-I" equips the students at the postgraduate level to understand systemic facts and latest theoretical developments for empirical analysis.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

#### **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## UNIT-I

*Consumption Function :* Absolute Income Hypothesis, Relative Income Hypothesis, Permanent Income and Life Cycle Hypotheses, Consumption under Uncertainty – Modern approach.

#### **UNIT-II**

*Investment Function :* Keynesian Approach, Accelerator Theory and Neo-Classical Theory of Investment and Tobin's Q Theory of Investment.

## **UNIT-III**

*Demand for Money* : Quantity Theory of Money, Keynesian Approach, Baumol and Tobin's Contribution, Friedman's Restatement of Quantity Theory of Money.

#### **UNIT-IV**

*Supply of Money* : Definition of Money and its importance in Macroeconomics. Money Multiplier and Credit Creation by Commercial Banks.

Derivation, Properties and Shifts of IS and LM Curves and Simultaneous Equilibrium in Money and Product Markets. Effects of Monetary and Fiscal Policies under Different Cases in the IS-LM Framework.

#### Essential Readings :

1.	Ackley, G. (1978)	:	Macroeconomics : Theory and Policy, Macmillan, New York.
2.	Aschheim, J. and Hiech, C. (1969)	:	Macroeconomics : Income and Monetary Theory, Columbus, Ohio, Charles E. Merrill.
3.	Blanchard, O. J. and Fisher, S. (1989)	:	Lectures in Macroeconomics, MII Press, Cambridge.
4.	Branson, W. H. (1994) (3 <sup>rd</sup> ed.)	:	Macroeconomic Theory and Policy, Harper and Row, New York.
5.	Branson, W. H. & Litvack, J. M. (1976)	:	Macro-economics, Harper and Row, New York.
6.	Brooman, F. S. (1975) (5 <sup>th</sup> edn.)	:	Macro Economics, George Allen and Unwin Ltd.
7.	Burrow, P. & Hitiris, T. (1974)	:	Macro Economic Theory : A Mathematical Introduction, John Wiley and Sons.
8.	Curwen, P. J. (1976)	:	Inflation, Macmillan.
9.	Dernberg, T. F. and Mc Dugall, D. M. (1976)	:	Macro Economic Analysis (4 <sup>th</sup> Ed.), McGraw Hills.
10.	Dornbusch, R. (1980)	:	Open Economy Macro Economics, Basic Books.
11.	Dornbusch, R. & F. Stanley (1997)	:	Macroeconomics, McGraw Hill Inc., New York.
12.	Duesenberry, J. S. (1949)		Income, Saving and the Theory of Consumer Behaviour, Harvard University Press, Harvard.

13.	Eugene, Diulio (1997)	:	Macroeconomics, Schaum's Outlines of Theory and Problems, McGraw Hill.
14.	Friedman, M. (1970)	:	A Theory of the Consumption Function, Oxford and IBH.
15.	Friedman, M. (1956)	:	Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago.
16.	Frisch, H. (1983)	:	Theories of Inflation, Cambridge University Press, Cambridge.
17.	Gordon, R. and S. G. Harris (1998)	:	Macroeconomics, Addison Wesley.
18.	Hagger, A. J. (1977)	:	Inflation: Theory and Policy, Macmillan, London.
19.	Hall, R. E. & J. B. Taylor (1986)	:	Macroeconomics, W. W. Norton, New York.
20.	Heijdra, B. J. & V. P. Frederick (2001)	:	Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
21.	Hicks, J. R. (1950)	:	A Contribution to the Theory of Trade Cycles, Clarendon Press, Oxford.
22.	Hicks, J. R. (1974)	:	The Crisis in Keynesian Economics, Oxford University Press, New Delhi.
23.	Jha, R. (1999)	:	Contemporary Macroeconomic Theory and Policy, New Age International (P.) Ltd., New Delhi.
24.	Keynes, J. M. (1936)	:	The General Theory of Employment, Interest and Money, Macmillan, London.
25.	Laidler, D. E. W. (1977)	:	Demand for Money : Theory and Evidence, Dum-Don Valley, New York.
26.	Levacic, R. and R. Rebman (1986)	:	Macroeconomics : An Introduction to Keynesian and Neo- classical Controversies, Macmillan, London.
27.	Lucas, R. (1981)	:	Studies in Business Cycle Theory, MIT Press, Cambridge, Massachusetts.
28.	Mankiw, N. G. and D. Romer (eds.) (1991)	:	New Keynesian Economics (2 Vols.), MIT Press, Cambridge.
29.	Mathews, R. C. O. (1964)	:	The Trade Cycle, Cambridge Univ. Press.
30.	Mckinen, G. E. (1978)	:	Money, The Price Level and Interest Rates, Prentice Hall of India, New Delhi.
31.	Mueller, M. G. (1966) (3 <sup>rd</sup> ed.)	:	Readings in Macroeconomics, Holt Rinehart and Winston, New York.
32.	Patinkin, D. (1965)		Money, Interest and Prices (2 <sup>nd</sup> ed.), Harper and Row, New York.

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33.	Peston, M. H. (1982)	:	Theory of Macroeconomic Policy, Heritage Publishers.
34.	Rakshit, M. (1998)	:	Studies in the Macroeconomics of Developing Countries, Oxford University Press, New Delhi.
35.	Romer, D. L. (1996)	:	Advanced Macroeconomics, McGraw Hill Co. Ltd., New York.
36.	Scarfe, B. L. (1977)	:	Cycles, Growth and Inflation, McGraw Hill Co. Ltd., New York.
37.	Shapiro, E. (1996)	:	Macro-economic Analysis (5 <sup>th</sup> ed.), Galgotia Publications, New Delhi.
38.	Surrey, M. J. C. (ed.) (1976)	:	Macroeconomics Themes, Oxford University Press, Oxford.
39.	Smith, W. L. and Teigen, R. L. (1970) (Ed.)	:	Readings in Money, National Income and Stabilization Policy, Richard D. Irwin.
40.	Taylor, L. (1983)	:	Structuralist Macroeconomics, Basic Books, New Longman.
41.	Turnovsky, S. J. (1977)	:	Macroeconomic Analysis and Stabilization Policy, Cambridge University Press, Cambridge.
Furi	ther Readings :		

1.	American Economic	:	A Survey of Economic Theory, Vols.1, 2 & 3.
	Association and The Royal		
	Economic Society (1965)		

## Paper-MAECO-302 : ECONOMICS OF GROWTH AND DEVELOPMENT -I

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

## **Objective :**

As a sequel to the post-second war developments, the study of Economic Development gained impetus because three-fourths of humanity was experiencing wretched conditions of existence. There was a pressing need in those countries for uplifting their economic conditions by restructuring their economies to acquire greater diversity, efficiency and equity, in consonance with their priorities.

#### M.A. ECONOMICS (SEMESTER SYSTEM) SYLLABUS

Since a variety of perspectives were available, the policy makers were eager to acquaint themselves with various policy options in their bid to re-construct their dilapidated economies. In addition, various international bodies were also keen to help and guide the laggards. Consequently, the study of development economics assumed greater significance.

In recent times, the resurgence of marketism and greater focus on areas like education, health, sanitation, energy and environment, and infrastructure development, hitherto relegated to the background, have reopened some of the old debates besides opening up new areas of investigation. Growth and Development economists are making earnest efforts at theorizing to break fresh grounds. Consequently, study of this discipline continues to be of prime importance.

Modules incorporated in this paper are devoted to the theories of growth and development, importance of agriculture, and the rational and pattern of industrialization in developing countries. The other important issues in the context of development such as infrastructure-linkages, role of international trade, importance of economic policies and relevance of planning have been included in the modules of this paper.

The time-tested method of imparting verbal instructions through lectures would be used. Examples, in so far as possible, would be selected from everyday life/experience.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

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The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

*Understanding Development :* Living in a heterogeneous World - Islands of Prosperity and How the other Three Quarters Live. Dividing the World and Levels of Development (Development as an Evolving Concept i.e. Development, Growth and Change; Goulet's Three Core Values of Development; Sen's Conception of Development; Income/Output based Measures and Their Inadequacies; PQLI and HDI as Indicators of Development).

#### UNIT-II

*Diverse Structure and Common Characteristics of Developing Nations* : Size and Income Level (The Vicious Circle of Poverty and Low Level Equilibrium Trap), Historical Background (Colonialism and Dependence), Meaning of Dualism, its Characteristics and Forms, Resources and Technology (Quantum and Quality of Natural Resources, Physical Capital, and Technology); Values and Institutions.

#### **UNIT-III**

*Theories of Development :* David Ricardo; Karl Marx; Schumpeter and Rostow's Theory of Stage of Economic Growth.

## **UNIT-IV**

*Population Growth, Economic Development and Environment :* The Historical Changes in World Population, Demographic Transition, Interrelation between Population Growth and Economic Development (from Pessimism to Optimism), Sustainable Development (Conceptualization, Concern, Indicators and Remedial Measures).

#### Essential Readings :

1.	Meier, Gerald M. and James E. Raunch (2003)	:	Leading Issues in Economic Development, Oxford University Press, New York.
2.	Thirlwall, A. P. (2003)	:	Growth and Developing, Seventh Edition, Palgrave Macmillan, New York.
3.	Todaro, Michael P. and Stephen C. Smith (2004)	:	Economic Development, Pearson Education (Singapore) Pvt. Ltd., Indian Branch, Delhi.
4.	Ray, Debraj (2004)	:	Development Economics, Seventh Impression, Oxford University Press, New Delhi.

#### Paper-MAECO-303 & 304 : (OPTION) (i) : ECONOMICS OF AGRICULTURE-I

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

The focus of this course is to introduce students to the importance of agricultural sector and to the issues associated with agricultural transformation, agricultural production, and demand of and supply for agricultural commodities. The objective is to equip students to analyze and critically assess issues, policies and programmes in these areas with particular emphasis on Indian agriculture.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

*Introduction* : Nature and Scope of Economics of Agriculture; Specificities of Farm Organisation and Agricultural Production and Markets; Inter-sector Linkages of Agriculture [Backward and Forward Linkages and Feedback Effects].

*Role of Agriculture in Economic Development :* Contribution of Agriculture to Economic Development; Historical Perspective [Experience of England, United States, Australia, Latin America, Soviet Russia, Japan, and India]; Declining Role of Agriculture and Dilemmas of Development.

## UNIT-II

*Agricultural Transformation :* Barriers to Agricultural Growth. Schultz Theory of Transformation of Traditional Agriculture. Hayami-Ruttan Induced Innovation Hypothesis. Generation of Innovations and Institutional Constraints. Agricultural Transformation : Indian Experience.

#### UNIT-III

Agricultural Production :

Uniqueness of Agricultural Production; Various Types of Factor-Product, Factor-Factor, and Product-Product Relations; Role of Farm Size and Structure in Equilibrium, Productivity, and Return to Scale.

*Production Analysis* : Primal Estimate [Cobb-Douglas Culture], The Duality Culture, Multiproduct Production; Empirical Analysis of Allocative, Technical and Economic Efficiencies Using Frontier Production Function and Data Envelop Analysis Approaches.

#### M.A. ECONOMICS (SEMESTER SYSTEM) SYLLABUS

#### UNIT-IV

#### Risk and Uncertainty in Agriculture :

Nature and Types of Risks and Uncertainties in Agriculture, Public Policies and Farm Level Measures to Reduce Risk and Uncertainties.

#### Demand for and Supply of Farm Products :

Characteristics of Demand for Farm Products; Quantity and Quality Components of Demand for Food; Forecasting of Demand for Food Products.

Characteristics of Supply of Farm Products, Supply Response of Farm Products; Role of Price and Non-Price Factors in Inducing Aggregate Supply, Empirical Supply Response Functions and Evidence.

#### Essential Readings :

1.	Bruce L., Gardener and Gordon C., Rausser (Eds.)	:	Handbook of Agricultural Economics, Vol.1A, Agricultural Production, Amersterdam, Elsevier Science B.V.
2.	Bruce L., Gardener and Gordon C., Rausser (Eds.)	:	Handbook of Agricultural Economics, Vol.1B, Marketing, Distribution and Consumption, Amersterdam, Elsevier Science B.V.
3.	Bruce, L., Gardener and Gordon C., Rausser (Eds.)	:	Handbook of Agricultural Economics, Vol. 2A, Agricultural and Its External Linkages, Amsterdam, Elsevier Science B.V.
4.	Bruce L., Gardener and Gordon C., Rausser (Eds.)	:	Handbook of Agricultural Economics, Vol. 2B, Agricultural and Policy, Amsterdam, Elsevier Science B.V.
5.	Eicher Carl and Lawrence Witt (Eds.) (1964)	:	Agriculture and Economic Development, New York, McGraw Hill Co.
6.	Ghatak Subrata and Ken Ingersent	:	Agriculture and Economic Development, Harvestor Press Ltd., London.
7.	Southworth Herman and Bruce Johnston (eds.) (1968)	:	Agricultural Development and Economic Growth, Cornell University Press, New York.

## Paper-MAECO-303 & 304 : (OPTION) (ii) : ECONOMICS OF INDUSTRY-I

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

In the contemporary world with globalization and liberalization, more and more attention is being given to industry. Since industry performance critically depends on firms' behaviour allowing equilibrium outcome, the course intends to provide a rigorous knowledge of different long-run equilibrium outcome of firms under different conditions from the point of view of public policy. The students are also equipped to

deal with debates involved in the industrial development in a cogent and analytical manner, particularly in the Indian context. However, it should be noted that Game Theoretic approach to any topic/problem is outside the scope of the present syllabus.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

#### **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## UNIT-I

Modern Corporation Enterprise. Size and Ownership Structure of Industrial Enterprise. Dominant Position of Corporate and its Characteristics. Issue of Separation of Ownership from Management and Control Models Alternative to Profit Maximization : Baumol, Williamson, Marris and Cyert and March.

## UNIT-II

Monopoly Power and Oligopolistic Market Structure. Measures of Sellers' Concentration. Determinant of Sellers' Concentration: Economies of Scale, Barriers to Entry, Mergers, Size and Growth of Markets.

#### **UNIT-III**

*Market Conduct under Oligopoly* : Rivalry and Collusive Conduct. Dominant Firm Behavior and Potential Competition. Limit Price and Contestable Markets. Non-Price Competition with Reference to Advertising.

#### UNIT-IV

*Market Performance* : Allocative Efficiency. Market Structure and Profitability. Productive Efficiency and Sub-Optimal Capacity. Allocative versus Productive Efficiency.

30

## Essential Readings :

1.	Cohen, K. L. & Cyert R. M. (1976)	:	Theory of the Firm, Prentice Hall.
2.	Scherer, F. M. & Ross David (1990)	:	Industrial Market Structure and Economic Performance, Boston Houghton Miffilin Company.
3.	Hay, D. A. and Morris, D. J. (1991)	:	Industrial Economics : Theory and Evidence, Oxford University Press.
4.	Shepherd, W. G. (1990)	:	The Economics of Industrial Organisation (3 <sup>rd</sup> edn.), Prentice Hall Englewood Cliffs, New Jersey.
5.	Martin Stephen (1989)	:	Industrial Economics (Economic Analysis and Public Policy).
6.	Bain, J. S. (1968)	:	Industrial Organizations (2 <sup>nd</sup> edn.), University of California.
7.	Caves, R. (1972)	:	American Industry : Structure, Conduct Performance (2 <sup>nd</sup> edn.), Prentice Hall.
8.	Wildsmith, S. (1975)	:	Managerial Theories of the Firm.
9.	Hawkin, C. J. (1973)	:	Theory of the Firm, Macmillan.
10.	Devine, P. J. & Others (1976)		Introduction to Industrial Economics, George Allen & Unwin.
11.	Bhagwati, J. and Desai, P. (1970)	:	Planning for Industrialization : India, Oxford University Press.
12.	Dilip Mukherjee (1995)	:	Indian Industry, Oxford University Press.
13.	Nayyar, Deepak (ed.) (1994)	:	Industrial Growth and Stagnation, Oxford University Press.
14.	Gupta, Vinod K. (1972)	:	"Some Factors relating to Concentration in Indian Industries", Artha Vijnana (December, 1972).
15.	-do- (1985)	:	'Profit Margin Performance and Market Structure in Indian Manufacturing Industries', Artha Vijnana, Vol. XXVII, March, 1985.
16.	Kansra, S. L. (1990)	:	Monopoly Power : Some aspects of its Impact on Indian Industry (Unpublished Ph.D. Thesis, P. U.).
17.	Economic and Political	:	Various Issues.
	Weekly		

## Paper-MAECO-303 & 304 : (OPTION) (iii) : BASIC ECONOMETRICS

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

Application of economic theory need a reasonable understanding of economic relationships and relevant statistical methods. The econometric theory thus becomes a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with basic theory of econometrics and relevant applications of the methods. 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. The feedback would be sought through the students writing assignments, tutorials and seminars.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

Nature & Types of Econometrics, Methodology Followed & Type of Data Used in Econometric Models.

Estimation of the Two Variable and Multiple Regression Models with the Method of Ordinary Least Squares (OLS); BLUE Properties and Testing of Hypothesis, Maximum Likelihood Estimation (MLE).

#### **UNIT-II**

Nature, Consequences, Detection & Remedial Measures for the problems of : Multicollinearity, Hetroscedasticity and Autocorrelation.

#### **UNIT-III**

Distributed Lag and Autoregressive Models:

Introduction and Nature of Distributed Lag (DL) & Auto Regressive (AR) Model. Koyck Approach for Estimation of DL & AR Models Rationalization of Koyck Approach by Adaptive Expectation and Partial Adjustment Hypothesis; Almon's Polynomial Approach.

#### **UNIT-IV**

Estimation of Regression Models using Standard Statistical/Econometric Packages [SPSS/E-View/STATA].

Interpretation of Estimates and Hypothesis Testing.

Testing for and redressal of Multicollinearity, Hetroscedasticity, Autocorrelation using Computer Techniques.

Essential Readings :

1.	Gujarati Damodar (2002)	:	Basic Econometrics, 4 <sup>th</sup> Ed., McGraw Hill.
2.	Kemanta, J. (2008)	:	Elements of Econometrics (2 <sup>nd</sup> Ed.), Macmillan, New York.
3.	Maddala, G. S. (2007)	:	Introduction to Econometrics (3 <sup>rd</sup> ed.), Wiley India.
4.	Koutsoyiannis, A. (1973)	:	A Theory of Econometrics, Harper & Row, New York.
5.	Johnston, J. and D. Nardo (1997)	:	Econometric Methods, 4 <sup>th</sup> Ed., McGraw Hill.
6.	Wooldridge, Jeffery M. (2000)	:	Introductory Econometrics, South Western College Publishing.

## Paper-MAECO-303 & 304 : (OPTION) (iv) : ECONOMICS OF POPULATION

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

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.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## **UNIT-I**

Theories of Population; Malthus, Marxian, Liebenstein, Becker.

Demographic Transition Theory and Optimum Population Theory.

Population and Economic Development. Population as "Limits to Growth and as Ultimate Source".

# UNIT-II

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

Concept of Fertility Transition. Measurement of Fertility and Fertility Differentials in India. Mortality : Components and Measurement. Mortality Differentials in India: Rural-Urban, Age and Gender.

#### **UNIT-III**

Migration : Concepts, Measurement, Migration Selectivity, Causes and Consequences of Migration. Migration in India : Causes and Trends. Migration Differentials in India : Rural-Urban, Male-Female.

# **UNIT-IV**

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

## **Recommended Readings** :

1.	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.
2.	Bouge, D. J. (1971)	:	Principles of Demography, John Wiley, New York.
3.	Coale, A. and E. Hoover (1958)	:	Population Growth and Economic Development in Low Income Countries : A Case Study of India's Prospects, Princeton University Press, Princeton.
4.	Cox, Peter R. (1979)	:	Demography, Vikas Publishing House, New Delhi.
5.	John R. Weeks (2002)	:	Population : An Introduction to Concepts and Issues (7 <sup>th</sup> Edition), Wadsworth Publishing Company, New York.
6.	Shryock, H. S. et. al. (1976)	:	The Methods and Materials of Demography, Academic Press, New York.
7.	Srinivasan, K. (1998)	:	Basic Demographic Techniques and Applications, Sage Publications, New Delhi.
8.	Thompson, W. S. and Lewis, D. T. (1976)	:	Population Problems, Tata McGraw Hills Publishing Co., New Delhi.

Further Readings :

1.	Boserup, E. (1981)	:	Population and Technological Change. A Study of Long Term Trends Chicago: University of Chicago Press.
2.	Chandna, R. C. (2008)	:	A Geography of Population Concepts, Determinants and Patterns
3.	Schultz, Theodore W. (1978)	:	Investing in People; The Economics of Population Quality, Hindustan Publishing Corporation, India, Delhi.

OR

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Paper-MAECO-303 & 304 (OPTION) (iv)

# ECONOMICS OF HUMAN RESOURCE DEVELOPMENT

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

# **Objective :**

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

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

# UNIT-I

*Human Resource Development (HRD)* : Concept and Significance; Traditional and Modern Approaches. Human Resource Development and Manpower Planning (Genesis, Growth and Thrust Areas).

# **UNIT-II**

*Human Capital :* Concept of Human Capital and Problems in its Measurement. Economics of Education (Formal, Informal, On the Job Training and Re-training); Becker's Model. An introduction to Economics of Health and Nutrition. Role of Public and Private Investment in Human Capital Formation.

## UNIT-III

Functioning of Market for Human Resources : Internal Allocation.

Asymmetric Information and Functioning of the Human Resource Market. Brain Drain and Migration (Theories, and the Emerging Challenges).

## UNIT-IV

Managing Human Resources : Wage Determination Under Different Market Conditions. Incentives- Productivity Relationship. Economics of Discrimination– Concept, Types, Models of Discrimination. (Becker, Crowding model, Monopsony Model and Theory of Statistical Discrimination).

## **Recommended Readings :**

1.	Bellante, Don and Jackson Mark (1979)	:	Labour Economics : Choice in Labour Markets, Jackson McGraw-Hill Book Company, New York.
2.	Campbell, R. McConnell and Brue Stanley, L. and David, A. Macpherson (2010)	:	Contemporary Labour Economics, McGraw Hill Book Company, New York.
3.	Kempton, John (1995)	:	Human Resource Management and Development: Current Issues and Themes, MacMillan, St. Martin's Press, London.
4.	Richard, B. Peterson (2005)	:	Systematic Management of Human Resources, Lam Tracy Addison Wesley Publishing Company, London.
5.	Schultz, Theodore W. (1981)	:	Investing in People: The Economics of Population Quality, Hindustan Publishing Corporation (India), Delhi.

6. Stoney, John J. (ed.) (2001) : Human Resource Management : A Critical Text, Routledge, London.

# Further Readings :

1.	Becker, Gary, S. (1957)	:	Economics of Discrimination, University of Chicago Press, Chicago.
2.	Sen, A.K. (1975)	:	Employment, Technology and Development, Oxford University Press, New Delhi.
3.	Solow, R.M. (1990)	:	Labour Market as an Institution, Blackwell, London.
4.	Standing, G. & V. Tokman (1991).	:	Towards Social Adjustment, ILO, Geneva (Eds.)
5.	Venkata Ratnam, C.S. (2001)	:	Globalization and Labour Management Relations : Dynamics of Change, Sage Publications/Response Books, New Delhi.

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## SEMESTER-IV

## Paper-MAECO-401 : MACRO - ECONOMICS-II

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

Macroeconomics or aggregative economic analysis and establishes the functional relationship between the large aggregates. The aggregate analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of the different issues and policies. Macroeconomics now is not only a scientific method of analysis; but also a body of empirical economic knowledge.

The paper entitled "Macro Economics" equips the students at the postgraduate level to understand systemic facts and latest theoretical developments for empirical analysis.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit 4 in all. Each question shall carry 15 marks  $(15 \times 4 = 60)$ .

#### **UNIT-I**

*Demand and Supply of Labour :* Classical and Keynesian Views. Keynesian and Classical Models of Income and Employment Determination. Wage-Price Flexibility and Automatic Full Employment – Classical versus Keynesian Approach.

# UNIT-II

*Inflation :* Its effects, Kaldorian Theory of Distribution. Quantity Theory View, Keynes' view. Phillips Curve Analysis, Long Run Phillips Curve, Monetarist and Structuralist Views of Inflation.

Trade Cycle Theories : Accelerator-Multiplier Interaction Models, Kaldor Model.

## **UNIT-III**

*Balance of Payments :* Current and Capital Accounts, Mundell-Flemming Open Economy Model, Disequilibrium in Balance of Payments and Its Consequences, Balance of Payments Adjustment Policies under Fixed and Flexible Exchange Rates.

#### **UNIT-IV**

Monetary and Fiscal Policies : Objectives, Conflicts Among Objectives, Mundell Model, Swan Model.

*Recent Developments :* Monetarism. New-Classical Macroeconomics : Rational Expectation Revolution and Real Business Cycle Theory. New-Keynesian Macroeconomics.

## **Recommended Readings :**

1.	Ackley, G. (1978)	:	Macroeconomics : Theory and Policy, Macmillan, New York.
2.	Aschheim, J. and Hiech, C. (1969)	:	Macroeconomics : Income and Monetary Theory, Columbus, Ohio, Charles E. Merrill.
3.	Blanchard, O. J. and Fisher, S. (1989)	:	Lectures in Macroeconomics, MII Press, Cambridge.
4.	Branson, W. H. (1994) (3 <sup>rd</sup> ed.)	:	Macroeconomic Theory and Policy, Harper and Row, New York.
5.	Branson, W. H. & Litvack, J. M. (1976)	:	Macro-economics, Harper and Row, New York.
6.	Brooman, F. S. (1975) (5 <sup>th</sup> edn.)	:	Macro Economics, George Allen and Unwin Ltd.
7.	Burrow, P. & Hitiris, T. (1974)	:	Macro Economic Theory : A Mathematical Introduction, John Wiley and Sons, New York.
8.	Curwen, P. J. (1976)	:	Inflation, Macmillan.
9.	Dernberg, T. F. and Mc Dugall, D. M. (1976)	:	Macro Economic Analysis (4 <sup>th</sup> Ed.), McGraw Hills.

10.	Dornbusch, R. (1980)	:	Open Economy Macro Economics, Basic Books.
11.	Dornbusch, R. & F. Stanley (1997)	:	Macroeconomics, McGraw Hill, Inc., New York.
12.	Duesenberry, J. S. (1949)	:	Income, Saving and the Theory of Consumer Behaviour, Harvard University Press, Harvard.
13.	Eugene, Diulio (1997)	:	Macroeconomics, Schaum's Outlines of Theory and Problems, McGraw Hill.
14.	Friedman, M. (1970)	:	A Theory of the Consumption Function, Oxford and IBH.
15.	Friedman, M. (1956)	:	Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago.
16.	Frisch, H. (1983)	:	Theories of Inflation, Cambridge University Press, Cambridge.
17.	Gordon, R. and S. G. Harris (1998)	:	Macroeconomics, Addison Wesley.
18.	Hagger, A. J. (1977)	:	Inflation : Theory and Policy, Macmillan, London.
19.	Hall, R. E. & J. B. Taylor (1986)	:	Macroeconomics, W. W. Norton, New York.
20.	Heijdra, B. J. & V. P. Frederick (2001)	:	Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
21.	Hicks, J. R. (1950)	:	A Contribution to the Theory of Trade Cycles, Clarendon Press, Oxford.
22.	Hicks, J. R. (1974)	:	The Crisis in Keynesian Economics, Oxford University Press, New Delhi.
23.	Jha, R. (1999)	:	Contemporary Macroeconomic Theory and Policy, New Age International (P) Ltd., New Delhi.
24.	Keynes, J. M. (1936)	:	The General Theory of Employment, Interest and Money, Macmillan, London.
25.	Laidler, D. E. W. (1977)	:	Demand for Money : Theory and Evidence, Dum-Don Valley, New York.
26.	Levacic, R. and R. Rebman (1986)	:	Macroeconomics : An Introduction to Keynesian and Neo- classical Controversies, Macmillan, London.
27.	Lucas, R. (1981)	:	Studies in Business Cycle Theory, MIT Press, Cambridge, Masscechusetts.

28.	Mankiw, N. G. and D. Romer (eds.) (1991)	:	New Keynesian Economics (2 Vols.), MIT Press, Cambridge.
29.	Mathews, R. C. O. (1964)	:	The Trade Cycle, Cambridge University Press.
30.	Mckinen, G. E. (1978)	:	Money, the Price Level and Interest Rates, Prentice Hall of India, New Delhi.
31.	Mueller, M. G. (1966) (3 <sup>rd</sup> ed.)	:	Readings in Macroeconomics, Holt Rinehart and Winston, New York.
32.	Patinkin, D. (1965)	:	Money, Interest and Prices (2 <sup>nd</sup> ed.), Harper and Row, New York.
33.	Peston, M. H. (1982)	:	Theory of Macroeconomic Policy, Heritage Publishers.
34.	Rakshit, M. (1998)	:	Studies in the Macroeconomics of Developing Countries, Oxford University Press, New Delhi.
35.	Romer, D. L. (1996)	:	Advanced Macroeconomics, McGraw Hill Co. Ltd., New York.
36.	Scarfe, B. L. (1977)	:	Cycles, Growth and Inflation, McGraw Hill Co. Ltd., New York.
37.	Shapiro, E. (1996)	:	Macro-Economic Analysis (5 <sup>th</sup> ed.), Galgotia Publications, New Delhi.
38.	Surrey, M. J. C. (ed.) (1976)	:	Macroeconomics Themes, Oxford University Press, Oxford.
39.	Smith, W. L. and Teigen, R. L. (Ed.) (1970)	:	Readings in Money, National Income and Stabilization Policy, Richard D. Irwin.
40.	Taylor, L. (1983)	:	Structuralist Macroeconomics, Basic Books, New Longman.
41.	Turnovsky, S. J. (1977)	:	Macroeconomic Analysis and Stabilization Policy, Cambridge University Press, Cambridge.

# Further Readings :

American Economic Association and	:	A Survey of Economic	Theory	Vols.1, 2 & 3.
The Royal Economic Society (1965)				

# Paper-MAECO-402 : ECONOMICS OF GROWTH AND DEVELOPMENT -II

Max. Marks	: 100
Theory	: 80 Marks
Internal Assessment	: 20 Marks
Time	: 3 Hours
Teaching Hours	: 50

#### **Objective :**

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

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

# **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks ( $10 \times 2 = 20$ ).
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## UNIT-I

*Economic Growth and Structural Change :* Structural Changes in the Composition of Gross Domestic Product, Occupational Structure, Structure of Capital Accumulation; and Accumulation of Human Capital; Exploring the Relationship between Economic Development and Income Distribution (Kuznets' inverted U – shaped Curve and Augmented Kuznets' Curve).

# UNIT-II

*Agriculture-Industry Interface :* Interdependence between Agriculture and Industry; Industrialization and Urbanization (The Models of Lewis, Fei and Ranis and Todaro); The Balanced Growth Doctrine (Review of Rosenstein, Nurkse and Lewis); The Strategy of Unbalanced Growth (Hirschman's version), and the Reconciliation of the two.

# UNIT-III

*Economic Isolation and Integration with the Global Market :* International Trade and Economic Development (Three stories about Trade and Development Relationship); Developmental Aid–Role, Trends and Constraints; Role of Foreign Direct Investment (FDI) and Multi-National Corporations (MNCs) in the Emerging Scenario.

# UNIT-IV

*Market and State :* An Overview of the Economic Functions of the Market and State; Efficiency of the Competitive Market, Market Failure, Government Failure, on the Choice of Economic System, Market Failure in a Dynamic Economy.

# **Recommended Readings:**

1.	Agarwala, 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, <i>Review of Economic Studies</i> , 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, <i>American Economic Review</i> , 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, <i>Journal of Monetary Economics</i> , July.
10.	Romer, Paul M. (1986)	:	Increasing Returns and Long Run Growth, <i>Journal of Political Economy</i> , October.
11.	Romer, Paul M. (1990)	:	Endogenous Technological Change, <i>Journal of Political Economy</i> , October.
12.	Schultz, Theodore W. (1981)	:	Investing in People, Hindustan Publishing Corporation (India), Delhi.
13.	Sen, A. K. (ed.) (1970)	:	Growth Economics, Penguin Books.

#### M.A. ECONOMICS (SEMESTER SYSTEM) SYLLABUS

14.	Sen, A. K. (1999)	:	Development as Freedom, Oxford University Press, London.
15.	Thirlwall, A. P. (2003)	:	Growth and Development, Seventh Edition, Palgrave Macmillan, New York.
16.	Thorvaldur Gylfason (1999)	:	Principles of Economic Growth, Oxford University Press.
17.	Todaro, Michael P. and Stephen C. Smith, (2004)	:	Economic Development, Pearson Education, (Singapore) Pvt. Ltd., Indian Branch, Delhi.
18.	Yotopoulos, Pan A. and Nugent Jeffery B. (1976)	:	Economics of Development : Empirical Nugent Investigations, Harper and Row Publishers, New York.

# Paper-MAECO-403 & 404 : (OPTION) (i) : ECONOMICS OF AGRICULTURE-II

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

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 objective is to equip students to analyse and critically assess issues, policies and programmes in these areas.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

#### Agricultural Finance :

Financial Characteristics of Agriculture, Imperfect Information [Agency Relationship, Adverse Selection and Moral Hazard] and Enforcement Problems in Credit Markets; Segmented Rural Credit Markets, Resolving Information and Incentive Problems; Managing Borrowers' Credit Risks; Agribusiness and Trade Financing; and Rationale for Government Intervention in Rural Credit Markets.

Structure and Functioning of Rural Credit Market in India.

#### UNIT-II

#### Agricultural Markets :

Nature, Types and Problems of Agricultural Commodity Markets; Marketing Margins and Marketing Margin Determinants; and Evaluation of Marketing Efficiency.

Horizontal Structure of Agricultural Marketing, Vertical Market Relationships, Institutional and Organizations in Agricultural Markets [Farmers Cooperatives, Marketing Orders, Marketing Boards and Trading Enterprises].

Instability in Agricultural Markets, Price Stabilization and Social Benefits, Storage and Market Stabilization, Role of Commodity Futures and Options in Stabilization.

# **UNIT-III**

#### Food Security and International Trade :

Concept, Threat, Indicators and Mechanism to Food Security; Food Assistance Programmes [both Domestic and International].

Main Features of International Trade in Agricultural Commodities, Domestic Agricultural and Trade Policies of Developed Countries and Their Impact on World Trade, Cartels and Integrated Commodity Agreements, Agriculture in GATT Negotiations and WTO.

#### **UNIT-IV**

#### Recent Developments in Indian Agriculture :

Indian Agricultural Development Strategy Since Independence.

Opportunities and Challenges [Expectations, Performance, and Emerging Constraints and Potentials] for Indian Agriculture in the Post Reform Period.

National Agricultural Policy 2002 and the Agricultural Development Strategy in the Latest Five Year Plan.

## **Essential Readings**:

1.	Bruce L. Gardener and Gordon C. Rausser (Eds.)	:	Handbook of Agricultural Economics Vol.1 A : Agricultural Production, Amersterdam, Elsevier Science B.V.
2.	Bruce L. Gardener and Gordon C. Rausser (Eds.)	:	Handbook of Agricultural Economics Vol.1 B : Marketing, Distribution and Consumption, Amersterdam, Elsevier Science B.V.
3.	Bruce L. Gardener and Gordon C. Rausser (Eds.)	:	Handbook of Agricultural Economics Vol.2 A : Agricultural and Its External Linkages, Amersterdam, Elsevier Science B.V.
4.	Bruce L. Gardener and Gordon C. Rausser (Eds.)	:	Handbook of Agricultural Economics Vol. 2 B : Agricultural and Policy, Amersterdam, Elsevier Science B.V.
5.	Ghatak Subrata and Ken Ingersent (1984)	:	Agriculture and Economic Development, Harvestor Press Ltd., London.
6.	Government of India (2006)	:	Mid Term Appraisal of Tenth Five Year Plan, Planning Commission, Government of India, New Delhi.
7.	Government of India (2007)	:	Approach Paper to the Eleventh Five Year Plan, Planning Commission, Government of India, New Delhi.
8.	Government of India (2002)	:	National Agricultural Policy, Ministry of Agriculture, Government of India, New Delhi.
9.	World Bank (2006)	:	Rejuvenating Indian Agriculture, Washington, World Bank.

# Paper-MAECO-403 & 404 : OPTION (ii) ECONOMICS OF INDUSTRY-II

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

## **Objective :**

In the contemporary world with globalization and liberalization more and more attention being given to industry. Since industry performance critically depends on firms' behavior allowing equilibrium outcome, the course intends to provide a rigorous knowledge of different long-run equilibrium outcome of firms under different conditions from the point of view of public policy. The students are also equipped to deal with debates involved in the industrial development in a cogent and analytical manner, particularly in the Indian context. However, it should be noted that Game Theoretic approach to any topic/problem is outside the scope of the Present syllabus.

The time-tested method of imparting verbal instructions through lectures would be used. Examples, in so far as possible, would be selected from everyday life/experience. The feedback would be sought through the students writing assignments, tutorials and seminars.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/options concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

# **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks ( $10 \times 2 = 20$ ).
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

Nature of Industrial Data for Organized Industry. Annual Survey of Industries – Scope and Coverage. Uses and Critique of ASI Data. Major Classification of the Organized Industry – by Economic Activities, Type of Organization, Type of Ownership, Size of Employment, Size of Output and Net Value Added and by States.

#### **UNIT-II**

Public Policy for Industrial Development in India since Independence – a critique. Pattern of Industrial Growth and Changes in Industrial Structure in India since 1951. Factors Affecting Industrial Location. Regional Imbalances in Industrial Development in India and Government Policy for Balanced Regional Development of Industry.

#### **UNIT-III**

Analysis of Business Groups in India. Ownership Pattern of Indian Corporate Sector. MRTP and Nature of Concentration in Indian Industry. Liberalization and Privatization in Indian industry. Mergers and Takeovers. Competition Policy and Consumer Protection in India.

#### **UNIT-IV**

India's FDI inflows – Nature and Extent. FDI and Acquisition of Technology in India. Trends in Indian Direct Investment Abroad. Impact of Economic Reforms on Industrial Sector in India.

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Essential Readings :

1.	Bhagwati, J. and Desai, P. (1970)	:	Planning for Industrialization : India, Oxford University Press.
2.	Dilip Mukherjee (1995)	:	Indian Industry, Oxford University Press.
3.	Nayyar, Deepak (ed.) (1994)	:	Industrial Growth and Stagnation, Oxford University Press.
4.	Gupta, Vinod K. (1972)	:	Some Factors Relating to Concentration in Indian Industries, Artha Vijnana (December, 1972).
5.	Kansra, S. L. (1990)	:	Monopoly Power : Some Aspects of its Impact on Indian Industry (Unpublished Ph.D. Thesis, P. U).
6.	Economic and Political Weekly	:	Various Issues
7.	CMIE Publications	:	Various Issues

## Paper-MAECO-403 & 404 : (OPTION) (iii) MATHEMATICAL ECONOMICS

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

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

Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships. This course has been accordingly designed to include various mathematical techniques/methods/models related to the different parts of economic theory like consumer theory, theory of production, pricing, trade cycles, growth models etc. The paper covers important aspects of microeconomics; macroeconomics and development theory and the various modules have been accordingly designed.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

# **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry 15 marks  $(15 \times 4 = 60)$ .

#### UNIT-I

*Theory of Consumer Behaviour :* Concept of Elasticities – Generalization to n-Variable Case; Linear Expenditure Function and Indirect Utility Function; Roy's Identity; Expenditure Function; Consumer's Surplus; Choice under Risk, Von Neumann Utility Function; Intertemporal Utility Maximization.

*Production Analysis :* Homogeneous and Homothetic Production Functions; Elasticity of Substitution; Cobb-Douglas, CES and VES Production Functions; Output and Profit Maximization, Cost Minimization; Analysis of Joint Profit Maximization and Multi-Product Firm; Production Possibility Curve.

#### UNIT-II

*Market Equilibrium :* Existence and Uniqueness of Equilibrium; Stability of Equilibrium; Dynamic Equilibrium with Lagged Adjustment; Cobweb Model. Multi-Market Equilibrium, Walras's Law and the Existence of General Equilibrium.

*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; Dynamic Leontief-System.

#### UNIT-III

*Macro Economics* : Relative Efficiency of Fiscal and Monetary Policy under Different Regimes of IS-LM Model : A Mathematical Representation, the Balanced Budget Multiplier.

*Growth Models* : An Overview of Neo-Classical Growth Models and Golden Rule of Capital Accumulation. Growth Accounting; Models of Endogenous Growth.

## **UNIT-IV**

Linear Programming : Simplex Method; Dual and its Economic Interpretation; Complimentary Slackness Conditions; Duality Theorems; Applications of Linear Programming in Economics.

Game Theory : Two person Zero Sum Game, Max-Min Strategy. Non-Zero Sum Game, Static Games in Complete Information, Strongly and Weakly Dominant Strategies, Dominant Strategy Equilibrium; Pure and Mixed Strategies; Concept of Nash Equilibrium-Examples such as Prisoner's Dilemma, Battle of Sex, Matching Pennies, Co-ordination Problem and Multiple Equilibria, etc., Focal Points, Dynamic Games in Complete Information, Sub-Games and Sub-Game Perfect Nash Equilibrium.

# **Recommended Readings:**

1.	Abel, A., Bernanke, and Mcnabb, (1998)	:	Macroeconomics, Addison Wesley, Massachusetts.
2.	Allen, R. G. D. (1974)	:	Mathematical Economics, Macmillan, London.
3.	Allen R. G. D. (1967)	:	Macro Economic Theory, Macmillan, London.
4.	Baumol, W. J. (2000) (4 <sup>th</sup> Edn.)	:	Economic Theory and Operations Analysis, Prentice Hall of India, N. Delhi.
5.	Dorfman, R. Samuelson, P. and Sallow, R. (1968)	:	Linear Programming and Economic Analysis, McGraw Hill Kogakusha Ltd., Tokyo.
6.	Dornbusch, R. and Fisher, S.	:	Macroeconomics, McGraw Hill, N. Delhi.
7.	(1981) Hamberg, D. (1971)	:	Models of Economic Growth, Harper & Row, New York.
8.	Henderson, J. M. & Quandt, R. B. (1980)	:	Micro Economic Theory : A Mathematical Approach (3 <sup>rd</sup> ed.), McGraw Hill, New Delhi.
9.	Lancaster, V. (1965)	:	Mathematical Economics, Rand McNally College Pub.
10.	Silberberg, E. (1990)	:	The Structure of Economics – A Mathematical Analysis, McGraw Hill, New York.
11.	Varian, H. R. (1992)	:	Microeconomic Analysis, W. W. Norton, New York.
12.	Nehar, Phillips, A. (1971)	:	Economic Growth and Development : A Mathematical Introduction, John Wiley, New York.
13.	Madnani, G. M. K. (2003)	:	Mathematical Economics, Oxford IBH Publishing Co. Pvt. Ltd., New Delhi.

# Further Readings:

1.	Chiang, A. C. (1984)	:	Fundamental Methods of Mathematical Economics (3 <sup>rd</sup> edn.), McGraw Hill.
2.	Chung, J. W. (1993)	:	Utility and Production : Theory and Application, Basil Blackwell, London, New York.
3.	Green, H. A. J. (1971)	:	Consumer Theory, Penguin, Harmondsworth.
4.	Jha, R. (1991)	:	Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
5.	Jones, H. G. (1976)	:	An Introduction to the Modern Theory of Economic Growth, McGraw Hill - Kogakusha, Tokyo.
6.	Mahesh Chand & Anand V. K. (1981)	:	Economic Theory – A Mathematical Approach, Kitab Mahal, Allahabad.
7.	Nash, J. F. (1996)	:	Essays on Game Theory, Cheltenham, U.K.
8.	Quirk, J. and Saposnik, R. (1968)	:	Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
9.	Sen, A. K. (ed.) (1990)	:	Growth Economics, Penguin, Harmondsworth.
10.	Solow, Robert M. (2000)	:	Growth Theory – An Exposition, Oxford University Press, Oxford.
11.	Taha, H. S. (1997)	:	Operations Research – An Introduction (6 <sup>th</sup> edition), Prentice Hall of India Pvt. Ltd., New Delhi.
12.	Leontief, W. W. (1966)	:	Input-Output Economics, Oxford University Press, New York.
13.	Todaro, M. P. (1971)	:	Development and Planning Models and Methods, Oxford University Press, Oxford.

# Paper-MAECO-403 & 404 : (OPTION) (iv) ECONOMICS OF MONEY AND BANKING

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

# **Objective :**

Money and banking constitute important components towards understanding of economics. A clear understanding of the operations of money and banking and their interaction with the rest of the economy is

essential to realize how monetary forces operate through a multitude of channels – market, non-market, institutions and among others, the state. The operation of financial markets and their regulations are to be studied to appreciate their key-role in an economy, especially after the far reaching banking and financial sector reforms in India and elsewhere. The present course is designed to acquaint the students fully with the changing role of financial institutions in the process of growth and development. Accordingly, the paper on 'Economics of Money and Banking' is an optimal integration of monetary theory, banking and non-banking financial institutions, which combines with itself a systematic discussion of the theory, institutions and policy with special reference to India.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

#### Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

# **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

#### UNIT-I

*The Definition of Money* : Function and Types of Money, Post-War Controversy on the Definition of Money and Money Supply – The Theoretical Debate and Empirical Attempts.

*Demand for Money* : The Classical Quantity Theory of Money, The Keynesian Approach, Friedman's Theory.

*Supply of Money* : Money Creation by the Banking System. High Powered Money and Money Multiplier. Measures of Money Supply in India.

#### UNIT-II

Term Structure of Interest Rates :

The Expectations Theory, Liquidity Premium Theory, Market Segmented Theory, Preferred Habitat Theory.

Monetary Policy :

Targets, Goals and the Trade Offs Among Alternate Goals, Lags in Operation, Transmission Mechanism – Classical Model, Keynesian Model and Monetarist Model, Rules vs. Discretion.

## **UNIT-III**

*Central Banking :* Origin and Evolution, Main Functions, Policy Tools, RBI – Monetary Policy and Autonomy.

Commercial Banking :

Functions, Major Developments in Commercial Banking in India since Nationalization. Banking Sector Reforms.

# **UNIT-IV**

*Development Financial Institutions* : Role, Growth and Structure of Development Financial Institutions in India. Types and Control of Non - Banking Financial Companies (NBFCs) by RBI.

International Monetary System :

IMF and International Liquidity. European Monetary System – Features of the Maastricht Treaty and Post Maastricht Treaty Developments.

# **Recommended Readings :**

1.	Bofinger Peter (2001)	:	Monetary Policy : Goals, Institutions, Strategy and Instruments, Oxford University Press.
2.	Dennis Geoggrey, E.J. (1981)	:	Monetary Economics, Longman.
3.	Dinlio, A. Eugene (Latest Edition)	:	Theory and Problems of Money and Banking, International Edition (Schaum's Outline Series).
4.	Fabozzi, F. J. and Franco Modigliani (Fourth Edition) (2009)	:	Capital Markets Institutions and Instruments, Prentice Hall, New Jersey.
5.	Howells, Peter and Bain Keith (2002)	:	The Economics of Money, Banking and Finance, Prentice Hall, Pearson Education Ltd.

6.	Khanna, Perminder (2005)	:	Advanced Study in Money and Banking Theory and Policy Relevance in the Indian Economy, Atlantic Publishers, New Delhi.
7.	Kulkarni, G. (1999)	:	Modern Monetary Theory, Macmillan, New Delhi.
8.	Mankiw, N.G. (Fifth Edition) (2008)	:	Macro-economics, Macmillan Worth Publishers, New York.
9.	Mohan Rakesh (2009)	:	Monetary Policy in a Globalized Economy – A Practitioner's View, Oxford University Press.

Further Readings :

1.	Government of India	:	Economic Survey (Recent Issues).
2.	Reserve Bank of India	:	Various Reports.

OR

Paper-MAECO-403 & 404 : (OPTION) (iv)

# : ECONOMICS OF FINANCIAL MARKETS AND INSTITUTIONS

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

#### **Objective :**

The positive and significant role of financial institutions in the process of growth and development has been very well recognized in the literature and indeed has become more important during the last two decades as the financial systems of different countries have become integrated in the process of globalization. India is no exception and has taken far reaching measures since 1991 in this direction. It is, therefore, essential that the students of economics should be well conversant with the theory and practice of different financial institutions and markets to understand and analyse the interconnection between the monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international levels.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

## Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

## **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks ( $10 \times 2 = 20$ ).
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

## UNIT-I

*Financial Markets and Financial Institutions :* The role and structure of Financial Markets in the Economy. Functions of Financial Institutions.

#### Introduction to Corporate Finance :

Various Methods of Corporate Finance, Goals of Financial Management, The Cost of Capital and the Capital Structure.

## UNIT-II

The Supply of Securities :

Regulations Governing Supply of Securities, General Characteristics of Securities – Government Bonds – Index Linked Bonds – Corporate Securities, Mutual Funds and Money Market Funds.

#### The Demand for Securities :

The Time Dimension – Present Value and Duration, Yields on Zero-Coupon Bonds. Measurement of risk, Expected Utility Approach, Mean Variance Portfolio Theory, Portfolio Diversification.

## **UNIT-III**

Efficiency of Securities Markets :

The Efficient Market Hypothesis (EMH), The Capital Asset Pricing Model (CAPM), The Arbitrage Pricing Theory (APT).

Regulation of Financial Markets :

Securities and Exchange Board of India (SEBI) – Role and Functions. Recent Reforms in the Indian Financial Market.

# **UNIT-IV**

*Foreign Exchange Market :* Nature, Organisation and Participants.

Essential Readings :		R	Recommended Readings:		
1.	Bhole, L. M. (2002)	:	Financial Institutions and Markets, Tata McGraw Hill Publishers Company Ltd., New Delhi.		
2.	Eatwell, John and Taylor Lance (2003)	:	International Capital Markets, System in Transition, Oxford University Press, Delhi.		
3.	Fabozzi, Frank J. Modigliani Franco (Third Edition)	:	Capital Markets, Institution and Instruments, Prentice Hall of India Pvt. Ltd., New Delhi.		
4.	Khan, M. Y. (2000)	:	Indian Financial System, Tata McGraw Hill, New Delhi.		
Further Readings :					

1.	Government of India	:	Economic Survey (Recent Issues).
2.	Reserve Bank of India	:	Various Reports.

## Paper-MAECO-403 & 404 : (OPTION) (v) ADVANCED ECONOMETRICS

Max. Marks	:	100
Theory	:	80 Marks
Internal Assessment	:	20 Marks
Time	:	3 Hours
Teaching Hours	:	50

## **Objective :**

Application of economic theory need a reasonable understanding of economic relationships and relevant statistical methods. The econometric theory thus becomes a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with basic theory of econometrics and relevant applications of the methods. The topics

covered in the course include various problems faced in estimation of both single equations and simultaneous equations 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. The feedback would be sought through the students writing assignments, tutorials and seminars.

The students would be evaluated at the end of each semester through subjective type questions/answers (both short and essay type). The scripts would be evaluated by the examiners having adequate postgraduate teaching experience in the paper/option concerned.

# Pedagogy of the Course Work :

The course relies on a combination of lectures, solving problems, and discussing of academic articles or real-life situations. Teacher will assign topic for assignments on contemporary themes and issues from the syllabi. Special tutorials/contact hour for one-to-one student-teacher interactions.

#### **INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES :**

- 1. The syllabus of this paper has been divided into four units.
- 2. There shall be 9 questions in all.
- 3. The first question, which would be **compulsory**, shall be short answer type (word limit 25-30 each). It would carry 15 short questions, spread over the entire syllabus. The candidate will be required to attempt any 10 short answer type questions. Each short answer type question would carry 2 marks  $(10 \times 2 = 20)$ .
- 4. Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be required to attempt one question from each Unit— 4 in all. Each question shall carry **15** marks  $(15 \times 4 = 60)$ .

# UNIT-I

## Test Procedures and Model Selection:

Specification Errors, Tests of Specification and Misspecification, Errors of Measurement, Encompassing Models and Criteria for Model Selection.

Dummy Variables and Their Use to Test Equality to Two Regressions.

# UNIT-II

*Qualitative Response Regression Models:* Nature of Qualitative Response Regression Models. Description and Estimation of Linear Probability, Logit, Probit and Tobit Models.

#### M.A. ECONOMICS (SEMESTER SYSTEM) SYLLABUS

#### **UNIT-III**

Simultaneous Equations Models (SEM): Nature of SEM's Simultaneous Equation Bias, Identifications Problem. Rank and Order Conditions. Testing Identification of Economic Models. Estimation of SEM'S : ILS, 2SLS, 3SLS, LVR and LIML Methods.

#### **UNIT-IV**

*Time Series Analysis:* Testing Casuality in Economics: Granger Causality Test. Stationary, Test of Stationary, Spurious Regression, Unit Roots, Dickey-Fuller Test, Cointegration, Engle Granger Test.

*Forecasting:* AR, MA and ARIMA processes, Box Jenking Methodology. Vector Auto Regression (VAR) Model, Introduction, Formulation and Estimation.

Panel Data Models.
Introduction: Advantages and Issues Involved in Utilizing Panel Data.
Simple Panel Data Models: Fixed Effects Models – LSDV Approach, Random Effects Models.
Dynamic Panel Model: Random, Coefficient Model.

## **Recommended Readings:**

Essential Readings :

1.	Gujarati Damodar (2003)	:	Basic Econometrics, 4th Ed., McGraw Hill, New York.
2.	Kementa, J. (1971)	:	Elements of Econometrics, 2 <sup>nd</sup> Edition, Macmillan, New York.
3.	Madala, G. S. (2007)	:	Introduction to Econometrics, 3 <sup>rd</sup> Edition, John Wiley & Sons Ltd., England.
Further Readings			

*Further Readings:* 

- S. Hsiao Cheng (2003)
   Analysis of Panel Data, 2<sup>nd</sup> Ed., Cambridge University Press, Cambridge.
   Johnston, J. and Dinarido : Econometrics, 4<sup>th</sup> Ed., New York, McGraw Hill.
- . Johnston, J. and Dinarido : Econometrics, 4<sup>th</sup> Ed., New York, McGraw Hill. (2007)

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