



**UNIVERSITY OF CALICUT**

**Abstract**

M.A.Economics (CUCSS-PG) - Post Graduate Programmes in affiliated Colleges - Revised scheme and syllabus Implemented from the Academic year 2015 Admission onwards-corrected -Orders issued

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**G & A - IV - B**

U.O.No. 10261/2015/Admn

Dated, Calicut University.P.O, 30.09.2015

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*Read:-*1.U.O.No. 9067/2015/Admn Dated, Calicut University.P.O, 24.08.2015

2.U.O Note from Pareeksha Bhavan No. 55884/EX-I-ASST-2/2015/PB Dated:  
11.09.2015

3. E Mail from Chairman Board of Studies in Economics (PG)

4.Orders of the Vice Chancellor in the file of even No dated 26-09-2015.

**ORDER**

Vide paper read first above M.A.Economics (CUCSS-PG) Post Graduate Programmes in affiliated Colleges was implemented from the Academic year 2015 Admission onwards.

Vide paper read second above Pareeksha Bhavan has pointed out that no Course Codes are seen provided against Core courses in the syllabus as stipulated in the Regulations of CUCSS PG programmes for Affiliated colleges.

Vide paper read third above Chairman has provided Course codes against Core Courses and forwarded the corrected syllabus.

Vide paper read fourth above Vice Chancellor has accorded sanction to implement the corrected syllabus.

Sanction has therefore been accorded to issue orders for implementing the corrected Syllabus including Course codes against Core courses for M.A.Economics (CUCSS-PG) Post Graduate Programmes in affiliated Colleges with effect from 2015 admission onwards.

UO read first above stands modified to this extent.

Orders are issued accordingly.

(Revised syllabus is uploaded in the website.)

Usha K  
Deputy Registrar

To

The Principal of affiliated colleges.

Copy to:

PA to CE/ Ex/EG/ EX 4/DR-AR PG Sn/PG Tabulation Sn/Library/System Administrator with  
a request to upload the syllabus/ GAI F Sn/SF/DF/FC

Forwarded / By Order

Section Officer



**UNIVERSITY OF CALICUT**

**Abstract**

M.A.Economics (CUCSS-PG) - Post Graduate Programmes in affiliated Colleges - Revised scheme and syllabus Implemented from the Academic year 2015 Admission onwards-approved-Orders issued

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**G & A - IV - B**

U.O.No. 9067/2015/Admn

Dated, Calicut University.P.O, 24.08.2015

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*Read:-*1. U.O No.GA IV/J1/1373/08 dated 23-07-2010

2. Minutes of the meeting of the Board of Studies in Economics (PG) held on 30.05.2015 item No. 3
3. Minutes of the meeting of the Faculty of Humanities held on 04-06-2015 item XI
4. Minutes of the meeting of the Academic Council held on 11-07-2015 (item II B)
5. Circular No. 53986/GA - I - F 1/2015/Admn Dated: 04.08.2015.

**ORDER**

As per paper read first, Calicut University Credit Semester System for all regular Post Graduate Programmes in affiliated Colleges (CUCSS-PG-2010) was implemented with effect from 2010 admission onwards.

Vide paper read second , the Board of Studies in Economics (PG) held on 30.05.2015 (item No.3) resolved to approve the revised Scheme and Syllabi of M.A. Economics programme under CUCSS.

Vide paper read third, the meeting of the Faculty of Humanities at its meeting held on 04-06-2015 as per item XI, has resolved to approve the Minutes of the Economics (PG) held on 30.05.2015.

Vide item read fourth above, the Academic Council Meeting held on 11.07.2015 has resolved to approve the the Minutes of the meeting of Faculty of Humanities.

Vide paper read fifth above sanction has been accorded to implement the revised scheme and syllabus of the M.A.Economics programme ( CUCSS) P.G in affiliated Colleges in the University with effect from 2015 admission onwards.

Orders are issued accordingly.

The syllabus is appended herewith.

Deputy Registrar

To

The Principal of affiliated colleges.

Copy to:

PA to CE/ Ex/EG/ EX 4/DR-AR PG Sn/PG Tabulation Sn/Library/System Administrator with  
a request to upload the syllabus/ GAI F Sn/SF/DF/FC

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Section Officer

**CALICUT UNIVERSITY CREDIT SEMESTER SYSTEM  
(CUCSS)**

**FOR  
POSTGRADUATE PROGRAMME  
OF  
UNIVERSITY OF CALICUT**



**SCHEME & SYLLABUS**

**FOR**

**M A ECONOMICS**

**(2015-16 Academic Year onwards in Affiliated Colleges)**

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## **PREFACE**

The Master of Arts (M A) in Economics is a two-year full-time programme, with each year comprising of two semesters. Regular updation of both curriculum and syllabus in economics is unavoidable because the subject of economics has a rapid growth compared to most of the other fields in social sciences. Accordingly, timely modifications and updations are to be made in the curriculum in tune with the latest developments in economic theories, techniques and methods of analysis and the rapidly changing global economic environment.

The present syllabus is designed after making a thorough review of the existing curriculum. It incorporates a wide range of electives for the students. Thoroughly revised contents, evaluation schemes, model question papers and a format to prepare the dissertation are the major components of the new syllabus.

The revised syllabus is the outcome of a series of sittings of the members of the board of studies and consultations with the faculty members handling various papers and experts in the respective areas. The draft syllabus has been sent to the faculty in different colleges for their expert opinion and suggestions.

Valuable comments and suggestions given by them have been incorporated in the syllabi before finalizing it. I express my deep sense of gratitude to the members of the Board of Studies in Economics (PG), experts from different fields and economics faculty of various colleges for the help and support extended by them in materializing it.

**Dr D Retnaraj**  
**Chairman, Board of Studies in Economics (PG)**  
**University of Calicut**

**MEMBERS OF THE P G BOARD OF STUDIES IN ECONOMICS**

1. Dr D Retnaraj, Professor of Economics, Dr John Matthai Centre, (Chairman).
2. Dr K X Joseph, Professor of Economics, Dr John Matthai Centre, Thrissur.
3. Prof. Abraham P Mathew, Principal, Marthoma College, Chungathara.
4. Dr E M Thomas, Associate Professor, Christ College, Irinjalakkuda.
5. Dr K M Francis, Associate Professor, St Thomas College, Thrissur.
6. Dr Shibi M Thomas, Associate Professor, St. Joseph's College, Devagiri.
7. Dr Abdul Nasar Vallassery, Associate Professor, MES College, Mampad.
8. Shri C T Aboobacker, Associate Professor, MES Ponnani College, Ponnani.
9. Dr P P Yusuf Ali (UG Board Chairman), Associate Professor, Farook College.
10. Dr N Radhakrishnan, Associate Professor, Guruvayurappan College.
11. Dr C P James, Associate Professor, St Aloysius College, Elthuruth.



**M A ECONOMICS (CUCSS) 2015-16 ADMISSION-SCHEME OF THE COURSE**

Semester	Name of the Paper	Credit	Hours/Week #	Total Weight	
				External	Internal
<b>I</b>	Core Course I- ECO1C01 Microeconomics: Theory and Applications I	4	7	36	5
	Core Course II- ECO1C02 Macroeconomics: Theories and Policies I	4	6	36	5
	Core Course III- ECO1C03 Indian Economy: Problems and Policies	4	6	36	5
	Core Course IV- ECO1C04 Quantitative Methods for Economic Analysis-I	4	6	36	5
<b>II</b>	Core Course V- ECO2C05 Microeconomics: Theory and Applications II	4	6	36	5
	Core Course VI- ECO2C06 Macroeconomics: Theories and Policies II	4	6	36	5
	Core Course VII- ECO2C07 Public Finance: Theory and Practice	4	7	36	5
	Core Course VIII- ECO2C08 Quantitative Methods for Economic Analysis-II	4	6	36	5
<b>III</b>	Core Course IX- ECO3C09 International Trade	4	6	36	5
	Core Course X- ECO3C10 Growth and Development	4	6	36	5
	Core Course XI- ECO3C11 Banking: Theory and Practice	4	6	36	5
	Core Course XII- ECO3C12 Basic Econometrics	4	7	36	5
<b>IV</b>	Core Course XIII- ECO4C13 International Finance	4	6	36	5
	Core Course XIV- ECO4C14 Financial Markets	4	6	36	5
	Electives*				
	Elective-1	4	6	36	5
	Elective- 2	4	6	36	5
	Dissertation	4	1		
	Viva Voce (a+b) a. Dissertation Viva (2 Credits) b. Theory Viva (2 Credits)	4			
	<b>Total</b>	<b>72</b>			

# 20 hours are allotted for seminars for each paper per semester.

\* Two elective papers to be selected from the list of 13 elective papers appended.

## EVALUATION SCHEMES

### INTERNAL EVALUATION

COMPONENT	WEIGHTAGE
Assignment	1
Seminar	1
Attendance	1
Test Papers (2)	2
<b>Total</b>	<b>5</b>

### EXTERNAL EVALUATION

PART	COMPONENT	WEIGHTAGE
A	12 Questions x 1/4	3
B	5 Questions x 1	5
C	8 Questions x 2	16
D	3 Questions x 4	12

**Part A (Multiple Choice Questions)**

**Answer all 12 Questions**

(12 x 1/4 Weightage = 3 Weightage)

**Part B (Very Short Answer Questions)**

**Answer any 5 questions out of 8 questions**

(5 questions x 1 = 5 Weightage)

**Part C (Short Answer Questions)**

**Answer any 8 questions out of 11 questions**

(8 questions x 2 = 16 Weightage)

**Part D (Essay Questions)**

**Answer any 3 questions out of 5 questions.**

(3 questions x 4 = 12 Weightage)

**Total = 36 Weightage**

### **LIST OF CORE PAPERS**

1. Paper I - ECO1C01-Microeconomics: Theory and Applications I
2. Paper II - ECO1C02- Macroeconomics: Theories and Policies I
3. Paper III - ECO1C03- Indian Economy: Problems and Policies
4. Paper IV- ECO1C04- Quantitative Methods for Economic Analysis-I
5. Paper V- ECO2C05- Microeconomics: Theory and Applications II
6. Paper VI - ECO2C06- Macroeconomics: Theories and Policies II
7. Paper VII - ECO2C07- Public Finance: Theory and Practice
8. Paper VIII - ECO2C08- Quantitative Methods for Economic Analysis-II
9. Paper IX- ECO3C09- International Trade
10. Paper X- ECO3C10- Growth and Development
11. Paper XI- ECO3C011- Banking: Theory and Practice
12. Paper XII- ECO3C12- Basic Econometrics
13. Paper XIII- ECO4C13- International Finance
14. Paper XIV- ECO4C14- Financial Markets

### **LIST OF ELECTIVE PAPERS**

1. Paper I - ECO4C15-Advanced Econometrics
2. Paper II - ECO4C16- Agricultural Economics
3. Paper III - ECO4C17- Business Economics
4. Paper IV- ECO4C18- Demography
5. Paper V - ECO4C19- Environmental Economics
6. Paper VI - ECO4C20- Gender Economics
7. Paper VII - ECO4C21- Health Economics
8. Paper VIII - ECO4C22- Industrial Economics
9. Paper IX - ECO4C23- Labour Economics
10. Paper X - ECO4C24- Local Level Planning
11. Paper XI- ECO4C25- Mathematical Economics
12. Paper XII - ECO4C26- Regional Economics
13. Paper XIII - ECO4C27- Research Methodology and Computer Applications

## **M A ECONOMICS DISSERTATION FORMAT**

### **STRUCTURE OF THE DISSERTATION**

#### **Cover Page and Front Page**

- a. Title of the project
- b. Degree for which project is submitted.
- c. Name of the Candidate & Roll Number
- d. Name of the College
- e. Month and year the project is presented

#### **Contents**

- a. Certificate of the supervising teacher.
- b. Certificate of the head of the department.
- c. Certificate of the college principal.
- d. Declaration by the student.
- e. Acknowledgement.
- f. Table of Contents
- g. List of Tables
- h. List of Figures
- i. Introductory Chapter
- j. Analyses Chapters
- k. Concluding Chapter
- l. Bibliography
- m. Appendix

### **CONTENTS OF THE INTRODUCTORY CHAPTER**

1. Introduction
2. Statement of objectives
3. Hypotheses (optional)
4. Methodology
  - a. Data sources (primary/secondary)
  - b. Tools of analysis (statistical & mathematical)
5. Scope of the study (sample size & period of study)
6. Significance of the study
7. Limitations of the study
8. Conceptual framework-Optional (specification of terms and concepts)
10. Review of literature (references are to be given in footnotes)
11. Chapter outlines.

### **STYLE OF PRESENTATION**

1. Report Length: 40 to 60 pages excluding Appendix and Certificates
2. Alignment: Justify
3. Font: Times New Roman
4. Font size: 12
5. Line spacing: 1.5

**SEMESTER I**

<b>Core Course</b>	<b>Title of the Paper</b>	<b>Credits</b>	<b>Hours/Week</b>
I	Microeconomics: Theory and Applications I	4	7
II	Macroeconomics: Theories and Policies I	4	6
III	Indian Economy: Problems and Policies	4	6
IV	Quantitative Methods for Economic Analysis-I	4	6

**Core Course-I**  
**MA ECONOMICS (CUCSS)**  
**I SEMESTER**  
**PAPER-I- MICROECONOMICS: THEORY AND APPLICATIONS-I**  
**Credit 4**

Total Hours: 100  
Lecture Hours: 80  
Seminar Hours: 20

**Module I Consumer Behaviour under Uncertainty and Risk**

Choice under uncertainty-Bernoulli hypothesis- St. Petersburg paradox-Neumann-Morgenstern hypothesis-Choice under risk- Probability and variability in measuring risk- Risk aversion- Economics of insurance-Risk pooling and risk spreading-Friedman Savage hypothesis-Markowitz hypothesis.

**Module II Recent Developments in Demand Theory**

Bandwagon effect-Snob effect and Veblen effect- Characteristic approach of Kelvin Lancaster-Demand for durable and nondurable goods-Constant elasticity demand function-Dynamic versions of demand functions-Nerlove, Houthakker and Taylor-Linear expenditure system.

**Module III Theory of Production and Costs**

Homogeneous production function- Linearly homogeneous production function-Cobb-Douglas production function and CES production function and their properties-Technological progress and production function-Economies of scale-Cost functions- Modern theories of costs-Short run costs- Long run costs-Engineering costs-Economies of scope- Learning curve.

**Module IV Theory of Oligopoly Markets**

Oligopoly- Characteristics- Collusive versus noncollusive oligopoly- Noncollusive models-Cournot model- Bertrand's model- Chamberlin's model-Kinked demand curve model of Sweezy- Stackelberg's model- Collusive models- Cartels- Price leadership-Mergers- Theory of Games - Basic concepts-Cooperative versus noncooperative game- Zero sum versus non-zero sum game- Prisoner's dilemma- Dominant strategies- Mixed strategies- Repeated games- Sequential games- Nash equilibrium.

**Module V Managerial Theories and Theories of Limit Pricing**

Managerial theories of the firm-Baumol's model-Marris' model-Williamson's model-Theory of limit pricing-Models of Bain-Sylos-Labini-Franco Modigliani-Bhagwati and Pashigian.

**References**

1. A Koutsoyiannis (1979): Modern Microeconomics- 2<sup>nd</sup> Edition, Macmillan.
2. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons.
3. Robert S Pindyck and Daniel L Rubinfeld (2009): Microeconomics- 7<sup>th</sup> Edition, Pearson India.
4. Dominick Salvatore (2003): Microeconomics: Theory and Applications- 4<sup>th</sup> Edition, Oxford University Press.
5. Christopher Snyder and Walter Nicholson (2008): Fundamentals of Microeconomics- 1<sup>st</sup> Edition, Cengage Learning.

6. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1<sup>st</sup> Edition, South Western Cengage Learning.
7. Andrew Schotter (2008): Microeconomics: A Modern Approach- 1<sup>st</sup> Edition, South Western College.
8. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1<sup>st</sup> Edition, Oxford University Press.
9. Edgar K Browning and Jacqueline M Browning (1986): Microeconomic Theory and Applications- 2<sup>nd</sup> Edition, Kalyani Publishers.
10. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1<sup>st</sup> Edition, Tata McGraw-Hill.
11. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8<sup>th</sup> Edition, McGraw-Hill.
12. Watson and Getz (2004): Price Theory and its Uses- 5<sup>th</sup> Edition, AITBS Publishers and Distributors.
13. Hugh Gravelle and Ray Rees (2004): Microeconomics- 3<sup>rd</sup> Edition, Pearson Education
14. Jeffrey M Perloff (2012): Microeconomics: Theory and Applications with Calculus- Pearson India.
15. Mark Blaug: Economic Theory in Retrospect- Vikas Publishing House.

**Core Course-II**  
**MA ECONOMICS (CUCSS)**  
**I SEMESTER**  
**PAPER-II- MACROECONOMICS: THEORIES AND POLICIES-I**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Micro Foundations of Monetary Theory**

Classical dichotomy -Say's identity-Say's equality-Inconsistency between Say's law and the quantity theory of money-Walrasian system -Arrow-Debreu Model-Samuelson's overlapping generations' model- Money illusion-Keynes effect and Pigou effect.

**Module II: Demand for and Supply of Money**

Demand for Money: Nominal versus real cash balances- The Neoclassical theory- Keynes liquidity preference theory-Friedman's restatement of the quantity theory of money-Baumol's inventory theory- Portfolio balance theory- Liquidity theory (Radcliff-Sayer's version and Gurley and Shaw version) - Patinkin's real balance effect- Supply of money- Measures of money supply- The H theory of money supply- Money multiplier process-Behavioural and endogenous money supply models- Fisher effect.

**Module III: Theories of Consumption and Investment**

Consumption function: Keynes' psychological law- Absolute income hypothesis- Permanent income hypothesis- Life cycle hypothesis and Relative income hypothesis- Kuznet's consumption puzzle- Fisher's inter-temporal choice model- Investment function- Neo-classical theory of investment- Tobin's q-ratio- Accelerator theory of investment (simple and flexible acceleration models).

**Module IV: Macroeconomic Equilibrium and Policy**

Macroeconomic equilibrium analysis: One sector neo-classical model- One sector Keynesian model-Goods market and IS curve-Money market and LM curve- IS-LM general equilibrium-Neo-Classical and Keynesian versions- Neo-classical synthesis- Three sector IS-LM model- Macroeconomic policies- Objectives of macroeconomic policies- Target variable and instrument variable-Monetary Policy-Instruments- The issue of central bank autonomy-Rules versus discretion- The Taylor rule-Time inconsistency of policy- Fiscal policy- Instruments- Policy lags - Inside and outside lags- Fiscal policy and budget deficit- Crowding out effect and government budget- Effectiveness of monetary and fiscal policy using IS-LM framework- Income policy- Stabilization policy.

**References**

1. Gregory Mankiw (2008): Macroeconomics- Worth Publishers NY, 6<sup>th</sup> ed.
2. Richard T Froyen (2005): Macroeconomics: Theories and Policies- Pearson (LPE), Seventh ed.
3. Rosalind Levacic and Alexander Rebman (1982): Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies- 2<sup>nd</sup> ed. Macmillan.
4. Eric Pentacost: Macroeconomics-An Open Economy Approach- Macmillan.
5. Rudiger Dornbusch, Stanley Fisher and Richard Startz (2004): Macroeconomics- Tata McGraw Hill, 9<sup>th</sup> ed.
6. Errol D'Souza (2008): Macroeconomics- Pearson Education.
7. P.N Junankar (1972): Investment: Theories and Evidence- Macmillan.



8. Fred R Glahe (1985): Macroeconomics: Theory and Policy- Harcourt Publishers, New Delhi.
9. Veneries and Sebold (1977): Macroeconomics: Models and Policies- John Wiley & Sons.
10. Gurley J and Shaw E S (1960): Money in a Theory of Finance- Washington: Brookings Institution.
11. Samuelson and Nordhaus (1998): Macroeconomics- 16<sup>th</sup> ed. Irwin McGraw Hill.
12. Robert J Gordon: Macroeconomics- Eastern Economy Edition.
13. Edward Shapiro: Macroeconomics- Galgotia Publications, New Delhi.
14. Mervyn K.Lewis and Paul D Mizen (2000): Monetary Economics- Oxford University Press.
15. Jagdish Handa (2000): Monetary Economics-Routledge.

**Core Course-III**  
**MA ECONOMICS (CUCSS)**  
**I SEMESTER**  
**PAPER-III- INDIAN ECONOMY: PROBLEMS AND POLICIES**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Growth and Structural Changes of the Indian Economy**

Economic growth in India- Contribution of different sectors to GDP and employment- Trends in India's national income-Distribution of national income among four factors of production- Trends in savings and investment since reforms- Regional disparity in growth and development- Analysis of poverty in India- Migration- Unemployment and inequality since reforms-Environmental degradation- HDI related indicators of India-Millennium Development Goals- Inclusive growth in India.

**Module II: Economic Planning in India**

Planning and economic development-Objectives of planning-Techniques of planning- Planning in a market oriented economy-Achievements of planning- Agricultural development under the plans- Industrial development under the plans- Foreign trade under the plans- Population policy and demographic changes under the plans-Parallel economy in India-Evaluation of Five Year Plans-NITI Aayog.

**Module III: Economic Reforms Since 1991**

Background of economic reforms- Industrial policy reforms- Trade policy reforms- Fiscal policy reforms- Financial sector reforms- Foreign investment policy reforms- Second generation economic reforms-An appraisal of India's economic reforms.

**Module IV: Kerala Economy**

Structural changes of Kerala economy- Kerala model of development- Agricultural performance-Industrial backwardness- Health and education-Migration and foreign remittances-Economic impact of Gulf emigration on Kerala Economy- Decentralization- Achievements of decentralization- Poverty and unemployment in Kerala- State finances of Kerala-Fiscal crisis of Kerala-Causes and consequences.

**References**

1. Vijay Joshi and IMD Little: India: Macroeconomics and Political Economy: 1964-1991- Oxford University Press, New Delhi 1994.
2. Uma Kapila (ed): Indian Economy Since Independence- Academic Foundation, New Delhi 2004.
3. Vijay Joshi and I. M.D Little: India's Economic Reforms: 1991- 2001- Oxford University Press, New Delhi, 1996.
4. VM Dandekar and Nilakant Rath: Poverty in India- Indian School of Political Economy, Pune, 1971.
5. Sanjeev Kumar: Foreign Direct Investment in India- BR Publishing Company Delhi, 1996.
6. Balasubramanyan: Selected Issues in Development Economics- Oxford University Press, London, 1993.
7. Jagdish Bhagwati: India in Transition- Oxford University Press, Delhi, 1994.
8. Dr. S Murthy: Structural Reforms of Indian Economy- Atlantic Publishers, 1995.

9. H W Singer, Neelambar Hatti and Rameshwar Tandon (eds): Trade Liberalisation in the 1990's- Indus Publishing Company, New Delhi, 1990.
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17. Shanker Acharya and Rakesh Mohan (Eds) (2011): India's Economy: Performance and Challenges- Oxford University Press, New Delhi.
18. Jayaraj D and Subramanian S (2010): Poverty, Inequality and Population- Oxford University Press, New Delhi.
19. Mahendradev S (2010): Inclusive Growth in India- Oxford University Press, New Delhi.
20. CT Kurien: Poverty, Planning and Social Transformation in India- Allied Publishers, Delhi, 1978.
21. BA Prakash (Ed): Kerala's Economic Development: Issues and Problems- Sage publishers, New Delhi, 1999.
22. ET Mathew (1997): Employment and Unemployment in Kerala- Sage publishers, New Delhi.
23. George K K (1999): Limits to Kerala Model of Development- CDS, Trivandrum.
24. Sunil Mani, Anjii Kochar, Arun M Kumar: Crouching Tiger Sacred Cows- D C Books, Kottayam.
25. K Rajan: Kerala Economy: Trends during the Post-reform Period-Serial Publishers, New Delhi.
26. CDS (1975): Poverty Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala- CDS, Trivandrum.
27. K.K. George and K.K. Krishnakumar (2012): Trends in Kerala State Finances-1991-92 to 2012-13: A Study in the Backdrop of Economic Reforms in India-Working Paper N0.28-Centre for Socio-economic & Environmental Studies-Kochi (available online).
28. RBI Annual Reports.
29. Ministry of Finance: Economic Survey-Various Issues.
30. RBI: Handbook of Statistics on Indian Economy- Various Issues.

**Core Course-IV**  
**MA ECONOMICS (CUCSS)**  
**I SEMESTER**  
**PAPER-IV- QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS-I**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I Matrices & Determinants**

Types of Matrices- Operations of matrices- Determinants-Properties of determinants- Minors and cofactors- Adjoint of a matrix- Inverse of a matrix-Rank of a matrix- Solution of a system of linear equations using matrices- Cramer's rule- Characteristic equations- Characteristic roots- Applications in economics.

**Module II: Applications of Differential Calculus**

Applications-Rate of change and the derivative-Derivative and slope of a curve-Rules of differentiation involving functions of different variables-Partial and total differentiation-Differentials and derivative-Differentials and point elasticity-Total derivatives-Economic applications of partial and total differentiation and differentials.

**Module III: Optimisation and Integration**

Unconstrained maxima and minima with single explanatory variables and its applications-Optimisation with equality constraints-Lagrange multiplier method-Methods of integration-Integration by parts-Simple applications.

**Module IV: Probability Theory**

Concept-Permutations Combinations- Definition classical, empirical-Axiomatic approaches-Addition and multiplication laws- Conditional probability- Bayesian probability - Baye's theorem random variable- Probability functions-Mathematical expectation-Moments.

**References**

1. Taro Yamane (1973): Statistics: An Introductory Analysis- Harper & Row.
2. Hoel PG (1971): Introduction to Mathematical Statistics- John Wiley & Sons.
3. RGD Allen: Mathematical Analysis for Economics.
4. Simpson & Kafka: Basic Statistics.
5. Dowling E.T (1992): Introduction to Mathematical Economics- Schaum's Outline Series, McGraw Hill, New York.
6. Tulsian P.C and Vishal Pandey: Quantitative Techniques- Pearson Education, New Delhi.
7. S.P. Gupta: Statistical Methods- S Chand and Sons, New Delhi.
8. Hooda R.P: Statistics for Business and Economics- Macmillan, New Delhi.
9. Alpha C Chiang: Fundamental Methods of Mathematical Economics- 2<sup>nd</sup> Ed.-Inter National Student Edition, McGraw-Hill.
10. Sreenath Baruah: Basic Mathematics and its Applications in Economics- MacMillan India.

**SEMESTER II**

<b>Core Course</b>	<b>Title of the Paper</b>	<b>Credits</b>	<b>Hours/Week</b>
V	Microeconomics: Theory and Applications II	4	6
VI	Macroeconomics: Theories and Policies II	4	6
VII	Public Finance: Theory and Practice	4	7
VIII	Quantitative Methods for Economic Analysis-II	4	6

**Core Course-V**  
**MA ECONOMICS (CUCSS)**  
**II SEMESTER**  
**PAPER-I- MICROECONOMICS: THEORY AND APPLICATIONS-II**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module-I: Input Output Analysis and Linear Programming**

Input-output analysis-Technical coefficients- Hawkin-Simon condition-Leontief's open system-closed system-Linear Programming-Statement of the linear programming problem-Graphical solution-Simplex method.

**Module II: General Equilibrium and Welfare Economics**

Elements of general equilibrium analysis-General equilibrium of exchange- General equilibrium of production- Welfare economics- Criteria of social welfare-Pareto optimality-Kaldor-Hicks compensation criterion- Social welfare function-Scitovsky criterion - Theory of second best-Arrow's impossibility theorem-Rawls theory of justice-Sen's theory of welfare.

**Module III: Externalities and Public Goods**

Externalities-Negative externalities in consumption and production-Positive externalities in consumption and production-Externalities and inefficiency-Ways of correcting market failure-Externalities and property rights-Coase theorem-Tragedy of commons-Public goods-Characteristics-Provision of public goods-Public goods and market failure.

**Module IV-Economics of Information**

Search cost-Searching for the lowest price-Search and advertising- Asymmetric information: Market for lemons- Implications of asymmetric information - Adverse selection- Insurance markets-Market signaling- Moral hazard- Principal-agent problem-The efficiency wage theory.

**Module V-Macro Theories of Distribution**

Theories of Ricardo, Marx, Kalecki and Kaldor-Euler's theorem and adding up problem.

**References**

1. A Koutsoyiannis (1979): Modern Microeconomics- 2<sup>nd</sup> Edition, Macmillan.
2. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons.
3. Robert S Pindyck and Daniel L Rubinfeld (2009): Microeconomics- 7<sup>th</sup> Edition, Pearson India.
4. Dominick Salvatore (2003):Microeconomics: Theory and Applications- 4<sup>th</sup> Edition, Oxford University Press.
5. Christopher Snyder and Walter Nicholson (2008): Fundamentals of Microeconomics- 1<sup>st</sup> edition, Cengage Learning.
6. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1<sup>st</sup> Edition, South Western Cengage Learning.
7. Andrew Schotter (2008): Microeconomics: A Modern Approach- 1<sup>st</sup> Edition, South Western College.
8. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1<sup>st</sup> Edition, Oxford University Press.

9. Edgar K Browning and Jacqueline M Browning (1986): Microeconomic Theory and Applications- 2<sup>nd</sup> Edition, Kalyani Publishers.
10. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1<sup>st</sup> Edition, Tata McGraw-Hill.
11. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8<sup>th</sup> Edition, McGraw-Hill.
12. Watson and Getz (2004): Price Theory and its Uses- 5<sup>th</sup> Edition, AITBS Publishers and Distributors.
13. Hugh Gravelle and Ray Rees (2004): Microeconomics- 3<sup>rd</sup> Edition, Pearson Education.
14. Jeffrey M Perloff (2012): Microeconomics: Theory and Applications with Calculus- Pearson India.

**Core Course-VI**  
**MA ECONOMICS (CUCSS)**  
**II SEMESTER**  
**PAPER-II- MACROECONOMICS: THEORIES AND POLICIES-II**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Theories of Inflation and Unemployment**

Keynesian and monetarist approach to inflation- Structuralist theory of inflation- Phillips Curve- Short run and long run Phillips curve -The natural rate of unemployment hypothesis- Modified Phillips curve- Adaptive expectation hypothesis- Augmented Phillips curve- NAIRU- Okun's Law- Costs of Inflation- Inflation targeting-Anti-inflationary measures- Unemployment and labour market-Demand for and supply of labour- Neoclassical labour market equilibrium - Keynesian labour market- Underemployment equilibrium-Wage rigidity versus wage flexibility- Search theory-DMP (Diamond, Mortenson, Pissarides) model.

**Module II: Theories of Business Cycles**

Business cycles- Monetary theory of Hawtrey- Over investment theory of Hayek- Innovation theory of Schumpeter-Models of Samuelson, Hicks and Kaldor-Keynesian theory of business cycle-The real business cycle theory- Political business cycle theory- Current global recession.

**Module III: Modern Developments in Macroeconomics**

A. Classical School

The new classical macroeconomics -An overview of major themes in Monetarism- Rational expectations hypothesis- Lucas' surprise supply function- The inter-temporal substitution model-Policy ineffectiveness argument-The Lucas critique-Supply-side macroeconomics-Supply shocks and stagflation-Laffer curve-Policy implications-The Dynamically Stochastic General Equilibrium model (DSGE).

B. Keynesian School

Disequilibrium Keynesians: Re-interpretation of Keynes by Clower and Leijonhufvud- The dual decision hypothesis-Rationing model of Malinvaud-Post Keynesians: Kalecki's pricing theory- Financial instability theory of Minsky -The New Keynesians: Nominal Rigidities- Real Rigidities- Small menu cost model-Implicit wage contract model- Efficiency wage theories- Insider-outsider model and hysteresis-Coordination failure-Policy implications.

**Module IV: Monetary and Fiscal Policy in the Open Economy**

Mundell-Fleming model-The case of imperfect capital mobility-Monetary policy under fixed exchange rates-Fiscal policy under fixed exchange rates- Monetary policy under flexible exchange rates-Fiscal policy under flexible exchange rates-The case of perfect capital mobility-Policy effects under fixed exchange rates-Policy effects under flexible exchange rates.



## **References**

1. Gregory Mankiw (2008): Macroeconomics- Worth Publishers NY, 6<sup>th</sup> ed.
2. Richard T Froyen (2005): Macroeconomics: Theories and Policies- Pearson (LPE), Seventh ed.
3. Brian Snowdown and Howard Vane (2005): Modern Macroeconomics: Its Origin, Development and Current State- Edward Elgar pub., Cheltenham, UK. Northampton, MA, USA.
4. Levacic, Rosalind and Rebman, Alexander (1982): Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies- 2<sup>nd</sup> ed. Macmillan.
5. Eric Pentacost: Macroeconomics-An Open Economy Approach- Macmillan.
6. Rudiger Dornbusch: Stanley Fisher and Richard Startz (2004) Macroeconomics- Tata Mc Graw Hill, 9<sup>th</sup> ed.
7. Hargreaves Heap S.P (1992): The New Keynesian Macroeconomics: Time, Belief and Social Independence Edward Elgar Publishing.
8. D'Souza, Errol (2008): Macroeconomics- Pearson Education.
9. Fred R Glahe, (1985): Macroeconomics: Theory and Policy- Harcourt Publishers, New Delhi.
10. Veneries and Sebold, (1977): Macroeconomics: Models and Policies- John Wiley & Sons.
11. Samuelson and Nordhaus (1998): Macroeconomics- 16<sup>th</sup> ed. Irwin McGraw Hill.
12. Robert J Gordon: Macroeconomics- Eastern Economy Edition.
13. Edward Shapiro: Macroeconomics- Golgotha Publications, New Delhi.
14. Brian Showdown, Howard Vane and Peter Wynarczyk (2001): A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought- Edward Elgar.
15. Mervyn K.Lewis and Paul D Mizen (2000): Monetary Economics- Oxford University Press.
16. Jagdish Handa (2000):Monetary Economics- Routledge.

**Core Course-VII**  
**MA ECONOMICS (CUCSS)**  
**II SEMESTER**  
**PAPER-III- PUBLIC FINANCE: THEORY AND PRACTICE**  
**Credit 4**

Total Hours: 100  
Lecture Hours: 80  
Seminar Hours: 20

**Module I: The Case for Public Sector**

The role of government in economic activity-Allocation, distribution and stabilisation functions- Market failure and rationale for government intervention-Concepts of private, public and merit goods-Club goods-Externalities-Tiebout hypothesis-merit goods-Pigovian tax-Property rights and Coase theorem.

**Module II: Budgeting**

Performance, programme and zero based budgeting-Stages involved in the preparation, presentation and execution of government budget-Budget deficit concepts and its measures-Problem of fiscal deficit-Corrective measures-FRBM Act.

**Module III: Public Revenue**

Theory of tax- Partial and general equilibrium analysis- Shifting and incidence of tax - Musgrave's approach-Elasticity and buoyancy-Taxable capacity-Theory of optimal taxation-Distributional considerations in public finance-Compensatory finance-Functional finance-Balanced budget multiplier.

**Module IV: Public Expenditure and Debt**

Theories of public expenditure- Wagner's law- Wiseman- Peacock hypothesis-Critical limit hypothesis-Structure and growth of public expenditure of centre and states - Developmental and non developmental-Plan and non-plan expenditure- Control and management of public expenditure-Concept of subsidy-Financing social infrastructure and human development-Public debt-Sources, burden and its management-Macroeconomic impacts of deficits-Debt burden and inter-generational equity-Sustainability of public debt-Domar stability condition.

**Module V Fiscal Federalism**

Theory of fiscal federalism-Theory of intergovernmental transfers-Fiscal decentralization- Center state financial relations- Problems of center-state financial relations in India- Vertical and horizontal imbalance in inter governmental transfers in India- Reports of finance commissions in India.

**Module VI: Indian Public Finance**

Indian tax system: Revenue of the union, states and local bodies-Major taxes in India- Non tax revenue of center, state and local bodies- Reforms in direct and indirect taxes- Trends in revenue, expenditure and public debt in the post reform period- Fiscal crisis- Analysis of the latest union and Kerala budgets.

**References**

1. Robin.W. Boadway: Public Sector Economics.
2. Due and Fridlander: Government Finance.
3. P.H.Jackson and C.V. Brown: Public Sector Economics.
4. David Hyman (2005): Public Finance- Thomson Southwestern.
5. Musgrave and Musgrave (1989): Public Finance in Theory and Practice- McGraw Hill Book Company.

6. Richard.A. Musgrave: Theory of Public Finance.
7. Mankar: Public Finance in Theory and Practice.
8. Browning, J.M and Browning E.K (2004): Public Finance and the Price System- Pearson Education.
9. Sudipto Mundle: Public Finance: Policy Issues for India- OUP, 1997.
10. Divedi. D.N: Readings in Public Finance.
11. Duff L. (1997): Government and Markets- Orient Longman- New Delhi.
12. R.Goode (1986): Government Finance in Developing countries- Tata McGraw Hill.
13. Atkinson A and J Stiglitz (1980): Lectures in Public Economics- McGraw Hill.
14. Bailey S.J (2004): Public Sector Economics- Macmillan.
15. Ragabendara Jha (1999): Modern Public Economics- Routledge, London.
16. Singh S K (1986): Public Finance in Developed and Developing Countries- S. Chand and Company Ltd, New Delhi.
17. Rosan S Harve: Public Finance- Irwin Publications in Economics, USA.
18. John Cullis and Philip Jones (2010): Public Finance and Public Choice- Oxford.
19. S K Singh: Public Finance in Theory and Practice-S Chand Publishing.
20. Harvey Rosen and Ted Gayer (2012): Public Finance-Tata McGraw Hill.
21. Holley Ulbrich (2011): Public Finance in Theory and Practice-Routledge.
22. RBI Bulletins.

**Core Course-VIII**  
**MA ECONOMICS (CUCSS)**  
**II SEMESTER**  
**PAPER-IV- QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS-II**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Probability Distributions**

Discrete distribution- Distribution function- Properties of distribution functions- Mathematical expectation-Binomial distribution- Mean of binomial distribution- Variance of binomial distribution-Skewness and kurtosis of binomial distribution- Fitting of binomial distribution- Poisson distribution- Mean of Poisson distribution- Variance of Poisson distribution- Fitting of Poisson distribution (concept and applications only).

**Module II: Continuous and Normal Distributions**

Concept of continuous distribution- Normal distribution- Properties of normal distribution-Importance of normal distribution- Area under normal distribution- Problems in normal distribution using normal distribution tables- Lognormal distribution (concept and applications only).

**Module III: Sampling Distributions**

Sample-Theory of sampling distributions-Standard error- Sampling distribution of Sample mean- Chi square distribution-Student t distribution-F distribution- Central limit theorem.

**Module IV: Estimation Theory**

Point estimation- Properties of point estimation- Interval estimation- Confidence intervals- Test of hypothesis- Null and alternative hypothesis-Type I and Type II errors- Critical region- Level of significance- Power of a test- Critical value- Neymann Pearson Lemma.

**Module V: Testing**

Testing Mean of a population- Testing equality of means of two populations- Test of proportion of success of a population- Testing of equality of two population proportions- t test for the population mean- t test for the equality of two population means -Paired t test-  $\chi^2$  test for independence and goodness of fit-ANOVA.

**References**

1. Taro Yamane: Statistics: An Introduction.
2. Hoel PG: Introduction to Mathematical Statistics.
3. YP Agarwal: Basic Statistics, Statistics for Behavior Sciences.
4. K X Joseph: Quantitative Techniques.
5. Tulsian P.C and Vishal Pandey: Quantitative Techniques- Pearson Education, New Delhi.
6. S.P. Gupta: Statistical Methods- S Chand and Sons, New Delhi.
7. Hooda R.P: Statistics for Business and Economics- Macmillan, New Delhi.
8. Simpson & Kafka: Basic Statistics.

**SEMESTER III**

<b>Core Course</b>	<b>Title of the Paper</b>	<b>Credits</b>	<b>Hours/Week</b>
IX	International Trade	4	6
X	Growth and Development	4	6
XI	Banking: Theory and Practice	4	6
XII	Basic Econometrics	4	7

**Core Course-IX**  
**MA ECONOMICS (CUCSS)**  
**III SEMESTER**  
**PAPER-I- INTERNATIONAL TRADE**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: International Trade and Economic Development**

Importance of trade to development-Trade as an engine of growth-Contributions of trade to development- Terms of trade-Types- Terms of trade and economic development.

**Module II: Developments in Trade Theories**

Offer Curves- Reciprocal demand theory- Opportunity cost analysis- Factor intensity- Factor abundance-Heckscher-Ohlin Theory- Leontief Paradox- Factor intensity reversal-Factor Price Equalization Theorem- Stolper Samuelson theorem- Metzler Paradox- Economies of scale and international trade- Imperfect competition and international trade-Product differentiation and international trade- Technological gap and product cycle models- Transportation cost and international trade.

**Module III: Economic Growth and International Trade**

Growth of labour and capital- Rybczynski theorem-Technical progress (neutral, labour saving and capital saving)-The effect of growth on trade-Immiserising growth- Dutch disease- Prebisch - Singer Thesis-Myrdal's views-Two gap analysis-Foreign trade multiplier.

**Module IV: International Trade Policies**

Import substitution versus export orientation - Export instability and economic development- Trade restrictions-Tariffs- Partial and general equilibrium analysis-Optimum tariff-Effective rate of protection-Non tariff barriers and new protectionism-Import quotas- Effects of an import quota-Comparison of quota and tariff-International cartels- Dumping and anti dumping duties-Exchange control- Export subsidies- Countervailing tariff- Voluntary export restraints- Technical standards- Administrative and other regulations- Strategic trade policy.

**Module V: Economic Integration**

Economic Integration - Theories of customs union- Trade creating customs union-Trade diverting customs union-Static welfare effects of customs union-Dynamic benefits from customs union- European union-NAFTA-WTO-South Asian Association of Regional Co-operation (SAARC) - Association of South East Asian Nations (ASEAN).

**References**

1. Dominick Salvatore: International Economics-11<sup>th</sup> Edition John Wiley & Sons (2014).
2. Bo Sodersten and Geoffrey Reed: International Economics- Macmillan (2008).
3. Paul. R. Krugman and Maurice Obstfeld: International Economics- Pearson Education (2009).
4. Kindleberger, C.P: International Economics- R.D. Irwin, Homewood.
5. Bhagwati, J.N(Ed): International Trade: Selected Readings- MIT Press, 1987.
6. Robert J Carbaugh (2011): Global Economics- Cengage Learning.
7. Giancarlo Gandolfo: International Trade- Spinger International Edition- 2006.
8. Dennis R Appleyard and Alfred J Field: International Economics- McGraw Hill.

9. Appleyard and Field: International Trade: Theory and Policy.
10. Richard .E. Caves and Harry G. Johnson: Readings in International Economics.
11. Corden .W.M: Recent Developments in the Theory of International Trade- Princeton University Press.
12. Thomas A. Pugel: International Economics-McGraw Hill.
13. James C Ingram and Robert M Dunn: International Economics-John Wiley and Sons.
14. Richard Caves, Jeffrey Frankel and Ronald Jones: World Trade and Payments-Pearson Education.
15. Theo Eicher, John Mutti and Michelle Turnovsky (2009): International Economics-Routledge.

**Core Course-X**  
**MA ECONOMICS (CUCSS)**  
**III SEMESTER**  
**PAPER-II- GROWTH AND DEVELOPMENT**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Concept and Measurement of Economic Growth and Development**

Concepts of growth and development-Indicators of economic development-National income-Per capita income-PQLI-Human development index-Gender related development index-Gender empowerment index-Human poverty index and deprivation index-Inequality in income distribution- Kuznets inverted U hypothesis- Lorenz Curve and Gini-coefficient-Development gap-Development as freedom-Perpetuation of underdevelopment-Structural view of underdevelopment-Vicious circle of poverty.

**Module II: Grand Theories of Economic Growth**

Theories of Adam Smith- David Ricardo- Thomas Malthus- Karl Marx and Joseph Schumpeter-Comparison of the theories of economic growth-Ricardo and Marx- Schumpeter and Marx- Schumpeter and Ricardo- Marx and Schumpeter.

**Module III Models of Economic Growth**

Harrod-Domar growth model-Knife-edge equilibrium-Neo Classical model of Solow-Growth models of Joan Robinson, Meade and Kaldor-Convergence hypothesis-Extensions of simple growth model- Vintage model-Solow-Phelps model-Dependency theory of development-Arguments against the neoliberal propositions- Institutions and economic growth-Endogenous growth theory-Plan models in India.

**Module IV: Partial Theories of Economic Growth and Development**

Critical minimum effort thesis - Balanced vs unbalanced growth- Surplus labour and Lewis's theory-Fei-Ranis model- Theory of big push-Concept of dualism- Technological, social, geographical and financial- Myrdal- Backwash and spread effect- Circular and cumulative causation- Centre- periphery thesis-Todaro model.

**Module V: Environment and Development**

The limits to growth- The techno centre approach- Brudtland commission approach to suitable development- Sustainable development- International environmental issues (Trade and environment- Rio declaration- Kyoto Protocol)-Climate-economy interaction-Martin Weitzman's Dismal Theorem.

**References**

1. Thirlwal, AP (2003): Growth and Development: With Special Reference to Developing Economies- Palgrave Macmillan, Seventh Edn.
2. B.H. Dholakia, R.H. Dholakia: Theory of Economic Growth and Technical Progress: An Introduction -Macmillan 1998.
3. Michael.P.Todaro: Economic Development in the Third World- Orient Longman.
4. Debraj Ray (2003): Development Economics- Oxford India Paperbacks, OUP.
5. Rune Skarstein (1997): Development Theory: A Guide to Some Unfashionable Perspectives- OUP.



6. Ahulwalia and IMD Little: India's Economic Reforms: Essays for Dr Manmohan Singh.
7. Benjamin Higgins (1976): Principles of Economic Development- Universal Book Stall, New Delhi.
8. R.T.Gill: Economic Development: Past and Present- Prentice Hall of India Pvt.Ltd, New Delhi.
9. Meir.G M and Riuch.J.E (2000): Leading Issues in Economic Development- Oxford.
10. Everette Hagen (1975): The Economics of Development.
11. Ghatak, S (2003): An Introduction to Development Economics- Routledge (4<sup>th</sup> edn).
12. Irma Adelman (1961); Theories of Economic Growth and Development- Stanford University Press.
13. Todaro and Smith, S.C: Economic Development- Pearson.
14. Amartya Sen (1970): Growth Economics: Selected Readings- Penguin Books.
15. Hywel Jones (1976): Introduction to Modern Theories of Economic Growth- McGraw-Hill.
16. Charles P Kindleberger (1958): Economic Development- Tata McGraw-Hill, New York.

**Core Course-XI**  
**MA ECONOMICS (CUCSS)**  
**III SEMESTER**  
**PAPER-III- BANKING: THEORY AND PRACTICE**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I Central Banking**

Structure and functions of central banks-Federal Reserve System-Bank of England-European Central Bank-Reserve Bank of India- Monetary policy- Objectives and instruments-Liquidity management- Autonomy of the RBI-Monetary sector reforms in India since 1991-Recent monetary and credit policy of RBI-Impact of RBI's monetary policy on economic growth and inflation.

**Module II Commercial and Cooperative Banks**

Structure of commercial banks-Public sector banks-Private sector banks-New generation banks-Foreign banks-Functions of commercial banks-Commercial banks and credit creation-Branch expansion programme and policy-Deposit mobilization and sectoral allocation of bank credits- Priority sector lending- Social banking-Lead bank scheme- Cooperative banks-Central cooperative banks-State cooperative banks-Land development banks- Regional rural banks.

**Module III Specialized Financial and Investment Institutions**

Development financial institutions (IFCI, IDBI, IIBI, SIDBI) - Specialized financial institutions (EXIM Bank-National Housing Bank-NABARD-MUDRA bank)-Specialized investment institutions (Pension funds-Hedge funds-Mutual funds-UTI)- Non Banking Financial Companies-Investment banks-Merchant banks.

**Module IV Innovations in Banking Transactions**

Mail transfer-Telegraphic transfer-MICR clearing-Automated clearing system-Electronic funds transfer-Digital payment system-E-banking-Virtual payments systems-Internet banking-Mobile banking-Home banking-Tele-banking-Core banking.

**Module V Banking Sector Reforms in India**

Banking sector reforms since 1991- Context, need and objectives-Implementations of the Narsimham Committee recommendations- Issues in banking sector reforms-Priority sector lending-Asset classification-Non-performing assets-Capital adequacy norms-Regulation of the banking sector-Board for Financial Supervision-Credit Information Bureau of India Limited (CIBIL)-Banking Ombudsman.

**Module VI International Banking**

International banking-Reasons for the growth of international banking-Offshore banking-Multinational banking-Bank for International Settlements (BIS)-World Bank-Asian Development Bank-New Development Bank (BRICS bank).

**References**

1. M H de Kock: Central Banking-Universal Book Stall, New Delhi.
2. Meir Kohn (1996): Financial Institutions and Markets-Tata McGraw Hill.
3. Roger LeRoy Miller and David VanHoose (1993): Modern Money and Banking-McGraw-Hill International.
4. Jawed Akhtar and Shabbir Alam: Banking System in India: Reforms and Performance Evaluation- New Century Publications, New Delhi.

5. Y.V. Reddy: Monetary and Financial Sector Reforms in India- UBSPD, New Delhi.
6. Suraj.B. Gupta: Monetary Planning for India.
7. K. Rao: Management of Commercial Banks.
8. Harendra Badhav (ed): Challenges to Indian Banking: Competition, Globalisation and Financial Markets- Macmillan.
9. N.S. Kher: Non-Performing Advances in Banks, Skylark, New Delhi.
10. Hansen and Kathuria (ed.) A Financial Sector for the 21<sup>st</sup> Century OUP.
11. Muraleedharan (2009) Modern Banking: Theory and Practice- PHI Learning Private Limited.
12. Shekhar and Shekhar: Banking Theory and Practice-Vikas Publishing House Limited.
13. Bharati V Pathak (2011): The Indian Financial System- Pearson Education.
14. RBI: Report on Trend and Progress of Banking in India.
15. Report of the Committee (Narsimham) on the Financial System Nov., 1991.
16. Raghuram Rajan Committee Report on Financial Sector Reforms- Planning Commission.

**Core Course-XII**  
**MA ECONOMICS (CUCSS)**  
**III SEMESTER**  
**PAPER-IV- BASIC ECONOMETRICS**  
**Credit 4**

Total Hours: 100  
Lecture Hours: 80  
Seminar Hours: 20

**Module I: Nature and Scope of Econometrics**

Econometrics- Economic theory and mathematical economics-Methodology of econometrics-Uses of econometrics.

**Module II: Simple Linear Regression Model**

The concept of PRF -Significance of stochastic error term-The SRF-Problem of estimation- Method of ordinary least squares-Assumptions underlying the method of least squares-Properties of estimators- Gauss Markov theorem- Coefficient of determination,  $r^2$  - Normality assumption-Hypothesis testing- t and F test procedures-Prediction-Method of maximum likelihood-Maximum likelihood estimation of two variable model.

**Module III: Extensions of the Two Variable Regression Model**

Regression through the origin-Functional forms of regression models, log-log, log-lin, lin-log and reciprocal models.

**Module IV: Multiple Regression Analysis**

The three variable model-OLS estimation of partial regression coefficients-Multiple coefficient of determination  $R^2$  and adjusted  $R^2$ -Hypothesis testing- Testing the overall significance of the regression model- F test-Testing the equality of two regression coefficients- Restricted least squares- General k variable regression model- Matrix approach to estimation and derivation of the properties of OLS estimators.

**Module V: Dummy Variable Regression Models**

ANOVA models-ANCOVA models-Dummy variable trap- Dummy variables and seasonal analysis-Piecewise linear regression.

**Module VI: Econometric Problems**

Multicollinearity- Nature, consequences, detection and remedial measures- Autocorrelation- Nature, consequences, detection, and remedial measures- Heteroskedasticity- Nature, consequences, detection and remedial measures.

**Module VII: Model Specification and Diagnostic Testing**

Types of specification errors- Detection and consequences-Errors of measurement- Consequences, remedies.

**References**

1. Damodar N Gujarati and Dawn C Porter (2009): Basic Econometrics, Fifth edition, McGraw Hill International Edition.
2. James H Stock and Mark W Watson (2008): Introduction to Econometrics, Pearson, Addison Wesley.
3. Christopher Dougherty (2007): Introduction to Econometrics, Third edition, Oxford University Press.

4. G S Maddala (2002): Introduction to Econometrics, Third Edition, John Wiley and Sons.
5. Robert S Pindyck and Daniel L Rubinfeld (1998): Econometric Models and Economic Forecasts- Fourth Edition, McGraw Hill international Edition.
6. Jeffrey M Wooldridge (2006): Introductory Econometrics: A Modern Approach, Third Edition, Thomson South Western.
7. Chandan Mukherjee, Howard White and Marc Wuyts (1998): Econometric and Data Analysis for Developing Countries- First Edition, Routledge.
8. Johnston J: Econometric Methods- McGraw Hill.
9. AH Studenmund: Using Econometrics: A Practical Guide- Fifth Edition, Pearson Education.

**SEMESTER IV**

<b>Core Course</b>	<b>Title of the Paper</b>	<b>Credits</b>	<b>Hours/Week</b>
XIII	International Finance	4	6
XIV	Financial Markets	4	6
	Elective Paper 1	4	6
	Elective Paper 2	4	6
	Dissertation	4	1

**Core Course-XIII**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-I- INTERNATIONAL FINANCE**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Balance of Payments**

Balance of payments- Components- Equilibrium and disequilibrium in BOP- Methods of correcting BOP deficit-Adjustment mechanisms-Automatic, price and income adjustments- Elasticity approach- Marshall-Lerner condition- Absorption approach-Monetary approach- J curve effect- Currency convertibility- Current and capital account convertibility-The Indian experience-FEMA.

**Module II: Exchange Rate and Theories of Exchange Rate**

Exchange rate-Nominal, Real, Effective, NEER, REER- Exchange rate systems- Relative merits and defects of fixed and flexible exchange rates- Hybrid exchange rates- Exchange rate in India-Purchasing power parity theory-Monetary approach- Asset market (portfolio balance) model- Exchange rate overshooting.

**Module III: Foreign Exchange Market**

Foreign exchange market-Functions-Participants- Stability of foreign exchange markets- Spot and forward market- Currency futures and options- Swap market- Foreign exchange risk- Hedging- Speculation- Stabilizing and de-stabilizing- Currency arbitrage-Policy adjustments- Expenditure changing and expenditure switching policies- Internal and external balance under alternative exchange rate regimes- Assignment problem- Swan diagram- Mundell-Fleming model- The policy mix under fixed and flexible exchange rates.

**Module IV International Capital Flows**

Portfolio investment and direct investments- Motives for capital flows- Effects of international capital flows- Multinational corporations- Advantages and disadvantages of MNCs- Foreign investment in India since 1991.

**Module V International Monetary System**

International monetary system-The gold standard and its breakdown-Bretton Woods system and its breakdown- Present international monetary system- European monetary union- Euro-Optimum currency areas- Currency boards- Dollarization.

**References**

1. Dominick Salvatore: International Economics- JohnWiley and Sons.
2. Keith Pilbeam: International Finance-Macmillan.
3. Bo Sodersten and Geoffrey Reed: International Economics- Macmillan, London.
4. Paul R Krugman and Maurice Obstfeld: International Economics: Theory and Practice- Pearson Education, Singapore.
5. Thomas A. Pugel: International Economics- TMH.
6. Michael Melvin: International Money and Finance- Pearson Education.

7. James C Ingram and Robert M Dunn: International Economics- JohnWiley and Sons.
8. Keith Pilbeam: Finance and Financial Markets- Palgrave.
9. Dennis R Appleyard and Alfred J Field: International Economics-McGraw Hill.
10. Robert J Carbaugh (2011): Global Economics- Cengage Learning.
11. Giancarlo Gandolfo: International Finance and Open Economy Macroeconomics- Springer.
12. Van den Berg: International Finance and Open Economy Macroeconomics- World Scientific.
13. Lawrence Copeland: Exchange Rates and International Finance-Pearson Education.
14. M Levi: International Finance-McGraw Hill.
15. Richard Caves, Jeffrey Frankel and Ronald Jones: World Trade and Payments- Pearson Education.
17. Sumati Varma: Currency Convertibility: Indian and Global Experiences-New Century.
18. Theo Eicher, John Mutti and Michelle Turnovsky (2009): International Economics- Routledge.



**Core Course-XIV**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-II- FINANCIAL MARKETS**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Financial Markets**

Functions of financial markets-Types of financial markets- Participants in financial markets- Role of financial intermediaries-Financial innovation-Financial inclusion and inclusive growth.

**Module II: Money Market**

Functions of money market-Instruments of the money market-Call money-Bill of exchange-Commercial bills-Treasury bills- Commercial paper-Interbank market-Federal funds-Negotiable certificate of deposits- Banker's acceptance-Repurchase agreements-Money market mutual funds- Features of a developed money market-Structure of Indian money market- Money market reforms in India since 1991.

**Module III: Capital Market**

Functions of capital market-Primary market-Instruments of the primary market-Secondary market-Functions- Instruments of the secondary market-Demutualisation of stock exchanges- Trading mechanism of the stock exchanges- Liquidity products (margin trading, short sales, securities lending and borrowing)-Foreign institutional investment-Participatory notes (P-notes)-Insider trading-Investor protection- Credit rating-Capital market institutions- Depositories-Discount and Finance House of India-Stock Holding Corporation of India-Securities Trading Corporation of India-SEBI-Functions and powers- Capital market reforms in India since 1991.

**Module-IV Derivatives Market**

Types of derivatives-Participants in the derivative markets-Uses of derivatives- Options-Types of options-Uses of options-Platforms for options trade-Trading mechanics-Option premium-Profits and losses with options-Stock options and stock index options in India-Futures-Types of futures (stock index futures-foreign currency futures-interest rate futures-commodity futures)-Uses of futures-Market mechanics-Market participants- The clearing process- Stock futures and stock index futures in India-Difference between options and futures-Swaps-Interest rate swaps-Foreign currency swaps.

**Module V: Global Financial Markets**

Instruments- American Depository Receipts (ADR)-Global Depository Receipts (GDR)- Foreign Currency Convertible Bonds (FCCB)-External commercial borrowings-International bonds-Eurobonds-Euronotes-Euro commercial papers-Eurodollars-Eurocurrency market-Reasons for the growth-Features-Effects of the eurocurrency market.

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2. Keith Pilbeam (1998): Finance and Financial Markets- Palgrave.
3. Anthony Saunders and Marcia Millon Cornett (2007): Financial Markets and Institutions: A Modern Perspective- TATA McGraw Hill.
4. Fabozzi, Modigliani, Jones and Ferri (2002): Foundations of Financial Markets and Institutions- Pearson Education.
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6. Stephen Valdez and Julian Wood (2003): An Introduction to Global Financial Markets- Palgrave Macmillan.
7. Robert A Strong (2002): Derivatives: An Introduction- Thomson South-Western.
8. John C Hull (1995): Introduction to Futures and Options Markets -Prentice Hall India.
9. Sunil K Parameswaran (2003): Futures Markets- Tata McGraw Hill.
10. Michael Durbin (2006): All About Derivatives -Tata McGraw Hill.
11. Giancarlo Gandolfo: International Finance and Open Economy Macroeconomics- Springer.
12. Rajesh Chakrabarti and Sankar De (2010): Capital Markets in India-Response Sage New Delhi.
13. S Gurusamy (2009): Financial Markets and Institutions-McGraw Hill Higher Education.
14. H R Machiraju (2010): Indian Financial System- Vikas Publishing House New Delhi.
15. Y.V. Reddy: Monetary and Financial Sector Reforms in India- UBSPD, New Delhi.
16. Bharati V Pathak (2011): The Indian Financial System- Pearson Education.
17. National Stock Exchange of India (NSE): Indian Securities Market: A Review- Various Issues.

### ELECTIVE PAPERS

<b>Elective</b>	<b>Title of the Paper</b>	<b>Credits</b>	<b>Hours/Week</b>
1	Advanced Econometrics	4	6
2	Agricultural Economics	4	6
3	Business Economics	4	6
4	Demography	4	6
5	Environmental Economics	4	6
6	Gender Economics	4	6
7	Health Economics	4	6
8	Industrial Economics	4	6
9	Labour Economics	4	6
10	Local Level Planning	4	6
11	Mathematical Economics	4	6
12	Regional Economics	4	6
13	Research Methodology and Computer Applications	4	6

**Elective Course I**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-I- ADVANCED ECONOMETRICS**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Qualitative Response Regression Models**

The linear probability model (LPM)- The logit model- The probit model- The tobit model.

**Module II: Dynamic Econometric Models**

Autoregressive and distributed-lag models-Role of lag in economics-The Koyck approach- The adaptive expectations model- Stock adjustment model-Estimation of autoregressive models- The method of instrumental variable (IV)- Durbin h test- Almon approach to distributed lag models.

**Module III: Panel Data Regression Models**

Fixed effects regression model-The random effects model.

**Module IV: Simultaneous Equation Methods**

Simultaneous equation bias-The identification problem-Rules of identification- Rank and order condition- Simultaneous equation methods-Limited information versus full information methods-Recursive models and ordinary least squares-The method of indirect least squares (ILS)-The method of two stage least squares (2SLS)-Instrumental variable estimation- Properties of various estimators.

**Module V: Instrumental Variables Regression**

Instrumental variables estimator with a single regressor and a single instrument- The general IV model-Checking instrument validity, instrument relevance and instrument exogeneity.

**Module VI: Time Series Econometrics**

Stochastic processes, stationary versus nonstationary stochastic processes-Unit roots-Trend stationary versus difference stationary stochastic processes- Spurious regression-Testing for unit roots- Dickey Fuller and Augmented Dickey Fuller tests-Cointegration and error correction models

**Module VII: Modelling Stochastic Processes**

The Box Jenkins methodology -AR, MA, ARMA and ARIMA models-Estimation and forecasting- Vector autoregression (VAR)-Measuring volatility- The ARCH and GARCH models.

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- 1: Damodar N Gujarati and Dawn C Porter (2009): Basic Econometrics- Fifth Edition, McGraw Hill International Edition.
- 2: James H Stock and Mark W Watson (2008): Introduction to Econometrics- Pearson, Addison Wesley.
- 3: Christopher Dougherty (2007): Introduction to Econometrics, Third Edition, Oxford University Press.

- 4: Robert S Pindyck and Daniel L Rubinfeld (1998): Econometric Models and Economic Forecasts- Fourth Edition, McGraw Hill International Edition.
- 5: Jeffrey M Wooldridge (2006) -Introductory Econometrics: A Modern Approach- Third Edition, Thomson South Western
- 6: Chandan Mukherjee, Howard White and Marc Wuyts (1998): Econometric and Data Analysis for Developing Countries- First Edition, Routledge
- 7: Gary Koop (2005): Analysis of Economic Data- Second Edition, John Wiley and Sons
- 8: Kerry Patterson (2000): An Introduction to Applied Econometrics: A Time Series Approach- First Edition, Palgrave.
- 9: Jack Johnston and John Dinardo (1998): Econometric Methods- Fourth Edition, The McGraw Hill Companies.
- 10: William H Greene (2003): Econometric Analysis- Fifth Edition, Pearson Education
- 11: Walter Enders (2004): Applied Econometric Time Series- Second Edition, Wiley India Edition.
- 12: Richard Harris and Robert Sollis (2006): Applied Time Series Modelling and Forecasting- First Edition, Wiley Student Edition.

**Elective Course II**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-II- AGRICULTURAL ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Agriculture in Economic Development**

Nature and scope of agricultural economics- Agriculture and economic development, Models of agricultural development (Schultz, Lewis, Fei & Ranis, Jorgenson, Todaro, Mellor, and Boserup) - Interdependence between agriculture and industry- Terms of trade between agriculture and industry.

**Module II: Economic Decisions in Agriculture**

Production- Factor-product relationship - Production functions- Cobb Douglas, CES & Spillman- Factor-factor relationship- Product-product relationship- Resource-use efficiency- Farm-size productivity debate- Capital formation in agriculture- Public versus private investment- Complimentarily versus substitutability debate- Classification of costs- Farm planning and farm budgeting- Systems of farm organization.

**Module III: Behaviour of Demand, Supply and Agricultural Prices**

Price determination of agricultural commodities-Elasticity of demand and supply of agricultural commodities- Cob-web theorem- Nerlovian supply response model-Prices instability- Role of public intervention in price determination and distribution of agricultural commodities- Agricultural price policy in India- Instruments of price policy- Crop insurance- CACP- Output subsidy- PDS- Food inflation.

**Module IV: Agricultural Marketing**

Agribusiness- Market structure of agricultural commodities- Marketed and marketable surplus- Distress sales- Defects of markets- Regulated markets- Co-operative markets- Market intelligence- Futures trading.

**Module V: Structural and Institutional Changes in Indian Agriculture**

Area, production & productivity trends- Changing cropping pattern- Factors affecting cropping pattern- Agricultural development under five year plans- Green revolution- Agricultural inputs- HYV seeds- Farm mechanization- Fertilizer use efficiency- Crop irrigation technology- Input subsidies- Second green revolution- Ever green revolution- ICAR-Land reforms- Institutional and non-institutional sources of agricultural credit- NABARD- Co-operative credit, Rural indebtedness- Agricultural labour and wages- National Agricultural Policy 2000- National Commission on Farmers- WTO and Indian agriculture- DOHA Agreement.

**References**

1. Drummond and Goodwin: Agricultural Economics- Pearson, New Delhi, Ed.2, 2004.
2. Christopher Ritson: Agricultural Economics- Gosby Lockwood Staples, London, 1977.
3. Mellor J.W: The Economics of Agriculture Development- Vora & Co Bombay.
4. Bishop C.E. & Toussiant W.D: Introduction to Agricultural Economic Analysis- John Wiley & Sons, New York, 1958.

5. Heady E.O: Economics of Agricultural Production and Resource Use- Prentice Hall, N Y, 1961.
6. Hanumantha Rao C.H: Agricultural Production Function, Costs and Returns in India- Tata McGraw Hill 1965.
7. Joshi P.C: Land Reforms in India: Trends and Prospects- Allied Publishers, New Delhi, 1975.
8. Majumdar N A and Kapila Uma: Indian Agriculture in the New Millennium- Changing Perspective and Development Policy- Vol. I & II, Academic Foundation, New Delhi, 2006.
9. Mohammed, Munir, Rehman (Ed): Fifty Years of Indian Agriculture- Concept, New Delhi, 2007.
10. Vyas V Y: India's Agriculture Structure, Economic Policies and Sustainable Development- Academic Foundation, New Delhi, 2003.
11. C A Robertson: Introduction to Agricultural Production Economics and Farm Management.
12. Kapila Uma: Indian Economy- Academic Foundation, New Delhi, 2005.
13. Karl Eicher & Lawrence Witt: Agriculture in Economic Development- Vora & Co., Bombay, 1970.
14. Soni R N: Leading Issues in Agricultural Economics- Shoban Lal Nagin Chand, Jalandar, 1998.
15. Singh & Sadhu: Agricultural Problems in India- Himalaya, Bombay, 1986.
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19. C. H. Hanumantha Rao (2005): Agriculture, Food Security, Poverty and Environment: Essays on Post-reform India- Oxford University Press, New Delhi.
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21. Bhalla G.S (2007): Indian Agriculture Since Independence- National Book Trust, New Delhi.

**Elective Course III**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-III- BUSINESS ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Growth of the Firm**

Growth strategy-Constraints on growth-Alternative growth strategies-Internal expansion-External expansion- Vertical integration- Diversification-Merger-Growth through strategic alliance- Multinational corporation-Types of multinationals-Problems facing the multinationals.

**Module II: Demand Forecasting**

Demand forecasting- Need for demand forecasting-Types of demand forecasting- Short term and long term forecasting -Quantitative and qualitative forecasts -Explanatory versus time series forecasting- Basic steps involved in a forecasting task -Criteria of a good forecasting method- Survey methods and statistical methods.

**Module III: Financial Statements and Profit Planning**

Time value of money-Present value and discounting- Sources of business finance-Financial statements (income statement-balance sheet-statement of retained earnings-statement of cash flows)-Financial ratios (liquidity, activity, debt, profitability and market ratios)- Break-even analysis- Operating leverage.

**Module IV: Risk Analysis and Capital Budgeting**

Risk analysis-Types of risks- Risk return indifference curves-Risk management-Adjusting the valuation model for risk-Certainty equivalent adjustment- Risk adjusted discount rate- Decision trees -Computer simulation-Capital budgeting- Need for capital budgeting- Steps in capital budgeting- Capital budgeting and decision rules-Net present value- Internal rate of return- Payback period- Benefit cost ratio- Cost of capital- Capital rationing and profitability index.

**Module V: Pricing of Goods and Services**

Price discrimination- Pricing and the product life cycle-Pricing of multiple products-Products with interdependent demands-Joint products- Fully distributed versus incremental cost pricing- Ramsey pricing- Tying-Product bundling- Peak load pricing- Mark up pricing-Rigid pricing- Flexible pricing- Special designs pricing-Charm pricing- Seasonal pricing- Progressive pricing- Two-part tariff-Prestige pricing-Price lining-Price matching-Auction pricing-New product pricing (price skimming, penetration pricing, going rate pricing)- Transfer pricing.

**References**

1. John Sloman and Mark Sutcliff: Economics for Business- Third Edition, Pearson Education.
2. Mark Hirschey: Managerial Economics- Cengage Learning India.
3. Lila J Truett and Dale B Truett: Managerial Economics- John Wiley & Sons.
4. Spyros Makridakis, Steven C. Wheelwright, and Rob J Hyndman: Forecasting Methods and Applications- Third Edition, John Wiley & Sons.
5. Dominick Salvatore: Managerial Economics- Fourth Edition, Thomson Asia Pvt. Ltd.



6. Lawrence J Gitman: Managerial Finance- Tenth Edition, Pearson Education.
7. H Craig Peterson W Cris Lewis: Managerial Economics- Fourth Edition, Prentice Hall of India.
8. Paul G Keat and Philip K Y Young: Managerial Economics- Pearson Education.
9. R R Barthwal: Industrial Economics- New Age International (P) Ltd.
10. D N Dwivedi: Managerial Economics- Seventh Edition, Vikas Publishing House.

**Elective Course IV**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-IV- DEMOGRAPHY**  
**(Credit 4)**

Total Hours: 90  
 Lecture Hours: 70  
 Seminar Hours: 20

**Module I: Concepts and Measures of Population Changes**

Meaning and scope of demography- Components of population growth and their interdependence- Measures of population change- Growth, structure and distribution and sources of population data- Demographic data in India- Censuses, Civil Registration System and Sample Surveys- Sample registration- Methods and drawbacks- Measures of fertility and mortality- Standardized birth rates and death rates- Concepts of life table- Meaning of its column and uses- Population distribution- Population projections-Stable, stationary and quasi stable population.

**Module II: Sex and Age Structure**

Patterns of sex and age structure in developed and less developed countries- Determinants of sex and age structure- Demographic effects of sex and age structure- Ageing and younging of population.

**Module III: Fertility, Nuptiality, Mortality**

*Fertility:* Levels and trends-Factors affecting fertility in developed and LDCs- Differential fertility- Ecological factors- Regional differences- Urban-rural-Socio-economic factors- Educational attainment, economic status, occupation of husband, employment status of wife, religion, caste, race, etc.

*Nuptiality:* Concepts-Analysis of marital status from census-Mean age at marriage- Synthetic and decadal synthetic cohort methods- Mean age at widowhood and divorce- Trends in age at marriage-Change in age pattern of marriage.

*Mortality:* Levels and trends of mortality in developed and LDCs-Sex and age patterns of mortality- Fetal and infant mortality-Still birth, abortion and prenatal mortality-Levels and trends of infant mortality-Factors affecting-Mortality differentials-Rural, urban, geographical, occupational, ethnic, etc.- Factors in mortality declines in developed and LDCs.

**Module IV: Migration**

Basic concepts and definitions- Importance of migration in the study of population- Types of migration- Internal, international, temporary migration- Effects of immigration and emigration- Socio-economic aspects of migration- Theories concerning internal migration- Costs and benefits of internal migration and outmigration.

**References**

1. U.N: The Determinants and Consequents of Population Trends.
2. A.A. Bhende and T. Kanikar: Principles of Population Studies- Himalaya, 1982.
3. D.J.Bogue: Principles of Demography- Wiley, 1971.
4. B.D.Misra: An Introduction to the Study of Population- South Asian Publishers, 1980.
5. S.Nagarwal: India's Population Problem- Tata McGraw Hill, 1985.
6. Government of India: Census of India and Related Monographs and Reports.
7. U.N: Methods of Measuring Internal Migration- 1979.

**Elective Course V**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-V- ENVIRONMENTAL ECONOMICS**  
**Credit 4**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Basic Concepts**

Basic concepts of environmental economics- Property rights in environment- Pollution rights- Habitats, resources, amenities- Collectively consumed goods and services- Spill over costs- Social efficiency- Economic efficiency- Sustainability- Bio-diversity-Ozone layer- Environmental quality- Environmental accounts- Externalities.

**Module II: Normative Theory of Environmental Regulation**

The theory of externalities-Measurement of externalities- The basic theory of environmental policy- The choice among policy instruments- Environmental policy under uncertainty- Market imperfections- Properties of the Pigovian solution to the problem of extremities- Pigouvian levy as a tax equal to marginal damages at the optimal outcome.

**Module III: Design and Implementation of Environmental Policy**

Problems of measurement-Obstacles to determination of environmental policy- Second best approaches- Standards of targets for environmental quality- Design of regulatory system- Choice of policy instruments- Experience with economic incentives for environmental management- Legal liability as an economic instrument for environmental protection- Environmental federation- Enforcement policy on patterns of international trade- Command and control vs. economic incentives.

**Module IV: Measuring the Benefits and Costs of Pollution Control**

Defining the value of change in environmental quality- Indirect methods of measuring the benefits of environmental quality- The advertising behaviour approach- Weak complementarity approach- Hedonic market methods- Contingent valuation method- Application of valuation techniques.

**Module V: Review of Empirical Work in Environmental Economics**

Four categories of non-market benefits-Health benefits of pollution control- Recreation benefits of pollution control- Visibility benefits of pollution control- Ecological benefits of pollution control- Benefits of pollution control to agriculture.

**Module VI: Costs and Benefits of Environmental Programs**

Use of benefits- Cost analysis in environmental standards- Need for B-C analysis of environmental standards- Welfare loss from setting incorrect standards- Distribution of costs and benefits- Who pays for pollution abatement and who benefits from it- Environmental economics and environmental policy-Use of economic analysis and economic incentives in environmental management.

**Module VII: Development and Sustainability**

Notion of development- Notion of sustainability-Variables of the ecological system- Rules that govern the interactions of these variables-Operational meaning of sustainability-Defining the target state- Measure of sustainability-Case of agricultural system- Soil technology- Crop production and environmental changes-Environmentally (Eco) friendly technology and development-Value of sustainable path- Use and constraints of natural resources accounting and

auditing- Methodologies for pricing natural resources- an overview -Case studies of sustainable development (based on man and the biosphere series- Studies sponsored by the UNESCO).

**References:**

1. Joseph J Seneca and M K Taussig: Environmental Economics.
2. P Abelson: Cost Benefit Analysis and Environmental Problems.
3. P Nikamp: Theory and Application of Environmental Economics, Vol. I
4. P Nikamp: Environmental Economics, Vol. I
5. H Siebert: Economics of Environment: Theory and Policy.
6. D N Thompson: The Economics of Environmental Protection.
7. A M Freeman (etc) Economics of Environmental Policy.
8. C C Park: Environmental Policies: An International Review.
9. R Costanza: Ecological Economics.
10. Charles D Kolstad (2003): Environmental Economics- OUP.

**Elective Course VI**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-VI- GENDER ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
 Lecture Hours: 70  
 Seminar Hours: 20

**Module I: Introduction to Gender Studies**

Concepts of gender and sex-Feminity and masculinity-importance of women studies- Patrilineal and matrilineal systems and its relevance to present Indian society- Demography of female population in India-Age structure, mortality rates-Inter-state variations in sex ratio- Causes of declining sex ratio- Measurement of fertility and its control-UNDP's gender related measures.

**Module II: Women and Labour Markets**

Factors affecting female entry in labour markets-supply and demand for female labour in developed and developing countries, particularly in India- Female work participation in agriculture, non-agriculture rural activities, informal sector, cottage and small industries, organized industry and service sector- Wage differentials and its determinants- Gender, Education, Skill, Productivity, Efficiency -Impact of technology and modernization on women's work participation- Effects of globalization and liberalization on women.

**Module III: Tools of Women Empowerment**

Women and education- GER ratio in India -Addressing gender inequalities in education- Gender equity in health-Access to nutrition-Women's participation in decision making -Role of civil society -Role of NGO's in empowering women- Gender and Community Economic Development(CED)-Self-Employed Women's Association(SEWA)-Shramshakti-Kudumbashree in Kerala.

**Module IV: Social Security and Social Protection for Women**

Measures for gender well being- Entitlements, ensuring economic independence and risk coverage, access to credit and insurance market- Review of legislation for women's entitlements in India -Importance of 73rd Amendment of constitution in gender empowerment-Protection of property rights- schemes for safety net for women- Effectiveness of collective bargaining-Public and private programmes to improve women's health-National Commission for Women(NCW)- The National Credit Fund for Women-Mahila Samridhi Yojana (MSY)-National policy for empowering women- International measures to protect women's' rights-U.N Decade for women -UN convention on CEDAW and DEVAW.

**References**

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2. Sen, Suvarna (2006): Gender and Development- ICFAI University Press, Hyderabad.
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4. Dutta, Nandita and, Sumitra Jha (2014): Women and Agricultural Development- Pacific Book, New Delhi.

5. Dutta, Nandita and Sumitra Jha (2014): Women Social Work and Social Welfare- Pacific Books International, New Delhi.
6. Jitendra Ahirrao (2013): Entrepreneurship and Rural Women in India- New Century Publications, New Delhi.
7. A.Venkateswarlu, et al. (2013): Dimensions of Female Sex Ratio::Interstate Variations in India- Serials Publications, New Delhi.
8. Desai, N and M.K Raj (1974): Women and Society in India- SNDT University, Mumbai.
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15. ILO (2002): Women and Men in the Informal Economy: A Statistical Picture- ILO.
16. Govt. of India (1974): Towards Equality-Report of the Committee on the Status of Women in India- Dept of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
17. Govt.of India (2009): Gender Equality and Women Empowerment in India- National Family Health Survey 2005-06 (NFHS-3), IIPS, Mumbai.
18. John Mary .E (1996): Gender and Development in India- EPW, 31(47), PP 3071-77).
19. Pal, Manoranjan et.al (Ed) (2011): Health, Nutritional Status and Role of Women in India- Oxford University Press, New Delhi.
19. E Boserup (1970): Women's Role in Economic Development- George Allen and Unwin, London.

**Elective Course VII**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-VII- HEALTH ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: The National and International Health Scene**

Health output and input indicators and their correlation with the level of economic development and with the public expenditure on health-Sources of health statistics and a critical appraisal of their usefulness and limitations.

**Module II: Resource Allocation in the Health Sector**

Resource allocation problems in private and government hospitals- Resource allocation problems facing a private practitioner-The problem of multiple services of a hospital- Pricing of these services and the choice of the mix of services- The trade-offs between quantity and quality- Production function- Productivity-Efficiency and equity considerations applied to the hospital sector- Spatial distribution of health care facilities and services-The demand for health services and the role of the physician- The impact of pharmaceutical companies and health insurance on this demand.

**Module III: Evaluation of Benefits and Costs of Health Services**

Private benefits and private costs of providing health services- The failure of the market to provide essential health services- The provision of health services by the government-The application of benefit cost analysis to public health and family planning projects- The role of health in economic development- Value of output lost due to number of sick days- Benefits and costs (both private and social) of training professional manpower such as physicians, dentists, pharmacists and nurses.

**Module IV: Financing of Health Service**

Theory and practice- Review of per capita and public expenditure on health services over time and in different parts of the country- An analysis of the sources of public funds for health-The need for a general health insurance- Need for a social health insurance for the savings and the aged- A comparative analysis of alternative payment systems such as health insurance, pre-payments scheme, savings-linked insurance system etc.-Financing health services through specific (health cess) and general (direct and indirect taxes) local government revenues- The role of government financing institutions in financing health.

**Module V: Issues in Health Economics**

Growth in expenditure of personal health services- Characteristics of health services- Healthcare problems, public's and economist's views- Analysis of demand for health services and supply of it-Tastes and preferences- Relative prices- Full-cost pricing- Rising healthcare costs- Supply, demand and reform approaches-Productivity and efficiency of private and public health services- Laissez-faire approach to healthcare industry-Issues in the Indian healthcare system.

**Module VI: Health and Nutrition: Indian Experience**

Socio-economic and political setting-Improvement in health status, a historical analysis-Factors affecting health-Nutritional status- Changes in morbidity pattern and trends immortality

rates-Development policies, health strategy and role of non-health system- Socio-economic determinants of health status- Health goals, strategies and intersectoral action-Implementation of intersectoral programme for health-Institutional framework- Community participation and informal organization- Health and nutrition in Kerala-Issues for the 21<sup>st</sup> Century.

## References

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2. Banerjee D: Poverty, Class and Health Culture in India. Vol. I, Practical Prakashan, New Delhi 1982.
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28. Panikar P.G.K: Resources not the Constraint on Health Improvement-A Case Study of Kerala- EPW, No.44, 1979.
29. Panikar P.G: Inter-regional Variations in Calorie Intake- EPW, Special No 1980.
30. Government of Kerala: Report of the High Power Committee on Health Service- Thiruvananthapuram, 1979.

**Elective Course VIII**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-VIII- INDUSTRIAL ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: A Prelude to Industrial Economics**

Market structure-conduct-performance paradigm-Alternative schools of thought- Market concentration and monopoly power-Causes and measurement-Market concentration and performance-Extent of market concentration in India-Recent trends-Vertical integration, diversification and merger (motives and measurement).

**Module II: Location Analysis**

Factors determining location-Approaches to industrial location analysis-Theoretical (geographical and economic theories) and operational approaches-Industrial location pattern in India.

**Module III: Technological Change**

Measurement-Trend and impact of technological change in Indian industries- Problems related to R & D and innovation- Trends in total factor productivity.

**Module IV: Industrial Finance**

Sources (internal and external)-Financial Statements- Analysis of financial ratios and their interrelatedness- Standards for comparison of financial ratios-Problems of financial analysis.

**Module V: Industrial Efficiency**

Determinants of productive and economic efficiency- Measurement of the efficiency level.

**Module VI: Industrial Development Government Regulation of Industries**

Pattern of industrialization since independence-Changing structure of industries- Debates on industrial stagnation-Issues in industrial development in the context of globalization-Evolution of industrial policy- Performance of licensing policy-Rationale of delicensing-Regulation of monopolies.

**References**

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2. Hay D A and Morns D J: Industrial Economics: Theory and Evidence- Oxford, 1979.
3. Barthwal R R: Industrial Economics- New Age International Pvt. Ltd., New Delhi, 1995.
4. Smith D M: Industrial Location: An Economic and Geographic Analysis- John Wiley, New York, 1971.
5. Lave L B: Technological Change: Its Conception and Measurement- Wiley, 1966.
6. CDS: Balakrishnan P and Pushpangadan K: Total Factor Productivity Growth in Indian Manufacturing: A Fresh Look- Working Paper No. 259, Thiruvananthapuram, 1994.
7. Ahluwalia I J: Industrial Growth in India- Oxford University Press, 1985.

8. Prasanna Chandra: Financial Management-Theory and Practice- Tata McGraw Hill, New Delhi, 1995.
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11. Buleshkar A V, Mithani D M (Ed.): Structural Changes and Issues of Indian Economy- Himala Publishing House, New Delhi, 1990.
12. Sach S J and Varshney A (Eds.): India in the Era of Economic Reforms: A Political Economy- Oxford University Press, 2000.
13. Ahluwalia I J and Little I M D (Eds.): India's Economic Reforms and Development- Oxford University Press, 2000.

**Elective Course IX**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-IX- LABOUR ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
 Lecture Hours: 70  
 Seminar Hours: 20

**Module I: Labour Market**

Nature and characteristics of labour markets in developing countries like India- Paradigms of labour market-Classical, neo-classical and dualistic- Analysis of demand and supply forces- Demand for labour relating to size and pattern of investment, choice of technology and government labour policies and their orientation- Supply of labour in relation to growth of labour force- Labour market process.

**Module II: Employment**

Employment and development relationship-Importance of employment in the context of poverty in the developing countries- Concept and measurement of unemployment- Causes- Issues relating to employment, rationalization, technological, change and modernization- Rural unemployment and educated unemployment-Employment policy under the five year plans- Evaluation of employment policy in India.

**Module III: Wage Determination: Theory and Practice**

Classical, neo-classical and bargaining theories of wage determination- Concepts of wages- Fair living- Minimum wages- Problems of implementation of minimum wages -Wage determination by sectors- Urban and rural organized and unorganized sectors- Wage and non-wage components of labour remuneration-Wage and productivity and wage and inflation relationship-Productivity and profit sharing schemes- Wage differentials in terms of firm, industry, occupation, region, sex and skills-Wage standardization - Wage policy in India.

**Module IV: Industrial Relations and Trade Unions**

Growth of industrialization and emergence of unionism- Theories of labour movement- Growth, structure and pattern of trade unions in India- Achievements and failures of trade union movements- Determinants of industrial disputes- Steps to achieve peace- Methods of present and settle industrial disputes-Collective bargaining, conciliation, arbitration adjudication- Grievance settlement- Labour participation in management.

**Module V: State and Labour**

Increasing role of state in the determination of labour matters- Labour policy of the government in the past-Social security and labour welfare measures adopted by governments- Important labour legislation in India and their implications- Impact of ILO- Government policy towards labour and trade unions- Agricultural labour-Child labour- Labour in the unorganized sector-VRS policy.

**References**

1. Hunter and Mulvey: Economics of Labour- Macmillan, 1983.
2. A Freeman: Labour Economics- 1982.
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4. C R Mc Connell and S L Brue: Contemporary Labour Economics- McGraw Hill, 1986.

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21. S Palekar: Wage Policy and Economic Development- Asia, 1978.
22. C A Myers: Industrial Relations in India- Asia, 1958.
23. S D Punekar: Labour Welfare, Trade Unionism and Industrial Relations- Himalaya, 1978.
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**Elective Course X**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-X- LOCAL LEVEL PLANNING**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Planning**

Types-Decentralised planning in India- Problems of planning from below- Priority rating and time framing-Assessment of funds-Strategy- Target setting- Resource allocation-Integration-Inter-sectoral-Spatial planning-Multilevel planning-Inter tier integration-Decentralised planning in Kerala-People's campaign for 9<sup>th</sup> Plan- Methodology-People's participation- Phases- Issues.

**Module II: History of Local Governance**

Gramaswarj-Balwanth Rai Metha Committee-Ashok Mehtha Committee-73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments-Features-Gramasabha-Kerala Panchayat Raj Act 1994-Kerala Municipalities Act 1994-Institutional arrangements-Three tier system-Grama, Block, District panchayat- Municipalities- DPC.

**Module III: Projects**

Types of projects- Scheme- Programme- Plan- Project format-Aspects of project preparation: technical, institutional, social, commercial, financial, economic-Project cycle-Identification-Preparation-Analysis-Appraisal-Implementation-Evaluation-Benefit-cost analysis-Appraisal criteria-Payback period- Accounting rate of return- Debt service coverage ratio-Net present value- IRR- CPM/PERT- People's participation and process evaluation.

**References**

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2. Amirban Kashyap: Panchayat Raj Views of Founding Fathers and Recommendation of Different Committees- Lancers Books, New Delhi, 1989.
3. Hicks U.K: Development from Below- Oxford, 1961.
4. Kerala Panchayat Raj Act, 1994.
5. Kerala Municipalities Act, 1994.
6. Manabendu Chathopadyaya and Pradeep Maity: Planning and Economic Policy in India- 1996.
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33. P G K Panikar, T N Krishnan and N Krishnaji: Population Growth and Agricultural Development- A Case Study of Kerala- FAO, 1978.
34. P G K Panickar and C R Soman: Health Status of Kerala: Paradox of Economic Backwardness and Health Development- CDS, 1984.
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36. K K George: Limits to Kerala Model of Development- Centre for Development Studies, 1993.
37. K Ramachandran Nair: Industrial Relations in Kerala- 1974.

**Elective Course XI**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-XI- MATHEMATICAL ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
 Lecture Hours: 70  
 Seminar Hours: 20

**Module I Theory of Consumer Demand**

Utility maximization- derivation of demand functions – Elasticity- measurement -Slutsky equation -Direct and cross effects - Homogeneous and homothetic utility functions - Indirect utility function - Roy's identity - Linear expenditure systems -Constant elasticity models.

**Module II Theory of Production**

Production Function – Producers equilibrium – derivation of input demand functions - Cobb-Douglas production function - CES production function -VES production function- Translog production. Cost function: Derivation of cost as a function of output-Duality - Shepherd's lemma- derivation of supply function- generalized Leontief cost function - Technological progress and production function.

**Module III Theory of Markets**

Mathematical treatment of market equilibrium- Single goal firm and multiple goal firms- Mathematical treatment of equilibrium under different market situations.

**Module IV Linear Models**

Linear programming: Primal and dual problem - General linear programme - Complementary slackness theorem - Simplex solution-Input Output Analysis: Open and closed, static and dynamic Leontief system -Technological viability -Hawkins-Simon's conditions for viability-Theory of Games: Two person zero-sum game - Pure and mixed strategy - Saddle point theorem.

**References**

1. Allen R.G.D (1956): Mathematical Economics- Macmillan Co. Ltd.
2. Birchenhall C and Grout P (1984): Mathematics for Modern Economics- Philip Allen. Harness and Noble Books, Oxford.
3. David. F Heithfield and Soren Wibe (1987): Introduction to Cost and Production Functions- Macmillan Education Ltd.
4. Eugene Silberberg (1990): The Structure of Economics: A Mathematical Analysis- Second Edition, McGraw Hill International Ltd.
5. J.M Henderson and R.E Quandt (1980): Microeconomic Theory: A Mathematical Approach- McGraw Hill International Ltd.
6. Michel D. Intriligator (1980): Econometric Models, Techniques and Applications- Prentice Hall of India Ltd.
7. Alpha C. Chiang (1988): Fundamental Methods of Mathematical Economics- McGraw Hill International Edition.
8. Amitabh Kundu, et. al (1976): Input Output Framework and Economic Analysis- Centre for the Study of Regional Development, New Delhi.
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10. Barry Bressier: A Unified Introduction to Mathematical Economics.



**Elective Course XII**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-XII- REGIONAL ECONOMICS**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Regional and Spatial Microeconomic Theory**

Concept of region- Time and space as variables in economic analysis of a region -Spatial microeconomic theory- Theory of location- Price equilibrium in geographically separated and interlinked markets- Spatial monopolistic competitions-Spatial price discrimination-Alternative objectives of the firm with regard to locational choice- Locational interdependence- Hotelling's formulation and its critique- Economies and diseconomies of agglomeration- Transport cost on location- Views of Weber, Sargent Florence, E M Hoover, Colin Clark.

**Module II: Spatial Macroeconomic Theory**

Spatial macroeconomics- Regional social accounting theory- Short run regional income determination -Interregional income-Multiple income determination in a multi regional economic system-Marginal growth theories-Difference in regional income trends in per capita income-Survey of recent techniques for regional analysis-Views of Christaller, Losch, Perroux, Isard -Dynamic theory of regions.

**Module III: Regional Economic Policy**

Regional income accounts-Regional planning and development- Views of Perloff, Dunn, Lampard and Muth-Regional growth of income-Long term tendencies-Spread effects and backwash effects-Regional economic policy-Formulation of interregional objectives-Channalisation approach towards backward regions-Level of inter regional disparities- Role of finance commission in regional financial allocation.

**Module IV: Regional Imbalances and Policies**

Regional characteristics in India and imbalances- Regional development programs to reduce imbalances in India-Policies to reduce regional imbalances in India -Dandekar Committee on regional imbalances.

**Module V: Kerala Economy: Past, Present and Future**

Overview of social, political and economic situation in Travancore, Cochin and Malabar before the formation of Kerala-Migration to Malabar- Emergence of indigenous capitalist class-Commercialization of agriculture-The rise of plantation sector- Economic development policies of the state of Travancore-Structural characteristics of Kerala economy and changes in them since 1956-Strength and weakness.

**Agriculture:** Land reforms- Co-operative movement-Institutional and informal credit system-Food crops/cash crops sector- Area, production, productivity and price trends- Cost structure-Rural employment/ unemployment and wages- Food security.

**Industry:** Structural characteristics-Strength and weaknesses-Formal/informal sectors- Growth of unorganized sector-Modernization of traditional industries- the case of coir-Industrial productivity and wage rates-Industrial relations-Trade union movement- Infrastructure-Power energy-Transport and communications-Banking-Education, Healthcare- Development issues.

**External Sector:** Exports, imports and balance of trade-Gulf migration and remittances-Implications of Government of India's policies on Kerala economy-Kerala Model of Development-Strength and weaknesses-Major issues in Kerala's development- Problems and prospects.

### **References**

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4. T Wilson (Ed.): Papers on Regional Development- 1965.
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**Elective Course XIII**  
**MA ECONOMICS (CUCSS)**  
**IV SEMESTER**  
**PAPER-XIII- RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS**  
**(Credit 4)**

Total Hours: 90  
Lecture Hours: 70  
Seminar Hours: 20

**Module I: Fundamentals of Research Methodology**

Meaning of research- The relation between theory and research- Scientific and social research- Pure and applied research- Special features of social research- Different approaches in social research.

**Module II: Formulation of Research Problem**

Formulation of null and alternative hypothesis- Research design and methods- Exploratory, diagnostic and experimental studies- Deductive and inductive method- Static and dynamic method- Historical and dialectical method- Case study method- Interdisciplinary research.

**Module III: Sampling Methods**

Random, stratified, multistage, systematic, cluster, quota and judgment samples- Data analysis techniques- Drawing inferences from analysis- Report writing procedures.

**Module IV: Computer Applications**

Estimation of mean, median and mode- Standard deviation and coefficient of variation- Presentation of graphs- Line, sub divided, multiple, pie graphs- Estimation of growth rates- Estimation of trend equations- Estimation of regression equations- Introduction to EXCEL, SPSS.

**References**

1. William J Goode and Paul K Hatt (1981): Methods in Social Research- McGraw- Hill.
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**FIRST SEMESTER M A DEGREE EXAMINATION, NOVEMBER 2015**  
**(CUCSS)**  
**ECONOMICS**

**MICROECONOMICS: THEORY AND APPLICATIONS I**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

Multiple Choices:

1. Cournot duopoly leads to:
  - (a) stable equilibrium (b) unstable equilibrium (c) disequilibrium (d) neutral equilibrium
2. Labour deepening technical progress increases the  $MP_L$ :
  - (a) faster than  $MP_K$  (b) slower than  $MP_K$  (c) at the same rate as  $MP_K$  (d) none of the above
3. Stock adjustment principle was developed by:
  - (a) Leontieff (b) J R Hicks (c) Nerlove (d) Marshall
4. Linearly homogeneous production function represents the case of:
  - (a) constant returns to scale (b) increasing returns to scale (c) decreasing returns to scale (d) none
5. Neumann-Morgenstern hypothesis deals with consumer behaviour in respect of:
  - (a) risk (b) preference (c) introspection (d) indifference
6. Sales maximization model was introduced by:
  - (a) Modigliani (b) Baumol (c) Marris (d) Williamson
7. Bernoulli hypothesis holds that individual takes decision under risky and uncertain decisions on the basis of:
  - (a) expected monetary value (b) expected utility (c) marginal utility of money
  - (d) both expected monetary value and expected utility
8. Kinked demand curve model is associated with the name of:
  - (a) Stackelberg (b) Sweezy (c) Samuelson (d) Sen
9. Which of the following economists is not associated with limit pricing theory?
  - (a) Modigliani (b) Bain (c) Labini (d) Stackelberg
10. In both the Chamberlin and the kinked demand curve models, the oligopolists:
  - (a) recognize their interdependence (b) do not collude
  - (c) tend to keep prices constant (d) all of the above
11. The strategy of maximizing the minimum gain is called:
  - (a) minimax (b) maximin (c) pure strategy (d) mixed strategy
12. All the following curves are U-shaped except:
  - (a) the AVC curve (b) the AFC curve (c) the AC curve (d) the MC curve

(12 x 1/4 = 3 weightage)

**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. Explain risk pooling.
14. What is snob effect?
15. What is a learning curve?
16. What is meant by limit price?
17. What is a cartel?
18. What is a homogeneous production function?
19. Explain economies of scope.
20. What is meant by saddle point?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. Explain St. Petersburg paradox.
22. Explain the Markowitz hypothesis.
23. Explain linear expenditure system.
24. Explain the properties of CES production function.
25. Write a note on price leadership.
26. Explain Baumol's sales maximization model.
27. What is meant by constant elasticity demand function?
28. Explain the limit pricing theory of Bain.
29. What are engineering costs?
30. Explain Paul Sweezy's model.
31. Explain different concepts of technical progress.

(8 x 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Explain Williamson's model of managerial enterprise.
33. Critically examine the Cobb-Douglas production function.
34. Explain the basic concepts of the theory of games.
35. Critically examine the Neumann-Morgenstern hypothesis.
36. Critically examine Chamberlin's model of oligopoly.

(3 x 4 = 12 weightage)

**FIRST SEMESTER M A DEGREE EXAMINATION, NOVEMBER 2015**  
**(CUCSS)**  
**ECONOMICS**  
**MACROECONOMICS: THEORIES AND POLICIES I**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

Multiple Choices:

1. Permanent income hypothesis is related to:  
 (a) income (b) saving (c) consumption (d) investment
2. Portfolio balance theory was developed by:  
 (a) Walras (b) Arrow (c) Baumol (d) Tobin
3. Ratchet effect is related to:  
 (a) absolute income hypothesis (b) life cycle hypothesis (c) relative income hypothesis  
 (d) permanent income hypothesis
4. The concept of money illusion was introduced by:  
 (a) Debreu (b) Arrow (c) Fisher (d) Walras
5. The level of output cannot be increased by using the monetary policy, if the LM curve is:  
 (a) perfectly elastic (b) perfectly inelastic (c) relatively elastic (d) relatively inelastic
6. Consumption puzzle was introduced by:  
 (a) Tobin (b) Kuznet (c) Fisher (d) Pigou
7. The number of assets in the Keynesian liquidity preference theory:  
 (a) three (b) four (c) two (d) five
8. The curve showing the equilibrium in the money market:  
 (a) IS (b) LM (c) BP (d) none of these
9. If MPC falls as income rises, then the consumption function is said to be:  
 (a) proportional (b) non-proportional (c) linear (d) non-linear
10. Which of the following is not a monetary policy instrument?  
 (a) bank rate (b) reverse repo rate (c) cash reserve ratio (d) tax
11. The slope of the IS curve is:  
 (a) negative (b) positive (c) zero (d) none of these
12. The economist who wrote the book 'Money, Interest and Prices':  
 (a) James Tobin (b) Baumol (c) Radcliff (d) Don Patinkin

(12 x 1/4 = 3 weightage)

**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. What is Classical dichotomy?
14. Define Fisher effect.
15. What is Tobin's q ratio?
16. What is an LM curve?
17. Explain the concept of money illusion.
18. Distinguish between  $M_1$  and  $M_3$  measures of money supply?
19. Explain the Taylor rule.
20. Explain crowding out effect.

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. Distinguish between Keynes effect and Pigou effect.
22. Explain the H theory of money supply.
23. Explain the permanent income hypothesis
24. What are the instruments of fiscal policy?
25. Explain the accelerator theory of investment.
26. Explain Baumol's inventory theory.
27. Explain Kuznet's consumption puzzle
28. Explain general equilibrium using IS-LM analysis.
29. Briefly explain Arrow-Debreu Model
30. Explain the behavioural model of money supply.
31. Explain Patinkin's real balance effect.

(8 x 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Critically examine the relative income hypothesis.
33. Examine Friedman's restatement of the quantity theory of money.
34. Explain Samuelson's overlapping generations' model.
35. Explain the relative effectiveness of monetary and fiscal policy using IS-LM framework.
36. Explain the objectives and instruments of monetary policy.

(3 x 4 = 12 weightage)

**FIRST SEMESTER M A DEGREE EXAMINATION, NOVEMBER 2015**  
**(CUCSS)**  
**ECONOMICS**

**INDIAN ECONOMY: PROBLEMS AND POLICIES I**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

Multiple Choices:

1. Which of the following replaces the Planning Commission of India?  
 (a) SEBI (b) CIBIL (c) CRISIL (d) NITI Aayog
2. Which sector contributes the maximum to India's GDP?  
 (a) primary (b) secondary (c) tertiary (d) agriculture
3. The study of population is known as:  
 (a) NITI Aayog (b) demography (c) perestroika (d) glasnost
4. Which of the following is an indicator of poverty?  
 (a) head count index (b) poverty gap ratio (c) poverty square gap ratio (d) all of the above
5. The most populous state in India according to 2011 census is:  
 (a) Madhya Pradesh (b) Uttar Pradesh (c) Andhra Pradesh (d) Himachal Pradesh
6. Inclusive growth objective is given in the plan document of:  
 (a) Ninth Five Year Plan (b) Tenth Five Year Plan  
 (c) Eleventh Five Year Plan (d) Twelfth Five Year Plan
7. Five Year Plans are finally approved by:  
 (a) President (b) Prime Minister (c) National Development Council (d) Planning Commission
8. The period of 'plan holiday' in India was:  
 (a) 1962-65 (b) 1966-69 (c) 1969-72 (d) 1972-75
9. Which among the following coined the term 'second generation reforms'?  
 (a) World Bank (b) IMF (c) RBI (d) None of the above
10. What is the crux of Kerala model of development?  
 (a) low level of economic development and low level of social development  
 (b) high level of economic development and high level of social development  
 (c) low level of economic development and high level of social development  
 (d) high level of economic development and low level of social development
11. Gross domestic saving rate of Indian economy in 2012-13 was:  
 (a) 25.7 (b) 33.6 (c) 36.8 (d) 30.1
12. Which of the following is the most important expenditure item of Kerala government?  
 (a) salary and pensions (b) interest payments (c) repayment of debt (d) road construction

(12 x 1/4 = 3 weightage)



**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. What is meant by parallel economy?
14. Explain the concept of inclusive growth.
15. Explain the concept of decentralization.
16. What are the objectives of planning?
17. What are the components of PQLI?
18. Write a note on new industrial policy of India.
19. Explain the concept of environmental degradation.
20. What is NITI Aayog?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. What are the important HDI related indicators?
22. What are Millennium Development Goals?
23. Write a note on the state of unemployment in Kerala.
24. Explain the features of decentralized planning in Kerala.
25. Examine the demographic changes in India under the plans.
26. What are the causes of industrial backwardness of Kerala?
27. What are the important poverty eradication measures in India?
28. Critically analyze the second generation reforms in India.
29. Critically examine the Kerala model of development.
30. Explain the economic impact of Gulf emigration on Kerala Economy.
31. Explain the important policy reforms connected to foreign investment.

(8 x 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Make a critical evaluation of India's Five Year Plans.
33. What were the major structural changes in Indian economy since 1951?
34. Critically examine the impact of financial sector reforms in India since 1991.
35. Explain the trends in savings and investment in India since reforms.
36. Explain the causes and consequences of fiscal crisis of Kerala.

(3 x 4 = 12 weightage)

**FIRST SEMESTER M A DEGREE EXAMINATION, NOVEMBER 2016**  
**(CUCSS)**  
**ECONOMICS**

**QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS I**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

1. If  $A^2 = A$ , then the matrix A is called:  
 (a) nil potent (b) idem potent (c) symmetric (d) skew symmetric
2.  $A + B = B + A$ . This implies that matrix addition is:  
 (a) commutative (b) associative (c) distributive (d) multiplicative
3. A square matrix A is said to be ..... if  $A^T = -A$ :  
 (a) symmetric (b) skew symmetric (c) idem potent (d) nil potent
4. Given  $A = \begin{bmatrix} 3 & 5 & 7 \\ 2 & 1 & 4 \\ 4 & 2 & 3 \end{bmatrix}$  and  $|A| = 35$ ,  $B = \begin{bmatrix} 6 & 10 & 14 \\ 2 & 1 & 4 \\ 4 & 2 & 3 \end{bmatrix}$ , what is  $|B|$ :  
 (a) -35 (b) 70 (c) 40 (d) 89
5. Which of the following correctly evaluates the definite integral:  
 (a) -3 (b) 9 (c) -5 (d)  $6\frac{3}{16}$
6. Which of the following is the indefinite integral of  $2x^{1/2}$ :  
 (a)  $\frac{4}{3}x^{3/2} + c$  (b)  $3x^{3/2} + c$  (c)  $3x^{2/3} + c$  (d)  $x^{-1/2} + c$
7. The elasticity of demand for the demand function  $x = 27/p^3$  is:  
 (a) 1 (b) 2 (c) 3 (d) 4
8. Which of the following approximates the marginal impact on the objective function caused by a small change in the constant of the constraint:  
 (a) the Lagrange multiplier (b) the Jacobian (c) the Hessian (d) the determinant
9. The function  $y = 3x^2 - 14x + 5$  is increasing when x is equal to:  
 (a) 4 (b) 5 (c) 7 (d) 9
10. The function  $y = -2x^3 + 4x^2 + 9x - 15$  is concave when x is equal to:  
 (a) 11 (b) -5 (c) -7 (d) 3
11. A bag contains 2 red, 3 green and 2 blue balls. Two balls are drawn at random. What is the probability that none of the balls drawn is blue:  
 (a)  $\frac{10}{21}$  (b)  $\frac{11}{21}$  (c)  $\frac{2}{7}$  (d)  $\frac{5}{7}$
12. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5:  
 (a)  $\frac{1}{2}$  (b)  $\frac{2}{5}$  (c)  $\frac{8}{15}$  (d)  $\frac{9}{20}$

(12 × 1/4 = 3 weightage)

**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. Define rank of a matrix.
14. Define adjoint of a matrix.
15. Optimize  $TC = 35 + 5Q - 2Q^2 + 2Q^3$ .
16. State the conditions for maxima and minima for a multi variable function.
17. Find the total revenue function given  $MR = 84 - 4Q - Q^2$ .
18. Find the integral for  $y = \int (2x^5 - 3x^{-1/4})dx$ , given the initial condition  $y = 6$  when  $x = 0$ .
19. Define conditional probability.
20. Three unbiased coins are tossed. What is the probability of getting at most two heads?

(5x1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. Given  $Q = 700 - 2P + 0.02y$ , where  $p = 25$  and  $y = 5000$ . Find the price elasticity of demand.
22. Optimize the function  $f(x, y) = xy$  subject to the constraint  $x^2 + y^2 = 8$ .
23. Given  $TR = 1400Q - 6Q^2$ ,  $TC = 1500 + 80Q$ . Find the profit maximising level of output.
24. Find the marginal and the average function of the total function  $TC = 35 + 5Q - 2Q^2 + 2Q^3$  at  $Q = 3$
25. What is Baye's theorem?
26. A die is rolled and a coin is tossed, find the probability that the die shows an odd number and the coin shows a head.
27. A card is drawn at random from a deck of cards. Find the probability of getting the 3 of diamond.
28. Solve using Cramer's rule
 
$$\begin{aligned} 5x_1 - 2x_2 + 3x_3 &= 16 \\ 2x_1 + 3x_2 - 5x_3 &= 2 \\ 4x_1 - 5x_2 + 6x_3 &= 7 \end{aligned}$$
29. Find the maximum profit that a company can make if the profit function is given by:
 
$$P(x) = 41 - 24x - 18x^2$$
30. Given  $MC = dTC/dQ = 32 + 18Q - 12Q^2$ ,  $FC = 43$ . Find (a) TC (b) AC and (c) VC functions.
31. Evaluate  $\int_0^{\infty} xe^{-x} dx$

(8× 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Use matrix inversion to solve for the unknowns in the following system of linear equations

$$3x_1 + 5x_2 + x_3 = 36$$

$$x_1 + 2x_2 + 4x_3 = 42$$

$$4x_1 + 3x_2 + 2x_3 = 28$$

33. Find the MR functions for the demand function  $44 - 4P - Q = 0$  and evaluate at  $Q = 4$  and  $Q = 10$

34. The blood groups of 200 people are distributed as follows: 50 have type A blood, 65 have B blood type, 70 have O blood type and 15 have type AB blood. If a person from this group is selected at random, what is the probability that this person has O blood type.

35. A consumer has Rs. 600 to spend on two commodities, the first of which costs Rs. 20

per unit and the second Rs. 30 per unit. Suppose that the utility derived by the consumer from  $x$

units of the first commodity and  $y$  units of the second commodity is given by the function

$U = 10x^{0.6}y^{0.4}$ . How many units of each commodity should the consumer buy to maximise utility.

36. Find the characteristic equation and characteristic roots of the matrix

$$A = \begin{bmatrix} 2 & -1 & 1 \\ -1 & 2 & -1 \\ 1 & -1 & 2 \end{bmatrix}$$

(3 × 4 = 12 weightage)

**SECOND SEMESTER M A DEGREE EXAMINATION, MAY 2016**  
**(CUCSS)**  
**ECONOMICS**

**MICROECONOMICS: THEORY AND APPLICATIONS II**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

Multiple Choices:

1. Arrow's impossibility theorem is associated with:  
 (a) linear programming (b) welfare economics (c) input-output analysis (d) search cost
2. The market condition which satisfies Pareto optimality is:  
 (a) monopoly (b) monopolistic competition (c) oligopoly (d) perfect competition
3. Concept of justice is closely associated with:  
 (a) Bergson (b) Kaldor (c) Rawl (d) Scitovsky
4. Perfect competition leads to a point on the grand utility possibility curve:  
 (a) always (b) never (c) sometimes (d) none of the above
5. Public goods are:  
 (a) nonrival (b) nonexclusive (c) both nonrival and nonexclusive (d) none of the above
6. Situation in which a buyer and a seller possess different information about a transaction:  
 (a) asymmetric information (b) Coase theorem (c) Euler's theorem (d) none of the above
7. The party whom the action affects:  
 (a) agent (b) principal (c) commons (d) none of these
8. Linear programming is associated with the name of:  
 (a) Dantzig (b) Morgenstern (c) Scitovsky (d) Coase
9. Which of the economists is not associated with the macro theories of distribution:  
 (a) Marx (b) Kalecki (c) Kaldor (d) Keynes
10. Which of the following economists is not associated with welfare economics?  
 (a) Amartya Sen (b) Arrow (c) Kaldor (d) Kalecki
11. 'With asymmetric information, low quality goods can drive high quality goods out of the market'. This statement is known as:  
 (a) tragedy of commons (b) Pareto optimality (c) adding up problem (d) the lemons problem
12. The condition for satisfying the adding up problem is:  
 (a)  $MP_K = MP_L$  (b)  $Q = MP_K + MP_L$  (c)  $Q = K.MP_K + L.MP_L$  (d)  $Q = MP_K - MP_L$

(12 x 1/4 = 3 weightage)

**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. Define externalities.
14. What is meant by search cost?
15. What is meant by adverse selection?
16. Explain adding up problem.
17. What are public goods?
18. Explain the concept of efficiency wage.
19. Explain the concept of Pareto optimality.
20. What is linear programming?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. What is meant by the market for lemons?
22. Explain adverse selection and moral hazard.
23. Explain Hawkin-Simon condition
24. Explain Arrow's impossibility theorem.
25. Distinguish between negative and positive externalities in consumption.
26. Explain Euler's theorem.
27. Explain Sen's theory of welfare.
28. What is meant by tragedy of commons?
29. Explain Kaldor-Hicks compensation criterion
30. Explain the methods of correcting market failure.
31. Explain Kaldor's theory of distribution.

(8 x 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Critically examine the Ricardian theory of distribution.
33. Explain how the graphical method is used to solve a linear programming problem.
34. What are public goods? Explain their characteristics and the emergence of market failure.
35. Examine the various criteria of social welfare.
36. Critically examine the Marxian theory of distribution.

(3 x 4 = 12 weightage)

**SECOND SEMESTER M A DEGREE EXAMINATION, MAY 2016**  
**(CUCSS)**  
**ECONOMICS**

**MACROECONOMICS: THEORIES AND POLICIES II**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

Multiple Choices:

1. Purely monetary theory of trade cycle was developed by:  
 (a) Keynes (b) Hawtrey (c) Haberler (d) Hayek
2. Which of the following economists constructed a multiplier-accelerator model?  
 (a) Keynes (b) Baumol (c) Samuelson (d) Schumpeter
3. The idea of rational expectations was first put forward by:  
 (a) John Muth (b) Nerlov (c) Baumol (d) Tobin
4. The accelerator measures the relationship between:  
 (a) income and consumption (b) saving and investment  
 (c) consumption and investment (d) income and investment
5. Phillips curve shows the relationship between unemployment and:  
 (a) saving (b) wage rate (c) consumption (d) investment
6. The over investment theory is associated with:  
 (a) Keynes (b) Hawtrey (c) Haberler (d) Hayek
7. The relationship between tax rate and tax revenue is illustrated in:  
 (a) Lorenz curve (b) Laffer curve (c) Offer curve (d) Phillips curve
8. Rationing model was introduced by:  
 (a) Minsky (b) Malinvaud (c) Kalecki (d) Clower
9. Which of the following is not an anti-inflationary measure?  
 (a) Increase in bank rate (b) higher CRR (c) credit rationing (d) increase in public expenditure
10. Keynesian labour market is characterized by:  
 (a) wage rigidity (b) wage flexibility (c) both wage rigidity and flexibility (d) none of these
11. The concept of stagflation was introduced by:  
 (a) Minsky (b) Malinvaud (c) Kalecki (d) Paul Samuelson
12. Who introduced the acceleration principle into economics?  
 (a) Samuelson (b) Keynes (c) Kalecki (d) Brooman

(12 x 1/4 = 3 weightage)

**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. Define natural rate of unemployment.
14. What is Okun's law?
15. What is meant by wage rigidity?
16. What is stagflation?
17. What is meant by perfect capital mobility?
18. What is meant by real rigidities?
19. Define underemployment equilibrium.
20. What is NAIRU?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. Briefly explain the Keynesian business cycle model.
22. Explain the long run Phillips curve.
23. Explain the small menu cost model.
24. What are the costs of inflation?
25. Explain the financial instability theory of Minsky.
26. Explain the structuralist theory of inflation.
27. Evaluate the implicit wage contract model.
28. Examine Lucas' surprise supply function.
29. Explain the political business cycle theory.
30. Explain the search theory.
31. What are the policy implications of Laffer curve?

(8 x 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Critically examine the business cycle model of Paul Samuelson.
33. Compare Keynesian labour market equilibrium and neoclassical labour market equilibrium.
34. Explain the important themes of supply side macroeconomics.
35. Critically examine the real business cycle theory.
36. Examine the relative effectiveness of fiscal and monetary policies under the fixed exchange rate.

(3 x 4 = 12 weightage)



**SECOND SEMESTER M A DEGREE EXAMINATION, MAY 2016**  
**(CUCSS)**  
**ECONOMICS**

**PUBLIC FINANCE: THEORY AND PRACTICE**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

Multiple Choices:

1. A pure private good is:
  - (a) non-rival and non-excludable (b) non-rival and excludable
  - (c) rival and non-excludable (d) rival and excludable
2. Excise duty is imposed on:
  - (a) goods exported (b) goods imported (c) interstate movement of goods
  - (d) goods manufactured within the country
3. The relationship between tax rate and tax revenue is illustrated in:
  - (a) Lorenz curve (b) Laffer curve (c) Offer curve (d) Phillips curve
4. If the amount of tax paid increases as income increases, it is said to be:
  - (a) progressive tax (b) proportional tax (c) regressive tax (d) optimal income tax
5. Goods whose benefits are completely indivisible and are jointly and equally consumed by a large relevant group are:
  - (a) club good (b) pure public good (c) quasi-public good (d) pure private good
6. Market failure in the provision of social goods is due to:
  - (a) non-rival consumption (b) rival consumption (c) excludability (d) none of these
7. The most widely used index of ability to pay is:
  - (a) income (b) wealth (c) consumption (d) expenditure
8. The difference between total government expenditure and current revenue is termed as:
  - (a) fiscal deficit (b) revenue deficit (c) primary deficit (d) monetized deficit
9. Which of the following is not a direct tax?
  - (a) estate duty (b) income tax (c) service tax (d) corporation tax
10. Which of the following is not a route of fiscal transfers from the Union to the states in India?
  - (a) finance commission (b) finance commission (c) central ministries (d) RBI
11. The chairman of the fourteenth finance commission is:
  - (a) Rangarajan (b) Y V Reddy (c) Bimal Jalan (d) Reghuram Rajan
12. Which of the following is the most important source of tax revenue to Kerala government?
  - (a) sales tax (b) income tax (c) wealth tax (d) agricultural income tax

(12 x 1/4 = 3 weightage)

**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. Explain the concepts of fiscal deficit and budget deficit.
14. State the Domar stability condition.
15. What is meant by functional finance?
16. Explain the concept of deficit financing.
17. Explain the concept of compensatory finance.
18. Distinguish between plan and non-plan expenditure.
19. What is Wagner's law?
20. What is balanced budget multiplier?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. Explain the theory of club goods.
22. What are the techniques of managing public expenditure?
23. What are the major sources of tax revenue to a state government?
24. Explain the theory of optimal taxation.
25. Explain Wiseman- Peacock hypothesis.
26. What are the functions of the finance commission?
27. Write a note on GST in India.
28. Discuss the allocative, distributive and stabilization functions of the government.
29. Explain Tiebout model.
30. What is meant by zero based budgeting? What are its implications?
31. Examine the modern theory of tax incidence.

(8 x 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Define vertical and horizontal equity. Evaluate the nature of centre-state financial relations in India.
33. Examine the rationale of growing public expenditure in India.
34. Examine the causes and consequences of fiscal crisis in Kerala.
35. Explain the stages involved in the preparation, presentation and execution of government budgets.
36. What is public debt? Explain the sources and macroeconomic impacts of public debt in India.

(3 x 4 = 12 weightage)

**SECOND SEMESTER M A DEGREE EXAMINATION, MAY 2016**  
**(CUCSS)**  
**ECONOMICS**

**QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS II**

Time: 3 Hours

Maximum Weightage: 36

**Part A**

Answer **all** questions

Each bunch of four questions carries a weightage of **1**

1. if A and B are mutually exclusive events then  $P(A \cup B)$  is:
  - (a)  $P(A) + P(B) - P(A \cap B)$
  - (b)  $P(A) - P(B)$
  - (c)  $P(A) + P(B)$
  - (d)  $P(A) + P(B) + P(A \cap B)$
2. The mean and the variance are equal in:
  - (a) all probability distributions. (b) the binomial distribution.
  - (c) the Poisson distribution. (d) the hypergeometric distribution.
3. The ratio of explained variation to total variation is:
  - (a)  $r$  (b)  $r^2$  (c)  $R$  (d) none of the above
4. t test is proposed for:
  - (a) large sample (b) small sample (c) medium sample (d) both small and large sample
5. Which of the following is not a requirement of a binomial distribution:
  - (a) a constant probability of success (b) only two possible outcomes
  - (c) a fixed number of trials (d) equally likely outcomes
6. The normal distribution is a:
  - (a) discrete distribution. (b) continuous distribution.
  - (c) positively skewed distribution. (d) none of the above.
7. The expected value of the random variable:
  - (a) will also be the most likely value of the random variable.
  - (b) is another term for the mean value.
  - (c) is also called the variance. (d) cannot be greater than 1.
8. The area under a normal curve between 0 and  $-1.75$  is:
  - (a) 0.0401 (b) 0.9599 (c) 0.4599 (d) none of the above.
9. A sample:
  - (a) is a part of the population. (b) has more than 30 observations.
  - (c) is usually identified as  $N$ . (d) all of the above.
10. Which of the following is not a method of probability sampling:
  - (a) random sampling (b) systematic sampling
  - (c) stratified sampling (d) all of the above are methods of probability sampling.
11. The difference between the sample mean and the population mean is called the:
  - (a) population mean. (b) population standard deviation.
  - (c) standard error of the mean. (d) sampling error.
12. The standard error of the mean is:
  - (a) the standard deviation of the sampling distribution of sample means.
  - (b) always normally distributed. (c) sometimes less than 0. (d) none of the above.

(12 x 1/4 = 3 weightage)

**Part B (Very Short Answer Questions)**Answer any **five** questionsEach question carries a weightage of **1**

13. What is a continuous random variable?
14. Define mathematical expectation of a random variable.
15. Define a Poisson distribution?
16. Define a normal probability distribution.
17. Suppose a population consisted of 20 items. How many different samples of  $n = 3$  are possible, if sampling without replacement.
18. What is type 1 error?
19. What is non-sampling error?
20. What is confidence interval?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**Answer any **eight** questionsEach question carries a weightage of **2**

21. Define log normal distribution and state its applications in economics.
22. Explain the characteristics of a normal probability distribution.
23. Explain the central limit theorem.
24. Define an interval estimator and an interval estimate.
25. Distinguish between a one-tailed and a two-tailed test of hypothesis.
26. Distinguish between t test and F test giving examples.
27. An insurance representative has appointments with four prospective clients tomorrow. From past experience she knows that the probability of making a sale on any appointment is 1 in 5 or 0.20. Use the rule of probability to determine the likelihood that she will sell a policy to 3 of the 4 prospective clients.
28. The mean life of certain type of refrigerator is approximately normally distributed with a mean of 7.2 years and a standard deviation of 1.9 years. What fraction of the refrigerators last more than 10 years?
29. A recent survey of Car and Driver Magazine readers indicated those buying a new car within the next year expected to pay a mean of Rs. 29,500 for the car. Assume this value is the mean of the population and that the population standard deviation is Rs. 6,500. What is the likelihood of selecting a sample of 30 car buyers and finding the sample mean within Rs. 1,000 of the population mean?
30. A sample of 80 Chief Financial Officers revealed 20 had at one time been dismissed from a job. Develop a 95 per cent confidence interval for the proportion that has been dismissed from a job.
31. A random sample of size 26 has 55 as mean. The sum of squared deviations from the mean is 494. Can the sample be regarded as taken from the population having 50 as mean? Also find probable limits in which the mean is expected to lie.

(8 x 2 = 16 weightage)

**Part D (Essay Questions)**Answer any **three** questionsEach question carries a weightage of **4**

32. Explain under what conditions sampling is the proper way to learn something about a population. Describe the different methods for selecting a sample.
33. Define ANOVA. Explain when will you be able to carry out a one way ANOVA?
34. Define null and alternative hypotheses. Describe the five-step hypothesis testing procedure.
35. The Appliance Center reports on its TV commercials that “more than 70 percent of our customers have purchased an appliance with us before”. The CEO of the company hired a marketing research firm to independently validate this claim. In a sample of 200 recent buyers, 160 reported that they had, in fact, purchased an appliance from the Appliance Center before. At the 0.01 significance level is the claim of the commercial correct?
36. A study found that the mean stopping distance for a school bus travelling 80 kilometres per hour is 90 meters. The transportation director of ABC Transport wants to compare his fleet of busses with this national statistic. For a sample of ten busses the mean stopping distance was 92 meters and the standard deviation was 5 meters. Should the director conclude that the stopping distance is more for the ABC busses? Use the .10 significance level.

(3 x 4 = 12 weightage)