

#### **UNIVERSITY OF CALICUT**

#### **Abstract**

General and Academic- Faculty of Humanities-Correction in the Scheme & Syllabus of MA Economics Programme under CBCSS PG Regulations 2019 by reinstating the course "Research Methodology and Computer Applications" in the list 2 of electives only for affiliated colleges and also to list the same course as a core course only for SDE/Private Registration as a substitute for dissertation with effect from 2019 Admission onwards -implemented- Orders Issued

#### G & A - IV - B

U.O.No. 10593/2020/Admn

Dated, Calicut University.P.O, 12.11.2020

Read:-1. UO No. 4487/2019/Admn Dated 26.03.2019

- 2. UO No. 8660/2019/Admn Dated: 02.07.2019
- 3. UO. No. 15855/2019/Admn Dated: 08.11.2019
- 4. UO No.6474/2020/Admn dated 09.07.2020
- 5. UO No .10495/2020/Admn dated 10.11.2020
- 6. Email dated 23-10-2020 from the Chairman, Board of Studies in Economics PG
- 7. Remarks of Dean, Faculty of Humanities dated 04.11.2020.

#### **ORDER**

- 1. The Regulations for Choice Based Credit and Semester System for Post Graduate (PG) Curriculum 2019 (CBCSS PG Regulations 2019), for all PG Programmes under Affiliated Colleges and SDE/Private Registration with effect from 2019 Admission has been implemented in the University of Calicut vide paper read (1) above. Accordingly, orders were issued implementing the Syllabus of MA Economics Programme in accordance with new CBCSS PG Regulation 2019, vide paper read (2) above.
- 2. Later, as per paper read (3) above, the Syllabus of MA Economics Programme (CBCSS) was implemented correcting minor mistakes found in the code, teaching hours, scheme of evaluation and format of model question paper etc.
- 3. The corrected Scheme & Syllabus of MA Economics (CBCSS) Programme in accordance with amended CBCSS PG Regulations 2019, for affiliated Colleges and SDE/Private Registration is implemented in the University with effect from 2019 Admission onwards, removing the elective course titled 'Research Methodology and Computer Applications" from the list 2 of the elective courses in the semester 4 and offering it as a course in lieu of dissertation for SDE/Private registration candidates, vide paper read (4) above, and made absolute, vide paper read (5) above.
- 4. The Chairman Board of Studies in Economics PG, vide paper read (6) above has informed that the removal of the Course, "Research Methodology and Computer Applications" from the list 2 of elective courses in semester 4 was meant to be applicable only to SDE candidates. But by mistake, it was removed from the list 2 of elective courses in semester 4 for both SDE and affiliated colleges. Hence the Chairman has requested to reinstate the course "Research Methodology and Computer Applications" in the list 2 of elective courses in semester IV CBCSS, only for affiliated colleges with the code ECO4 E10 and also to list the same course as a core course only for SDE/Private Registration as a substitute for dissertation with the code ECO4 C14.

- 5. The Dean, Faculty of Humanities has approved the suggestions of the Chairman, Board of Studies in Economics (PG), vide paper read (7) above. The Vice Chancellor has accorded sanction, on 05.11.2020, to implement the corrections suggested by the Chairman Board of Studies, in the Scheme & Syllabus of MA Economics Programme in accordance with the new CBCSS PG Regulations 2019, as approved by the Dean, Faculty of Humanities, in the University with effect from 2019 Admission onwards.
- 6. The corrected Scheme & Syllabus of MA Economics (CBCSS) Programme in accordance with amended CBCSS PG Regulations 2019, for affiliated Colleges and SDE/Private Registration is therefore implemented in the University with effect from 2019 Admission onwards, reinstating the elective course titled, 'Research Methodology and Computer Applications" in the list 2 of the elective courses in semester IV only for affiliated Colleges with the code ECO4 E10 and also to list the same course as a core course only for SDE/Private Registration as a substitute for dissertation with the code ECO4 C14.
- 7. Orders are issued accordingly. (Corrected Scheme & Syllabus is appended)
- 8. UO read (4) above is modified to this extent.

Arsad M

Assistant Registrar

To

The Principals of all affiliated Colleges

Copy to: PS to VC/PA to PVC/ PA to Registrar/PA to CE/ ICE I/ II

Copy to: PS to VC/PA to PVC/ PA to Registrar/PA to CE/JCE I/JCE V/DoA/EX and EG Sections/GA I F/Digital Wing/DoA/CHMK Library/ Information Centres /SF/DF/FC

Forwarded / By Order

Section Officer

#### **UNIVERSITY OF CALICUT**

### POSTGRADUATE PROGAMME IN M A ECONOMICS

### CHOICE BASED CREDIT SEMESTER SYSTEM (CBCSS)



### SCHEME & SYLLABUS (2019-20 Academic Year onwards in Affiliated Colleges)

#### **CONTENTS**

PARTICULARS	PAGE
Preface	3
Members of the Board of Studies	4
Eligibility Criteria	5
Scheme of the Programme	6
<b>Evaluation Schemes</b>	7
List of Core Courses	8
List of Elective Courses	8
Audit Courses	9
Dissertation Format	10
Detailed Syllabi-Core Papers	11-40
Detailed Syllabi-Elective Papers	41-67
Detailed Syllabi-Additional Paper in lieu of Project (SDE/Private)	68
Model Question Paper	69-70

#### **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 and as per the CBCSS PG Regulations 2019. 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.

DrKXJosephC hairman, Board of Studies in Economics(PG) University of Calicut

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

- 1. Dr K X Joseph, Prof: of Economics (Rtd) Dr John Matthai Centre(Chairman)
- 2. Shri. Rajasekharan P V, Associate Professor, SKVC, Thrissur.
- 3. Shri. Bose Rapheal, HOD, Christ College, Irinjalakkuda.
- 4. Dr D Shyjan, HOD, Department of Economics, Dr John MatthaiCentre.
- 5. Dr Shiby M Thomas, Associate Professor, St. Joseph's College, Devagiri.
- 6. Dr C Krishnan, Associate Professor, Govt College, Kodanchery.
- 7. Shri Mohammed Najeeb P M, Asso: Professor, EMEA College, Kondotty.
- 8. Smt. P K Prasanna, Associate Professor, Govt College, Pattambi.
- 9. Dr K P Shabeer, Assistant Professor, Govt College, Kodanchrry.
- 10. Dr Shibinu S, Assistant Professor, PSMO College, Thirurangadi.
- 11. Dr C P James, Associate Professor, St Aloysius College, Elthuruth.

#### **ELIGIBILITY CRITERIA WITHOUT**

#### **ENTRANCE** UNDER MARK SYSTEM

BA degree of this university with Economics/Foreign Trade/Development Economics (Main) or equivalent degree with at least 45% marks for Part III (excluding subsidiaries) Or BSc degree of this University with Statistics/Mathematics (Main) or equivalent degree with at least 70% marks for Part III (excluding subsidiaries). OBC/OEC candidates are eligible to relaxation up to 5%. SC/ST candidates need only to get apass.

#### **UNDER GRADE SYSTEM**

BA degree of this university with Economics/Foreign Trade/Development Economics (Main) or equivalent degree with Overall CGPA, at least equivalent to 50% or BSc degree of this University with Statistics/Mathematics (Main) or equivalent degree with equivalent grade to 70%. OB/OEC candidates are eligible for relaxation up to 5%. SC/ST candidates need only to get a pass.

#### **LANGUAGE OF EXAMINATION**

The language of writing the examination shall be English only.

### MA ECONOMICS (CBCSS) 2019-20 ADMISSION-SCHEME OF THE PROGRAMME

Semester	Name of the Course Credit		Hours/	Total Weightage	
			Week	External	Internal
	ECO1 C01 Microeconomics: Theory	5	7	30	5
	and Applications I				
	ECO1 C02 Macroeconomics: Theories	5	6	30	5
I	and Policies I				
	ECO1 C03 Indian Economy: Problems	5	6	30	5
	and Policies				
	ECO1 C04 Quantitative Methods for	4	6	30	5
	Economic Analysis I				
	ECO1 A01 Ability Enhancement	4*			
	Course				
	ECO2 C05 Microeconomics: Theory	5	6	30	5
	and Applications II				
II	ECO2 C06 Macroeconomics: Theories	5	6	30	5
	and Policies II				
	ECO2 CO7 Public Finance: Theory	5	7	30	5
	and Practice			2.0	_
	ECO2 C08 Quantitative Methods for	5	6	30	5
	Economic Analysis II				
	ECO2 A02- Professional Competency	4*			
	Course				
	ECO3 C09 International Trade	5	6	30	5
	ECO3 C10 Growth and Development	5	6	30	5
III	ECO3 C11 Basic Econometrics	5	7	30	5
	Elective I	4	6	30	5
	ECO4 C12 International Finance	3	6	30	5
	ECO4 C13 Financial Markets	3	6	30	5
	Elective II	4	6	30	5
IV	Elective III	4	6	30	5
	ECO4 P14 Project	4	4	4	4
	OR	4	1	4	1
	ECO4 C14 Research Methodology and Computer Applications				
	( Only for SDE/Private Registration)				
	ECO4 V15 Comprehensive Viva Voce	4			
	Total Credits	80			
	Total Citalis	00			

<sup>@ 1</sup> elective course in Semester 3 and 2 elective courses (1 each from the two lists) in semester 4 are to be selected from the appended lists of elective courses.

<sup>\*</sup>The credits will not be counted for evaluating the overall SGPA & CGPA

#### **EVALUATION SCHEMES**

#### **COURSE EVALUATION (INTERNAL)**

COMPONENT	WEIGHTAGE
Assignment	1
Seminar	1
Attendance	1
Test Papers (2)	2
Total	5

#### **COURS EVALUATION (EXTERNAL)**

PART	COMPOMENT	WEIGHTAGE
Α	15 Questions x 1/5	3
В	5 Questions x 1	5
С	7 Questions x 2	14
D	2 Questions x 4	8

#### **Part A (Multiple Choice Questions)**

#### **Answer all 15 Questions**

 $(15 \times 1/5 \text{ Weightage} = 3 \text{ Weightage})$ 

#### 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 7 questions out of 10 questions

(7 questions x 2 = 14 Weightage)

#### Part D (Essay Questions)

#### Answer any 2 questions out of 4questions.

(2 questions x 4 = 8 Weightage)

#### **Total = 30 Weightage**

#### PROJECT EVALUATION (INTERNAL AND EXTERNAL)

Sl No	Criteria	Weightage	Weightage	Weightage
			External	Internal
1	Relevance of the Topic		8	2
	and Statement of the Problem	60%		
2	Methodology and Analysis		8	2
3	Quality of Report and Presentation		8	2
4	Viva-voce	40%	16	4
5	Total Weightage	100%	40	10

#### **EVALUATION OF AUDIT COURSES**

Evaluation and grading of students in audit courses may be done on the basis of a presentation made by the students about Ability Enhancement Course (AEC) and Professional Competency Course (PCC) undertaken. Minimum pass requirement in each audit course is 1.5credits.

#### **LIST OF CORE COURSES**

4		
1	Course I	ECO1 C01- Microeconomics: Theory and Applications I
2	Course II	ECO1 C02- Macroeconomics: Theories and Policies I
3	Course III	ECO1 C03- Indian Economy: Problems and Policies
4	Course IV	ECO1 C04- Quantitative Methods for Economic Analysis-I
5	Course V	ECO2 C05- Microeconomics: Theory and Applications II
6	Course VI	ECO2 C06- Macroeconomics: Theories and Policies II
7	Course VII	ECO2 C07- Public Finance: Theory and Practice
8	Course VIII	ECO2 C08- Quantitative Methods for Economic Analysis-II
9	Course IX	ECO3 C09- International Trade
10	Course X	ECO3 C10- Growth and Development
11	Course XI	ECO3 C11- Basic Econometrics
12	Course XII	ECO4 C12- International Finance
13	Course XIII	ECO4 C13- Financial Markets
		ECO4 P14- Project
14	Course XIV	OR
		ECO4 C14-Research Methodology and Computer Applications
		(Only for SDE/Private Registration)
15	Course XV	ECO4 V15- Comprehensive Viva Voce

#### LIST OF ELECTIVE COURSES

#### **SEMESTERIII**

1	Course I	ECO3 E01- Banking: Theory and Practice
2	Course II	ECO3 E02- Industrial Economics
3	Course III	ECO3 E03- Labour Economics
4	Course IV	ECO3 E04- Regional Economics

#### **SEMESTERIV**

#### List1

5	Course V	ECO4 E01 - Advanced Econometrics
6	Course VI	ECO4 E02 - Business Economics
7	Course VII	ECO4 E03 - Demography
8	Course VIII	ECO4 E04 - Environmental Economics
9	Course IX	ECO4 E05 - Political Economy of Development

#### List2

10	Course X	ECO4 E06 - Agricultural Economic
11	Course XI	ECO4 E07 - Gender Economics
12	Course XII	ECO4 E08 - Health Economics
13	Course XIII	ECO4 E09 - Mathematical Economics
14	Course XIV	ECO4 E10 – Research Methodology and Computer
		Applications( Only for Affiliated Colleges)

#### **AUDIT COURSES**

The students will have to undergo two audit courses with 4 credits each. The credits will not be counted for evaluating the overall SGPA & CGPA. Audit courses are not part of the normal workload.

#### **GENERAL GUIDELINES**

#### Semester I: Ability Enhancement Course (AEC) 4 Credits

The student can attempt any one of the following for securing 4 credits.

- 1. An internship in an academic/research institution or in any related organization suitable to the topic under study, under a supervisor/teacher official.
- 2. One seminar presentation of 15 minutes duration, on a relevant topic.
- 3. One case study analysis approved by the Department Council.
- 4. Community Linkage Programme in a nearby Local Government.
- 5. Review of one recently published book related to Economics.

#### Semester II: Professional Competency Course (PCC) 4 Credits

The student should acquire skill in at least one of the software such as SPSS/R/Econometrics/Python/Stata or any software relevant to Economics and use the software to do any one of the following with the help of a supervising teacher.

- 1. Calculation of descriptive measures in statistics.
- 2. Calculation of correlation and regression.
- 3. Fitting of normal curve and parabola.
- 4. Perform ANOVA.
- 5. Multiple regression models.
- 6. Calculation of growth rate, elasticity etc.
- 7. Perform *t*, chi square and F test.
- 8. Perform any non-parametric test.

#### M A ECONOMICS PROJECT FORMAT

#### STRUCTURE OF THE PROJECT

#### **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. Declaration by the student.
- d. Acknowledgement.
- e. Table of Contents
- f. List of Tables
- g. List of Figures
- h. Introductory Chapter
- i. Analyses Chapters
- j. Concluding Chapter
- k. 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: 50 to 70 pages excluding Appendix and Certificates
- 2. Alignment: Justify
- 3. Font: Times New Roman
- 4. Font size: 12
- 5. Line spacing: 1.5

#### SEMESTER I

Core	Title of Course	Hours/	Credit
Course		Week	
I	Microeconomics: Theory and Applications I	7	5
II	Macroeconomics: Theories and Policies I	6	5
III	Indian Economy: Problems and Policies	6	5
IV	Quantitative Methods for Economic Analysis I	6	4
	Ability Enhancement Course	0	4

#### Core Course-I MA ECONOMICS (CBCSS) I SEMESTER

### ECO1 C01 - MICROECONOMICS: THEORY AND APPLICATIONS-I (Credit 5)

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

Choice under uncertainty- Representing uncertainty by Probability distributions- Expected Value and Variability- Maximising expected utility- Fair gambles and expected utility hypothesis- St. Petersburg paradox-Neumann-Morgenstern utility index- Friedman Savage hypothesis-Markowitz hypothesis- Utility functions and attitudes towards risk- risk neutrality, risk aversion, risk preference, certainty equivalent, demand for risky assets- reducing risks-diversification, insurance, flexibility, information- The state preference approach to choice under uncertainty.

#### **Module II Market Demand for Commodities**

Deriving market demand- Network externalities- Bandwagon effect, Snob effect and Veblen effect- Empirical estimation of demand- Linear demand curve, Constant elasticity demand function- Dynamic versions of demand functions-Nerlove, Houthakker and Taylor-Linear expenditure system- Characteristic approach to demand function.

#### **Module III Theory of Production and Costs**

Short run and long run production function- returns to scale- elasticity of substitution-Homogeneous production function- Linear homogeneous production function- Fixed proportion production function- Cobb Douglas production function and CES production function- Technological progress and production function- Cost function- Cost minimising input choices- properties of cost functions- Economies of scope- The Learning curve – Estimating and Predicting cost- Short run and long run distinction.

#### **Module IV Theory of Imperfect Markets**

Oligopoly- Characteristics- Collusive versus non-collusive oligopoly- Non-collusive models-Cournot model- Bertrand model- Chamberlin's model-Kinked demand curve model of Sweezy- Stackelberg's model- Welfare properties of duopolistic markets- Collusive models-Cartels and Price leadership

#### **Module V Theory of Games**

Basic concepts-Cooperative versus non-cooperative game- Zero sum versus non- zero sum game- Prisoner's dilemma- Dominant strategies- Nash equilibrium- Prisoner's dilemma- Pure strategies- Mixed strategies- repeated games- Sequential games- Threats, commitments and credibility.

- 1. Walter Nicholson and Christopher Snyder (2017): Microeconomic Theory- Basic Concepts and Extensions, 12<sup>th</sup> edition, Cengage Learning India Private Limited.
- 2. Andrew Schotter (2009): Microeconomics: A Modern Approach- 1<sup>st</sup> edition, South Western Cengage Learning.
- 3. Michael E Wetzstein (2013): Microeconomic Theory- Concepts and Connections, 2<sup>nd</sup> edition, Routledge.
- 4. Robert S Pindyck and Daniel L Rubinfeld (2017): Microeconomics- 8<sup>th</sup> edition, Pearson.
- 5. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1<sup>st</sup> edition, South Western Cengage Learning.
- 6. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1<sup>st</sup> edition, Oxford University Press.
- 7. Geoffrey A Jehle (2010): Advanced Microeconomic Theory- 3<sup>rd</sup> edition, Prentice Hall
- 8. Hall R Varian (2014): Intermediate Microeconomics- A Modern Approach, WW Norton and Co.
- 9. Jeffrey M Perloff (2019): Microeconomics -7<sup>th</sup> edition, Pearson
- 10. Hugh Gravelle and Ray Rees (2007): Microeconomics- 3<sup>rd</sup> edition, Pearson Education
- 11. Edgar K Browning and Mark Zupan (2011): Microeconomics: Theory and Applications- 3<sup>rd</sup> edition.
- 12. Dominick Salvatore (2009): Microeconomics 5<sup>th</sup> edition, Oxford University Press.
- 13. A Koutsoyiannis (1979): Modern Microeconomics- 2<sup>nd</sup> edition, Macmillan.
- 14. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons
- 15. Watson and Getz (2004): Price Theory and its Uses- 5<sup>th</sup> edition, AITBS Publishers and Distributors.
- 16. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8<sup>th</sup> edition, McGraw-Hill
- 17. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1<sup>st</sup> Edition, Tata McGraw-Hill.

### Core Course-II MA ECONOMICS (CBCSS) I SEMESTER ECO1 C02 - MACROECONOMICS: THEORIES AND POLICIES I (Credit 5)

#### **Module I: Aggregate Demand**

**Consumption Function**: Keynes' psychological law- Absolute income hypothesis- Kuznet's consumption puzzle - Relative income hypothesis - Fisher's inter-temporal choice model – Permanent income hypothesis- Life cycle hypothesis.

**Investment Function** - MEC and MEI approaches -user cost and Neo-classical theory of investment- Tobin's q-ratio- Accelerator theory of investment (simple and flexible acceleration models).

**Demand for Money**- Classical approach to demand for money- Quantity theory approaches, Fisher's equation, Cambridge quantity theory, Keynes's liquidity preference approach - Post-Keynesian approaches to demand for money: Friedman's restatement of Quantity theory of money, Approaches of Baumol and Tobin.

**Supply of Money** - Measures of money supply (RBI definition) - The H theory of money supply- Money multiplier process-Behavioural and endogenous money supply models- Fisher effect.

#### Module II: Theories of Inflation and Unemployment

Keynesian and monetarist approach to inflation- Structuralist theory of inflation- Inflation unemployment trade off-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-The new microeconomics of the labour market and search theory-Rational expectations.

#### **Module III: 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

#### Module IV: Neo-Classical and Keynesian Synthesis

The IS-LM model-equilibrium in goods and money market - ISLM model with government sector; Relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices. The three sector macro model with Keynesian and Neoclassical versions.

#### **Module V: Macroeconomic Policy**

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- The Ricardian Equivalence- Income policy- Stabilization policy.

- 1. Gregory Mankiw (2008): Macroeconomics- Worth Publishers NY, 6th 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- 2nd ed. Macmillan.
- 4. Eric Pentacost: Macroeconomics-An Open Economy Approach- Macmillan.
- 5. Rudiger Dornbusch, Stanley Fisher and Richard Startz (2004): Macroeconomics- Tata McGraw Hill, 9th 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- 16th 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 (CBCSS) I SEMESTER ECO1 C03 - INDIAN ECONOMY: PROBLEMS AND POLICIES (Credit 5)

#### Module I: Growth, Structural Changes and Challenges of the Indian Economy

Economic growth in India- CSO and national income related aggregates- Contribution of different sectors to GVA, GDP and Employment- Trends in savings and investment since reforms- Migration, diaspora and remittance - Regional disparity in growth and development-Analysis of poverty, unemployment and inequality in India

#### **Module II: Review of Economic Development**

Assessment of Indian agriculture sector and recent initiatives by the government for its growth-Inter regional dimensions of industrial growth in India- Make in India initiative-Service sector: growth rate, share in exports and imports, software exports- Infrastructure at cross roads -Prices: Headline inflation-Inflation based on WPI and CPI combined, food inflation, core inflation- Monetary management in India prior to 1990 and position after 1990s-New initiatives of the government towards black money-Inclusive policies of the government-A global deal on climate change: possible role for India.

#### **Module III: Economic Planning in India**

Planning and economic development-Objectives of planning-Techniques of planning-Achievements of planning- Bottom up and Step down approaches in planning- Evaluation of Five Year Plans-NITI Aayog and its Vision Documents- Welfare programmes announced in the last two Union Budgets.

#### Module IV: Economic Reforms Since 1991

Background of economic reforms- Washington Consensus- 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- Post reform Infrastructure Investment Models-PPP- Cooperative federalism with special reference to GST.

#### Module V: Kerala Economy

Economic liberalization and economic growth in Kerala- Kerala model of development-Agricultural performance-Industrial backwardness- Health and education - Migration of casual workers to Kerala- Decentralization-Achievements of decentralization-Poverty and unemployment in Kerala - State finances of Kerala- Causes of acute fiscal crisis of Kerala.

- 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. Jagdish Bhagwati: India in Transition-Oxford University Press, Delhi, 1994.
- 6. Dr. S Murthy: Structural Reforms of Indian Economy- Atlantic Publishers, 1995.
- 7. H W Singer, Neelambar Hatti and Rameshwar Tandon (eds): Trade Liberalisation in the 1990's- Indus Publishing Company, New Delhi, 1990.
- 8. Jagdish Bhagwati and TN Srinivasn: Foreign Trade Regimes and Economic Development: India- NBER, New York, 1986.
- 9. Isher Judge Ahluwalia and IMD Little (ed): India's Economic Reforms and Development: Essays for Manmohan Singh- Oxford University Press, Delhi, 1998.
- 10. KR Gupta (Ed): Liberalization and Globalization of Indian Economy- Atlantic Publishers, New Delhi 1995.
- 11. Deepak Lal: India in the World Economy-Oxford University Press, 1999.
- 12. Datt. R. (2001): Second Generation Economic Reforms in India- Deep and Deep Publications, New Delhi.
- 13. Mahendra K Premi (2009): India's Changing Population Profile- National Book Trust, New Delhi.
- 14. B A Prakash (Ed): Indian Economy Since 1991-Pearson Education.
- 15. Shanker Acharya and Rakesh Mohan (Eds) (2011): India's Economy: Performance and Challenges- Oxford University Press, New Delhi.
- 16. Jayaraj D and Subramanian S (2010): Poverty, Inequality and Population- Oxford University Press, New Delhi.
- 17. Mahendradev S (2010): Inclusive Growth in India-Oxford University Press, New Delhi.
- 18. CT Kurien: Poverty, Planning and Social Transformation in India- Allied Publishers, Delhi, 1978.
- 19. BA Prakash (Ed): Kerala's Economic Development: Issues and Problems- Sage publishers, New Delhi, 1999.
- 20. ET Mathew (1997): Employment and Unemployment in Kerala- Sage publishers.
- 21. George K K (1999): Limits to Kerala Model of Development- CDS, Trivandrum.
- 22. Sunil Mani, Anjii Kochar, Arun M Kumar: Crouching Tiger Sacred Cows- D C Books, Kottayam.
- 23. K Rajan: Kerala Economy: Trends during the Post-reform Period-Serial Publishers, New Delhi.
- 24. CDS (1975): Poverty Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala- CDS, Trivandrum.
- 25.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).
- 26. K R Guptha, Indian Economy in 3 volumes: Atlantic Publishers.
- 27. BA Prakas and Jerry Alwin, Kerala's Economic Development: Emerging Issues and Challenges, Sage publishers, 2018.
- 28. RBI Annual Reports.
- 29. Ministry of Finance: Economic Survey-Various Issues

### Core Course-IV MA ECONOMICS (CBCSS) I SEMESTER ECO1 C04 - QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS I (Credit 4)

#### Module I: Linear Algebra

Different types of functions and its graphs, Constant Linear, Quadratic, Cubic, Polynomial, Exponential and logarithmic functions. Applications of linear functions in Economics-Vectors and Matrices, determinants, solution of a system of equations - Inverse method and Crammer's rule- Rank of a matrix-characteristic equations and characteristic roots and vectors.

#### **Module II: Differential Calculus**

Functions, limit of a function, continuity of a function, Derivative of a function - Rules of Differentiation, Higher order derivatives, differentiation of logarithmic functions, exponential functions and implicit functions- Application of Derivatives- Meaning of a Derivative- rate of change- slope of a curve- Marginal concepts related to demand, supply, cost, revenue and production functions. Maxima and minima- Economic applications.

#### **Module III: Functions of Several Variables**

Functions of several variables - Partial differentiation- Optimisation of Multivariable functions- constrained optimization with Lagrangian multipliers-Consumers and producers equilibrium using constrained optimization Differentials- Total and Partial derivatives- Total derivatives- Rules of integration- Definite integral, area under a curve-estimation of producers and consumers surplus.

#### **Module IV: Differential and Difference Equations**

First order Differential equations -Definitions and concepts, general formula for Differential equations — Economic applications-Differential equations for limited and unlimited growth - First order Difference equations- Solution of first order difference equations - General formula for First order Linear Difference equations, applications - stability conditions, Cobb Web model.

#### **Module V: Financial Mathematics**

Arithmetic and geometric sequence and series- Simple interest, compound interest and annual percentage rates- Depreciation- Net present value and internal rate of return- Annuities, debt repayments, sinking funds- The relationship between interest rates and the price of bonds.

- 1. Essential Mathematics for Economics and Business, Teresa Bradley and Paul Patton, Revised by Teresa Bradley, Wiley Student Edition Chapter- 2 and Chapter-4.
- 2. Introduction to Mathematical Economics Edward T. Dowling Third Edition Chapter-8.
- 3. Taro Yamane: Statistics An Introductory Analysis, Harper & Row, Edition 3.
- 4. Hoel PG: Introduction to Mathematical Statistics, John Wiley & Sons, Edition.
- 5. RGD Allen Mathematical Analysis for Economics.
- 6. Tulsian, P.C and Vishal Pandey: Quantitative Techniques, Pearson Education, New Delhi.
- 7. S.P. Gupta: Statistical Methods, Sultan 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, 2nd Ed.

Inter National Student Edition, Mc Grawhill.

- 10. Edward T Dowling: Introduction to Mathematical Economics, Third Edition, Schaum's Outlines, Tata Mc Grawhill Publishing Co. Ltd, New Delhi.
- 11. Sreenath Baruah: Basic Mathematics and its Applications in Economics, Macmillan India Ltd.
- 12. Joseph K.X, Quantitative Techniques, CUCCS Ltd, Calicut University.

#### **SEMESTER II**

Core	Title of Course	Hours/Week	Credit
Course			
V	Microeconomics: Theory and Applications II	6	5
VI	Macroeconomics: Theories and Policies II	6	5
VII	Public Finance: Theory and Practice	7	5
VIII	Quantitative Methods for Economic Analysis II	6	5
	Professional Competency Course	0	4

#### Core Course-V MA ECONOMICS (CBCSS) II SEMESTER

### ECO2 C05 - MICROECONOMICS: THEORY AND APPLICATIONS-II (Credit 5)

#### **Module I: Intertemporal Choice and Capital Decisions**

Capital and the rate of return- Determining the rate of return- Demand for future goods-Utility maximisation- Effects of changes in r- Supply of future goods- Equilibrium price of future goods- Rate of return- Real interest rates and nominal interest rates- Pricing of risky assets- The firm's demand for capital- The net present value criterion for capital investment decisions- Adjustment for risks- Diversification versus non-diversifiable risks- The capital assets pricing model.

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

Elements of general equilibrium analysis-General equilibrium of exchange- General equilibrium of production- Efficiency of competitive markets- Welfare economics- Criteria of social welfare-Pareto optimality-Kaldor-Hicks compensation criterion- Scitovsky criterion-Deriving a Social welfare function- Theory of second best- Arrow's impossibility theorem-Rawls theory of justice- First Theorem of welfare economics- Second Theorem of welfare economics.

#### 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- Common property resources-Tragedy of commons-Public goods-Characteristics- Public goods and market failure-Provision of public goods- Free rider problem- Lindahl pricing.

#### **Module IV: Asymmetric information**

Asymmetric information- Implications of asymmetric information- The lemons problem-Adverse selection- Hidden information- Moral hazard (hidden action)- Insurance markets-Market signalling- Principal-agent problem- The efficiency wage theory.

#### **Module V: Behavioural Economics**

Behavioural economics- Reference points and consumer preferences- Rules of thumb and biases in decision making.

- 1. Walter Nicholson and Christopher Snyder (2017): Microeconomic Theory- Basic Concepts and Extensions, 12<sup>th</sup> edition, Cengage Learning India Private Limited.
- 2. Andrew Schotter (2009): Microeconomics: A Modern Approach- 1<sup>st</sup> edition, South Western Cengage Learning.
- 3. Michael E Wetzstein (2013): Micro economic Theory- Concepts and Connections, 2<sup>nd</sup> edition, Routledge.
- 4. Robert S Pindyck and Daniel L Rubinfeld (2017): Microeconomics- 8<sup>th</sup> edition, Pearson.
- 5. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1<sup>st</sup> edition, South Western Cengage Learning.
- 6. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1<sup>st</sup> edition, Oxford University Press.
- 7. Geoffrey A Jehle (2010): Advanced Microeconomic Theory- 3<sup>rd</sup> edition, Prentice Hall
- 8. Hall R Varian (2014): Intermediate Microeconomics- A Modern Approach, WW Norton and Co.
- 9. Jeffrey M Perloff (2019): Microeconomics -7<sup>th</sup> edition, Pearson
- 10. Hugh Gravelle and Ray Rees (2007): Microeconomics- 3<sup>rd</sup> edition, Pearson Education
- 11. Edgar K Browning and Mark Zupan (2011): Microeconomics: Theory and Applications-3<sup>rd</sup> edition.
- 12. Dominick Salvatore (2009): Principles of Microeconomics 5<sup>th</sup> edition, Oxford University Press.
- 13. A Koutsoyiannis (1979): Modern Microeconomics- 2<sup>nd</sup> edition, Macmillan.
- 14. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons
- 15. Watson and Getz (2004): Price Theory and its Uses- 5<sup>th</sup> edition, AITBS Publishers and Distributors.
- 16. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8<sup>th</sup> edition, McGraw-Hill
- 17. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1<sup>st</sup> edition, Tata McGraw-Hill.

### Core Course-VI MA ECONOMICS (CBCSS) II SEMESTER ECO2 C06 - MACROECONOMICS: THEORIES AND POLICIES II (Credit 5)

#### Module I: Classical vs Keynes

**Classical Macroeconomics** -Classical revolution, production, employment, equilibrium output and employment, quantity theory of money, classical aggregate demand curve, classical theory of interest rate, policy implications of the classical equilibrium model. Classical model of output and employment

**Keynes's General Theory:** Keynes' main propositions, Keynes's analysis of the labour market, Keynes's rejection of Say's Law, Keynes and the quantity theory of money, Keynesian aggregate demand and supply schedules, Keynes and international macroeconomics- How to pay for the war, Causes and consequences of the Great Depression, Keynesian policy conclusions.

#### Module II: Monetarism

The quantity theory of money approach, The expectations-augmented Phillips curve analysis, The monetary approach to balance of payments theory and exchange rate determination, The monetarist view of great depression, fiscal and monetary policy effectiveness.

### Module III: New Classical Macroeconomics, Real Business Cycle School and Supply Side Economics

**The new classical macroeconomics:** Rational expectations hypothesis, Lucas' surprise supply function, The inter-temporal substitution model, Policy ineffectiveness argument, The Lucas critique- **Real business cycle school**: central features of real business cycle models, a simple real business cycle model, macroeconomic policy in a real business cycle model - **Supply-side macroeconomics**: Supply shocks and stagflation, Laffer curve, Policy implications

#### **Module IV: New Keynesian Economics**

The fall and rise of Keynesian economics- A Keynesian resurgence, New Keynesian economics, Core propositions and features of new Keynesian economics, Nominal rigidities, Real rigidities, Small menu cost model, Implicit wage contract model- Efficiency wage theories-Insider-outsider model, New Keynesian business cycle theory, Hysteresis and the NAIRU, Policy implications

#### **Module V: The New Political Macroeconomics**

Political distortions and macroeconomic performance, Political influences on policy choice, The role of government, Politicians and stabilization policy, Alternative approaches to the political business cycle, The Nordhaus opportunistic model, The Hibbs partisan model, The decline and renaissance of opportunistic and partisan models, Rational political business cycles, Policy implications of politico-economic models: an independent central bank?, The political economy of debt and deficits, Political and economic instability.

- 1. Gregory Mankiw (2008): Macroeconomics- Worth Publishers NY, 6th ed.
- 2. Richard T Froyen (2008): 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 Cheltenham, UK. Northampton, USA.
- 4. Levacic, Rosalind and Rebman, Alexander (1982): Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies- 2nd 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, 9th 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- 16th 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 (CBCSS) II SEMESTER ECO2 C07 - PUBLIC FINANCE: THEORY AND PRACTICE (Credit 5)

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

The role of government in the national economy-Concepts of club goods, public goods-Tiebout hypothesis, merit goods, externalities, Pigovian tax.

#### Module II: Public Revenue and Policy

Theory of tax- Partial and general equilibrium analysis- Shifting and incidence of tax- Theory of optimal taxation- Distributional considerations in public finance- Fiscal and monetary policies -Comparative analysis- Balanced budget multiplier- Zero based budgeting.

#### Module III: Public Expenditure and Debt

Pure theory of public expenditure-Pricing of public utilities-Public choice theory-The Median Voter theorem- Concept of subsidy-Macroeconomic impacts of deficits- Debt burden and inter-generational equity- Sustainability of public debt and Domar stability condition.

#### **Module IV: Fiscal Federalism**

Theory of fiscal federalism- Theory of inter-governmental transfers- fiscal decentralisation-Problems of centre-state financial relations in India-Vertical and horizontal imbalance in inter-governmental transfers in India.

#### **Module V: Indian Public Finance**

Trend and sources of revenue in the union, states and local bodies in India-Trends in public expenditure and public debt in India- VAT and GST in federal set-up- The FRBM Act-Federalism and issues of Centrally Sponsored Schemes- Finance Commissions and the changing centre- state relations during the reform period-Analysis of the latest union budget.

- 1. Harvey, Rosen, and Ted Gayer. Public Finance (2013)- McGraw-Hill Higher Education,
- 2. Dalton, Hugh. Principles of Public Finance (2003) Vol. 1. Psychology Press,
- 3. Pen, Jan. Income Distribution (1974)-Penguin (Non-Classics).
- 4. Musgrave, RA and Musgrave, PB (1989)- Public Finance in Theory and Practice, McGraw Hill, New York
- 5. Boadway, R. W. (1979) Public sector economics Winthrop, Cambridge, MA.
- 6. Due, John F and Friedlaender, Ann F (1973)- Government Finance: Economics of the Public Sector, Richard Irwin
- 7. Brown, Charles Victor, and Peter McLeod Jackson (1990) Public Sector Economics. Vol. 76. Oxford: Basil Blackwell,
- 8. Hyman, David N (1973), Economics of Government Activity, Holt, Rinchard and Winston Inc.
- 9. Browning, Edgar K., and Jacqulene M. Browning (1979) Public Finance and the Price System. Macmillan,
- 10. Mundle, Sudipto, ed. Public Finance: Policy Issues for India (1997) Oxford University Press, USA,
- 11. Dwivedi, D. N., ed. Readings in Indian Public Finance (1981) Chanakya Publications,

- 12. Laffont, Jean-Jacques. Fundamentals of Public Economics (1988) -MIT Press Books 1
- 13. Auerbach, Alan J. The Theory of Excess Burden and Optimal Taxation-Handbook of Public Economics 1 (1985): 61-127
- 14. Atkinson, Anthony B., and Joseph E. Stiglitz (2015) Lectures on Public Economics. Princeton University Press,
- 15. Alan T. Peacock, (1979) The Economic Analysis of Governments, and Related Themes, St Martin Press, New York.
- 16. Amaresh Bagchi, (2005) Readings in Public Finance, Oxford University Press, USA.
- 17. Jha, Raghbendra (1998)-Modern Public Economics- Routledge, London.
- 18. Cullis, John, and Philip R. Jones (2009) Public Finance and Public Choice: Analytical Perspectives- Oxford University Press.

## Core Course-VIII MA ECONOMICS (CBCSS) II SEMESTER ECO2 C08 - QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS II (Credit 5)

#### **Module I: Probability and Probability Distributions**

Concepts- Set theory- Permutations and Combinations, Definitions of Probability - classical, empirical and axiomatic approaches- Addition and multiplication laws, conditional probability- Bay's theorem, Random variables- probability distribution- Mathematical expectation- moments- Two random variables, joint, Marginal and conditional probability functions, expectation of two random variables.

#### **Module II: Discrete and Continuous Probability Distribution**

Probability Distributions - Discrete Probability Distributions, Binomial , Poisson, Uniform - simple applications-Continuous probability distributions- Normal, Lognormal and Exponential Distributions (Derivations are not expected), concept of law of large numbers and Central limit theorem.

#### **Module III: Theory of Estimation**

Statistical Inference, Concept of population, sample- Sampling distributions- Standard error-Distributions of sample mean, Sample variance - chi square Student's t, and F distributions- Small and large sample properties of Z, t, Chi Square and F- Estimations of populations parameters- point and interval estimation- Fisher's properties of estimators-Confidence interval for Mean and Proportion and variance- Methods of estimation-Methods of least squares, Method of maximum likelihood.

#### **Module IV: Testing of Hypothesis**

Parametric and Non-parametric tests of Hypothesis - Testing of hypothesis- simple and composite hypothesis- Null and alternative hypothesis- Type I and Type II error, Critical region- Level of significance, Power of a test- Test procedure - Test of significance in respect of Mean, Proportion, Variance and Correlation coefficient and their differences -Chi Square test of goodness of fit, and test for independence of attributes. Non parametric tests, sign test, Wilcoxon- Mann Whitney U Test, Signed rank test, Kruskal Wallis test, Wald-Wolfowitz test.

#### Module V: Analysis of Variance

Analysis of Variance- Meaning, assumptions-One way classification and Two way classifications, simple applications.

- 1. Taro Yamane, Statistics: An Introductory Analysis, Harper & Row, Edition 3, 1973
- 2. Hoel PG: Introduction to Mathematical Statistics, John Wiley & Sons, Edition 4, 1971
- 3. YP Agarwal: Statistical Methods: Concepts, Application and Computation, Sterling Publishers 1986
- 4. Sidney Siegal, N. John Castellan: Non parametric Statistics for Behaviour Sciences, Edition 2, 1988, Mc Graw-Hill
- 5. Tulsian, P.C and Vishal Pandey: Quantitative Techniques, Pearson Education, New Delhi
- 6. S.P. Gupta: Statistical Methods, Sulthan Chand and Sons, New Delhi.

- 7. Hooda R.P: Statistics for Business and Economics , Mac Million, New Delhi
- 8. Alpha C Chiang: Fundamental Methods of Mathematical Economics, 2<sup>nd</sup> Ed. -Inter National Student Edition, Mc Grawhill
- 9. Edward T Dowling: Introduction to Mathematical Economics, Third Edition, Shaum's Outlines, Tata Mc Grawhill Publishing Co. Ltd, New Delhi.
- 10. Sreenath Baruah: Basic Mathematics and its applications in Economics, Macmillan India Ltd.
- 11. Joseph K.X, Quantitative Techniques, CUCCS Ltd, Calicut University.

#### **SEMESTER III**

Core	Title of Course	Hours/Week	Credits
Course			
IX	International Trade	6	5
X	Growth and Development	6	5
XI	Basic Econometrics	7	5
Elective	Elective I	6	4

# Core Course-IX MA ECONOMICS (CBCSS) III SEMESTER ECO3 C09 - INTERNATIONAL TRADE (Credit 5)

#### 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.

#### **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- Posner's Imitation gap- Vernon's Product Cycle Theory -Leamer's and Trefler's Theorem - Kravis theory of Availability- Linder's theory of Volume of Trade and Demand pattern- Transportation cost and international trade - Foreign trade multiplier.

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

Growth of labour and capital- Rybcyznski theorem- The effect of growth on trade-Immiserising growth- Dutch disease- Prebisch - Singer Thesis-Myrdal's views-

#### **Module IV: International Trade Policies**

Import substitution versus export orientation - Trade restrictions-Tariffs- Effects of Tariffs - Partial and general equilibrium analysis-Optimum tariff-Effective rate of protection-Non tariff barriers - Import quotas-Effects of an import quota - New Protectionism - Exchange control- Export subsidies- Countervailing tariff- Voluntary export restraints- Technical standards- Administrative and other regulations- Dumping and anti-dumping duties-International Cartels - Trade in Wastes.

#### **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 - Emerging issues in SAFTA, ASEAN and EU-Problems and prospects of WTO Agreement in present Global trading.

- 1. Dominick Salvatore: International Economics-11th 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.
- 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.
- 16. Jagdish Bhagwati, Arvind Panagariya and T.N. Srinivasan (1998) Lectures on International Trade, MIT Press, 2nd edition.
- 17. Robert C. Feenstra (2004) Advanced International Trade: Theory and Evidence, Princeton University Press, (Indian edition 2007).

# Core Course-X MA ECONOMICS (CBCSS) III SEMESTER ECO3 C10 - GROWTH AND DEVELOPMENT (Credit 5)

#### Module I: Concepts and Measurements of Economic Growth and Development

Concepts of growth and development-Indicators of Economic Development: National Income, Per capita Income, PQLI, Human Development Index, Gender Development Index, Human Poverty Index and Deprivation Index. Measures of Inequality: Kuznets Inverted U hypothesis, Lorenz Curve and Gini-coefficient, Atkinson, Theil, Palma ratio.

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

Harrod-Domar Growth Model- Contributions of Kaldor-Mirrlees and Joan Robbinson, Hirofumi Uzawa model, Solow's Growth Model and the Convergence Hypothesis, Endogenous Growth Theory and the role of Human Capital; Indian Plan Models of Mahalanobis and Wage-goods model.

#### Module III: Partial Theories of Economic Growth and Development

Basic Features of Underdeveloped Countries, Population Growth and the Theory of Low-Level Equilibrium Trap, Critical Minimum Effort Thesis, Theory of Big-Push; Balanced Versus Unbalanced Growth Theories- Concepts of linkages.

#### **Module IV: Stage Theories**

Marxian Stage theory, Rostow's Stage Theory. Theory of Growth and Structural Change. Concept of Dualism: Technological, Social, Geographical and Financial. Myrdal and Circular Causation, Backwash and Spread Effect. Institutions and Economic Growth.

#### **Module V: Financing Economic Development**

Domestic Resource Mobilisation: Prior-Savings Approach, The Keynesian and Quantity Theory Approaches to the Financing of Economic Development. Foreign Resource: Dual Gap Analysis.

- 1. Adelman, Irma (1961): 'Theories of Economic Growth and Development', Stanford University Press
- 2. Ahluwalia and I.M.D Little: India's Economic Reforms and Development: Essays for Manmohan Singh
- 3. Hollis, Chenery, and T. N. Srinivasan: "Handbook of Development Economics, Vol. 1." (1988).
- 4. Fortado (1964): Development and Underdevelopment', University of California Press, Berkley
- 5. Ghatak, Subrata: Introduction to Development Economics. Routledge (4<sup>th</sup> edn.)
- 6. Gill, Richard T: Economic Development: Past and Present. No. HD82 G52. 1963.
- 7. Hagen, Everett (1975): The Economics of Development Richard D. Irwin Illinois
- 8. Higgins, Benjamin (1976): Principles of Economic Development, Universal Book Stall, New Delhi.
- 9. Jones, Hywel G: An Introduction to Modern Theories of Economic Growth. London: Nelson, 1975.

- 10. Kindleberger, C.P (1958): Economic Development, Tata McGraw-Hill, NY
- 11. Kuznets S (1972): Modern Economic Growth, Oxford and IBH, New Delhi.
- 12. Little, Ian Malcolm David: Economic Development: Theory, Policy, and International Relations. (1982).
- 13. Meier, Gerald M., and James E. Rauch: Leading Issues in Economic Development. 5th ed. New York: Oxford University Press, 1989.
- 14. Ray, Debraj (2003): 'Development Economics', Oxford India Paperbacks, OUP
- 15. Sen, A. K: Introduction in Growth Economics: Selected Readings." (1970).
- 16. Skarstein, Rune. Development Theory: A Guide to Some Unfashionable Perspectives. Oxford University Press, USA, 1997.
- 17. Stiglitz, Joseph E., and Hirofumi Uzawa, eds: Readings in the Modern Theory of Economic Growth. Mit Press, 1969.
- 18. Thirlwall, A. P. Growth and Development: With Special Reference to Developing Economies: Palgrave Macmillan." (2003).

## Core Course-XI MA ECONOMICS (CBCSS) III SEMESTER ECO3 C11 - BASIC ECONOMETRICS (Credit 5)

#### **Module I: Simple Linear Regression Model**

Nature and scope of Econometrics-Economic theory and mathematical economics-Methodology of econometrics-Uses of econometrics-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<sup>2</sup> -Normality assumption-Hypothesis testing- t and F tests-P value- Practical versus statistical significance-Prediction-Method of maximum likelihood-Maximum likelihood estimation of two variables model.

#### **Module II: 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-Chow test-General k variable regression model- Matrix approach to estimation and derivation of the properties of OLS estimators.

#### **Module III: Econometric Problems**

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

#### Module IV: Extensions of Two Variables and Dummy Variable Regression Model

Regression through the origin-Functional forms of regression models, log-log, log-lin, lin-log and reciprocal models- Dummy variable-ANOVA models-ANCOVA models-Dummy variable trap-Dummy variables and seasonal analysis-Structural analysis-Piecewise linear regression.

#### Module V: Model Specification and Diagnostic Testing

Types of specification errors-Detection and consequences-RESET-Errors of measurement-Consequences, remedies-Qualitative response regression models-Linear probability model, Logit and Probit.

- 1. Damodar N Gujarati and Dawn C Porter (2009): Basic Econometrics, Fifth Edition, McGraw Hill International Edition.
- 2. Damodar N Gujarati (2011): Econometrics by Example, First Edition, Palgrave, MacMillan.
- 3. James H Stock and Mark W Watson (2017): Introduction to Econometrics, Third Edition, Pearson, Addison Wesley.
- 4. Carter Hill, William Griffiths and Guay Lim (2011): Principles of Econometrics, 4<sup>th</sup> Edition, John Wiley & Sons.

- 5. Jeffrey M Wooldridge (2018): Introductory Econometrics: A Modern Approach, 7<sup>th</sup> Edition, Thomson South Western.
- 6. Robert S Pyndick and Daniel L Rubinfeld (1998): Econometric Models and Economic Forecasts, Fourth Edition, McGraw Hill International Edition.
- 7. Kerry Patterson (2000): An introduction to Applied Econometrics: A Time Series Approach, First Edition, Palgrave.
- 8. Walter Enders (2010): Applied Econometric Time Series, Third Edition, Wiley India Edition.
- 9. Richard Harris and Robert Sollis (2006): Applied Time Series Modeling and Forecasting, First Edition, Wiley Student Edition.
- 10. Dimitrios Asteriou and Robert Hall (2015): Applied Econometrics, 3<sup>rd</sup> Edition, Oxford University Press.
- 11. Jack Johnston and John Dinardo (1998): Econometrics Methods, Fourth Edition, The McGraw Hill Companies.
- 12. William H Greene (2018): Econometric Analysis, 8<sup>th</sup> Edition, Pearson Education.
- 13. Christopher Dougherty (2007): Introduction to Econometrics, Third Edition, Oxford University Press.
- 14. Chris Brooks (2012): Introductory Econometrics for Finance, 3<sup>rd</sup> Edition, Cambridge.
- 15. Hamid R Seddighi (2012): Introductory Econometrics- A Practical Approach, Routledge.
- 16. Chandan Mukherjee, Howard White and Marc Wuyts (1998)-Econometric and Data Analysis for Developing Countries, First Edition, Routledge.
- 17. Peter Kennedy (2013): A Guide to Econometrics, 6<sup>th</sup> Edition, Wiley- Blackwell.
- 18. AH Studenmund: Using Econometrics: A Practical Guide, Fifth Edition, Pearson Education.

#### **SEMESTER IV**

Core	Title of Course	Hours/Week	Credits
Course			
XII	International Finance	6	3
XIII	Financial Markets	6	3
Elective	Elective II	6	4
Elective	Elective III	6	4
Core XIV	Project	1	4
Core XV	Comprehensive Viva Voce		4

#### Core Course-XII MA ECONOMICS (CBCSS) IV SEMESTER ECO4 C12 - INTERNATIONAL FINANCE (Credit 3)

#### **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 demerits of fixed and flexible exchange rates- Hybrid exchange rates- Purchasing power parity theory-Monetary approach- Asset market (portfolio balance) model- Exchange rate overshooting - Exchange rate in India- Indian Rupee and its fluctuations in international currency market.

#### 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- Internal and external balance- Policy adjustments- Expenditure changing and expenditure switching policies-Assignment problem- Swan diagram- Mundell-Fleming model.

#### **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- Brexit.

- 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.
- 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-XIII MA ECONOMICS (CBCSS) IV SEMESTER ECO4 C13 - FINANCIAL MARKETS (Credit 3)

#### **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 (Pnotes)-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.

- 1. Anthony Santomero and David Babbel (2001): Financial Markets, Instruments and Institutions- McGraw Hill Higher Education.
- 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.
- 5. Jeff Madura (2008): Financial Markets and Institutions-Cengage Learning.
- 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.

### LIST OF ELECTIVE COURSES

#### SEMESTER III

Elective	Title of Course	Hours/	Credit
Course		Week	
I	Banking: Theory and Practice	6	4
II	Industrial Economics	6	4
III	Labour Economics	6	4
IV	Regional Economics	6	4

# Elective Course I MA ECONOMICS (CBCSS) III SEMESTER ECO3 E01 - BANKING: THEORY AND PRACTICE (Credit 4)

#### **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 Banks and Specialised Financial Institutions**

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- Land development banks- Regional rural banks-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 III 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 IV 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-SARFAESI Act.

#### **Module V 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).

- 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-Perforing Advances in Banks, Skylark, New Delhi.
- 10. Hansen and Kathuria (ed.) A Financial Sector for the 21st Century OUP.
- 11. Muraleedharan (2009) Modern Banking: Theory and Practice- PHI Learning Pvt Ltd.
- 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.

# Elective Course II MA ECONOMICS (CBCSS) III SEMESTER ECO3 E02 - INDUSTRIAL ECONOMICS (Credit 4)

#### **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: 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 IV: Technological Change and Industrial Efficiency

Measurement-Trend and impact of technological change in Indian industries- Problems related to R & D and innovation- Trends in total factor productivity- Determinants of productive and economic efficiency- Measurement of the efficiency level.

#### Module V: 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.

- 1. Roger Clarke: Industrial Economics- Basil Blackwell, New York, 1985.
- 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.
- 9. Harvey Leibenstein: Allocative Efficiency vs. X-Efficiency- American Economic Review, 1966, pp. 392-415
- 10. Uma Kapila: Indian Economy Since Independence- Academic Foundation, New Delhi,
- 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 III MA ECONOMICS (CBCSS) III SEMESTER ECO3 E03 - LABOUR ECONOMICS (Credit 4)

#### **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 nonwage 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.

- 1. Hunter and Mulvey: Economics of Labour- Macmillan, 1983.
- 2. A Freeman: Labour Economics- 1982.
- 3. R A Lester: Economics of Labour- Macmillan, 1964.
- 4. C R Mc Connell and S L Brue: Contemporary Labour Economics- McGraw Hill, 1986.
- 5. B Mc Cormic and Smith (Ed): The Labour Market-Penguin, 1968.
- 6. L Reynalds: The Structure of Labour Markets- Harper, 1951.
- 7. E B Jakubauskas and N A Palomba: Manpower Economics- 1973.

- 8. A Rees: Economics of Work and Pay- 1978.
- 9. N Das: Unemployment, Full Employment and India- Asia, 1960.
- 10. L K Deshpande, P R Brahmanand and E A G Robinson (Ed.): Employment Policy in Developing Economy- Macmillan, 1983.
- 11. R Jolley et al. (Eds): Third World Employment: Problems and Strategy-Penguin, 1973.
- 12. S Kannappan: Employment Problems and Urban Labour Markets in Developing Nations-University of Michigan, 1983.
- 13. A K Sen: Employment, Technology and Development-Oxford University Press, 1975.
- 14. L K Deshpande and J C Jandesara (Ed): Wage Policy and Wage Determination in India-Bombay University, 1970.
- 15. J T Dunlop (Ed): Theory of Wage Determination- Macmillan, 1957.
- 16. J R Hicks: The Theory of Wages-Oxford, 1932.
- 17. Subrahmaniam: Wages in India- Tata McGraw Hill, 1977.
- 18. T S Papola: Principles of Wages Determination- 1975.
- 19. B K Madan- The Real Wages of Industrial Labour in India- Management Development Institute, New Delhi, 1977.
- 20. Sandesara and Deshpande: Wage Policy and Wage Determination in India
- 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.
- 24. E A Ramaswamy and U Ramaswamy: Industrial and Labour- Oxford University Press, 1981.
- 25. A Rees: Economics of Trade Unionism- Nisbet, 1962.
- 26. H A Turner: Wage Trends, Wage Policies and Collective Bargaining- Cambridge, 1965.
- 27. C B Mamoria: Labour Problems and Social Welfare in India- Kitab Mahal, 1966.
- 28. E A Ramaswamy and U Ramaswamy: Industrial Relations in India- Macmillan, 1978.
- 29. V B Singh (Ed): Industrial Labour in India- Popular Prakasham, 1970.
- 30. K N Vaid: Labour Welfare in India- Centre for Industrial Relations, Delhi, 1970.
- 31. E Boserup: Women's Role in Economic Development- 1971.
- 32. Ray Marshall and Richards (Ed): An Anthology of Labour Economics: Readings and Commentaries- Wiley, 1972.

# Elective Course IV MA ECONOMICS (CBCSS) III SEMESTER ECO3 E04 - REGIONAL ECONOMICS (Credit 4)

#### 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, Sergent 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-Differnce in regional income trends in per capita income-Survey of recent techniques for regional analysis-Views of Christaller, Locsch, Perroux, Isad -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.

- 1. H W Richardson: Regional Economics- 1969.
- 2. H W Richardson: Regional Economics -A Reader- 1969.
- 3. H W Richardson: Elements on Regional Economics- 1969.
- 4. T Wilson (Ed.): Papers on Regional Development- 1965.
- 5. L Needlemena (Ed.): Regional Analysis- 1968.
- 6. H S Perloff, E S Lampard and R F Muth: Region's Resources and Economic Growth.
- 7. J R Myer: Regional Economics: A Survey in Economic Theory- Vol. II, 1968.
- 8. L S Bhat: Regional Planning in India- Statistical Publishing Society, 1972

### **LIST OF ELECTIVE COURSES**

#### **SEMESTER IV**

#### List1

Elective	Title of Course	Hours/	Credit
Course		Week	
V	Advanced Econometrics	6	4
VI	Business Economics	6	4
VII	Demography	6	4
VIII	Environmental Economics	6	4
IX	Political Economy of Development	6	4

#### List2

Elective	Title of Course	Hours/	Credit
Course		Week	
X	Agricultural Economics	6	4
XI	Gender Economics	6	4
XII	Health Economics	6	4
XIII	Mathematical Economics	6	4
XIV	Research Methodology and Computer	6	4
	Applications( Only for Affiliated Colleges )		

# Elective Course V MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E01 - ADVANCED ECONOMETRICS (Credit 4)

#### **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 and Panel Data Regression 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.

#### **Panel Data Regression Models**

Fixed effects regression model-The random effects model.

#### **Module III: 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 IV: Instrumental Variables Regression and Time Series Econometrics

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

#### **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 V: 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.

- 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 Pyndick 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 VI MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E02 - BUSINESS ECONOMICS (Credit 4)

#### **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)- Breakeven 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.

- 1. John Sloman and Mark Sutcliff: Economics for Business- Third Edition, Pearson.
- 2. Mark Hirschev: 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
- 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 VII MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E03 - DEMOGRAPHY (Credit 4)

#### 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**

*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.

#### **Module IV: Nuptiality and Mortality**

*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 V: 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.

- 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 VIII MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E04 - ENVIRONMENTAL ECONOMICS (Credit 4)

#### **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: Benefits and Costs of Pollution Control and Environmental Programs

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

#### **Benefits and Costs 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 andbenefits- 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 V: 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).

- 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 IX MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E05 -POLITICAL ECONOMY OF DEVELOPMENT (Credit 4)

#### **Module I: Subject Matter of Political Economy**

Subject matter of political economy- State, market and institutions-Government, bureaucracy, corruption, mis-governance, rent seeking- Elite capture, Political clientelism- Competitive Populism.

#### **Module II Classical Political Economy**

Genesis of Classical Political Economy-Adam Smith and David Ricardo on theory of value, growth and distribution- Views on trade- Major questions raised by classical economists-Neoclassical critique of classical economics-Contributions of Joan Robinson and Sraffa.

#### Module III Marxist Political Economy

Mode of production- Dynamics of social change- Primitive communism, slavery, feudalism, capitalism, socialism and communism- Asiatic mode of production- Theory of value, surplus value and profit- Marxian Scheme of Simple and Expanded Reproduction.

#### **Module IV International Political Economy**

Neoclassical views on international integration- WTO regime- Free Trade and its relative gains, ECLA-school- Latin American experience, Prebisch Singer, Unequal exchange, Dependency theory- Monopoly capital, imperialism and its critique. Cross border investment. European Integration- Intermediate regime.

#### Module V Political Economy of Development in India

The Mode of Production debate in India- Political economy of fiscal federalism- Political economy of liberalisation in India- Decentralisation and local government-displacements, Environment related movements - selected cases.

- 1. Ha-Joon Chang 2006: Rethinking Development Economics- Anthem Press.
- 2. Edmund S. Phelps, Political Economy: An Introductory Text-New York: WW Norton, 1985.
- 3. Usher, Dan 2003: Political Economy, Blackwell Publishing
- 4. Weingast, Barry R., and Donald Wittman: The Reach of Political Economy- The Oxford handbook of political economy, (2006)..
- 5. Dasgupta, A. K (1987): Epochs of Economic Theory- Blackwell Publishers
- 6. Bharadwaj, Krishna (1986): Classical Political Economy- Universities Press
- 7. Dimitris Milonakis and Ben Fine: From Political Economy to Economics: Method, the social and the historical in the evolution of economic theory", Routledge.
- 8. Hahnel, Robin 2002: ABC of Political Economy- Modern Primer, Pluto Press.
- 9. Jeffrey S. Banks and Eric Allen Hanushek: Modern Political Economy: Old Topics, New Directions (Cambridge UP, 1995)
- 10. Skarstein, Rune. 1997: Development Theory: A Guide to Some Unfashionable Perspectives, OUP
- 11. Thomas Ferguson and Joel Rogers, eds., The Political Economy: Readings in the Politics and Economics of American Public Policy- M.E. Sharpe, 1984.

- 12. James P. Caporaso and David P. Levine: Theories of Political Economy -New York: Cambridge University Press, 1992.
- 13. Martin Staniland, What is Political Economy? A Study of Social Theory and Underdevelopment -Yale, 1985.
- 14. Dobb, Maurice (1975), Theories of Value and Distribution Since Adam Smith: Ideology and Economic Theory, Cambridge University Press
- 15. Screpanti, Ernesto and Zamagni, Stefano (2006), An Outline of the History of Economic Thought, Second Edition, Oxford University Press, New Delhi (Chapter 8.1)
- 16. Sweezy, P. M (1968), The Theory of Capitalist Development, Monthly Review Press, New York
- 17. Robinson, Joan (1972), Economic Heresies, Macmillan
- 18. Baran, Paul A. and Sweezy, Paul, M (1966), Monopoly Capital- Monthly Review Press
- 19. Patnaik, Prabhat et. al (2011), Marx's Capital: An Introductory Reader, Leftword Books, Delhi
- 20. Gianni Vaggi, Peter D. Groenewegen (2003), A Concise History of Economic Thought: From Mercantilism to Monetarism, Macmillan.
- 21. Corbridge, Stuart: The Political economy of Development in India Since Independence. (2009): 318-336.Paul R Brass 'Handbook of South Asian Politics, Routledge
- 22. Ernest Mandel (2008), Marxist Economic Theory (Vol 1 & 2), Aakar Books, Delhi.
- 23. Kozlov (1977): Political Economy of Capitalism, Progress publishers, Moscow.
- 24. Khudokormov G.N. (1985), Political Economy of Socialism, Union of Soviet Socialist Republics.
- 25. Chalm K.S. (1999), Readings in Political Economy, Orient Longman, Hyderabad.
- 26. Vaggi, Gianni: Historical Antecedents of Development Economics-International Handbook of Development Economics. Cheltenham: Edward Elgar (2008): 97-110.
- 27. Bagchi, A. K. 2008: Historical Perspectives on Development, in, Amitava Krishna Dutt and Jamie Ros (eds), International Handbook of Development Economics, Vol. 1, Edward Elgar, Cheltenham, UK and USA, Chapter 2, pp16-31.
- 28. Junankar P N: Marx's Economics.

# Elective Course X MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E06- AGRICULTURAL ECONOMICS (Credit 4)

#### 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.

- 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 & Lawerence 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.
- 16. S. Ghatak. & K. Ingersent: Agriculture and Economic Development- New Delhi. Select Book Service Syndicate.
- 17. Shultz T.W: Transforming Traditional Agriculture- New Haven, London Yale University Press 1965.
- 18. Vaidyanathan A (2010): Agricultural Growth in India: The Role of Technology, Incentives and Institutions- Oxford University Press, New Delhi.
- 19. C. H. Hanumantha Rao (2005): Agriculture, Food Security, Poverty and Environment: Essays on Post-reform India- Oxford University Press, New Delhi.
- 20. Subba Reddy, P. Raghu Ram, T. V. Neelakanta Sastry and I. Bhavani Devi (2004): Agricultural Economics- Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
- 21. Bhalla G.S (2007): Indian Agriculture Since Independence- National Book Trust, New Delhi.

# Elective Course XI MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E07 - GENDER ECONOMICS (Credit 4)

#### **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)-SEWA-Shramshakti-Kudumbashree in Kerala.

#### **Module IV: Social Security 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.

#### Module V: Social Protection for Women

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.

- 1. Sen, Sujatha (2012): Gender Studies- Dorling Kindersley (India) Pvt.Ltd, New Delhi.
- 2. Sen, Suvarna (2006): Gender and Development- ICFAI University Press, Hyderabad.
- 3. Dutta, Nandita and, Sumitra Jha (2014): Women and Rural Development- Pacific Books International Delhi.
- 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.
- 9. Krishna Raj .M, Sudarshan.R.M, and Shariff.A (1999): Gender, Population and Development- Oxford University Press, New Delhi.
- 10. Seth .M (2000): Women and Development: The Indian Experience- Sage Publications, New Delhi.
- 11. Srinivasa.K, and A.Shroff (1998): India Towards Population and Development Goals-OUP, New Delhi.
- 12. Wazir, R, (2000): The Gender gap in Basic Education: NGO's as Change Agents- Sage Publications, Delhi.
- 13. Sen, Amartya. (1990): More than 100 Million Women are Missing- New York Review of Books, vol.37, No.20, 1990.
- 14. UNRISD, (2004): Gender Equality: Striving for Justice in an Unequal World- UNRISD, France, 2004.
- 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 XII MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E08 - HEALTH ECONOMICS (Credit 4)

#### 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 and Issues in Health Economics

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, prepayments 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.

#### **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 V: 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 21st Century.

- 1. Baneerjee D: Social and Cultural Foundation of Health Service Systems in India- Enquiry, Supplement to Vol XII, June 1975.
- 2. Banerjee D: Poverty, Class and Health Culture in India. Vol. I, Practical Prakashan, New Delhi 1982.
- 3. Gandhian Institute for Rural Health and Family Planning: Studies on Morality in India-Monograph Series, No. 5, 1972.
- 4. Government of India: National Health Policy- New Delhi, 1983.
- 5. Indian Council of Social Science Research and Indian Council of Medical Research: Health for All- 2000 A.D- ICSSR, 1981.
- 6. Madan T.N: Who Chooses Modern Medicine and Why- Economic and Political Weekly, pp. 1475-84, 1969.
- 7. Madan T.N: Doctors and Society: Three Asian Case Studies- Vikas Publishing House, Delhi 1980.
- 8. Naik J.P: An Alternative System of Healthcare Services in India: Some Proposals- ICSSR, Delhi.
- 9. Feldstein M.S: Economic Analysis of Health Service Efficiency- North Holland, Amsterdam, 1967.
- 10. Jimenz E: Pricing Policy in the Social Sectors- Johns Hopkins University Press, New York, 1987.
- 11. Klarman H.E: The Economics of Health- Columbia University Press, Columbia, 1965.
- 12. Malenbaum W: Progress in Health: What Index of What Progress: Annals of the American Academy of Politics and Social Science- January, 1971.
- 13. Mote V.L. and H.N. Pathak: Drug Price Control: An Evaluation- Economic and Political Weekly, 15 July, 1972.
- 14. Newhouse J.P: Towards a Theory of Non-profit Institutions: An Economic Model of a Hospital- American Economic Review, March 1970.
- 15. Panchamukhi P.E. Economics of Health: A Trend Report- in ICSSR, A Survey of Research in Economics- Vol. VI, Infrastructure, Allied Publishers, Delhi.
- 16. Galenson W and W Pyatt: Quality of Labour and Economic Development in Certain Countries- International Labour Organisation, Geneva, 1964.
- 17. Pearce D and P Dasgupta: Social Benefit Cost Analysis- Macmilan, London, 1982.
- 18. Weisbroad B. A: Economics of Public Health- University of Pennsylvania Press, Pennsylvania, 1961.
- 19. Weisman J: Cost Benefit Analysis and Health Service Policy- Scottish Journal of Political Economy, Vol. 20, No. 1, February 1962.
- 20. Krishnakumar T and Rao K.N: Financing of Health Services in India: Perspectives and Issues- Department of Economics, University of Hyderabad (Mimeographed), September 1987.
- 21. Rothenberg J: Welfare Implications of Alternate Methods of Financing Medical Care-American Economic Review, Proceedings, May 1951.
- 22. World Bank: The Financing Health Services in Developing Countries: An Agenda for Reform- World Bank Policy Study, Washington, 1987.
- 23. David Daren: National Health Insurance: Benefits, Costs and Consequences- Brookings Institutions, 1975.

- 24. Lindsay Cotton M (Ed.): New Directions in Public Health Care: A Prescription for the 1980s- Institute for Contemporary Studies, San Francisco, 1980.
- 25. Russel L.B: Technology in Hospitals: Medical Advance and their Diffusion- Brookings Institution.
- 26. Panikar P.G. and C.R. Soman: Health Status of Kerala- Centre for Development Studies, Thiruvananthapuram.
- 27. CDS: Poverty, Unemployment and Development Policy- 1975, UN, NY.
- 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-Thiruvananthapruam, 1979.

# Elective Course XIII MA ECONOMICS (CBCSS) IV SEMESTER ECO4 E09 - MATHEMATICAL ECONOMICS (Credit 4)

#### **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 Programming and Input-Output Analysis**

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-

#### **Module V Decision Theory**

Decision theory framework-Payoff tables-Regret tables-Decision under uncertainty-uncertainty and risk-Methods of incorporating risk-Value of perfect information-Decision tree and its uses-Theory of Games: Two person zero-sum game - Pure and mixed strategy - Saddle point theorem.

- 1. Allen R.G.D (1956): Mathematical Economics- Macmillan Co. Ltd.
- 2. Birchcnhall 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.
- 9. Krishna K.L (ed.) (1987): Econometric Applications in India- Oxford University Press, New Delhi.
- 10. Barry Bressier: A Unified Introduction to Mathematical Economics.

### MA ECONOMICS(CBCSS) IV SEMESTER

#### **Elective Course XIV (Only for Affiliated Colleges )**

### ECO4 E10. - RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS (Credit 4)

#### Additional Course for SDE/Private registration Students in lieu of Dissertation/Project

### ECO4 C14. - RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS (Credit 4)

#### Module I: Fundamentals of Research Methodology

Meaning of research- The relation between theory and research- Types of 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: Data Collection

Sources of data- Primary and secondary- Time series and cross section data- Sample survey-Methods - Interview methods-Questionnaire methods- Construction of questionnaire.

#### **Module IV: Sampling Methods**

Random, stratified, multistage, systematic, cluster, quota and judgment samples- Data analysis techniques- Drawing inferences from analysis- Scaling-Problems and Techniques- Report writingprocedures.

#### **Module V: 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.

- 1. William J Goode and Paul K Hatt (1981): Methods in Social Research- McGraw-Hill.
- 2. Pauline V Young: Scientific Social Surveys and Research- Prentice Hall India PvtLtd.
- **3.** C R Kothari (2004) Research Methodology: Methods and Techniques- NewAge.
- **4.** W Lawrence Neuman (2006): Social Research Methods: Quantitative and Qualitative Approaches-Pearson.
- **5.** Wilkinson and Bhandarkar (2002) Methodology and Techniques of Social Research-Himalaya PublishingHouse.
- **6.** Marc Blaug: The Methodology of Economics, or How Economics Explain-CUP.
- 7. Wilkinson and Bhadarkar: ResearchMethodology.
- **8.** Modern Language (2009) The MLA Handbook for Writers of Association of America, ResearchPapers.
- **9.** Sarma KVS (2001): Statistics Made Simple: Do it Yourself on PC- PrenticeHall.
- 10. William M. K. Traochim, Research Methods, 2nd Edn., Biztantra, 2003.
- 11. Ellen.R.Griden, Evaluating Research Articles, SAGE,2001.
- 12. Bridget Somekth & Cathy Liwin (Ed) Research Methods in Social Sciences, Vistar, 2005.
- **13.** John Adams, Research Methods for Graduate Business & Social Science Students, Response, 2007.

#### FORMAT OF THE MODEL QUESTION PAPER M A ECONOMICS (CBCSS) 2019 ADMISSION ONWARDS

Time: 3 Hours Maximum: 30 Weightage

### Part A Answer all Questions Each bunch of five questions carries a weightage of 1

#### **Multiple Choice Questions** 1. 2. 3. 4. **5. 6.** 7. 8. 8. **10.** 11. **12. 13.** 14. (15x1/5 = 3 weightage)**15.** Part B (Very Short Answer Questions) **Answer any 5 Questions** Each question carries a weightage of 1 **16.** 17. 18. 19. **20.** 21. 22. 23. (5x1 = 5 weightage)**Part C (Short Answer Questions) Answer any 7 Questions** Each question carries a weightage of 2 24. 25. **26.** 27. 28. **29.** 30.

31.	
32.	
33.	(7x2 = 14  weightage)
	Part D (Essay Questions)
	Answer any 2 Questions
	Each question carries a weightage of 4
34.	
35.	
<b>36.</b>	
37.	(2x4 = 8  weightage)

### FIRST SEMESTER M A ECONOMICS DEGREE EXAMINATION, NOVEMBER 2019 (CBCSS)

#### ECO1 C01-MICROECONOMICS: THEORY AND APPLICATIONS I

Time: 3 Hours Maximum Weightage: 30

#### Part A

#### Answer **all** questions

Each bunch of **5** 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 MPL:
- (a) faster than MPκ (b) slower than MPκ (c) at the same rate as MPκ (d) none of the above
- 3. If the LAC curve falls as output expands, this is due to:
- (a) economies of scale (b) the law of diminishing returns
- (c) diseconomies of scale (d) any of the above
- 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. Oligopoly is characterised by:
- (a) two sellers (b) one seller (c) few sellers (d) few buyers
- 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. If an oligopolist incurs losses in the short run, then in the long run:
- (a) the oligopolist will go out of business (b) the oligopolist will stay in business
- (c) the oligopolist will break even (d) any of the above is possible
- 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) AVC curve (b) AFC curve (c) AC curve (d) MC curve
- 13. The concept of bandwagon effect was introduced by:
- (a) Stackelberg (b) Sweezy (c) Samuelson (d) Harvey Leibenstein
- 14. Games in which the gains of one player equal the losses of the other are called:
- (a) zero-sum games (b) non-zero sum games (c) prisoner's dilemma (d) pure strategy
- 15. At the point of producer equilibrium:
- (a) the isoquant is tangent to the isocost line (b) the MRTS $_{LK}$  equals  $P_L/P_K$
- (c)  $MP_L/P_L = MP_K/P_K$  (d) all of the above

 $(15 \times 1/5 = 3 \text{ weightage})$ 

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

Answer any **5** questions
Each question carries a weightage of **1** 

- 16. What is Veblen effect?
- 17. Distinguish between risk aversion and risk preference.
- 18. What is a learning curve?
- 19. What is meant by elasticity of substitution?
- 20. What is a cartel?
- 21. What is a linearly homogeneous production function?
- 22. Explain non-collusive oligopoly.
- 23. What is meant by saddle point?

 $(5 \times 1 = 5 \text{ weightage})$ 

#### **Part C (Short Answer Questions)**

Answer any 7 questions
Each question carries a weightage of 2

- 24. Explain the properties of CES production function.
- 25. Write a note on price leadership.
- 26. Explain expected utility hypothesis.
- 27. What is meant by constant elasticity demand function?
- 28. Explain prisoner's dilemma.
- 29. Explain returns to scale.
- 30. Explain Paul Sweezy's model.
- 31. Explain different concepts of technical progress.
- 32. Explain Friedman-Savage hypothesis.
- 33. Explain the characteristic approach to demand function.

 $(7 \times 2 = 14 \text{ weightage})$ 

#### Part D (Essay Questions)

Answer any **2** questions
Each question carries a weightage of **4** 

- 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.
- 37. Critically examine the Cobb-Douglas production function.

 $(2 \times 4 = 8 \text{ weightage})$ 

### FIRST SEMESTER M A ECONOMICS DEGREE EXAMINATION, NOVEMBER 2019 (CBCSS)

#### ECO1 C02-MACROECONOMICS: THEORIES AND POLICIES I

Time: 3 Hours Maximum Weightage: 30

#### Part A

#### Answer **all** questions

Each bunch of **5** questions carries a weightage of **1** 

#### Multiple Choices:

- 1. Permanent income hypothesis is related to:
- (a) income (b) saving (c) consumption (d) investment
- 2. Innovation theory of business cycle was developed by:
- (a) Hayek (b) Hawtrey (c) Schumpeter (d) Samuelson
- 3. Ratchet effect is related to:
- (a) absolute income hypothesis (b) life cycle hypothesis
- (c) relative income hypothesis
- (d) permanent income hypothesis
- 4. The trade of between inflation and unemployment is explained by:
- (a) quantity theory of money (b) Phillips curve (c) q ratio (d) H theory
- 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
- 13. O ratio was introduced by:
- (a) James Tobin (b) William Baumol (c) Radcliff (d) Don Patinkin
- 14. Who is associated with rational expectations?
- (a) Keynes (b) Robert Lucas (c) Milton Friedman (d) Don Patinkin
- 15. Which of the following is not a fiscal policy instrument?
- (a) bank rate (b) tax (c) savings (d) government spending

 $(15 \times 1/5 = 3 \text{ weightage})$ 

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

Answer any **5** questions
Each question carries a weightage of **1** 

- 16. What is marginal efficiency of investment?
- 17. Define Fisher effect.
- 18. What are the motives for holding money according to Keynes?
- 19. What is an LM curve?
- 20. What is meant by natural rate of unemployment?
- 21. Distinguish between M1 and M3 measures of money supply?
- 22. Explain the Taylor rule.
- 23. Explain crowding out effect.

 $(5 \times 1 = 5 \text{ weightage})$ 

#### **Part C (Short Answer Questions)**

Answer any 7 questions
Each question carries a weightage of 2

- 24. What are the instruments of fiscal policy?
- 25. Explain the accelerator theory of investment.
- 26. Explain the relative income hypothesis.
- 27. Explain Kuznet's consumption puzzle
- 28. Explain general equilibrium using IS-LM analysis.
- 29. Briefly explain the structuralist theory of inflation.
- 30. Explain the behavioural model of money supply.
- 31. Write a note on central bank autonomy.
- 32. Explain the H theory of money supply.
- 33. Explain the permanent income hypothesis

 $(7 \times 2 = 14 \text{ weightage})$ 

#### Part D (Essay Questions)

Answer any **2** questions
Each question carries a weightage of **4** 

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

 $(2 \times 4 = 8 \text{ weightage})$ 

### FIRST SEMESTER M A ECONOMICS DEGREE EXAMINATION, NOVEMBER 2019 (CBCSS)

#### ECO1 C03-INDIAN ECONOMY: PROBLEMS AND POLICIES

Time: 3 Hours Maximum Weightage: 30

#### Part A

#### Answer **all** questions

Each bunch of **5** 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. 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. Estimates of national income in India are prepared by:
- (a) RBI (b) NITI Aayog (c) Ministry of Finance (d) CSO
- 13. From which nation India adopted Five Year Plans?
- (a) USA (b) Germany (c) China (d) USSR
- 14. The best indicator of economic growth of a nation is:
- (a) PCI (b) GDP (c) Index of Industrial Production (d) WPI
- 15. GST was launched on:
- (a) July 1, 2017 (b) March 5, 2009 (c) March 10, 2011 (d) October 2, 2015

 $(15 \times 1/5 = 3 \text{ weightage})$ 

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

Answer any **5** questions
Each question carries a weightage of **1** 

- 16. What is meant by headline inflation?
- 17. Explain the concept of inclusive growth.
- 18. Explain the concept of decentralization.
- 19. What are the objectives of planning?
- 20. Write a note on make in India initiative.
- 21. Write a note on GST.
- 22. Explain the concept black money.
- 23. What is NITI Aayog?

 $(5 \times 1 = 5 \text{ weightage})$ 

#### **Part C (Short Answer Questions)**

Answer any 7 questions
Each question carries a weightage of 2

- 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.
- 32. What are Millennium Development Goals?
- 33. Write a note on the state of unemployment in Kerala.

 $(7 \times 2 = 14 \text{ weightage})$ 

#### Part D (Essay Questions)

Answer any **2** questions Each question carries a weightage of **4** 

- 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.
- 37. What were the major structural changes in Indian economy since 1951?

 $(2 \times 4 = 8 \text{ weightage})$ 

#### FIRST SEMESTER MA ECONOMICS DEGREE EXAMINATION, NOVEMBER 2019 (CBCSS)

### ECO1 C04-QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS I

Maximum Weightage: 30 Time: 3 hours

#### Part A **Answer all Questions**

Multi	ple	Cho	oice
	P		

a. Rs.250/b. Rs.247.20 c. Rs.247/d. Rs.248/-

	Each bunch of 5 questions can	rries	a weightage of 1		
ıltip	le Choice		0 0		
1.	The function $y = \frac{1}{3}x + 2$ is:				
	a. Quadratic b. Linear	c.	Cubic	d.	Reciprocal
2.	In a matrix the number of rows and columns are	call	ed:		-
	a. order b. size	c.	degree	d.	all the above
3.	Trace of a matrix is:				
	a. Largest column sum	c.	Sum of principal dia	agona	l elements
	b. Sum of off diagonal elements	d.	None of these		
4.	The derivative of $y = logx$ is:				
	a. $\frac{1}{x^2}$ b. $\frac{1}{2\sqrt{x}}$	c. 6	X	d.	$\frac{1}{x}$
5.	The total utility function is $q^2$ , then the marginal	l utili	ity function is:		
	a. $q^{-2}$ b. $q^2$	c.		d.	q
6.	The function $y = log x - x$ is stationary, then the	ie va	lue of <i>x</i> is:		
	a. 1 b. 0	c.	-1	d.	2
7.	If $u = x^2 + y^2$ , then $\frac{d^2u}{dxdy}$ is:				
	a. 2 <i>x</i> b. 2	c.	0	d.	2y
8.	$u = x^2 + xy + y^2$ , then the total differential $dx$	u is:			
	a. (2x + y)dx + (2y + x)dy	C.	(2x+2y)dx+(x+2y)dx+	+ y)	dx
	b. $2xdx + 2ydy$	d.	None of these		
9.	$\int_{1}^{3} (x^2 + 2x - 3) dx:$				
	a. $\frac{31}{3}$ b. $\frac{32}{3}$	c.	30	d.	$\frac{40}{3}$
10.	The order of the difference equation $I_t = \alpha(y_t)$				
	a. One b. Two	c.	Zero	d.	Three
11.	The differential equation $\frac{dy}{dt} + 4y = 20$ is:				
	a. Linear b. Non-linear	c.e	xact d.	. No	one of these
12.	Which of the following area where difference ed	quati	on can be applied:		
	a. Cob-web Model		c. Both a and b		
	b. Harrod-Domar model		d. None of these		
13.	The difference between present value of benefit	s and			
	a. Internal rate of return		c. Nominal present		!
	b. Net present value		d. Profitability inde		_
14.	An amount of Rs.2000/- is invested for 2 years a	at an	interest rate of 6%.	Then	the compound
	interest is:				

15. The formulae for depreciation is:

a. 
$$A = P(1+r)^t$$
 b.  $A = P(1-r)^t$  c.  $A = P(1-\frac{r}{2})^t$  d.  $P = A(1-r)^t$  (15  $x = 3$  weightage)

#### **PART B (Very Short Answer Questions)**

Answer any 5 questions

Each question carries a weightage of 1

- 16. Define odd and even function.
- 17. What is a singular matrix?
- 18. State quotient rule on differentiation.
- 19. What do you mean by points of inflexion?
- 20. State Euler's theorem.
- 21. Give one example of a second degree first order differential equation.
- 22. What do you mean by annuities?
- 23. What do you mean by sinking fund?

 $(5 \times 1 = 5 \text{ weightage})$ 

### Part C (Short Answer Questions)

#### Answer any 7 questions

Each question carries a weightage of 2

- 24. Draw the graph of the function  $y = \frac{1}{x}$ .
- 25. Find the characteristic roots of the matrix  $\begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}$
- 26. Determine the elasticity of demand when price falls from 136 to 119, given the demand function  $P = 200 Q^2$
- 27. A monopolist has inverse demand function P = 150 2x. His total cost is  $c = 1.1x^3 3x^2 + 5x + 100$ . What is the profit maximizing price and output?
- 28. If  $u = x^3 + y^3 + z^3 3xyz$ , prove that  $x \frac{du}{dx} + y \frac{du}{dy} + z \frac{du}{dz} = 3u$ .
- 29. What is meant by consumer's surplus? Calculate the consumer's surplus given to the demand function  $p=35-2q-q^2$  and the demand  $q_0=3$
- 30. Solve (1-x)dy (1-y)dx = 0.
- 31. Solve  $y_{t+1}+3y_t = 4$  given  $y_0=4$ .
- 32. Discuss the merits and demerits of NPV method.
- 33. Establish the relationship between interest rates and price of bonds.

 $(7 \times 2 = 14 \text{ weightage})$ 

#### Part D (Essay Questions)

Answer any 2 questions
Each question carries a weightage of 4

34. Solve the system of equations by Crammer's rule

$$2x-3y+5z=11$$
,  
 $5x+2y-7z = -12$ ;  
 $-4x+3y+z=5$ 

- 35. For a firm each unit of capital and labour cost Rs.10 and Rs.20 respectively. The total output costs are fixed at Rs.1600/-. If the firm faces a production function given by  $Q=4LK+L^2$ , find the levels of K and L when the firm maximizes its output. Also find maximum output.
- 36. Obtain the optimum value of the function z = xy + 2x subject to the constraint 20-x-2y = 0, using Lagrange multiplier method.
- 37. What is time value of money? Discuss the IRR method used for measuring investment worth. Compare and contrast NPV and IRR method.

 $(2 \times 4 = 8 \text{ weightage})$