ST. JOSEPH'S CHOICE BASED CREDIT SEMESTER SYSTEM-PG
(SJCBCSS PG – 2019)

FOR

POSTGRADUATE PROGRAMME

OF

ST. JOSEPH'S COLLEGE (AUTONOMOUS)

DEPARTMENT OF ECONOMICS

SCHEME & SYLLABUS

FOR

M A ECONOMICS

(2019-20 Admissions Onwards)

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

Semester	Name of the Course	Credit	Hours/ Week	Total Weightage	
				External	Internal
I	FECO1 C01 Microeconomics: Theory and Applications I	5	7	30	5
	FECO1 C02 Macroeconomics: Theories and Policies I	5	6	30	5
	FECO1 C03 Indian Economy: Problems and Policies	5	6	30	5
	FECO1 C04 Quantitative Methods for Economic Analysis I	4	6	30	5
	FECO1 A01-Ability Enhancement Course	4*			
II	FECO2 C05 Microeconomics: Theory and Applications II	5	6	30	5
	FECO2 C06 Macroeconomics: Theories and Policies II	5	6	30	5
	FECO2 C07 Public Finance: Theory and Practice	5	7	30	5
	FECO2 C08 Quantitative Methods for Economic Analysis II	5	6	30	5
	FECO2 A02-Professional Competency Course	4*			
III	FECO3 C09 International Trade	5	6	30	5
	FECO3 C10 Growth and Development	5	6	30	5
	FECO3 C11 Basic Econometrics	5	7	30	5
	Elective I	4	6	30	5
IV	FECO4 C12 International Finance	3	6	30	5
	FECO3 C13 Financial Markets	3	6	30	5
	Elective II	4	6	30	5
	Elective III	4	6	30	5
	FECO4 P14 Project	4	1	4	1
	FECO4 V15 Comprehensive Viva Voce	4			
	Total Credits	**80**			

 # 20 hours are allotted for seminars for each course per semester.
@ 1 elective course in Semester 3 and 2 elective courses in semester 4 are to be selected from the appended lists of elective courses.
***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
A	**12 Questions x 1/4**	**3**
B	**5 Questions x 1**	**5**
C	**7 Questions x 2**	**14**
D	**2 Questions x 4**	**8**

Part A (Multiple Choice Questions)
Answer all 12 Questions
(12 x ¼ Weightage = 3 Weightage)

Part B (Very Short Answer Questions)
Answer any 5 questions out of 8 questions
(5 questions x 1 = 5 Weightage)

Part C (Short Answer Questions)

Answer any 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 External	Weightage Internal
1	Relevance of the Topic and Statement of the Problem	**60%**	**8**	**2**
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 1.5 credits.

LIST OF CORE COURSES

1	Course I	FECO1 C01- Microeconomics: Theory and Applications I
2	Course II	FECO1 C02- Macroeconomics: Theories and Policies I
3	Course III	FECO1 C03- Indian Economy: Problems and Policies
4	Course IV	FECO1 C04- Quantitative Methods for Economic Analysis-I
5	Course V	FECO2 C05- Microeconomics: Theory and Applications II
6	Course VI	FECO2 C06- Macroeconomics: Theories and Policies II
7	Course VII	FECO2 C07- Public Finance: Theory and Practice
8	Course VIII	ECO2 C08- Quantitative Methods for Economic Analysis-II
9	Course IX	FECO3 C09- International Trade
10	Course X	FECO3 C10- Growth and Development
11	Course XI	FECO3 C11- Basic Econometrics
12	Course XII	FECO4 C12- International Finance
13	Course XIII	FECO4 C13- Financial Markets
14	Course XIV	FECO4 P14- Project
15	Course XV	FECO4 V15- Comprehensive Viva Voce

LIST OF ELECTIVE COURSES

SEMESTER III

1	Course I	FECO3 E01- Banking: Theory and Practice

SEMESTER IV

5	Course 1	FECO4 E02 - Advanced Econometrics
12	Course II	FECO4 E03 - Mathematical Economics

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) – FECO1 A01 -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) FECO2 A02 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 Course	Title of Course	Hours/ Week	Credit
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
FECO1 C01 - MICROECONOMICS: THEORY AND APPLICATIONS-I
(Credit 5)

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

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.

References

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

Core Course-II
MA ECONOMICS (CBCSS)
I SEMESTER
FECO1 C02 - MACROECONOMICS: THEORIES AND POLICIES I
(Credit 5)

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

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 Equivalance- Income policy- Stabilization policy.

References

1. Gregory Mankiw (2008): Macroeconomics- Worth Publishers NY, 6_{th} ed.
2. Richard T Froyen (2005): Macroeconomics: Theories and Policies- Pearson (LPE), Seventh ed.
3. Rosalind Levacic and Alexander Rebman (1982): Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies- 2_{nd} ed. Macmillan.
4. Eric Pentacost: Macroeconomics-An Open Economy Approach- Macmillan.
5. Rudiger Dornbusch, Stanley Fisher and Richard Startz (2004): Macroeconomics- Tata McGraw Hill, 9_{th} ed.
6. Errol D'Souza (2008): Macroeconomics- Pearson Education.
7. P.N Junankar (1972): Investment: Theories and Evidence- Macmillan.
8. Fred R Glahe (1985): Macroeconomics: Theory and Policy- Harcourt Publishers, New Delhi.
9. Veneries and Sebold (1977): Macroeconomics: Models and Policies- John Wiley & Sons.
10. Gurley J and Shaw E S (1960): Money in a Theory of Finance- Washington: Brookings Institution.
11. Samuelson and Nordhaus (1998): Macroeconomics- 16_{th} 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
FECO1 C03 - INDIAN ECONOMY: PROBLEMS AND POLICIES
(Credit 5)

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

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 to1990 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 IV: 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.

References

1. Vijay Joshi and IMD Little: India: Macroeconomics and Political Economy: 1964-1991- Oxford University Press, New Delhi 1994.
2. Uma Kapila (ed): Indian Economy Since Independence- Academic Foundation, New Delhi 2004.
3. Vijay Joshi and I. M.D Little: India's Economic Reforms: 1991- 2001- Oxford University Press, New Delhi, 1996.
4. VM Dandekar and Nilakant Rath: Poverty in India- Indian School of Political Economy, Pune, 1971.
5. 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
FECO1 C04 - QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS I
(Credit 4)

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

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, debit repayments, sinking funds- The relationship between interest rates and the price of bonds.

References

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 Course	Title of Course	Hours/Week	Credit
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
FECO2 C05 - MICROECONOMICS: THEORY AND APPLICATIONS-II
(Credit 5)

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

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.

References

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

Core Course-VI
MA ECONOMICS (CUCSS)
II SEMESTER
FECO2 C06 - MACROECONOMICS: THEORIES AND POLICIES II
(Credit 5)

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

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.

References

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 (CUCSS)
II SEMESTER
FECO2 C07 - PUBLIC FINANCE: THEORY AND PRACTICE
(Credit 5)

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

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.

References

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 (CUCSS)
II SEMESTER
FECO2 C08 - QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS II
(Credit 5)

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

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.

References

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, 2nd 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 Course	Title of Course	Hours/Week	Credits
IX	International Trade	6	5
X	Growth and Development	6	5
XI	Basic Econometrics	7	5
Elective	Banking Theory and Practice	6	4

Core Course-IX
MA ECONOMICS (CBCSS)
III SEMESTER
FECO3 C09 - INTERNATIONAL TRADE
(Credit 5)

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

Module I: International Trade and Economic Development

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

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.

References

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
FECO3 C10 - GROWTH AND DEVELOPMENT
(Credit 5)

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

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.

References

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 (4th 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
FECO3 C11 - BASIC ECONOMETRICS
(Credit 5)

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

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^2 -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.

References

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, 4th Edition, John Wiley & Sons.

5. Jeffrey M Wooldridge (2018): Introductory Econometrics: A Modern Approach, 7th 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, 3rd 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, 8th Edition, Pearson Education.
13. Christopher Dougherty (2007): Introduction to Econometrics, Third Edition, Oxford University Press.
14. Chris Brooks (2012): Introductory Econometrics for Finance, 3rd 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, 6th Edition, Wiley- Blackwell.
18. AH Studenmund: Using Econometrics: A Practical Guide, Fifth Edition, Pearson Education.

SEMESTER IV

Core Course	Title of Course	Hours/Week	Credits
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
FECO4 C12 - INTERNATIONAL FINANCE
(Credit 3)

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

Module I: Balance of Payments

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

Module II: Exchange Rate and Theories of Exchange Rate

Exchange rate-Nominal, Real, Effective, NEER, REER- Exchange rate systems- Relative merits and 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.

References

1. Dominick Salvatore: International Economics- JohnWiley and Sons.
2. Keith Pilbeam: International Finance-Macmillan.
3. Bo Sodersten and Geoffrey Reed: International Economics- Macmillan, London.
4. Paul R Krugman and Maurice Obstfeld: International Economics: Theory and Practice-Pearson Education, Singapore.
5. Thomas A. Pugel: International Economics- TMH.
6. Michael Melvin: International Money and Finance- Pearson Education.
7. James C Ingram and Robert M Dunn: International Economics- JohnWiley and Sons.
8. Keith Pilbeam: Finance and Financial Markets- Palgrave.
9. Dennis R Appleyard and Alfred J Field: International Economics-McGraw Hill.

10. Robert J Carbaugh (2011): Global Economics- Cengage Learning.
11. Giancarlo Gandolfo: International Finance and Open Economy Macroeconomics- Springer.
12. Van den Berg: International Finance and Open Economy Macroeconomics- World Scientific.
13. Lawrence Copeland: Exchange Rates and International Finance-Pearson Education.
14. M Levi: International Finance-McGraw Hill.
15. Richard Caves, Jeffrey Frankel and Ronald Jones: World Trade and Payments- Pearson.
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
FECO4 C13 - FINANCIAL MARKETS
(Credit 3)

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

Module I: Financial Markets

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

Module II: Money Market

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

Module III: Capital Market

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

Module IV: Derivatives Market

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

Module V: Global Financial Markets

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

References

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 Course	Title of Course	Hours/ Week	Credit
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
FECO3 E01 - BANKING: THEORY AND PRACTICE
(Credit 4)

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

Module I Central Banking

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

Module II Commercial 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).

References

1. M H de Kock: Central Banking-Universal Book Stall, New Delhi.
2. Meir Kohn (1996): Financial Institutions and Markets-Tata McGraw Hill.
3. Roger LeRoy Miller and David VanHoose (1993): Modern Money and Banking-McGraw-Hill International.
4. Jawed Akhtar and Shabbir Alam: Banking System in India: Reforms and Performance Evaluation- New Century Publications, New Delhi. 5. Y.V. Reddy: Monetary and Financial Sector Reforms in India- UBSPD, New Delhi.
6. Suraj.B. Gupta: Monetary Planning for India.
7. K. Rao: Management of Commercial Banks.
8. Harendra Badhav (ed): Challenges to Indian Banking: Competition, Globalisation and Financial Markets- Macmillan.
9. N.S. Kher: Non-Perfoming 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.

LIST OF ELECTIVE COURSES

SEMESTER IV

Elective Course	Title of Course	Hours/ Week	Credit
V	Advanced Econometrics	6	4
VI	Agricultural Economics	6	4
VII	Business Economics	6	4
VIII	Demography	6	4
IX	Environmental Economics	6	4
X	Gender Economics	6	4
XI	Health Economics	6	4
XII	Mathematical Economics	6	4
XIII	Political Economy of Development	6	4
XIV	Research Methodology & Computer Applications	6	4

Elective Course V
MA ECONOMICS (CUBSS)
IV SEMESTER
FECO4 E01 ADVANCED ECONOMETRICS
(Credit 4)

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

Module I: Qualitative Response Regression Models

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

Module II: Dynamic Econometric Models 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.

References

1: Damodar N Gujarati and Dawn C Porter (2009): Basic Econometrics- Fifth Edition, McGraw Hill International Edition.
2: James H Stock and Mark W Watson (2008): Introduction to Econometrics- Pearson, Addison Wesley.
3: Christopher Dougherty (2007): Introduction to Econometrics, Third Edition, Oxford University Press.
4: 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 XII
MA ECONOMICS (CBCSS)
IV SEMESTER
FECO4 E08 - MATHEMATICAL ECONOMICS
(Credit 4)

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

Module I Theory of Consumer Demand

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

Module II Theory of Production

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

Module III Theory of Markets

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

Module IV Linear 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.

References

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.