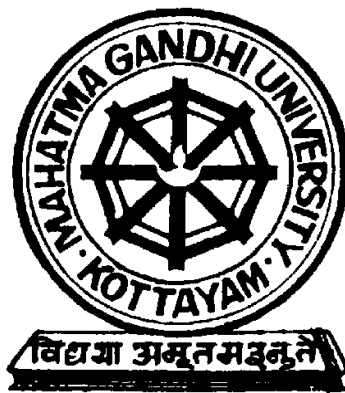


**MAHATMA GANDHI UNIVERSITY
KOTTYAM- KERALA STATE-INDIA
CHOICE BASED CREDIT
SEMESTER SYSTEM AND GRADING
SYLLABI**

**For
Undergraduate Programme
In
*ECONOMICS***



**Mahatma Gandhi University
Kottayam**

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Prepared by

**The Board of Studies (Economics) and The Faculty of Social Sciences with the core team of
Economics**

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Dean –Faculty of Social Science (Economics)
Mahatma Gandhi University ,
Kottayam

Introduction

MAHATMA GANDHI UNIVERSITY KOTTAYAM
B.A. ECONOMICS PROGRAMME
CHOICE BASED CREDIT AND SEMESTER SYSTEM
(2017 Admissions onwards)
AIMS AND OBJECTIVES OF THE PROGRAMME

In the present global scenario, Economics has emerged as one of the most 'sought after' subjects of study in Social Sciences as it immediately communicates with the changing societal priorities and needs. Many insights have been taken which are highly expedient in studying Economics and the behaviour of economic agents and their adaptations to economic policy and analysis of such behaviour in the present context of highly volatile markets and asymmetric information. In this context Economics has emerged as one of the most important subjects of study among the group of social sciences. In the past 50 years or so, many new insights have taken root and become important in economic theory and policy. In the light of the expanding horizons of knowledge, constant endeavours have been made to review the curriculum in many of the universities in the world to make Economics a vibrant and meaningful subject. The curriculum merits better pondering so as to make it practically more competitive and student centered in the multidimensional environment. *Major aims and objectives of the BA Economics programme are listed hereunder.*

- 1.To provide students a well-founded education in Economics;
- 2.To provide structured curricula which support the academic development of students;
- 3.To provide and adapt curricula that prepare our graduates for employment and further study as economists;
- 4.To provide the students with the opportunity to pursue courses that emphasize quantitative and theoretical aspects of Economics;
- 5.To provide students with the opportunity to focus on applied and policy issues in Economics;
- 6.To provide programmes that allow the students to choose from a wide range of economic specialization;
- 7.To provide a well-resourced learning environment for Economics.

COURSES

The restructured programme contains Sixteen Core Courses, including one Open course Elective (Semester V) and one Choice Based Elective (Semester VI) from the frontier area of the Programme and a Project Evaluation, four Complementary Courses from the relevant subjects for complementing the core of the study. There are ten Common Courses which include the First and Second Languages of study.

Teaching, setting question papers and valuing answer scripts in respect of the core and complementary courses (including Open course) and choice based courses inducted in this curriculum must be done by the faculty members from the Department of Economics.

*Generic Elective Course can be from the core area or other area as the case may be.

Course Coding

A course code has 8 letters/digits which show the programme, semester, type of course, theory or practical and the serial order of the course as tabled below.

EC	1/2/3/4/5/6	CR/GE/CB/CM/VO/PR/OJ /OP	T/P	XX
Economics	Semester	Type of Course	Theory or Practical	Serial order of a type of course

CC- Common Course/CR-Core Course/OP – Open Course /CB-Choice Based Elective/CM- Complementary Course/VO- Vocational Course/PR-Project/OJ-On the Job Training/VV-Viva Voce etc.

Detailed Distribution of Courses

Semester	Title of the Course	Hours/ Week	Credit
1	English 1	5	4
	English Common 1	4	3
	Second Language 1	4	4
	Perspectives & Methodology of Economics	6	4
	Complementary 1	6	4
2	English 2	5	4
	English Common 2	4	3
	Second Language 2	4	4
	Micro Economic Analysis-I	6	5
	Complementary 2	6	4
3	English 3	5	4
	Second Language common 1	5	4
	Micro Economic Analysis -II	4	4
	Economics of Growth and Development	5	4
	Complementary 3	6	4
4	English 4	5	4
	Second language Common 2	5	4
	Macro Economics-I	5	4
	Public Economics	4	4
	Complementary 4	6	4
5	Quantitative Techniques	6	4
	Macro Economics-II	6	5
	Open course**	4	3
	Environmental Economics	5	4
	Introductory econometrics	4	4
6	Quantitative Methods	6	4
	International economics	5	4
	Choice-based course**	4	3
	Money & financial Markets	5	4
	Indian Economy	5	4
	Project*	-	2
	Total	150	120

* Project internal and external evaluation should be done only in the 6th semester.

** One course to be selected from the list of Open Courses for semester V & One course from the list of Choice Based Electives for Semester VI. It is common to Model II & III.

B.A. Economics Programme– Model - I
Core, Complementary, Open and Choice-Based
Courses

Sem.	Core Papers	Course Code	Exam	T.H*	Cr.*	Total marks-100	
						Int.*	Ext.*
S1	Perspectives and Methodology of Economics	EC1CRT01	S1	6	4	20	80
	Complementary 1	EC1CMT01	S1	6	4	20	80
S2	Core 2- Micro Economic Analysis 1	EC2CRT02	S2	6	5	20	80
	Complementary 2	EC2CMT02	S2	6	4	20	80
S3	Core 3- Micro Economic Analysis- II	EC3CRT03	S3	4	4	20	80
	Core 4-Economics of Growth & Development	EC3CRT04	S3	5	4	20	80
	Complementary 3	EC3CMT01	S3	6	4	20	80
S4	Core 5-Macro Economics-I	EC4CRT05	S4	5	4	20	80
	Core 6-Public Economics	EC4CRT06	S4	4	4	20	80
	Complementary4	EC4CMT02	S4	6	4	20	80
S5	Core 7-Quantitative Techniques	EC5CRT07	S5	6	4	20	80
	Core 8-Macro Economics-II	EC5CRT08	S5	6	5	20	80
	Open course	EC5OPT01/2/3	S5	4	3	20	80
	Core9-Enviornmental Economics	EC5CRT09	S5	5	4	20	80
	Core10- Introductory Econometrics	EC5CRT10	S5	4	4	20	80
S6	Core 11 –Quantitative Methods	EC6CRT11	S6	6	4	20	80
	Core 12-International Economics	EC6CRT12	S6	5	4	20	80
	Choice based Elective	EC6CBT1/2/3	S6	4	3	20	80
	Core-13 Money & Financial markets	EC6CRT13	S6	5	4	20	80
	Core-14 Indian Economy	EC6CRT14	S6	5	4	20	80
	Project	EC6PR01			2	20	80

Broad Title of Courses *T.H- Teaching Hours per week, Cr.-Credits, Int.-Internal Evaluation and Ext.-External Examination

Distribution of Credits

Broad Title of Courses	No. of Courses	Credit
Common Courses	10	38
Core Courses	14	58
Choice Based Open Course	1	3
Complementary Courses	4	16
Choice Based Course	1	3
Project	1	2
Total	31	120

Total credits for core and complementary courses and project - 79

Total credit for Choice based Elective 3

Total Credit 82

List of Complementary Courses

The following Complementary courses are suggested with the option for choice (*two semester courses for each subject*)

1. History
2. Political Science
3. Psychology
4. Sociology
5. Mathematics
6. Mathematics for Economic Analysis
7. Logic

From among the above choices, Colleges can choose any *two* courses offered by the University without affecting the existing work load. Course code for the complementary courses to the first semester and second semester i.e. EC1CMT01 & EC2CMT02 and course code to the third semester and fourth semester i.e. EC3CMT01 & EC4CMT02.

CORE-CHOICE BASED OPEN COURSE- Semester-V

One open course should be chosen from among the following *three* courses.

Sl. No	Name of Course	Course Code
1	Foundations of Economics	EC5OPT01
2	Economics of Population	EC5OPT02
3	Gender Economics	EC5OPT03

CHOICE BASED -Elective - Semester –VI

One course can be chosen from among the following *Three* courses.

Sl. No	Name of Course	Course Code
1	Mathematical Economics	EC6CBT01
2	Business Economics	EC6CBT02
3	History of Economic Thought	EC6CBT03

COMPLEMENTARY COURSES (Economics) FOR OTHER BA PROGRAMMES

Sl. No	Name of Course	Course Code
1	Principles of Economics (Formerly <i>General Economic Principles</i>)	EC 1/3CMT01
2	Basic Economic Studies	EC 2/4CMT02

*Note: the first course may be chosen in 1st or 3rd semester and the second course in 2nd or 4th semester as the requirements of different colleges and courses.

COMPLEMENTARY COURSE FOR BA ECONOMICS

Sl. No	Name of Course	Course Code
1	Mathematics for Economic Analysis	EC1CMT03

*This course may be chosen any of the first four semesters depending on the requirement of the colleges or courses.

Note: Colleges which choose this course as complementary shall not opt 'Mathematics for Economic Analysis' as the Choice Based Elective in semester VI.

SYLLABI OF THE COURSES**Model I**

Semester I				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
1	EC1CRT01	Perspectives and Methodology of Economics	4	108

Course Objective

The course intends to familiarize the students with the broad contours of Social Sciences, specifically Economics and its methodologies, tools and analysis procedures. The course also aims to create an enthusiasm among students about different schools of Economic thought and various aspects of social science research, methodology, concepts, tools and various issues.

MODULE I: Methodology of Social Science

Science-Different branches of science-Evolution of a scientific approach Social science Disciplines - Need for interdisciplinary approach - Objectivity and subjectivity in social Science - Limits to objectivity in social science. (25hrs)

MODULE II: Methodology, Concepts and tools of Economics

Economics as a social science –Subject matter and scope of Economics, Importance of the study of economics with other social sciences like history, political science, psychology, law and Sociology. Positive and Normative Economics, Economic theory and Economic laws, Micro and Macro Economics, Role of assumptions in Economics, Method and Methodology - Deductive and inductive methodology, Economic Models

Various Concepts: Function, Variable, Equilibrium-Partial and General, Static, Comparative static and Dynamic ; Marginal and Total; Nominal and Real; Value; (30 hrs)

MODULE III: Major Schools of Economic Thought

Mercantilism(Thomas Mun, William Petty) and Physiocracy (Francis Quesnay and Turgot), Basic postulates of Classical and Neo-Classical economic thought (Adam Smith, Ricardo, J.B.Say, Malthus, J.S.Mill, Jeremy Bentham, Alfred Marshall, A.C.Pigou and Walras,) Socialist and Marxist Economic Thought(Saint Simon, Sismondi and Karl Marx,

Keynesianism(keynes as a critique of classical Economics and Monetarism(Milton Friedman). Contribution of Indian Economicsts-Kautilya, Dadabhai Naoroji, Amartya Sen and J.N..Bhagwathi). (27hrs)

MODULE IV: Research Methodology

Meaning and objectives of research – Types of research - Steps in research Data - Primary and secondary . Undertaking a research study - Conceptualization of research issues, reviewing the literature, Hypothesis, analysis and presentation of data, writing a research report. (30hrs)

References

Baumol, William J and Alan Blinder (2010): Economics: principles and Policy, 13 th Ed, South Western Cengage Learning, New Delhi.

Blaug, M (1998): The Methodology of Economics, Cambridge Surveys of Economic Literature New York.

Blaugh, Mark (1990): Economic Theory in Retrospect,4thed,Cambridge University Press, New York.

Boland, Lawrence A. (2000): The Methodology of Economic Model Building Methodology after Samuelson, Routledge, London and New York.

Boland, Lawrence A. (2003):The Foundations of Economic Method: A Popperian Perspective Second Edition, Routledge, London and New York.

Bruce, Stanley L. (1994): The Evolution of Economic Thought, 5th ed, the Dryden Press

Cooper, D. and Schindler P (2000): Business Research Methods, Tata McGraw Hill, New Delhi.

Dasgupta,Manas (2007): Research Methodology in Economics: Problems and Issues, Deep & Deep Publications, New Delhi.

Ekelund, Robert B Jr. and Robert F.Herbert (1975): “A History of Economic Theory and Methods”, Mc Graw Hill.

Eric Roll (1956): A History of Economic Thought, 3rd ed Prentice Hall, New Jersey.

Ethridge,Don (1995): Research methodology in Applied Economics: Organizing, Planning and Conducting Economic Research, IOWA State University Press.

- Goode, William J and Paul K Hatt (2006): Methods in Social Research,
- Guthrie, Gerard (2010): Basic Research Methods- an entry to social science research, Sage publications, New Delhi.
- Hajela, T N (2015): History of Economic Thought, 18th ed, Ane Books, New Delhi.
- Haney, Lewis H (1920): History of Economic Thought, Mc Milan, New York
- Hausman, Daniel M. (1992): Essays on philosophy and Economic Methodology, Cambridge University Press.
- Hunt, E.K and Mark Lautzenheiser(2011): History of Economic Thought: A Critical Perspective, 3rd ed, Prentice Hall of India, New Delhi.
- Hunt, Elgin F (2008): Social Science and its Methods, Social Science and Introduction to the study of Society, Alyn and Bacon.
- Hunt, Elgin F and David C. Colander (2010): Social science-An introduction to the study of Society, 13 th ed, Pearson, New Delhi.
- Kaufmann, Felix (1958): Methodology of the Social Sciences, The Humanities Press, New York.
- Kothari, C R (2010) : Research Methodology – Methods and Techniques, Rev edition, New Age Techno Press New Delhi
- Krishna swami, O P and M Ranganathan (1993): Methodology of Research in Social Sciences, Himalaya Publishing House, New Delhi.
- Lipsey, Christopher, T S Ragan, Paul A Storer (2007) : Micro Economics, 13 th ed, Pearson.
- Lipsey, Crystal (1999): Principles of Economic Analysis, 9th Edition, Oxford University Press.
- Mankiw, Gregory (2013) : Principles of Micro Economics, 6th ed, Cengage Learning India Private limited, Delhi.
- Perry, John A and Erna K Perry (2010): Contemporary Society – An introduction to Social Science, 12 th ed, Pearson, New Delhi.
- Samuelson P and Nordhaus (2002): Economics 7th ed, Tata McGraw-Hill.
- Samuelson, P (1948) : Foundations of Economic Analysis, Harvard University Press

Sayer, Andrew (1984): Method in Social Science a realist approach, Revised Second Edition, First published in 1984 by Hutchinson Second edition published in 1992 by Rout ledge.

Screpanti, Ernesto and Stefano Zmagni (2005): An outline of the History of Economic Thought, 2nd ed, Oxford University Press.

Wible, James R (1998):The Economics of science: Methodology and epistemology As if Economics really mattered, London and New York, First published 1998 by Routledge, London .This edition published in the Taylor & Francis e-Library, 2005.

Wilkinson and Bhandarkar(1990):Methodology and Techniques of Social Research, Himalaya Publishing House, New Delhi.

Young, P.V (1984): Scientific Social Survey and Research, Prentice Hall of India Ltd, New Delhi.

Semester 2				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
2	EC2CRT02	Micro Economic Analysis I	5	108

Learning Objectives

This is an introductory course that teaches the fundamentals of microeconomics. It gives the foundation for economic analysis and problem solving. This course provides an introduction to supply and demand and the basic forces that determine equilibrium in a market economy. It introduces a framework for learning about consumer behaviour and analyzing consumer decisions. The course also attends to firms and their decisions about optimal production. By the end of the course, we will be able to understand introductory microeconomic theory, solve basic microeconomic problems, and use these techniques to think about a number of policy questions related to the operation of the real economy.

Module I - Introduction to Microeconomics

Definitions of Economics-Problem of scarcity and choice – Central problems of Economy-production possibility frontier - microeconomic policy goals – efficiency and equity.– functions of an economic system -short run and long run analysis, partial and general equilibrium analysis (concepts only) – Marginal concept in micro Economics – (15 Hrs)

Module II –Demand and Supply Analysis

Concepts of demand- Factors affecting demand- Law of demand- exceptions-demand for normal, inferior, substitute and complementary goods- Shifts of demand versus movements along a demand curve – elasticity of demand – Degrees- price elasticity of demand – determinants- methods of estimation – Total outlay, Point, and arc method – income elasticity of demand and cross elasticity of demand – Concepts of supply- Factors affecting supply-Law of supply- shifts of supply versus movements along a supply curve - elasticity of supply – uses of elasticity – market equilibrium and impact of changes in demand and supply – dynamic demand and supply model: cobweb model — demand forecasting – objectives and methods of demand forecasting - seller's view. (23Hrs)

Module III – Theory of Consumer Behaviour

Concepts of Total and Marginal utility- Consumer preferences and choice-consumer's equilibrium – cardinal utility and ordinal utility – law of diminishing marginal utility –

consumer equilibrium under cardinal utility – derivation of demand curve - law of equimarginal utility – water-diamond paradox – criticisms of cardinal utility approach - indifference curve analysis – characteristics – MRS - budget line – consumer's equilibrium – income effect and Engel curve – price effect, income effect and substitution effect- derivation of demand curve – splitting price effect into income effect and substitution effect: Hicksian and Slutsky's approaches - criticisms of ordinal utility approach – revealed preference theorem – derivation of demand curve – distinction between weak and strong ordering – consumer's surplus – Marshallian and Hicksian approaches. New approaches to consumer theory - Pragmatic approach & Linear Expenditure System (LES) (Concepts only). (35Hrs)

Module IV – Theories of Production and Cost

Production function – total, average & Marginal product- time element in production function – law of variable proportions (modern approach)– isoquants – properties – MRTS - ridgelines and economic regions of production– Isocost lines – optimal input combination – producer's equilibrium – expansion path – elasticity of factor substitution - laws of returns to scale – economies and diseconomies of scale – empirical production function: Cobb-Douglas production function – properties – cost functions - cost concepts - explicit and implicit costs, economic and accounting costs, sunk cost, opportunity cost ,real cost, social cost- traditional theory of costs - short run and long run analysis of costs – envelope curve – modern theory of cost – short run and long run- L-shaped and saucer-shaped cost curves. (35 Hrs)

Readings

1. A. Koutsoyiannis. (1979). Modern Microeconomics. Palgrave McMillan.
2. Dominick Salvatore. Micro Economics Theory and Application. 4th Ed. New Delhi: Oxford University Press.
3. Robert S. Pindyck, et al. (recent edition). Micro Economics. Delhi: Pearson Education.
4. G.S. Maddala, Ellen Miller. (2004). Micro Economics - Theory and Applications. Delhi: Tata McGraw Hill.
5. Case, Karl E. & Ray C. Fair. (2007). Principles of Economics. (8th edition). Delhi: Pearson Education.
6. Varian. H.(2000). Intermediate microeconomics: A modern approach. Affiliated east West Press Pvt. Ltd.
7. Watson and Getz. (1996). Price Theory and its uses. New Delhi: AITBS Publisher.
8. Robert Y. Awh. Microeconomics- Theory and Applications. John Wiley and Sons Inc. (RYA).

9. Sen. A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
10. Varian, H.R. (2000), Microeconomics Analysis: W.W. Norton, New York.
11. Henderson, J and R.E Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
12. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India), 2010.
13. B. Douglas Bernheim and Michael D. Whinston, Microeconomics, Tata McGrawHill (India), 2009.
13. Varian, H.R. (2000), Microeconomics Analysis: W.W. Norton, New York.
14. Henderson, J and R.E Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.

Semester 3				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
3	EC3CRT03	Micro Economic Analysis II	5	72

Learning Objectives

This course helps the students to develop skills enabling them to understand economic concepts and use those concepts to analyze specific questions. By the end of this course, students should be able to understand consumer and firms' behaviour and to analyze different types of market structures. It also analyzes the behaviour of firms in a monopoly or oligopoly, and calculates the resulting changes in producer or consumer surplus. It helps students to use economic tools to analyze economic policies.

Module I – Market Structure:

Meaning of market- Market structure- Perfect Competition –characteristics - short run and long run equilibrium of a firm and industry – role of time element in the determination of value -derivation of supply curve – shut down point – producer's surplus – imperfect markets –Monopoly – sources - features – short run and long run equilibrium - discriminating monopoly- price and output determination under discriminating monopoly - degrees and types of price discrimination – dumping – Monopsony- Bilateral monopoly – social costs of monopoly power – regulation of monopoly. (17 Hrs)

Module II – Monopolistic Competition and Oligopoly

Monopolistic competition – characteristics - non-price competition and selling costs - short run and long run (group) equilibrium - ideal output and excess capacity – limitations of monopolistic competition - oligopoly – characteristics – Price stickiness - Kinked demand curve – Sweezy model - Non-Collusive oligopoly – Duopoly (concept only) –competition Vs collusion - collusive oligopoly – cartels and price leadership – low-cost, dominant and barometric price leadership models – concept of limit pricing and cost plus pricing. (20 Hrs)

Module III - Income Distribution and Factor Pricing

Functional versus personal distribution - concepts of total physical product (TPP), average physical product (APP) and marginal physical product (MPP) - Marginal productivity theory of distribution – factor price determination under perfect competition and imperfect competition – Ricardian and modern theories of rent - quasi-rent – money and real wages - wage differentials - effect of labour unions on wages – theories of interest – classical,

neo-classical and Keynesian theories of interest – theories of profit- dynamic theory, risk-bearing theory – innovation theory of profit (20 Hrs)

Module IV - Welfare Economics

Welfare economics – nature, concepts and scope- problems of measuring social welfare - Edgeworth box diagram – contract curve - criteria of social welfare – role of value judgement- growth of GNP criterion – Bentham's criterion – Cardinalist criterion - Pareto optimality criterion. (15 Hrs)

Readings

1. A. Koutsoyiannis. (1979). Modern microeconomics. Palgrave McMillan.
2. Dominick Salvatore. Micro economics Theory and application. 4th ed. New Delhi: Oxford University Press.
3. Robert S. Pindyck, et al. (recent edition). Micro economics. Delhi: Pearson Education.
4. G.S. Maddala, Ellen Miller. (2004). Micro economics - Theory and applications. Delhi: Tata McGraw Hill.
5. Case, Karl E. & Ray C. Fair. (2007). Principles of economics. (8th edition). Delhi: Pearson Education.
6. Varian. H. (2000). Intermediate microeconomics: A modern approach. Affiliated East West Press Pvt. Ltd.
7. Watson and Getz. (1996). Price theory and its uses. New Delhi: AITBS Publisher.
8. Robert Y. Awh. Microeconomics- Theory and applications. John Wiley and Sons Inc. (RYA).
9. Sen. A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.

Semester 3				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
4	EC3CRT04	Economics Of Growth & Development	4	90

Learning Objectives

This course enables the student to acquaint with the basic concepts and issues of growth and development from Adam Smith. It makes a student more insightful about the modern approaches to development presented by D Goulet and Amartya Sen.

Module I: Introduction to Economics of Growth and Development

Growth and Development – meaning – features – distinction – determinants and indicators – features of underdevelopment – measurement of development - income and non-income indices – GDP, PCI, PQLI, HDI, HPI, GEM – (GDI, GNH) – Development redefined – Development as a total social process – Development as freedom – Development as Liberation – Sen’s capability approach – poverty as capability and Entitlement failure – multidimensional poverty index – Quality of life – Education – Health and Nutrition – poverty – absolute and relative – inequality of income and wealth – Gini coefficient – Kuznet’s inverted ‘U’- Hypothesis – Development gap (22hrs)

Module II: Approaches to Development

Approaches to Economic Development: Structuralist – dependency - market- friendly approaches (concepts only) – vicious circle of poverty – Stage theories Rostow – low level equilibrium trap – Critical minimum effort thesis – Big push – Lewis model – balanced vs unbalanced growth strategy – Dualistic theories. (23hrs)

Module III: Theories and Factors in the Development Process

Classical – Marxian – Schumpeterian. Economic Development – role of agriculture – capital – technology – choice of technique - Trade and economic development – process of cumulative causation. (20 hrs)

Module IV: Human Resource and Development

Human Resource and Development – man power planning – concept of intellectual capital and its size – role of education and health in economic development – Education and health as joint investment for development – Gender and development – women in the labour force – missing women population and economic growth – optimum theory of population – theory of demographic transition – ageing and younging of population. (25hrs)

References

1. Thirlwall, Growth and Development with Special Reference to Developing Countries. Palgrave McMillian, New Delhi.
2. Benjamin Higgins(1968), Economic Development, Universal Book Stall, New Delhi.
3. Meier G.M. (2007) Leading Issues in Economic Development, Oxford University Press, New Delhi.
4. Todaro and Smith, Economic Development, Pearson Education, New Delhi.
5. Debraj Ray, Development Economics. Oxford University Press, New Delhi.
6. Felix Raj and et. al, Contemporary Development Economics, New Central Book Agency (p) Ltd.

Semester 4				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
5	EC4CRT05	Macro Economics I	5	90

Module I: Introduction to Macroeconomics

Micro and Macroeconomics-Main issues in Macroeconomics- Macro statics and macro dynamics-circular flow of economic activity in a two sector economy- National Income-concepts and their interrelationships- methods of measurement of national income- value added, income and expenditure methods-social accounting method-estimation of national income in India-Environmental concerns in national accounts- green accounting- Net Economic Welfare (20 Hrs)

Module II: Classical Macroeconomics

Main postulates of classical macroeconomics- Say's Law of Markets –Classical theory of employment and output determination – wage price flexibility and full employment equilibrium-classical theory of interest- quantity theory of money- Cash transactions and Cash balances approaches - -Classical dichotomy and neutrality –Pigou effect- Keynes criticism of classical theory. (25 Hrs)

Module III: Keynesian Macroeconomics

Keynesian Revolution –Main postulates of the general theory- Consumption function- Psychological law of consumption- Savings function- graphical, algebraic and numerical illustrations of APC, MPC, APS, MPS-factors determining consumption-investment demand Function-determinants of investment- MEC and MEI and the role of expectations- principle of effective demand (20 Hrs)

Module IV: Orthodox Keynesian Models

Two sector Keynesian cross model of income determination - Algebraic derivation- Under employment equilibrium-The effects of changes in autonomous investment on income-multiplier analysis-static and dynamic multiplier- three sector Keynesian Cross model-The effects of changes in taxes and public expenditure on income-Balanced budget multiplier- Four sector Keynesian Cross model-foreign trade multiplier(concept only).Two sector IS-LM model of income determination (model only). (25 Hrs)

Readings

1. N. Gregory Mankiw (recent edition), Macro Economics, Worth Publications, New York
2. Richard T. Froyen (recent edition), Macro Economics - Theories and Policies, Pearson Education
3. Eugene Diulio (2004), Macro Economics – Schaum’s Outline Series, Tata McGraw Hill, New Delhi.
4. Shapiro, Edward (1982), Macro Economic Analysis, Galgotia Publications (reprint edition)
5. Sampat Mukerjee (2008), Analytical Macro Economics: From Keynes to Mankiw, New Central Book Agency, Calcutta.
6. Andrew B. Abel (2011), Macro Economics, Pearson, Delhi.
7. Gardner Ackley. (1978). Macroeconomics- Theory and policy. Macmillan.
8. B Snowden & Howard Vane. A Modern Guide to Macro Economics. Edward Elgar
9. Macroeconomics Simplified-“An introduction to keynesian and Classical macroeconomic systems” by Nicoli Natrass and G.Visakh Verma,Published by Sage,New Delhi.2014

Semester 4				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
6	EC4CRT06	Public Economics	4	72

Learning Objectives

Public finance analyzes the impact of public policy on the allocation of resources and the distribution of income in the economy. In modern times, the activities of State have considerably increased and the theoretical understanding of different State activities through the budgetary mechanism is essential. The objective of the course is for students to learn about the working of the public finance system and to gain knowledge about the working of the Indian public finance.

Module I- Introduction to Public Finance

Meaning and subject matter of Public Finance – Public and Private Finance – Fiscal Functions-Allocation, distribution and stabilization- Principles of Maximum Social Advantage: Dalton, Musgrave – Public Goods: Pure and Impure Public Goods, Free rider problem. Private Goods, Mixed Goods and Merit Goods, -Market failure and role of government. (14 Hrs)

Module II- Public Revenue

Sources of public revenue -Classification of Taxes - Canons of Taxation, Principles of Taxation-Ability, Benefit and cost of service- Impact, Incidence and shifting of Tax Burden – – Effects of Taxation – Measurement of Deadweight loss -Taxable Capacity- Laffer curve- Major Taxes in India and its impact- Value Added Tax in India –Goods and Service Tax (GST-brief history, legislation and impact)- Budget and its role– Classification of budget Concepts :Revenue Account, Capital Account, Fiscal Deficit, Revenue Deficit, Primary Deficit,– Zero Base Budgeting-Budgetary Procedure in India (introduce the recent Central Budget to the students)- Gender Budgeting-Fiscal Policy –Deficit financing (22 Hrs)

Module III- Public Expenditure

Meaning— Canon's of Public Expenditure-Plan and Non-plan Expenditure-Developmental and Non-developmental expenditure- Wagner's Hypothesis, Peacock - Wiseman Hypothesis, critical limit hypothesis– Effects of Public Expenditure- Public expenditure in India: Its pattern and growth -Public Debt- Types- debt redemption –burden of public debt – public debt in India (18 Hrs)

Module IV- Federal Finance

Meaning – Principles of Federal Finance- vertical and horizontal equity in fiscal federalism - fiscal federalism in India – Finance commission – Current Finance Commission- Theory of grants – resource transfer from union to states – criteria for transfer of resources – State Finance Commission and Panchayati Raj institutions.

(18 Hrs)

References

1. Musgrave, R.A. and P.B. Musgrave. (1989). *Public finance in theory and practice*. McGraw Hill.
2. John Cullis, Philip Jones. *Public finance and public choice*. (1st edition). New Delhi: Oxford University Press.
3. Stiglitz, Joseph E. (Third edition). *Economics of public sector*. New York: Norton.
4. Harbar, Bernard. P. (Fifth edition). *Modern public finance*. Richard Irvin Inc.
5. Bagchi, Amaresh (ed.). *Readings in public finance*. New Delhi: Oxford University Press.
6. Ulbrich, Holley H. *Public Finance in Theory and Practice*. Thomson South-Western.
7. Singh.S.K. (Ninth edition) *Public Finance in Theory and Practice*. New Delhi: S Chand Publications.
8. Dalton. H. (eleventh edition). *Principles of Public finance*. Routledge Library Editions.
9. Taylor, Philip E. *Economics of public finance*. MacMillan.
10. Bhatia. H.L. (twenty-sixth edition). *Public finance*. New Delhi: Vikas Publishing House Pvt. Ltd.
11. Gupta, Janak. (2nd Revised & Enlarged edition). *Public economics in India: Theory and practice*. Atlantic.

Semester 5				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
7	EC5CRT07	Quantitative Techniques	4	108

Learning Outcome:

This is the first of the compulsory two-course sequence of Quantitative Techniques. Mathematical skills have become an essential tool for higher education. The objective of the first sequence is to introduce the body of mathematics to enable the study of economic theory including micro economic theory, macro economic theory, statistics and econometrics at the undergraduate level.

Module I

Basic Mathematics for Economic Analysis – Basic concepts: variables, constants, parameters, equations, exponents and logarithms, sequences and progressions - arithmetic and geometric. Applications of progressions in economics: problems relating to simple interest, compound interest, depreciation of assets and Net Present value. The real number system: properties of real numbers and types of numbers –limitations. (28hrs)

Module II

Calculus- Limits & Continuity, Derivatives: Meaning and significance - Rules of differentiation – First order and second order derivatives – Maxima and Minima of functions. Applications in economics. (20hrs)

Module III

Set theory - types of sets -set operations – Venn diagrams. Relations and functions: ordered pairs and Cartesian product. Functions: Types - Important economic functions. Linear and Quadratic-Solution to system of equations up to three unknowns- Matrices-Types, Matrix manipulations and their rules, Order of Matrix, Transpose of Matrix-Determinants up to order 3x3- Properties and Value of determinant, Minor and Cofactor, Inverse and Cramer's Rule.

(30hrs)

Module IV

Theory of Probability - Scope of probability in Economics- the case of uncertainty - Concepts – Rules of probability (addition and multiplication theorem – statement only) – Different approaches – Important terms related to probability (Random experiments, sample space, events) – Simple economic problems based on probability theorems – Probability distributions – binomial and normal – estimation of probabilities using binomial theorem standard normal table - their properties and uses and applications in Economics. (30hrs)

Readings:

1. Gupta S.P. *Statistical methods*. New Delhi: Sultan Chand & Sons.
2. Sharma J.K. *Business statistics*. Noida, India: Pearson Education.
3. Richard I Levin et.al. *Statistics for management*. India: Pearson Education.
4. Srivastava U.K et.al. *Quantitative techniques for managerial decisions*. New Delhi: New Age International Publishers.
5. Chiang A.C. (2005). *Fundamental methods of mathematical Economics*. McGraw Hill.
6. Allen R.G.D. *Mathematical analysis for economists*. Palgrave Mac Millan.
7. Monga G.S. *Mathematics and statistics for economists*. New Delhi: Vikas Publishing House.
8. Bradley Terasa. *Essential mathematics for economics and business*. New Delhi Wiley India Edn.

Semester 5				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
8	EC5CRT08	Macro Economics II	5	108

Module I- Theories of Consumption and Investment

Kuznets's consumption puzzle-Conflict between short-run and long run consumption functions- relative income hypothesis- permanent income hypothesis- life-cycle hypothesis Theory of capital and theory of investment- Present Value Criterion- Accelerator theory of Investment- Tobin's q theory (25 Hrs)

Module II- Money, Inflation and Unemployment

Money-classical approach –Keynesian liquidity preference theory and interest rate determination-liquidity trap-Keynes effect-supply of money-sources- high-powered money- money multiplier- measures of money supply in India. Inflation: types – Demand-pull and cost-push inflation – inflationary and deflationary gap-causes and effects of inflation – control of inflation-types of unemployment- Oakun's law-inflation and unemployment- the Phillips curve-Stagflation- long run Phillips curve-Natural rate of unemployment (38 Hrs)

Module III- Fluctuations, Monetary and Fiscal Policies

Trade cycles- Types and phases- Stabilization policies-Active or passive; monetary policy objectives and targets; Fiscal and Monetary policy in the IS-LM context(closed economy only)-Financial Crises & Regulatory response. (20 Hrs)

Module IV- Post Keynesian Schools of Macroeconomic Thoughts

Monetarism- Monetarist propositions and the Quantity Theory Restatement New Classical Economics- Rational Expectations(concept)- Lucas' Critique(Policy ineffectiveness proposition) Supply Side Economics- Tax cut policy and the Laffer Curve Analysis New Keynesian School – Nominal Wage Rigidity model (Overview) (25Hrs)

Readings

1. B Snowdon & Howard Vane. A Modern Guide to Macro Economics. Edward Elgar
2. R T Froyen . (Recent Edition)Macroeconomics – Theories and Policies. Pearson Education
3. N Gregory Mankiw. Macroeconomics. New York; Worth Publications
4. R Dornbusch, S Fisher. Macroeconomics. Tata McGraw Hill
5. Arthur O' Sullivan et al. (2015). Macroeconomics principles, applications and Tools. New Delhi: Pearson Education South Asia.
Macroeconomics Simplified-“An introduction to keynesian and Classical macroeconomic systems” by Nicoli Natrass and G.Visakh Verma,Published by Sage,New Delhi.2014
6. C Ram Manohar Reddy (2017) De monetisation and Black Money, Orient Black Swann.
7. G Omkarnath (2012) Economics – A primer for India, Orient Black Swann.

Semester 5				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
09	EC5CRT09	Environmental Economics	4	90

Learning objectives :

The importance of environmental science and environmental studies cannot be disputed. The need for sustainable development is a key to the future of mankind. Continuing problems of pollution, loss of forest, solid waste disposal, degradation of environment, issues like economic productivity and national security, Global warming, the depletion of ozone layer and loss of biodiversity have made everyone aware of environmental issues. The United Nations Conference on Environment and Development held in Rio de Janeiro in 1992 and world Summit on Sustainable Development at Johannesburg in 2002 have drawn the attention of people around the globe to the deteriorating condition of our environment. It is clear that no citizen of the earth can afford to be ignorant of environment issues. Environmental management has captured the attention of health care managers. Managing environmental hazards has become very important.

Human beings have been interested in ecology since the beginning of civilization. Even our ancient scriptures have emphasized about practices and values of environmental conservation. It is now even more critical than ever before for mankind as a whole to have a clear understanding of environmental concerns and to follow sustainable development practices.

India is rich in biodiversity which provides various resources for people. It is also basis for biotechnology.

Only about 1.7 million living organisms have been described and named globally. Still many more remain to be identified and described. Attempts are made to conserve them in ex-situ and in-situ situations. Intellectual property rights (IPRs) have become important in a biodiversity-rich country like India to protect microbes, plants and animals that have useful genetic properties. Destruction of habitats, over-use of energy resource and environmental pollution have been found to be responsible for the loss of a large number of life-forms. It is feared that a large proportion of life on earth may get wiped out in the near future.

In spite of the deteriorating status of the environment, study of environment has so far not received adequate attention in our academic programmes. Recognizing this, the Hon'ble Supreme Court directed the UGC to introduce a basic course on environment at every level in

college education. Accordingly, the matter was considered by UGC and it was decided that a six months compulsory core module course in environmental studies may be prepared and compulsorily implemented in all the University/Colleges of India.

The experts committee appointed by the UGC has looked into all the pertinent questions, issues and other relevant matters. This was followed by framing of the core module syllabus for environmental studies for undergraduate courses of all branches of Higher Education. We are deeply conscious that there are bound to be gaps between the ideal and real. Genuine endeavour is required to minimize the gaps by intellectual and material inputs. The success of this course will depend on the initiative and drive of the teachers and the receptive students.

Module I Unit 1 : Multidisciplinary nature of environmental studies

Definition, scope and importance (2 hrs)

Need for public awareness.

Unit 2 : Natural Resources :

Renewable and non-renewable resources : Natural resources and associated problems.

a) Forest resources : Use and over-exploitation, deforestation, case studies.

Timber extraction, mining, dams and their effects on forest and tribal people.

b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.

c) Mineral resources : Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

d) Food resources : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.

e) Energy resources: Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources, Case studies.

f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification

- Role of individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles. (10 hrs)

Unit 3: Ecosystems

- Concept of an ecosystem
- Structure and function of an ecosystem
- Producers, consumers and decomposers
- Energy flow in the ecosystem
- Ecological succession
- Food chains, food webs and ecological pyramids.
- Introduction, types, characteristic features, structure and function of the given ecosystem:-
 - a. Forest ecosystem

(6 hrs)

ModuleII Unit 1: Biodiversity and its conservation

- Introduction
- Biogeographical classification of India
- Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values.
- India as a mega-diversity nation
- Hot-spots of biodiversity
- Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts
- Endangered and endemic species of India

(8 hrs)

Unit 2: Environmental Pollution

Definition

Causes, effects and control measures of: -

- a. Air pollution
- b. Water pollution
- c. Soil pollution
- d. Marine pollution
- e. Noise pollution
- f. Thermal pollution
- g. Nuclear hazards
- Solid waste Management: Causes, effects and control measures of urban and industrial wastes.

- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: floods, earthquake, cyclone and landslides.

(8 hrs)

Unit 3: Social Issues and the Environment

- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people: its problems and concerns, Case studies
- Environmental ethics: Issues and possible solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, Case studies
- Consumerism and waste products
- Environment Protection Act
- Air (Prevention and Control of Pollution) Act
- Water (Prevention and control of Pollution) Act
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

(10 hrs)

Module – III Unit I: Economics and Environment

Environmental Economics – Definition – Scope – Meaning – importance – Environment-Economy interaction (linkages) – material balance model – ecosystem – structure and functions – relation between environment and development – Environment as a necessity and luxury-environmental issues and global concern-Stockholm Conference – Helsinki Convention – Montreal Protocol – Kyoto Protocol – Rio Summit – Paris Convention. Population growth and Environment – market failure – tragedy of commons-sustainable development-policy approach to sustainable development(An overview only). (16hrs)

Module IV Unit 1: Framework and Criteria for Environmental Analysis

Evaluation of environmental benefits – Contingent Valuation Method – Hedonic approach – travel cost method – preventive expenditure method - surrogate market approach – property value approach and wage differential approach - cost benefit analysis – UNIDO analysis –

Little- Mirrlees approach - Environmental Impact Analysis. Pollution control – socially optimum level of pollution – environmental policies and legislations in India. (18hrs)

Module – V Unit 1- Human Rights– An Introduction to Human Rights, Meaning, concept and development, Three Generations of Human Rights (Civil and Political Rights; Economic, Social and Cultural Rights).

Unit-2 Human Rights and United Nations – contributions, main human rights related organs - UNESCO, UNICEF, WHO, ILO, Declarations for women and children, Universal Declaration of Human Rights.

Human Rights in India – Fundamental rights and Indian Constitution, Rights for children and women, Scheduled Castes, Scheduled Tribes, Other Backward Castes and Minorities

Unit-3 Human Rights and environmental rights - Right to Clean Environment and Public Safety: Issues of Industrial Pollution, Prevention, Rehabilitation and Safety Aspect of New Technologies such as Chemical and Nuclear Technologies, Issues of Waste Disposal, Protection of Environment

Conservation of natural resources and human rights: Reports, Case studies and policy formulation. Conservation issues of western ghats- mention Gadgil committee report, Kasthuriangan report. Over exploitation of ground water resources, marine fisheries, sand mining etc. (12Hrs)

Reference

1. Agarwal, K.C 2001 Environmental Biology, Nidi Publ. Ltd, Bikaner.
2. Bharucha Erach, Text Book of Environmental Studies for undergraduate Courses. University Press, IInd Edition 2013 (TB)
3. Brunner, R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
4. Clark, R.S., Marine Pollution, Clanderson Press Oxford (TB)
5. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001. Environmental Encyclopedia, Jaico Publ. House. Mumbai. 1196p
6. De A.K. Environmental Chemistry, Wiley Eastern Ltd.
7. Down to Earth, Centre for Science and Environment (R)
8. Gleick, P. 1993 Water in crisis, Pacific Institute for Studies in Dev. Environment & Security. Stockholm Environment Institute Oxford University Press 473p

9. Hawkins R.E, Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
10. Heywood, V.H & Watson, R.T. 1995. Global Biodiversity Assessment, Cambridge University Press 1140p
11. Jadhav.H & Bhosale.V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284p
12. Mekinney, M.L & Schock.R.M. 1996 Environmental Science Systems & Solutions. Web enhanced edition 639p
13. Mhaskar A.K., Matier Hazardous, Techno-Science Publications (TB)
14. Miller T.G. Jr., Environmental Science, Wadsworth Publishing Co. (TB)
15. Odum.E.P 1971. Fundamentals of Ecology. W.B. Saunders Co. USA 574p
16. Rao.M.N & Datta.A.K. 1987 Waste Water treatment Oxford & IBII Publication Co.Pvt.Ltd.345p
17. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut
18. Survey of the Environment, The Hindu (M)
19. Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science (TB) XI
20. Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Stadards, Vol I and II, Enviro Media (R)
21. u) Trivedi R. K. and P.K. Goel, Introduction to air pollution, Techno-Science Publication (TB)
22. Wanger K.D., 1998 Environmental Management. W.B. Saunders Co. Philadelphia, USA 499p
23. (M) Magazine (R) Reference (TB) Textbook
- 24 Rabindra N Bhattacharya. (2007). Environmental Economis an Indian Perspective. Oxford University Press.
- 25 Charls D. Kolstad.(2007). Environmental Economics. New Delhi:OUP.
- 26 Ramaprasad Senguptha. (2009). Ecology and Economics. New Delhi: OUP.
- 27 Janet Thomas.(2009). Environmental Economics. New Delhi: Cenage Learning.
- 28 S.P. Mirsa, S.N. Pandey (2008). Essential Environmental Studies. New Delhi: Ane Books.
- 29 Katar Singh and Shishodia. (2007) Environmental Economics- Theory and application. New Delhi: Sage publication.
- 30 Tom Tietenberg. (2004). Environmental and Natural Resource Economics. Pearson Education.
- 31 Karpagam . M. (2008). Environmental Economics. New Delhi: Sterling Publishers.

- 32 R.K. Lekhi et al. (2008). Developmental and Environmental Economics. Ludhiana: Kalyani publishers.
- 33 Ulaganathan Sankar. (2009) Environmental Economics. New Delhi: OUP.
- 34 N. Das Gupha (1997). Environmental Accounting. Wheeler and Co New Delhi.
- 35 Thomas and Callan (2007). Environmental Economics. Thomas South-Western.
- 36 Paul Ackin .(2000) Economic Growth and Environmental sustainability, Routledge, London.
- 37 Nick Hanley. (2009) Environmental Economics in Theory and Practice. Palgrave Macmillian, New York.
- 38 Fisher A.C. (1981). Resource and Environmental Economics. Cambridge University Press, Cambridge.
- 39 Baumol. (1988). Theory of Environmental Policy (second edition). Cambridge University Press, Cambridge
- 40 PrasannaChandra:Projects-Planning,Analysis,Financing,Implementation&Review.(5th edition)TataMcGraw Hill.
- 41 PR Trivedi.(2014)Environmental Impact Assessment.APH Publishing Corporation.
- 42 Erach Baraucha (2014) Test book of Environmental studies, Orient Black Swann.

Semester 5				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
10	EC5CRT10	Introductory Econometrics	4	90

Module One:

Classical Liner Regression Model—Meaning and methodology—Modern interpretation of econometrics—Population regression function (PRF) —The concept of linearity in econometrics—stochasticre –interpretation and its significance — Sample regression function (SRF) (20hrs)

Module Two:

Estimation of PRF—The method of OLS—Advantages of OLS—Numerical Properties of OLS estimators— Statistical properties of OLS— Gauss - Markov Theorem and the assumptions of Classical Linear Regression Model (15hrs)

Module Three:

Evaluation of SRF—Goodness of the Fit—R Square—Reliability and Precision of OLS estimators—Standard Error of the OLS Estimator and the Estimate (15hrs)

Module Four:

Hypothesis testing and estimation—Hypothesis testing of OLS estimators—t test—Point and interval estimation (Basics)—Introduction to Multiple Regression (15hrs)

Module Five:

Relaxing the assumptions of Classical Linear Regression Model Hetroscedasticity—nature, estimation in its presence—detection and remedial measures— Autocorrelation—nature and estimation in its presence—detection and remedial measures— Multicollinearity—nature, estimation in its presence—detection and remedial measures (25hrs)

Readings:

- 1) Gujarati, Porter and Gunasekhar, Basic Econometrics, Fifth Edition
- 2) A Koutsoyiannis, Theory of Econometrics, Second Edition, Palgrave Macmillan
- 3) Chandan Mukherjee, Howard White and Marc Wytus, “Econometrics and Data Analysis for Developing Countries”, Routledge
- 4) James H Stock and Mark W. Watson, Introduction to Econometrics, Pearson Education; 3rd edition
- 5) RamuRamanathan, Introductory Econometrics with Applications, S.Chand & Company Ltd; 5th Revised edition
- 6) Christopher Dougherty, Introduction to Econometrics. NewDelhi: Oxford University Press
- 7) Johnston .J. Econometric Methods. McGraw Hill.
- 8) Dominick Salvatore , Derrick Reagle, Schaum's Outline of Statistics and Econometrics, Second Edition, McGraw-Hill Education

Semester 6				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
11	EC6CRT11	Quantitative Methods	4	108

(STATISTICS FOR ECONOMIC ANALYSIS)

Learning objectives:

Students of Economics need a variety of statistical skills to collect, analyse and interpret empirical data. This course intends to provide an introduction to statistical methods and tools that are essential for the study of economics at the undergraduate level.

Module I

Role of Statistics in Economics – Functions–limitations. Methods of primary data collection– census and sampling methods - Preparation of schedules and questionnaires, sample designs – random sampling and non-random sampling (SRS, systematic, stratified, cluster and multistage sampling).

Classification and Tabulation of Statistical data: Characteristics and types of classification– types of tables–difference between classification and tabulation. Presentation of data using charts and diagrams. (Histogram, Polygon, frequency curve, Bar chart, Pie diagram, Ogives)

(28hrs)

Module II

Central tendency: Various Measures - Properties, merits & demerits of Arithmetic mean, median, mode, geometric mean and harmonic mean – applications in economics.

Dispersion: Various Measures, absolute and relative measures – Range, quartile deviation, mean deviation, standard deviation – Lorenz curve and its economic applications. (25hrs)

Module III

Correlation and Regression Analysis: Correlation– significance and types– measurement: scatter diagram, Karl Pearson's correlation coefficient, (for ungrouped data only) and Rank correlation. Cause and effect relationships:

Regression– meaning and significance– regression equations/ regression lines– the line of best fit – prediction based on regression equations. Relation between correlation and regression.

(25hrs)

Module IV

Index Numbers – Different types – Importance and limitations, Problems in construction – Weighted and Unweighted price index numbers – Different methods of constructing price indices– Simple aggregative, simple average of price relatives, Weighted aggregative: Laspeyre's, Paasche's, Fisher's and Marshall Edgeworth's indices, weighted average of price relatives methods. Cost of living index numbers: significance, uses and methods of construction – aggregate expenditure method and family budget methods-WPI. Tests of index numbers

Time series: meaning, definition, uses, components – additive and multiplicative models, measurement of trend- free hand method, semi average, moving average and least square methods. (30hrs)

Readings

1. Gupta S.P. *Statistical methods*. New Delhi: Sultan Chand & Sons.
2. Sharma J.K. *Business statistics*. Noida, India: Pearson Education.
3. Richard I Levin et.al. *Statistics for management*. India: Pearson Education.
4. Srivastava U.K et.al. *Quantitative techniques for managerial decisions*. New Delhi: New Age International Publishers.
5. Chiang A.C. (2005). *Fundamental methods of mathematical Economics*. McGraw Hill.
6. Allen R.G.D. *Mathematical analysis for economists*. Palgrave Mac Millan.
7. Monga G.S. *Mathematics and statistics for economists*. New Delhi: Vikas Publishing House.
8. Bradley Terasa. *Essential mathematics for economics and business*. New Delhi: Wiley India Edn.

Semester 6				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
12	EC6CRT12	International Economics	4	90

Learning Objectives

This course provides the students a thorough understanding and deep knowledge about the basic principles that tend to govern the flow of trade in goods and services at the global level. The contents of the Paper, spread over various modules, lay stress both on theory and applied nature of the subject.

MODULE I- Introduction to International Economics and Trade Theories

Nature and scope of international economics-differences between internal and international trade -Inter industry trade and intra-industry trade -Terms of trade –types, and factors affecting terms of trade – community indifference curve - Classical theory -Theory of absolute cost advantage, Theory of Comparative cost advantage, reciprocal demand theorem - offer curves - Opportunity cost theorem, Heckscher - Ohlin theory, Leontief's paradox, Factor price equalization theorem, Gains from Trade, static and dynamic gain from trade-

(25 Hrs)

MODULE II- Balance of Payments

Meaning and structure of balance of payments – equilibrium and disequilibrium - measures to correct disequilibrium- monetary and non-monetary measures- Devaluation, depreciation and Balance of payments- Elasticity approach-Marshall- Learner condition – Jcurve effect

(20 Hrs)

MODULE III— Foreign Exchange Market

Functions of foreign exchange markets - Forex Market participants.-Demand and supply of foreign exchange, Determination of equilibrium exchange rates - Factors influencing exchange rates. Theories of exchange rate determination- The Mint Parity Theory, Purchasing Power Parity theory, balance of payment theory. – Fixed and floating exchange Rate, spot and forward rates, hedging, speculation, arbitrage, futures, options and currency swaps. Exchange rate system in India-managed floating – partial and full convertibility on current and capital accounts.

(25 Hrs)

MODULE IV- International Monetary and Trade System

Commercial Policy – free trade and protection – tariffs and quotas and their effects – other non-tariff barriers –Economic Integration-meaning, forms and benefits, BRICS – Gold standard – The Bretton Woods System, International Monetary Fund - World Bank. GATT - Uruguay round, WTO.

(20 Hrs)

Readings

1. Dominic Salvatore, (Recent Edition), International Economics: Trade and Finance, John Wiley and Sons, Limited.
2. Sodersten, Bo and Reed. G. (2005), International Economics, 3rd edition, Mc Millian Press Ltd.– International Economics.
3. Paul Krugman and Maurice Obstfeld (Recent Edition), International Economics: Theory and Policy, Pearson Education, Delhi.
4. Dominic Salvatore, Schaum's Outlines, Theory and Problems of International Economics. Tata MacGraw Hill, Delhi.
5. Kindle Berger C.P International Trade, R.D Irwin, Homewood 6. K.C Rana and K.N Varma, Internal Economics, Visual Publishing
7. Francis Chirunilam, International Economics, Mc Graw Hill, Education
8. Rajkumar, Internal Economics, Excel Books, New Delhi

Semester 6				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
13	EC6CRT13	Money & Financial Markets	4	108

Learning Objectives :

Financial Market provides the life blood to the real economy. Financial market institutions, regulators and instruments gives developmental and stabilizing services for the entire economy. Developments related to the working of the financial market are very essential to understand the way of economic functioning especially in the modern context. This Core Course tries to provide preliminary idea about the working of various financial market segments as well as the functioning of major regulators. Learners are advised to go through the basic concepts along with the course.

Module-1 Financial System

Structure of Indian Financial System–Banks and NBFIs –Insurance Companies, Pension funds, Mutual Funds, Asset Management Companies. (13 Hrs)

Module 2-Money and Central Banking

Static and Dynamic Functions of money, near money, inside money and outside money – monetary aggregates –M1,M2,M3, M4-High powered money and money multiplier. RBI-functions- Instruments of Monetary policy –Repo and Reverse Repo –Base rate. (25 Hrs)

Module3-Banking

Commercial banking in India –Structure-Functions of commercial banks –conflict between profitability and liquidity, credit creation and credit multiplier – Non-Performing Assets-Digital Payment System in India – RTGS,NEFT,Prepaid Payments instruments. (25 Hrs)

Module-4 Money market

Money Market-Functions-Structure of money market-Call Money Market-CBLO market,Collateral Loan Market-Acceptance Market-Bill or Discount Market- Features of Indian Money Market. (15 Hrs)

Module5 –Capital market

Capital Market –Functions –structure and functions of primary market and secondary market
–Methods of Public issue-IPO, FPO- Book building –Major investment groups –Retail
Investors-Domestic Institutional Investors and Foreign Portfolio Investors-SEBI-Functions.

(30 Hrs)

Readings:

1. Frederik S Mishkin, The Economics of Money, Banking and Financial Markets, Eleventh Edition, Pearson Education.
2. L.M. Bhole, Jitendra Mahakud. Financial institutions and markets – Structure, growth and innovations. (Latest edition), Tata McGraw Hill Education Private Limited, New Delhi
3. MY Khan, Indian Financial System, MacGraw Hills Education Pvt. Limited India.
4. F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education, 6th edition, 2011.
5. Bharati V. Pathak, Indian Financial System, Fourth Edition, Pearson Education, New Delhi
6. N. Jadhav, Monetary Policy, Financial Stability and Central Banking in India, Macmillan, 2006.

Semester 6				
Core Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
14	EC6CRT14	Indian Economy	4	90

Module I: Economic Development Strategy since Independence

Mixed Economic Framework - Key and Strategic Role of PSUs – Economic Crisis of 1990 – Macro Economic Reforms Implemented Since 1991-Structural Adjustment Programmes - Globalisation, Liberalisation and Privatisation –Performance of Indian Economy before and after Economic Reforms -External Sector Reforms since 1991 - Trade and Currency Reforms, - foreign capital - FDI, portfolio investments and MNCs (25hrs)

Module II- Demographic Features-

Population–size, structure (sex and age) – characteristics – population change – rural–urban migrations, occupational distribution, problems of over population, population dividend, population policy, Gender inequality, women empowerment. (15hrs)

Module III: Agriculture, Industry and Service Sector

Role of Agriculture in Indian Economy-Land Reforms-New Agricultural Strategy - Green Revolution — Need for Second Green Revolution - Agricultural Growth and Performance - New Agricultural Policy – Changes in Land use and Cropping Pattern-Agricultural Finance and Issues - Agriculture during Economic Reform Period - WTO and Indian Agriculture. Industrial growth during pre reform and post reform period-Industrial Policy Resolution of 1956 and 1991 - Role of Micro, Small and Medium Scale Industries (MSMEs) in Indian Economy Its problems and remedies- Role and Performance of Service sector in Indian Economy. (20 hrs)

Module IV: Economic Planning and Development Issues

Meaning and rationale of Planning-Basic Strategies, Objectives and Achievements of Planning in India-Strategies of 12th Plan, Inclusive Development-NITI Aayog - Trends in India's National Income – Magnitude of poverty and inequality in India - unemployment, black money and corruption – rising prices - energy crisis – Micro finance and its significance – importance of infrastructure in India's economic development. (15hrs)

Module V: Kerala Economy

Features, Kerala model of development - Structural change and economic growth in Kerala - Land reforms - current issues in agriculture – food crisis – changes in cropping pattern – agricultural indebtedness – unemployment - IT sector in Kerala - fiscal crisis in Kerala, Gulf migration, energy policy and energy crisis, decentralized planning in Kerala.

(15hrs)

Readings

1. Misra and Puri (recent edition), Indian Economy, Himalaya Publishing House, Mumabai.
2. Gaurav Datt & Ashwani Mahajan (recent Edition), Datt & Sundharam Indian Economy, S. Chand & Co., New Delhi
3. Meera Bai M. (ed) (2008), Kerala Economy, Serials Publication, New Delhi.
4. Prakash B A (2004) Kerala's Economic Development, Sage Publications, New Delhi
5. George K K (1993) Limits to Kerala Model of Developemnt, CDS, Trivandram
6. B A Prakash (2009), The Indian Economy since 1991: Economic reforms and performance , Pearson Education.
7. Sunil Mani et al. (ed) (2006), Kerala's Economy : Crouching Tiger, Sacred Cows, D C Books, Kottayam
8. State Planning Board, Economics Review , Government of Kerala, Thiruvananthapuram (latest issue)
9. Pulapre Balakrishnan (ed) (2011) Economic Reforms and Growth in India, Orient Black Swann.
10. Y V Reddy (2011) Global crisis, Recession and Uneven Recovery, Orient Black Swann.

Open Courses

Semester 5				
Open Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
01	EC5OPT01	Fundamentals of Economics	4	72

Learning Objectives:

This course is designed to make the undergraduate students of other disciplines aware of the basic ideas and concepts in Economics.

Module 1: Basic Concepts

Economics – micro and macro – deduction and induction – basic economic problems- production possibility curve. Utility - total and marginal. Law of Demand – elasticity of demand - price elasticity - types. Law of supply. National income – meaning - components of national income (12 Hrs)

Module 2: Public Economics

State vs Market - public revenue - public expenditure – tax and non-tax revenue – direct and indirect taxes – goods and service tax in India - budget – types - fiscal deficit - revenue deficit - public debt – trade cycle and its phases - fiscal and monetary policies as tools for combating inflation and deflation. (16 Hrs)

Module 3: Financial System and International Trade

Negotiable and non-negotiable instruments – cheques – drafts - bills of exchange – promissory notes-letter of credit - certificate of deposits – commercial papers - banking and non-banking institutions - commercial banks — Core Banking, Internet Banking, Mobile Banking, ATM/Debit & Credit Cards,IFSC,NEFT,RTGS–NPA in Indian banking sector RBI – functions - money and capital market – major financial instruments – shares, debentures and bonds – Insurance: meaning, nature and types - stock exchange – BSE, NSE – stock market indices – SEBI - mutual funds. Terms of trade - balance of trade - balance of payments - foreign exchange - exchange rate – spot – forward – fixed – floating - IMF, World Bank – WTO. (24 Hrs)

Module 4: Indian Economic Development

An overview of Planning in India - Planning Commission –NITI Aayog- Finance Commission – Green revolution – changing pattern of India's industrialisation - Liberalization - Privatization - Globalization (LPG) – Major features of population in India and Kerala - Kerala model of development (20 Hrs)

Readings

1. R R Paul (2008), Monetary Economics, Kalyani Publishers, Lidhiyana
2. V K Bhalla (2008), Investment Management, S. Chand & Co., New Delhi.
4. Bo Sodersten & Reed Dominic, International Economics, palgrave mcmillan
5. Samuelson (2009), Economics, Tata McGraw Hill, New Delhi.
6. Gaurav Datt & Ashwani Mahajan, (recent edition) Datt & Sundharam Indian Economy, S. Chand & Co., New Delhi (recent edition)
7. Alwin Prakash, Kerala;'s Economic Development (2004),Sage Publications, New Delhi.
8. Meera Bai M (ed) (2008), Kerala Economy, Serials Publication, New Delhi.

Semester 5				
Open Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
02	EC5OPT02	Economics Of Population	4	72

Module 1: Introduction to the study of Demography

Definition, scope and historical background of formal demography - Recent population trends - World - More Developed Regions - Less developed Regions and Least Developed Regions of the world - components of population growth - population composition- age composition in more developed and less developed regions of the world - population growth in India. Basic demographic methodology - rates in demography- birth (fertility) - mortality - marriage (Nuptiality) - infant mortality rate- computation of infant mortality rate -population projection- sources of population data - sources of demographic data in India. (20 hrs)

Module II : Theories of population

Thomas Robert Malthus - Micheal Thomas Sadler - an overview of sociological theories - optimum theory of population- demographic transition theory- demographic dividend - population and economic growth - economic characteristics of population- economically active population- work participation and unemployment - working population and work participation rate in India. (12hrs)

Module III Composition of Population

Pattern of sex and age structure in developed and developing countries- determinants of age and sex structure- demographic effects of age - sex- structural transition- ageing and younging of population- feminization. Determinants of population ageing - ageing index- median age - dependency ratio - potential support ratio and parental support ratio - Madrid plan - concepts of active ageing - healthy ageing - successful ageing and productive ageing- age structure transition and population ageing in India and Kerala. (20hrs)

Module IV Fertility - Mortality - Nuptiality

Trends and differentials in fertility transition in India and Kerala - causes of demographic changes in South India- trends and differentials in mortality in India and Kerala- Foetal and

infant mortality - life expectancy - still birth, abortion and prenatal mortality - laws relating to abortion in India- epidemiological transition- morbidity in Kerala. (12hrs)

Module V - Migration

Concepts - types - laws- Theories of migration - Todaro- Fei-Rani's models - cause and effect of migration (8hrs)

References

1. D.J.Bogue - Principles of Demography, Wiley 1971
2. Spiegelmon M- Introduction to Demography
3. H.S.Shryok - The Methods and Materials of Demography
4. A.A.Bhande - Principles of population studies, Himalaya and T. Kanitkar
5. Debraj Ray - Development Economics OXFORD, INDIA
6. RobVos, Jose Antonio Ocampo and Ana Luiza Cortez - Ageing Development, Orient and Black swan
7. John C Cladwe P.H.Reddy - Causes of Demography change - Pat Cald Well Experimental Research in SouthIndia, The University of Wisconsin press.
8. S. Iruday Rajan, US Misra & P.Sankara Sarma - India's Elderly -Burden or Challenge sage publications, New Delhi
9. S.Irudaya Rajan - Social Security for the elderly- experiments from South Asia, Routledge
10. Roland Pressat - Demographic analysis projections on Natalivity, Fertility and Replacement, Aldine Transaction- A division of Transaction Publishers.
11. D.Jayraj and S.Subramanian - Poverty inequality and population - OXFORD
12. P.K.Majumdar - India's Demography: Changing Demographic Senario in India, Rawat publications

13. Giridhar Kumar, Sathyanarayana, James, Alam - Population Ageing in India, Cambridge
14. Asis Kumar Chattopadhyay
Anuj Kumar Saha - Demography: Techniques and Analysis, Viva Books Private Limited.
15. Rajendra K Sharma - Demography and population problems Atlantic Publishers and Distributors.
16. N.Jayapalan - Social Demography, Book Enclave publishers
17. D.Radhadevi - Economics of Ageing, Serials publicaiton
18. Kerala state planning Board - Growing old in Kerala
20. K.C Zachariah, S.Irudaya Rajan - Kerala's Demographic transition, Determinants and consequences, Sage publications
21. A.K.Shiva kumar
Pradeep panda
Rajani R.Ved - Hand Book of Population and Development
22. UN(2002) - Political Declaration and Madrid plan of Action on Ageing, Second world Assembly on Ageing.
23. U.N - World population prospects (for various years) world population Ageing 2013 www.un.org/esa/population/publication.
24. US census bureau - An ageing world www.census.gov/prod.
25. Office of the Registrar General - Compendium of India's fertility- and Census Commission of India Mortality indicators.

Semester 5				
Open Course No	Course Code	Course Title	No. of Credit	No. of Teaching Hours
03	EC5OPT03	Gender Economics	4	72

Learning Objectives :

This course enables students to systematically perceive how the gender factor can Impact on economic and demographic development. It aims to make the student familiar with theoretical concepts in the area of Gender economics. It enables the students to conduct gender review of socio economic and demographic development programmes and strategies.

MODULE 1

The subject of Gender Economics-Interdisciplinary Approach in gender studies-HDI and incorporation of gender factor into HDI-Gender equality indices-GDI and GEM. Gender status in India and Kerala-Concept of Missing women (16 hrs)

MODULE 2 ECONOMIC GROWTH AND GENDER EQUALITY

Women's contribution to GDP-Feminization of poverty – Basic causes-Impact of gender equality on economic growth and socio economic development-Positive and negative impact of globalization on gender status-Occupational segregation-Gender discrimination in Education, Health, Employment, Political participation and decision making (20 hrs)

MODULE 3 DEMOGRAPHIC CHANGES AND GENDER STATUS

The gender factor in demographic development-Global demographic changes-Gender shift and demographic development-Impact on gender status-Gender differences in mortality-Concepts and factors-Biological factors. (16 hrs)

MODULE 4 GENDER POLICY

Objectives and methods of gender policy-Global and National gender policy-Gender inequality indicators- Indicators of gender differences in socio economic development-Main gender issues in socio economic development in developed and developing countries-International organizations and the role of gender studies and gender policy implementation-Gender Budgeting-Approaches and principles-Budgeting policies to reduce gender disparities. (20 hrs)

Readings

1. Gita Sen and Canen Crown; Gender and Class in Development Experience
2. Leela Gulati and Ramalingam; Kerala Women: A profile
3. Neera Desai and Maithreyi Krishnaraj; Health-A Gender Issue in India
4. Lourdes Beneria and Savithri Biswanath; Gender and Development: Theoretical, Empirical and Practical Approaches.
5. Lekha Chakraborti; Invisibility of Women's Work in Budgeting.
6. National Institute of public Finance and policy (NIPFP); Gender Budgeting in India, www.nipfp.org.in.
7. UNDP - Human Development Reports

Choice Based Elective

Semester 6				
Choice Based Course	Course Code	Course Title	No. of Credit	No. of Teaching Hours
01	EC6CBT01	Mathematics For Economic Analysis	3	72

Module I: Functions of one real variable

Types of functions- constant- polynomial- rational-exponential-logarithmic- Graphs and graphs of functions-Limit and continuity of functions-slope of curvilinear function. The Derivatives—rules of differentiation- higher –order derivatives- implicit differentiation- Economic applications. (25 Hours)

Module II: Calculus of multivariable functions

Functions of several variable- partial derivatives- rules of partial derivatives-second order partial derivatives. Optimization of multivariate functions- constrained optimization with Lagrange multiplier. Differentials-total and partial differentials-total derivatives-implicit and inverse function rules-Economic applications. (25 Hours)

Module III: Integral Calculus

The indefinite integral-integration-rule of integration- integration by substitution and by part. The definite integral- properties of definite integrals- area under a curve- area between curves- Economic application- consumer and producer surplus. (22 Hours)

Readings

1. Dowling,Edward T(2008): Introduction to Mathematical Economics,3rd Ed,Schaum'sOutline Series, McGraw Hill.(Chapters 3-6, 16-17)
2. Knut Sydsaeter, Peter Hammond and Arne Strom(2012): Essential Mathematics for Economic Analysis 4th Ed, Pearson India,.(Chapters-4-9)
3. MikWisneiwski(1998): Introductory Mathematical Methods in Economics, 2nd Ed McGraw- Hill,. (Chapters -7-10 and 13).
4. Michael Hoy,et.al(2009): Mathematics for Economics,2ndEd,PHI.(Chapters-Part IV- 11-12 and Part V-16).
5. Geoff Renshaw(2009): Maths for economics, 2nd Ed,OUP.(Ch-6-9, 14-16 and 18).
6. K.Holden and A.W.Pearson(2010): Introductory Mathematics for Economics and Business,2nd Ed. Macmillan.(Ch-5-7).
7. Ian Jacques(2015): Mathematics for Economics and Business,5thEd,PH. (Ch-4-6).
8. Akihito Asano(2013): An Introduction to Mathematics for Economics, CUP, (Ch-4- 7)

9. Jean Soper(2016): Mathematics for Economics and Business: An Interactive Introduction, 2nd, Blackwell.(Ch-5-10).
10. Mike Roser(2014): Basic Mathematics for Economists, 2nd Ed, Routledge(Ch-8-11)
11. Caroline Dinwiddy(2002): Elementary Mathematics for Economists: 2nd, OUP.
(Ch-6- 9)
12. J.M Pearson(1989): Mathematics for Economists: A First Course: Longman.(Ch-5-7).
13. Carl P Simon and Lawrence Blue(2002): Mathematics for Economists, WW Norton.
14. ShapoorVali(2014): Principles of Mathematical Economics, Springer.(for economic applications)
15. Chiang A.C. and K. Wainwright(2013): Fundamental Methods of Mathematical Economics, 4th Ed, , Tata McGraw-Hill Education .
16. E. K. Ummer: Basic Mathematics for Economics, Business, and Finance, 2014, Routledge.(Ch-3,4 and 8)

Semester 6				
Choice Based Course	Course Code	Course Title	No. of Credit	No. of Teaching Hours
02	EC6CBT 02	Business Economics	3	72

Learning Objectives

Business Economics discusses the application of economic theory and the tools of decision science to examine how an organisation can achieve its aims and objectives most efficiently. As an applied branch of economics, this course helps students understand how analytical tools of micro and macro economics are applied for solving many practical business problems.

Module I: Introduction to Business Economics

The scope and methods of Business Economics – role in managerial decision making – decision making – approaches to managerial decision making theory and firms – basic concepts in economics – scarcity – choice – resource allocation – fundamental concepts and principles : the incremental concept – the time perspective – the discounting principle – the opportunity cost concept – the equimarginal principle(concepts only). (12hrs)

Module II: Demand Analysis and Forecasting

Demand – types – determinants of demand – Law of demand – changes in demand – elasticity of demand – income – price – cross (with numerical illustration) – Demand determinants of non-durable consumer goods – durable consumer goods – capital goods – demand forecasting – types – methods of demand forecasting – forecasting demand for new products – criteria for a good forecasting method. (15hrs)

Module III: Production and Cost Analysis

Production function: Production function with empirical studies – Cobb Douglas production function – Cost concepts and classification – accounting cost and economic cost – actual cost and opportunity cost – explicit cost and implicit or imputed cost – out of pocket cost - book cost – direct and indirect cost – historical cost and replacement cost – short run and long run cost – total cost – average cost – marginal cost – cost estimation – accounting cost method – engineering cost method – objective of the firm: managerial theory of firm- by William J. Baumol. (15hrs)

Module IV: Pricing and Profits

Pricing methods – cost oriented pricing – competition oriented pricing – practical methods of pricing – peak-load pricing – pricing of a new product – multi product pricing – Dual pricing – administered pricing – transfer pricing – profit – profit theories – risk bearing theory – market imperfection theory – innovation theory – accounting and economic profit – profit planning – Break- even analysis (with numerical illustration). (15hrs)

Module V: Long Term Investment Decisions

Capital budgeting – meaning and need demand for capital – methods of investment criteria – payback period method – Average Rate of Return method – Discounted cash flow method – Net Present Value method – Profitability index – Internal Rate of Return method – (with numerical illustration) – cost of capital. (15hrs)

References

1. Dominick Salvatore. (2008) Managerial economics: Worldwide applications. New Delhi.
2. Nellis and Parker (2006). Principles of Business Economics. Pearson Education. New Delhi.
3. P.I. Mehta. Managerial Economics. Sultan Chand Publications.
4. H.L. Ahuja. Business Economics. S.Chand
5. S. Sankaran. (2002). Managerial Economics. Margham Publication
6. Mankar and Pillai. (2000). Business and managerial Economics. Himalaya.
7. Mote Paul and Gupta (2000) Managerial Economics. Tata Mc Graw Hill.
8. R.L. Varshney and K.L. Maheshwari. Managerial Economics. Sultan Chand.
9. Sampat Mukherjee. Business and Managerial Economics. New Central Book Agency (p) Ltd.
10. Francis Cherunilam. Business Economics

Semester 6				
Choice Based Course	Course Code	Course Title	No. of Credit	No. of Teaching Hours
03	EC6CBT03	History of Economic Thought	3	72

Learning Objectives

The aim of the course is to portrait the routes through which the Science of Economics has evolved as well as its development through the ages primarily demonstrating how past mainstream thoughts has contributed to the scope and content of modern economics. It is also designed to discuss deviations from orthodoxy that have helped to shape contemporary economic thought.

Module 1: Introduction

History of Economic Thought –Reasons for studying Economic Thought- Approach to the History of Economic Thought: Relative and Absolute- Evolution of Methodological Thought- Logical Positivism- Falsification- From Falsificationism to Paradigms- From Research Programmes to Sociological and Rhetorical Approaches- Post Rhetorical Approach (Only an overview is Required) Economics as a System of Natural Harmony- Naturalism V/S Supernaturalism V/S Utopian Socialism(Overview only). (10 hrs)

Module 2. Ancient Economic Thought

Ancient Economic Thought: Hebrew Thought (Old Testament - Subsequent Collections of Laws- Greek Economic Thought(General view)-Roman Economic Thought. Precursors of Classical economic Thought: Mercantilism- Economic Ideas of Thomas Mun, Francoise Quesnay (Physiocracy) (Only an Overview is required) (10 hrs)

Module 3. Classical Economic Thought

Classical Economic Thought: Its Critics and Reformers- Economics of Adam Smith- The Definitional Basis of the Wealth of Nations- The Analysis of Value- Analysis of Income Distribution- Analysis of Capital Accumulation - Economics of Thomas Robert Malthus:- The law of Population- David Ricardo: Method, Policy and Scope- The Ricardian Reformulation of the Theory of Value, Jean- Baptiste Say- Says Law of Market- Says Identity- Dichotomization of the Pricing Process- Says Identity and Quantity Theory of Money- Says Equality- The Revisionism of John Stuart Mill- Reciprocal Demand- Laws of Production and Distribution- Jeremy Bentham and Utilitarianism- Critics and Reformers of

Classical School- Works of Sismondi- Friedrich List – An Over View of Utopian Socialist- Karl Marx and Economics of Das Capital. (20 hrs)

Module 4. The Marginal Revolution and the Neo-Classical School.

The Marginal Revolution: Herman Heinrich, William Stanley Jevons- Carl Menger- Leon Walras- Marshallian Economics- Paretian Welfare Economics- Marginal Productivity Theory- Product exhaustion theorem – Wicksteed- Wicksell, J.B Clarks Marginal Productivity Theory and the Theory of Capital- Economics of Arthur Cecil Pigou- Economics of Welfare- Unemployment - The Pigou Effect-Keynes and Keynes Economics-Overview of Monetarism- New Classical Economics- Supply side economics-New Keynesianism.(20 hrs)

Module 5. Indian Economic Thought

Economic Ideas Kautilya- Dadabhai Naoroji-Ghandhian Philosophy and Economic Ideas- DR. Gadgil, CN Vakil. P R Brahmananda - K N Raj- P C Mahalanobis- V K R V Rao- Amarthya Sen. (12 hrs)

References

1. Lewis H Haney :*History of Economic Thought*, Surjeeth Publications, New Delhi, 1979, 4th Edn.
- 2 . Harry Landreth and David C Colander: *History of Economic Thought*, 4th Edn, Houghton Mifflin Company, Boston
3. Eric Roll: *A History of Economic Thought*, Faber and Faber, London 2004
4. Robert Lekachmn: *History of Economic Ideas*, The Universal Book Stall, New Delhi
5. Mark Blaug: *Economic Theory in Retrospect*, 4th Edn, Cambridge University Press.
6. Lokanathan V: *History of Economic Thought*, S Chand and Company, 1993
7. William J Barber: *A History of Economic Thought*, Penguin
8. Paul R R: *History of Economic Thought*, Kalyani Publications, Ludhiana, 1993
9. Bhatia H L: *History of Economic Thought*, Vikas Publishing House, Delhi

Complementary Course
Semester 1
Course1. MATHEMATICS FOR ECONOMIC ANALYSIS-1

No. of Credits - 4

No. of Contact hours – 108

Learning Objectives

Students of economics should learn the basic mathematical tools for the better understanding of economic theories. Most of the economic theories are based on mathematics. So it is necessary to acquire knowledge in mathematical methods which help students to enhance knowledge in economics. This course is expected to provide an introduction to mathematical concepts to students of economics at UG level. The basic aim of the course is to develop students' skills in applying mathematical concepts in the depth study of economics.

MODULE I

Quantitative Methods

Matrix Algebra: Definition of matrix- types of matrices- operation on matrices- determinants-properties- crammer's rule- rank of matrix- Variables, constants, parameters, simple functional relationship and their graphs, solutions to simultaneous equations, quadratic equations. (30 Hrs)

MODULE II

Differential and Integral calculus

Rules of Differentiation, Higher order derivatives, Applications of derivatives in Economics- Maxima and minima of functions- Elementary ideas of integral calculus. (30 Hrs)

Module III Input- output analysis

Input-output analysis – static and dynamic model – technical viability–Hawkins-Simon's conditions - open and closed model- application and limitation of the model. (20 Hrs)

Module IV Linear Programming

LPP- Formulation of LPP - Solution of LPP: Graphical method, Simplex method – duality- application and limitation of linear programming. (28 Hrs)

Readings

1. Yamane, Taro (2004): "Mathematics for Economists: an elementary survey", Prentice Hall of India.
2. Chiang. A. C (1988): "Fundamental Methods of Mathematical Economics", 3ed. Mc Graw Hill.
3. Allen R.G.D (1956): "Mathematical Analysis for Economists" Macmillan.
4. Amithabh Kundu, P N Mathur, G S Bhalla and Chalapathi Rao (1976): "Input- Output Framework and Economic Analysis", Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi.
5. Boumol. W.J (1987): "Economic Theory and Operations Analysis", 4 ed., Prentice Hall of India.
6. Loomba N.P (1979): "Linear Programming", Tata McGraw Hill Publishing Company

**Complementary Course
Semester 2**

COURSE 2: MATHEMATICS FOR ECONOMIC ANALYSIS-2

No. of Credits - 4

No. of Contact hours – 108

Learning Objectives

The aim of this course is to provide students with an introduction to economic theory through the use of elementary mathematics. This course covers essential topics in microeconomic theory. This course is expected to develop students' skill in applying mathematical tools in micro economic theory.

Module I Theory of Consumer Behaviour and Firms

The nature of utility function – indifference curve – maximisation of utility - Demand function – Demand curve - elasticity, types and measurements -Slutsky equation.

Production functions and product curves - isoquants - elasticity of substitution – Cobb-Douglas, CES production function- optimum combination of inputs-.Cost function - long run and short run (37hours)

Module II Market Structures

Demand and Supply functions under perfect competition - Goods market and Factor market
Equilibrium: Perfect competition, Monopoly, price discrimination, monopolistic competition.
(37 hours)

Module III - Game Theory

Concept - Two-person zero sum game - Maximin and Minimax strategy - Saddle point-Mixed strategies- Prisoner's dilemma – Payoff matrix of a game-two-person-two-commodity-and zero –sum-game. (34 hours)

Readings

1. Allen, R.G.D (1974) Mathematical Analysis for Economics, McMillan Press, London. (reprint edition)
2. Chiang, A.C., Fundamental Methods of Mathematical Economics, McGraw Hill, New Delhi (recent edition).
3. Henderson, J. and R.E. Quandt (1980) Micro Economic Theory: A Mathematical Approach, McGraw Hill, New Delhi
4. Handy, S.T (1997) Operations Research: Prentice-Hall of Indian, New Delhi.
5. Jeffrey Baldani et al. (2009), An Introduction to Mathematical Economics, Cengage Learning, Delhi.
6. Boumol. W. J (1987): "Economic Theory and Operations Analysis", 4 ed., Prentice Hall of India.
7. Heathfield D.F and Wibe, Soren (1987): "An Introduction to Cost and Production functions"Macmillan.

COMPLEMENTARY COURSE (ECONOMICS)

For Other B A Programmes

Course 1 PRINCIPLES OF

ECONOMICS

No of credits 4

No of contact hours 108

Learning objectives

To have a basic knowledge in basic micro economic theory

Module 1 Nature and Scope of Economics.

Definitions- wealth-welfare-scarcity and growth-methodology of economics-significance of economics-micro and macro economics- Positive and normative economics (12Hrs)

Module II Basic Economic problem – Choice and the allocation of resources.

The problem of scarcity and choice- allocation –growth and fuller utilization of resources – opportunity cost—production possibilities and technological choice. Basic features of capitalism ,socialism and mixed economy. (24Hrs)

Module III. Prices and markets

Market-types-Demand –demand curve- Law of demand- shift in demand -elasticity of demand- -degrees of elasticity of demand- measurement and practical uses of elasticity of demand.

Supply –law of supply – market equilibrium. (24Hrs)

Module IV- Consumer Behaviour.

Cardinal utility; law of diminishing marginal utility; derivation of the Marshallian demand curve Consumer's surplus- Marshallian measurement . (20 Hrs)

Module V Production and product pricing.

Production function- Short- Run and Long Run Law of variable proportions Returns to scale, Concepts of cost and Revenue, Market forms- perfect competition - salient features.monopoly- salient features- monopolistic competition salient features –oligopoly – salient features.(market forms –features only-No price and output determination in any of the market forms) (38 Hrs)

Readings

1. Samuelson P. A, Nordhaus (2009) *Economics*, Tata Mc Graw Hill
2. Mankiw , Gregory ,Principles of economics ,Cengage learning delhi
3. Case & Fair (2007) Principles of economics , Pearson Education , Delhi.

COMPLEMENTARY COURSE (ECONOMICS)
For Other B A Programmes

Course II
Basic Economic Studies

No of credits- 4

No of contact hours- 108

Learning objectives

The course intends to make UG students equipped with basic understanding in macro economics ,general issues in Indian economy and Kerala economy.

Module 1. National Income accounting.

Concept of Circular Flow, National income identities with government and international trade . concepts of National income Methods of National income accounting. –difficulties in estimating national income. (20 Hrs)

Module II.Public Economics.

State v/s market- sources of public revenue- GST-public expenditure –trends in India- budget- types –fiscal deficit-revenue deficit – public debt- fiscal policy –objectives, fiscal policy as tool for combating inflation and deflation (20 Hrs)

Module III Financial system.

Money — meaning, and functions- Meaning, Types, and Functions of commercial banks- Functions of a central bank – with reference to RBI.- Inflation and deflation— definition, types, causes and effects. Measures to control inflation- Monetary policy as a tool for combating inflation and deflation.. (20 Hrs)

Module IV Introduction to Indian economy.

Developed and less developed Economy: meaning and Concept. Characteristics of Indian Economy. Comparison of Indian Economy with Developed countries. a) Population b) per capita Income c) Human Development Index d) Agriculture e) Industry f) Service Sector.

Planning in india - five year plans- achievements and shortfalls Trends in National Income & Per Capita Income in india Since 1991. Place of Agriculture in the Indian Economy .Green Revolution: Achievements, & failures -Importance of Industrialization- Industrial policy since 1991. SEZ – Concept and features.New Economic Reforms – Concept i) Liberalization

ii) Privatisation, iii) Globalization

NITI Ayog . Recent reforms in banking sector in India- Narasimham Committee I & II.

Private Public participation in india. (28 Hrs)

Module V Basic Economic Issues of Kerala

Features of Kerala economy-structural changes- Kerala model of development- self reliance and self help groups (SHG'S) Impact of migration in Kerala economy (20 Hrs)

Readings

- 1 Samuelson P. A, Nordhaus (2009) *Economics*, Tata Mc Graw Hill.
2. Mankiw , Gregory ,Principles of economics ,Cengage learning delhi.
3. Uma Kapila *Indian economy since independence*. Accademic publication , New delhi
4. Meera Bai. M. (ed) (2008) Kerala Economy Serials Publication New delhi
5. Dre'ze Jean and Amarthya Sen(Ed) Indian developmt selected regional perspectives Oxford university press new delhi
6. Dutt and sundharam , Indian economy S chand and company New delhi.