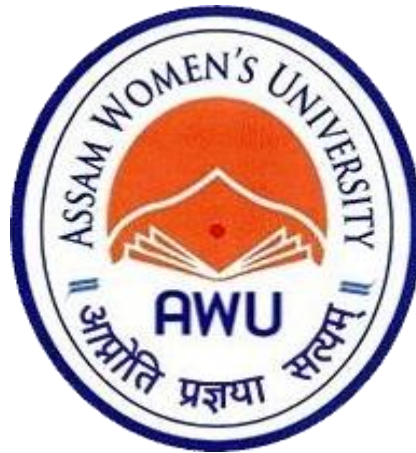


Syllabus for M.A. in Economics (Revised under CBCS)



**Department of Economics
School of Social Science and Humanities
Assam Women's University**

Jorhat, Rowriah-04

1. Department of Economics

The department of economics has been founded in 2015 along with a few departments. Since its inception, the department has witnessed many bright students and has been successful in contributing to the cause of society by producing efficient human resources. The Department supports postgraduate programme (M. A. in Economics) which draw a huge number of applicants from all over the North-Eastern states of India. This program has a strong theoretical and quantitative focus with an emphasis on empirical applications. The Department is proud of its many past faculty members who have made significant contributions to the Department and other higher educational institutions of the state along with various agencies of Government of Assam. The Department is also proud of its alumni who have gone on to distinguished academic careers. Department alumni can be found in the colleges and other non-governmental organizations, few being appointed in banks and non-banking financial institutions of the state. Few developmental activities apart from academics are to visit various nearby rural areas to study about the lacunas hindering the development of the region. The department is hopeful of future achievements in producing rational economic agents for society and provides policies and framework for the development of the discipline.

2. Choice Based Credit System

Introduction:

The Choice based credit system (henceforth, CBCS) provides an opportunity for the students to choose courses from the prescribed courses comprising the core, discipline specific elective, generic elective, skill enhancement and ability enhancement courses. The courses can be evaluated following the grading system, which is better than the conventional marks system. Grading system provides uniformity in the evaluation and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations which enables the student to move across institutions of higher learning. The uniformity in the evaluation system also enables potential employers to assess the performance of the candidates and also helps in the transfer of credit as per the NEP 2020.

3. Definitions:

1. **'Academic programme'** means the entire course of study comprising its structure, course details, evaluation schemes, etc.
2. **'Course'** means a segment of a subject that is part of an Academic Programme (traditionally known as a paper)
3. **'Programme structure'** means a list of courses (Core, Discipline specific Elective, Generic Elective, AEC & SEC) that makes up an Academic programme, specifying the syllabus, credits, hours of teaching, evaluation and examination schemes, minimum number of credits required for successful completion of the programme, etc., prepared in conformity with Assam Women's University CBCS rules.

4. **‘Core course’** means a course that a student admitted to the M. A. Economics programme must successfully complete receiving the degree and which cannot be substituted by any other course.
5. **‘Discipline specific elective course’** means an optional course within the discipline that is to be selected by a student out of a pool of such courses offered by the Economics Department.
6. **‘Generic Elective’** means an elective course which the students of other departments may opt, subject to fulfillment of eligibility criteria as laid down by the Economics department.
7. **‘Ability Enhancement Course(s)’**: Ability enhancement courses are the courses based upon the content that leads to Knowledge Enhancement. It is a Non CGPA course.
8. **‘Skill Enhancement Course(s)’**: These courses are designed to provide value-based/or skill bases knowledge and should contain both theory and lab/hands-on/training/field work. The main purpose of these courses is to provide students life-skills in hands on mode so as to increase their employability. It is a Non CGPA course.
9. **‘Dissertation’**: This course is compulsory for the final semester students for the fulfillment of post Graduation Degree. Students in the final semester would be required to do dissertation.
10. **Gender Sensitization Course:**
11. **‘Credit’** means the value assigned to a course indicating the level and quantity of instruction as measured by instructor-student interaction.
12. **‘SGPA’** means Semester Grade Point Average calculated for individual semester.
13. **‘CGPA’** is the Cumulative Grade Points Average calculated for all courses completed by the students at any point in time. CGPA is calculated each year for both the semesters clubbed together.

Programme Objective:

The Master of Arts (M. A.) programme in Economics reflects new developments in the Economics discipline. The curriculum has a strong theoretical and quantitative focus with all students being trained in the use of computers and statistical software that they find useful in their professional careers in academia, research institutions, government, and industry. The programme is semester-based and includes many elective courses which allow students to pursue their varied interests and to specialize in their fields of choice. Entry into the

programme requires basic foundations of economics, analytical, mathematical, and quantitative skills. The ability to write coherently and analytically in English is very important. The students will be further done these skills in the context of the Economics paradigm. At the end of the programme, the student should be able to bring to bear these skills to the modeling and analysis of a wide range of theoretical and applied problems in Economics and to the understanding and solution of real-world economic and social problems.

Programme Outcomes:

PO1: In depth knowledge of economic theories and application of these theories through models, statistical, econometric and mathematical tools of Economics to analyse socio-economic issues and formulate viable solutions.

PO2: Identify key macroeconomic indicators and measures of economic change, growth and development.

PO3: Understand how economy is influenced by economic policy, technological advances and demographic conditions.

PO4: Imbibe the scientific temperament towards conducting research to resolve socio-economic problems of the society.

PO5: Enlighten the entrepreneurial mindset of the students that will lead to opening up own business enterprises using available resources.

Structure

The M. A. Economics programme is spread over two years. Each year is divided into two semesters. The programme requires students to take a combination of Core Courses, Discipline specific elective Courses, Generic Elective Courses, Ability Enhancement Courses, Skill Enhancement Courses and Gender Sensitization Course. A student is required to complete a minimum of 75 credits for the completion of the programme and the award of the M. A. Economics degree. Depending on the nature of the course, instruction consists of lectures combined with computer labs, tutorials. The labs provide students with the opportunity for hands-on learning of programming, statistical, and econometric techniques. Tutorials are small group interactions in a classroom setting that complement the lectures.

Details of courses in MA programme

Semester	Core Courses(CC)	Discipline Specific Elective Courses(DSE)	Generic Elective Courses(GEC)	Foundation Courses: Skill Enhancement Course(SEC) and Ability Enhancement Course (AEC)

I	CC-1	DSEC-1 (Students will choose one course from a pool of courses)		SEC (Non CGPA course)	AEC (Non CGPA course)
	CC-2				
	CC-3				
	GSC (Gender Sensitization Course)				
II	CC-4	DSEC-2(Students will choose one course from a		SEC (Non CGPA	AEC (Non CGPA
	CC-5				
	CC-6				
III	CC-7	DSEC-3(Students will choose one course from a pool of courses)	GEC-1(Students will opt a course from other departments)		
	CC-8				
	CC-9				
IV	CC-10	DSEC-4(Students will choose one course from a pool of courses)	OEC/GEC-2(Students will opt a course from other departments)		
	CC-11				
	CC-12				

Credit Distribution of Courses

Semester	Core Course			Discipline Specific Elective Course			Generic Elective Course			Ability Enhancement Course (Non GGPA)			Skill Enhancement Course (Non CGPA)			Total Credit
	No of Course	Credit for each course	Total	No Course (Any one)	Credit for each course	Total	No of Course	Credit for each course	Total	No of Course	Credit for each course	Total	No of Course	Credit for each course	Total	
1 st	3	4	3x4=12	1	4	1x4=4	-	-	-	1	2	1x2=2	1	2	1x2=2	
Gender Sensitization Course	1	2	1x2=2													
Total			14			4						2 (Non CGPA)			2 (Non CGPA)	14+4=18
2 nd	3	4	3x4=12	4	1	1x4=4	-	-	-	1	2	1x2=2	1	2	1x2=2	
Total			12			4						2 (Non CGPA)			2 (Non CGPA)	12+4=16
3 rd	3	4	3x4=12	4	1	1x4=4	1	4	1x4=4	-	-	-	-	-	-	
Total			12			4			4							12+4+4= 20
4 th	2		2x4=8	4	1	1x4=4	1	4	1x4=4	-	-	-	-	-	-	
Dissertation	1		1x4=4													
Total			12			4			4							12+4+4=20
Total Credit for the entire course																74

Course Structure with distribution of Credit

Code	Course Name	L	T	P	C	CR
1st Semester						
CC						
MECC1401	Microeconomic Analysis	3	1	0	4	4
MECC1402	Macroeconomic Analysis	3	1	0	4	4
MECC1403	Mathematics for Economic Analysis	3	1	0	4	4
GSC1204	Gender Sensitisation Course	3	1	0	4	4
DSEC-1(One course from among MECE1401, MECE1402, MECE1403, MECE1404)						
MECE1401	Monetary Economics	3	1	0	4	4
MECE1402	Health Economics	3	1	0	4	4
MECE1403	Welfare Economics	3	1	0	4	4
MECE1404	Political Economy	3	1	0	4	4
SEC						
MECS1201	Statistical Software for Data Analysis and Presentation	1	0	1	2	2
AEC						
MECA1201	Portfolio Management	1	1	0	2	2
2nd Semester						
CC						
MECC2401	Development Economics	3	1	0	4	4
MECC2402	Macroeconomic Theory and Policies	3	1	0	4	4
MECC2403	Statistics for Economic Analysis	3	1	0	4	4
DSEC-2(One course from among MECE2401, MECE2402, MECE2403 & MECE2404)						
MECE2401	Population Studies	3	1	0	4	4
MECE2402	Industrial Economics	3	1	0	4	4
MECE2403	Environmental Economics	3	1	0	4	4
MECE2404	Economics of Gender and Development	3	0	1	4	4
SEC						
MECS2201	Economics of Rural Marketing	1	1	0	2	2
AEC						
MECA2201	Human Resource Development	1	1	0	2	2
3rd Semester						

CC						
MECC3401	International Economics	3	1	0	4	4
MECC3402	Public Economics in Indian Context	3	1	0	4	4
MECC3403	Introductory Econometrics	3	1	0	4	4
DSEC-3(One course from among MECE3401, MECE3402, MECE3403 & MECE3404)						
MECE3401	Financial Market and Institutions	3	1	0	4	4
MECE3402	Managerial Economics	3	1	0	4	4
MECE3403	Agricultural Economics	3	1	0	4	4
MECE3404	Labour Economics	3	1	0	4	4
GEC-1/OE-1 Students from other departments will opt this course						
MECG3401	Introductory Economics	3	1	0	4	4
4th Semester						
CC						
MECC4401	Research Methodology	3	1	0	4	4
MECC4402	Indian Economy and its Growing Dimensions	3	1	0	4	4
MECC4403	Dissertation	0	2	2	4	4
DSEC-4(One course from among MECE4401, MECE4402, MECE4403 & MECE4404)						
MECE4401	Mathematical Economics	3	1	0	4	4
MECE4402	Financial Operation and Management	3	1	0	4	4
MECE4403	North East Economy: Performance and Possibilities.	3	1	0	4	4
MECE4404	Econometric Analysis	3	1	0	4	4
OEC/GEC-2 (Students from other departments will opt this course)						
MECO4401	Money and Banking	3	1	0	4	4

***L= Lecture, T= Tutorial, P= Practical, CH= Contact Hour, CR=Credit

Course Structure:

A student's choice of elective courses in each semester will be limited to those announced by the Department at the beginning of that semester. Each student is required to decide her choice of elective courses within two weeks of the start of each semester. On account of infrastructural constraints, the Department may limit the number of students in an elective course, typically based on performance in a designated prior course. Such requirements will be announced at least one semester in advance. Elective courses may have prerequisites, which may be Core courses or Elective courses.

Teaching

The faculty of the Department is responsible for organizing lecture and tutorial work for the M. A. programme. There shall be 95 instructional days, excluding examinations, in a semester.

Assessment and examinations

English shall be the medium of instruction and examination. Assessment of a student's performance in a course shall be based on marks for Internal Assessment and the Final Examination in the relevant course, as per Assam Women's University's CBCS rules.

Marks, grades, and classes

Conversion of marks in courses into grade points, SGPA, CGPA, grand CGPA, and class will be done as per Assam Women's University CBCS rules.

Span period

No student shall be admitted as a candidate for the examination for any of the Parts/Semesters after the lapse of four years from the date of admission to the Part-I/Semester-I of the M. A. Economics Programme.

Internal assessment marks

Internal assessment will be based on multiple mid-term examinations, presentations, or projects. The appropriate mode of assessment for a course is chosen by the course instructor.

CORE COURSES

Microeconomic Analysis: MECC1401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	4	0	16
2	Module 2	12	4	0	16
3	Module 3	12	4	0	16
4	Module 4	12	4	0	16

Course Objective:

To extend basic knowledge of Microeconomics among the students.

Course outcomes:

CO1: Students will understand the difference between the choice of a consumer under certainty and uncertainty.

CO2: Students will understand the performance of insurance market of economics and learn about the problems arising in the insurance market.

CO3: Students will be able to learn the extension of market analysis beyond the traditional perfectly competitive markets.

CO4: Students will understand the use of game theory in solving the equilibrium of an oligopolist.

Module 1: Decision making Under Certainty: Hicks-Allen and Revealed preference; income and substitution effects, the Slutsky Equation; Ordinary and Compensated Demand Curves; Expenditure function, indirect utility function, Roy's identity; Decision making under uncertainty: Expected Utility Theorem, Measures of Risk Aversion, Fair Gambles, St. Petersburg Paradox and Bernoulli's Hypothesis; Neumann-Morgenstern Method of Constructing Utility Index Under Risky Situations ; Risk Lover, Risk Averter And Risk Neutral Persons; Economics of Insurance, Friedman-Savage Hypothesis, Certainty Equivalence and Cost of Risk.

Module 2: Economics of Insurance and Information– Asymmetric Information and Adverse Selection – Lemon Market-Moral Hazard – Signaling and Screening - the Principal-Agent Problem.

Module 3: Competitive markets-A Review of Perfect Competition Equilibrium; Market Power-Monopoly, Single Product Monopoly, Multiplant firm, Price Discrimination, Effect of tax; Monopolistic competition-review of equilibrium. Oligopoly: non-collusive oligopoly- Cournot Model, Stackelberg model, Bertrand model, Kinked demand curve model; collusive oligopoly-Dominant firm model, Cartels.

Module 4: Description of a game; Strategy; Prisoners' Dilemma; Competitive Games: Two- Person Zero-Sum Games; Pure and Mixed Strategies; Rules of Dominance and Iterated Deletion of Dominated Strategies; Solution of Games with and without Saddle Point; Two Person, Non-Constant-Sum Games: Cooperative Games and Nash Bargaining Solution; Non-Cooperative Games.

Suggested Readings:

1. Henderson, J.M. & Quandt, and R.E.: Micro Economic Theory, Mc Graw Hill.
2. Varian Hal R, Intermediate Microeconomics, Eight Edition, W. W. Norton & Company
3. Koutsoyiannis, A: Modern Microeconomics, ELBS with Macmillan Publication.
4. Maddala, G.S. and Miller, E.: Microeconomics, Theory and Applications; McGraw Hill
5. Pindyck, R.S., Rubinfeld, D.L. & Mehta: Microeconomics, Pearson Education
6. Salvatore. D.: Microeconomics, Theory and Applications, Oxford University Press.
7. Ahuja, H. L, Advanced Economic Theory – Micro Economic Analysis, S.Chand & Company Ltd

Macroeconomic Analysis: MECC1402

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl. no.	Module	L	T	P	Total
1	Module 1	16	4	0	20
2	Module 2	12	4	0	16
3	Module 3	10	2	0	12
4	Module 4	14	4	0	18

Course objective:

To learn the overall performance and activities of Macroeconomic indicators. Students shall be able to understand the economic policy framework of the Government after completion of the course.

Course Outcomes:

CO1: Students will be able to understand the basic concept of computation of National income and GDP in a country.

CO2: Students will be able to understand the equilibrium conditions of both product and money market simultaneously.

CO3: Students will understand the international scenario of macroeconomics, economic openness and exchange rate regimes

CO4: Students will be able to learn an idea about the emerging issues of new classical and new Keynesians.

Module 1: The Ideas of Income, Domestic Income and National Income; GDP as a Production Total and its sectoral composition, NDP as an Income Total, the Circular Flow and GDP as an Expenditure Total; Introduction to Equilibrium and Disequilibrium in the Macro-economy; Classical Model of Full Employment; Keynes Criticism of Classical theory, The Simple Keynesian Framework and the Multiplier.

Module 2: Joint Equilibrium of Income and Interest Rate: IS-LM Model, Fiscal and Monetary Policy Multipliers, Transmission Mechanism and the Liquidity Trap, Fiscal Policy and Crowding-Out. Patinkin's full employment equilibrium.

Module 3: Economic openness, Balance of Payments, Exchange rate regimes-concepts; Economic Policy in an open economy-Mundell-Fleming Model, Impossible Trinity; Speculative attack on currency; Purchasing Power and Interest Rate Parities; current account and capital account convertibility in India.

Module 4: Consumption under certainty- Permanent Income hypothesis, Consumption under Uncertainty– Random walk Hypothesis; Savings in Inter-temporal models-Life Cycle Hypothesis; Neo- Classical and Keynesian-Money Demand; Money Supply Process- Money Multiplier Theories of Investment Demand- the Accelerator Theories of Investment, the Neoclassical Theory of Investment and Q- Theory of Investment.

Suggested Readings:

1. Ahuja H.L & S chand: Macroeconomics, Theory and Policy. 20th Edition.
2. Dornbusch, R., Fischer, S. and Startz, R.: “*Macroeconomics*”; Tata McGraw-Hill Publishing Company Limited, New Delhi.
3. Don Patinkin, D., Money, Interest and Prices
4. Mankiw, N.G.: -Macroeconomics; Worth Publishers, New York
5. Rana, K.C. & Verma, K.N.: “*Macroeconomic Analysis*”; VPC, Jalandhar.
6. Richard T. Froyen: “*Macroeconomic Theory and Policies*”

Mathematics for Economic Analysis: MECC1403

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	10	2	0	12
2	Module 2	16	4	0	20
3	Module 3	16	4	0	20
4	Module 4	10	2	0	12

Course objective:

To understand the use of the mathematical tools in various fields of Economics. After the completion, of course, students shall be familiar with the easier mathematical techniques that make economic theories simpler and scientific in nature.

Course Outcomes:

CO1: Students will be able to learn a brief idea about set theory.

CO2: Students will be able to learn a detailed understanding of the matrix and its application and overview of input- output analysis.

CO3: Students will understand the different applicability of differentiation in economics.

CO4: Students will understand the application of linear programming in economics.

Module 1: Set Theory: Concepts of sets and its operations; The Real Number System, Constant, Variable, Relations and Functions; Types of functions; Equations, Limit, Continuity of a Function.

Module 2: Algebra of matrices; Simultaneous equations with matrices; Applications: partial equilibrium market model, national income model, external sector model. Introduction to input-output analysis – Static, open models, Solution, viability conditions - Hawkins – Simon conditions; Dynamic input-output model.

Module 3: Rules of Differentiation; Application to elasticity, derivation of marginal functions, simple market model, national income model, Production; Partial differentiation rules. Unconstrained optimization; Applications: Multiproduct firm, Multi-plant firm, Price discrimination, Constrained optimization, Optimization with equality constraint – Lagrange’s Multiplier method, Applications: Utility maximization, Least-cost input combination. Concept of integration; Simple

rules of integration; Application to consumer's surplus and producer's surplus. Capital formation and derivation of simple growth process (Domar).

Module 4: Concept and formulation of LP problems, Solutions: Graphical and Simplex methods; Transportation problem. Solution to ill behaved LP problem.

Suggested Readings

1. A.C. Chiang: Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
2. Allen, R.G.D. (1976), *Mathematical Analysis for Economists*, Macmillan.
3. Barua, S.: Basic Mathematics and its Application in Economics, Macmillan India Limited.
4. Carl Simon and Lawrence Blume, -Mathematics for Economists, W.W. Norton and Company.
5. Gupta, S.C. and Kapoor, U.K., "Fundamentals of Mathematical Statistics"
6. Hoy. M. and others: Mathematical Economics
7. J.M. Henderson & R.E. Quandt: Microeconomic Theory – A Mathematical Approach, McGraw Hill, Kogakusha, Tokyo
8. Sydsaeter and Hammond: Mathematics for Economic Analysis, Pearson.

Gender Sensitization Course:GSC1204

L:1 T:1 P:0

CR: 4

Development Economics: MECC2401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl. no.	Module	L	T	P	Total
1	Module 1	14	2		16
2	Module 2	14	2		16
3	Module 3	14	4		18
4	Module 4	12	2		14

Course objectives:

Students will learn various development strategies applicable in various field of economics and learn various instruments of measuring economic development.

Course Outcomes:

CO1: Students will learn the real meaning of development and its impact on various fields of Economics.

CO2: Students will learn how to interpret the various development strategies and theories to access the different development paths followed by different societies of the world.

CO3: Students shall be able to explain the measurement issues related to economic development.

CO4: Students will understand an introduction about the comparative analysis of the development approach of various countries.

Module 1: Problems in Defining Economic Development — Per Capita Income as an Index of Development – Alternative Measures of Development: PQLI, HDI, GDI, Multidimensional Poverty Index(MPI); Sen’s approach for development, Sustainable development; Inequality and Development – Kuznets Hypothesis – Lorenz Curve – Gini Coefficient; Redistribution with Growth, Corruption and Development - The inverse U shaped corruption curve.

Module 2: Economic Development and Unlimited Labour Supply (dual-economy models): Lewis Model, Lewis- Ranis- Fei Model, Rural-Urban Interaction- Harris-Todaro Model, The Dependence Revolution- Dependence Model, Dualistic Development Thesis.

Module 3: Classical Theory of Economic Growth: Harrod–Domar Model: Instability of Equilibrium; Solow’s Neoclassical Model and Steady-State Growth-Role of Technical Progress-Convergence, Endogenous Growth– Role of Human Capital; Alternative Growth Model: Joan Robinson.

Module 4: East Asian Miracle to East Asian Crisis, Latin American Economic Development: Brazil and Mexico - Latin American Crisis, Indian Economic Performance and Reforms, Economic Development and Reforms of China and South Korea.

Suggested Readings

Todaro & Smith,—Economic Development, Pearson Education Asia, Eight Edition.

Meier & Rauch, –Leading Issues in Economic Development, Oxford University Press.

1. Ray, Debraj,–Development Economics, Oxford University Press.

2. Taneja & Myer, –Economics of Development and Planning, Vishal Publishing Company.
3. Higgins, B.,–Economic Development–Problems, Principles& Practices, Universal Book Stall, New Delhi.
4. Laffont, Jean - Jacques. "Corruption and Development. Oxford University Press, Oxford, 2006.
5. Laffont, J.J. (2000), *Incentives and Political Economy*, Oxford University Press, Oxford.
6. Udry Christopher, (2004): Child Labor, Yale University(August)
7. Drèze, J. and A. Sen (2002), *India: Development and Participation*, Oxford University Press, NewDelhi
8. Riskin, C. (1987), *China’s political economy: the quest for development since 1949*, Oxford: Oxford University Press.
9. Akyuz, Y. (ed) (1998): *East Asian Development: New Perspectives*, Special Issue, *Journal of Development Studies*, 34(6).Pp.4-36
10. Bhagwati Jagdish & Panagariya Arvind(2012),–*India's Trystwith Destiny: Debunking Myths that Undermine Progress and Addressing New Challenges*, Harper Collins
11. Meier, G. and J. Rauch (2004), *Leading Issues in Economic Development*, 7th edition. Oxford University Press.
12. World Development Reports and Human Development Reports.

Macroeconomic Theory and Policies: MECC2402

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	2	0	14
2	Module 2	14	2	0	16
3	Module 3	14	2	0	16
4	Module 4	14	4	0	18

Course objective:

To learn the formulation and application of various macroeconomic policies and to understand the different dimensions of the growth theories as available in the fields of economic literature.

Course Outcomes:

CO1: Students shall be able to evaluate the nuance of different schools of thought and the implications thereof for macroeconomic policy formulation.

CO2: Students shall understand various concepts of money supply and its implications.

CO3: Students shall be able to enumerate the latest advances in theories of growth and business cycles.

CO4: Students shall be able to learn the criteria that are needed to take various investment decisions.

Module 1: Money, Inflation and Unemployment Inventory and Portfolio Balance Approaches to Demand for Money; Friedman's Restatement of the Quantity Theory of Money; Inflation Unemployment Trade-off: the Philips Curve Analysis; Monetarists' Criticism of the Trade-off, Natural Rate of Unemployment and the Long Run Philip Curve; Adaptive versus Rational Expectations, New Classical School and the Policy Ineffectiveness Hypothesis.

Module 2: Supply of Money and its Components, Inside and Outside Money, Determinants of Money Supply, High-powered Money, Money Multiplier, Money Supply Determination in an Open Economy.

Module 3: Advances in Business Cycle Theory, Philosophy of Real Business Cycles, Interpretation of the Labour Market, Importance of Technology Shocks, Neutrality of Money; New Keynesian Economics: Menu Cost Model, Recessions as Coordination Failure.

Module 4: The investment expenditure: criteria of investment decision, present value, internal rate of return, payback period, Keynesian formulation-long and short run relationship; the flexible accelerator; Neo-classical approach to fixed investment; Investment and levels and levels of current profit; Kalecki's theory and Eisner's reformulation; lags in the investment function.

Suggested Readings:

1. A P Thirlwal, Growth and Development
2. Brian Snowdon and H R Vane, Modern Macroeconomics
3. David Romer, Advanced Macroeconomics
4. Debraj Ray, Development Economics
5. Legacy and Reisman: Macroeconomics: An Introduction to Keynesian Neo-Classical Controversies
6. N. Gregory Mankiw, Macroeconomics
7. Ola Olson, Essentials of Advanced Macroeconomic Theory

8. Soumen Sikdar, Principles of Macroeconomics

Statistics for Economic Analysis: MECC2403

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	2	0	14
2	Module 2	12	4	0	16
3	Module 3	12	4	0	16
4	Module 4	14	6	0	20

Course objectives:

Students will learn how to use various statistical tool to test the relationships among various variables as suggested by the theories in economic literature.

Course Outcomes:

CO1: The students will be able to understand the use of statistics in Economics literature.

CO2: The students will learn about data collection, presentation, analysis and hypothesis testing.

CO3: Students will have an idea of regression analysis and its importance and uniqueness.

CO4: Students will learn about the use of t test, Chi-square test and hypothesis testing in their further research.

Module 1: Basic concepts of population, sample, sampling vs. population, variable, parameter, primary and secondary data. Techniques of data collection. Sampling – random and non- random sampling; Simple random sampling; Stratified random sampling, Convenience sampling, Snow ball sampling and Multistage sampling. Frequency Distribution, Cumulative Frequency Tabular, Graphic and diagrammatic representation of data.

Module 2: Measures of central tendency: Mean, Median, Mode, Geometric mean and Harmonic mean. Measures of dispersion; Range, Quartile deviation, Mean Deviation, Standard Deviation, Coefficient of variation, Skewness and Kurtosis.

Module 3: Correlation: Co-efficient of correlation – Karl Pearson and Rank Correlation, Partial and Multiple Correlation Analysis. Regression analysis – Estimation of the regression line in a bivariate distribution – Least-squares methods, interpretation of regression coefficients.

Module 4: Statistical Inferences and Hypothesis Testing – Concept of an estimator; Parametric and

Non-parametric test, Desirable properties of an estimator; Hypothesis –Formulation of statistical hypotheses – Null and alternative; goodness of fit; Confidence intervals and level of significance; Hypothesis testing based on Z, t, χ^2 (Chi-square) and F test; Type 1 and Type 2 errors.

Suggested Readings

1. Veerachamy. R (2002), Quantitative Methods for Economists, New Age International Publisher, New Delhi.
2. Gupta. S.C.(1993), Fundamentals of Applied Statistics. Chand & Sons, New Delhi.
3. Gupta S.P.,: Statistical Methods, 43rd Edition, Chand & Sons, New Delhi
4. Speigal,.M.R (1992), Theory and Problems of Statistics, Mc Graw Hill Books Co., London.
5. Nagar A.L. and R.K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.
6. N.G Das : Statistical Methods, Mc Graw Hill Education.

International Economics: MECC3401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	4	0	18
2	Module 2	14	2	0	16
3	Module 3	12	4	0	16
4	Module 4	12	2	0	14

Course objectives:

The purpose of this course is analyse the International trade theories, changing pattern of international trade in view of developments in trade environments and various international policies.

Course outcomes:

CO1: Students will learn a rigorous idea of the effect of international trade on the country’s economy.

CO2: Students will understand an idea about various theories comprising traditional and modern related to international trade.

CO3: Students will learn an idea about various trade policies and different Economic integration.

CO4: Students shall be able to understand about implication of tariff and non tariff policies in different countries. They

Module 1: Inter-regional versus international trade - Mercantilist doctrine of balance of trade - Adam Smith and absolute advantage theory of trade - Ricardo and comparative advantage, its limitations - production possibility curve - Community indifference curve - Gain from trade - Offer curve - Determination of international equilibrium price - Different concepts of terms of trade - Factors affecting terms of trade.

Module 2: Comparative advantage in Heckscher Ohlin Model - definitions of factor abundance - Relationship between factor prices and commodity prices - Factor price equalization theorem - Factor intensity reversal - the empirical evidence on Heckscher Ohlin theory - the Leontief Paradox - immiserising, growth – Foreign exchange constraint on growth. Savings gap versus foreign exchange gap controversy.

Module 3: Recent explanations of the basis of trade in terms of technological lead, domestic market size and product cycle approach – Linder’s hypothesis – Intra-industry trade and Inter-industry trade, Rybczynski theorem. Economic Integration; Theory of customs union – trade creation versus trade diversion – partial and general equilibrium approaches to the theory of customs union – static and dynamic effects.

Module 4: The rationale of tariffs, quotas, and subsidies – infant industry argument – tariffs and factor income distribution – Stolper-Samuelson Theorem — tariffs, the optimum tariff rate – tariffs, subsidies, and distortions in commodity and factor markets – an effective rate of protection. GATT and its objectives – issues at successive rounds of discussion – new issues at Uruguay Round – Trade in services – UNCTAD and evolution of world trading arrangements – World Trade Organization and fair trade.

Suggested Readings:

1. Bhagwati, Jagdish (1964), -The Pure Theory of International Trade, Economic Journal, Vol. 74, pp. 1-78.
2. Ethier, W. J. (1995), Modern International economics, 3rd edition, W.W. Norton & Co.
3. Heffernan & Sinclair, (1991), Modern International economics, Illustrated edition, Wiley-Blackwell
4. Heller, H. R. (1973), International trade: Theory and empirical evidence, 2nd Edition, Prentice-Hall, Englewood Cliff, New Jersey.
5. H.G Mannur ; International Economics. Second Revised Edition.
6. Krugman, P. R. & Obstfeld, Maurice, (2008), International economics: Theory & Policy, Addison-Wesley, May.
7. Salvatore, Dominic, International Economics, 13th edition.

Public Economics in Indian Context: MECC3402

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	2	0	16
2	Module 2	16	4	0	18
3	Module 3	12	2	0	14
4	Module 4	14	2	0	16

Course Objective:

Students will learn different activities of public authorities, various departments and bureaucrats in India.

Course outcomes:

CO1: Students will learn the different kinds of goods, problems associated with it and can apply to solve the problems.

CO2: Students will understand the revenue, budget and tax structure of India and contribution of different tax to the revenue of India.

CO3: Students will learn how to analyse trends and development of fiscal policy and fiscal deficit and various policy implication unit.

CO4: Students will understand the contribution of public choices in political field.

Module 1: Introduction to positive and normative public economics, Provision of Private Goods, Public Goods, Social Goods, Merit Goods and Mixed Goods; Market failure - imperfections, decreasing costs; Externalities: Types of Externality, Characteristic of Externalities - Pigouvian Corrective Taxes - Quasi-linear Preferences and the Coase Theorem, Tiebout hypothesis, Theory of club..

Module 2: Review of latest budget in India, Analysis of Central and State government budgets; Lack of flexibility in Central and State budgets, shrinking size of development finance through budgets. Crowding out effect, Welfare effect of deficit financing. Indian tax system, Non-tax revenue of Centre, State and local bodies, Goods and Services Tax (GST) - Issues in the taxation of Services in India. Subsidies in India, Trends in Indian subsidies.

Module 3: Trends and Developments in Indian Fiscal Policy and fiscal deficits, Principles of Federal Finance, Inter-Governmental resource Transfer, Horizontal and Vertical Balance in a Federation, Implication of recommendations of Finance Commission in India, Centrally Sponsored Schemes and its implications for federalism, Sub national fiscal reforms in India.

Module 4: Theory of public choice: Preferred political outcome of a voter and Downs' Rational Voter Hypothesis. Majority Rule and the Median Voter Model. Cyclical Majority Phenomenon and Arrow's Impossibility Theorem. Political Positioning and the Median Voter. Voting on multiple issues: Logrolling.

Suggested Readings:

1. Musgrave, R.A.: *The Theory of Public Finance: A Study in Public Economy*|| McGraw Hill Book Company New York.
2. Stiglitz, J.E. (1989) *Economics of the Public Sector*, W.W. Norton & Company, London.
3. Choudhry, R.K.: "*Public Finance and Fiscal Policy*"; Kalyani Publishers, New Delhi.
4. Tripathy, R.N.: "*Public Finance in Underdeveloped Countries*"; The World Press Pvt. Ltd., Calcutta.
5. Current Report of the Finance Commission, India.
6. Reports on Indian Tax Reforms, Government of India, New Delhi.
7. Latest Union Budget, Government of India.

Econometrics-I: MECC3403

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	10	2	0	12
2	Module 2	16	4	0	20
3	Module 3	14	2	0	16
4	Module 4	14	2	0	16

Course objective:

Students will understand the estimation of the economic model in real-world scenarios. After completing this course, they can take up the study of society in a more practical and scientific way.

Course Outcomes:

CO1: The student will be able to understand the use of econometric methods in economics.

CO2: Students will learn the basic regression and its advantages in the practical field.

CO3: Students will learn the classical linear regression model and its use.

CO4: Students will learn the different econometric techniques which are used in research.

Module 1: Nature and scope and need for study Econometrics, Specification of Econometric Model and Assumptions, Basic Concepts of Estimation and Desirable Properties of Estimator, random

variables and distribution, expected value, variance, conditional expectation, Central Limit Theorem, estimators and estimation, properties of estimators.

Module 2: Ordinary least squares (OLS) estimation, the Classical assumptions, the Gauss- Markov theorem and properties of the OLS estimators, Measuring Goodness of Fit , Analysis of Variance on OLS Regression, Regression Slope and Correlation Coefficient, Alternative Functional Forms for Regression Equation and hypothesis testing and prediction, reporting and interpreting regression results, OLS Estimation of Multiple Linear Regression Model, Properties of Multiple Regression Coefficients, Measuring Goodness of Fit – R^2 , adjusted R^2 and Various Problems of in Multiple Regression Model, Alternative to OLS Maximum Likelihood techniques, Restricted Least Square estimation, Likelihood Ratio (LR), Wald and Lagrange Multiplier (LM) Test.

Module 3: Exogenous Dummy Variable- Formulating and interpreting coefficients on dummy explanatory variables, interactions involving dummy variables and use of dummy variables in the seasonal analysis, piecewise regression analysis, the dummy variable alternative to chow test, Dependent Dummy variable - Linear Probability Model, Problems relating to LPM.

Module 4: Introduction, Consequences of violation of OLS assumption, GLS Estimation- Aitken's generalization of Gauss Marks Theorem, Estimation of σ^2 . Heteroscedasticity & Autocorrelation: Causes and consequences and remedial procedural, diagnostic test Introduction, perfect versus imperfect Multicollinearity, Consequences of Multicollinearity, tests for detection and remedies for Multicollinearity.

Suggested Readings:

2. Gujarati, Damodar, **Basic Econometrics**, 4th Edition, Tata McGraw Hill Publishing Company, New Delhi
3. Wooldridge J., Introductory **Econometrics**: A Modern Approach, South-Western College Pub.
4. Green, William H., **Econometric Analysis**, Prentice-Hall.
5. GMK Madnani ; Introduction to Econometrics, Principles and Applications
6. Johnston and Dinardo, Econometric Methods, 4th Edition McGraw-Hill International Edition.
7. Madala G.S., Introduction to **Econometrics**, John Wiley & Sons

Research Methodology: MECC4401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	2	0	16
2	Module 2	16	4	0	18
3	Module 3	12	2	0	14
4	Module 4	14	2	0	16

Course objectives:

This course will help students for further research. The purpose of this course is to facilitate student's inclination towards research with the procedure and discipline of research activity.

Course Outcomes:

CO1: Students will understand the concept of research in economics.

CO2: Students will understand various steps in the research process.

CO3: Students will understand various tools and techniques using in research.

CO4: Students will learn about various statistical packages related to quantitative research.

Module 1: Meaning of research in economics, Approaches to research; Deductive and Inductive methods; Types of research: Fundamental research, Applied Research, Action Research; Methods of Research: Historical, Descriptive, Experimental, and Analytical, observation, survey method.

Module 2: Research problems, Formulating the Research Problem, The Research Design; Literature Survey, Definition of Variables; Aim Objective and Development of Working Hypotheses, (Observational and Analytical): the Sampling Design, Collection of Data, Analysis of Data, Hypothesis Testing, Generalization and Interpretation, Preparation of the Report. Presentation of Qualitative and Quantitative Data; Drawing Conclusion; Research report format; Principles of writing report; Documentation: Footnotes and endnotes; Bibliography/references.

Module 3: Population and samples, Sampling techniques, Sampling and non-sampling errors, Sample size, Limitations of sampling. Sources of data: Primary data, Secondary data, Methods of data collection, Design of questionnaire, Structured vs. Unstructured and Participatory vs. Non-Participatory, Questionnaire vs Interview schedule, The Pilot Survey, Reliability and Validity; Problems in data collection, Data processing- operations and problems in data processing; Measurement and scaling techniques.

Module 4: Probability Distribution: Normal, binomial and poisson distribution; Hypothesis Testing - Test of Statistical Significance – Testing Correlation and regression coefficients, X^2 test, t-test, F test, Anova test. Data Analysis using MS Excel and SPSS.

Suggested Readings:

1. C.R. Kothari, Research Methodology: Methods and Techniques, Wishwa Prakashan, New Delhi.
2. Sharma B.A.V and other (1981) Research Methods in Social Sciences. New Delhi Sterling Publishers (P)Ltd.
3. Young, Pauline V (1977) Scientific Social Surveys and Research New Delhi; Prentice Hall of India
4. Black, James, A and Dean J. Champion (1976). Methods and Issues in Social Research, New york: John Wiley and Sons.
5. Goode, William J and Paul K Hatt (1952) Methods in Social Research. Newyork: Megraw- Hill Books Co.
6. Kerlinger, Fred N. (1965) Foundation of Behavioural Research, New York, Holt, Rinehart and Winston.
7. Ranjit Singh, Research Methodology. RT Publications.
8. S. Sachdeva. Research Methodology. Laksmi Narayan Agarwala Publications.

Indian Economy and Its Growing Dimensions: MECC4402

L:3 T:1 P:0

CR: 4

Total Class Hour: 641

Sl no.	Module	L	T	P	Total
1	Module 1	12	2	0	14
2	Module 2	16	2	0	18
3	Module 3	12	4	0	16
4	Module 4	12	2	0	14

Course outcome:

It is envisaged that it would give a general understanding of the basic issues of the Indian economy to the others. It is expected to be helpful for students who are preparing for competitive examinations.

Course outcomes:

CO1: Students will learn various plans in Indian Economy and Economic Reforms.

CO2: Students will understand the recent trends of agricultural growth in India.

CO3: Students will learn recent trends in industrial growth in India and know about Multinational Companies .

CO4: students will understand the recent policies of the Indian economy.

Module 1: Importance of Planning in Indian Economy, Analysing the five years plan from 1st five year plan to 12th five year plan, Green revolution and performance of agricultural sector, Crisis of 1990-91 and Reforms and era of LPG (Liberalization, Privatization and Globalization), global meltdown of 2006 -08 and impact on Indian Economy.

Module 2: Recent trends in agricultural growth in India, inter-regional variations in the growth of output and productivity, cropping pattern shifts; Supply of inputs: Irrigation, power, seed and fertilizers, pricing of inputs and role of subsidies; Role of public investment and capital formation in Indian agriculture; Agricultural Diversification. Role of PDS and food security, NFS Bill; Impact of World Trade Organisation on Indian agriculture.

Module 3: Industrial Policies in India since independence; Emergence and performance of the public sector in India; Rural Industrialization: Major issues and problems; Foreign Capital and foreign collaboration – MNCs and transfer of technology, Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI).

Module 4: Indian Public Finance-recent fiscal trend revenue, expenditure and fiscal imbalance, Fiscal reforms, Issues in fiscal federalism, Demographic features and trends-National population policies; Social Sector- Issues in health and education in Indian perspective.

Suggested Readings:

1. Bardhan, P., -The Political Economy of Development of India, OUP.
2. Brahmananda, P.R. and Panchamukhi, V.R., -The Development Process of Indian Economy, Himalaya.
3. Basu, Kausik (Ed), -India's Emerging Economy| OUP.
4. Datt, R. and Sundaram, K.P.M.: Indian Economy, S.Chand.
5. Jalan, Bimal (Ed), -The Indian Economy– Problems and Prospects, Viking
6. Kapila, Uma.: Indian Economy since Independence, Academic Foundation.
7. Sen, A. and Breeze, J., Economic Development and Social Oppor Moduleie, OUP.
8. Wadhwa, C. (Ed), -Some Problems of India's Economic Policy, Tata McGraw Hill.
9. Fonseca, A.J. (Ed), -Challenge of Poverty in India, Vikas.
10. Rao, V.K.R.V., -India's National Income, 1950-1980, Sage.
11. Joshi, Vijay and Little, IMD, -India's Economic Reforms 1991-2001, Oxford University Press.

Dissertation: MECC4403

L:3 T:1 P:1

CR: 5

Total Class Hour: 80

L	T	P	Total
40	20	20	80

Students in the final semester would be required to do project work/fieldwork/ dissertation. The project work is to be related to the specialization area chosen by the student. For example, a student who has chosen Environmental Economics as a specialization will have to do a project/field work related to Environmental Economics and submit a dissertation.

Discipline-Specific Elective

Monetary Economics: MECE1401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	4	0	16
2	Module 2	12	4	0	16
3	Module 3	12	4	0	16
4	Module 4	12	4	0	16

Course Objectives:

Students will be able to enhance their understanding of the monetary system and will learn the applicability issues. Inflationary situations and effects of trade cycle will become clear for the students.

Course outcome:

CO1: Students will be able to learn introduction to monetary economics of classical and Keynesians.

CO2: Students will understand the different concepts of the money supply.

CO3: Students will understand the economics of inflation and expectation.

CO4: Students will learn about different trade cycle theories.

Module 1: Classical and Keynesian approach (The Regressive Expectations model); Post Keynesian approaches to demand money-Tobin (Portfolio balanced approach), Baumol (Inventory theoretic approaches) and Friedman (Restatement of the quantity theory of money).

Module 2: Components of money supply; Measurement of money supply; RBI Approach to Money Supply -M1, M2, M3 and L1, L2, L3; High Powered Money and Money Multiplier; Budget Deficits and Money Supply; Money Supply and Open Economy; Control of Money Supply, Interest rate targeting versus Money supply targeting.

Module 3: Inflation and unemployment - Phillips curve approach, Stagflation; Effectiveness of monetary and fiscal policies – Monetarists, Keynesians, and Synthesis views; Inflation- expectation-

augmented Phillips curve; Okun’s law and inflationary pressure curve; Rational Expectation - policy ineffectiveness, criticisms; Keynesian counter-attack – price stickiness.

Module 4: Trade cycles – phases of trade cycle; Anti cyclical Policy; Theories of Trade Cycles – Hawtrey, Schumpeter, Samuelson, Hicks’; Control of business cycles-relative efficiency of fiscal and monetary policy.

Suggested Readings:

2. Rana, K.C. & Verma, K.N.: -Macro Economic Analysis Vishal Publishing Company.
3. Paul, R.R.: —Monetary Theory, Kalyani Publishers, Ludhiana.
4. Dornbusch, Fischer & Startz, Macroeconomics, Tata McGraw-Hill Publishing Co. Ltd.
5. Bain, Keith & Howells, Peter (2009), *Monetary Economics: Policy and Its*

Theoretical Basis, Palgrave.

6. Patinkin, D. (1965). *Money, Interest and Prices*, Harper and Row, New York.
7. Suraj B Gupta: *Monetary Economics, Institutions. Theory and policy*. Chands & Sons, New Delhi
8. Selected papers of Government departments and RBI.

Health Economics: MECE1402

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	2	0	16
2	Module 2	14	2	0	16
3	Module 3	14	6	0	20
4	Module 4	12	2	0	14

Course Objectives:

To help the students to draw connections between the theoretical models and health policy debates around the world.

Course Outcomes:

CO1: Students will understand the relationship between health and economics.

CO2: Students will know about the fact that resources for meeting health requirements are scarce, and the future is uncertain, this course intends to enable students to look at health-related aspects from an economic perspective.

CO3: Students will learn various topics such as information asymmetry, health insurance, the disparity in access to health care, and tries to explain, among others, why educated people experience better health and the ageing experience declining health.

CO4: Students will be able to critically analyse the various policies and programmes formulated for the betterment of health by government.

Module: 1 Rationale for Economics of Health. Nature of Health Economics: Information Asymmetry, Health Insurance, Process Utility and Disparity in Access. Health and Development. Health and Income: The two way linkage. Health care as an economic commodity.

Module: 2 Determining the demand for health care. Elasticity of the demand curve for health. The Grossman Model: production possibility frontier, health production schedule, the labour-leisure-health improvement trade off, the marginal efficiency of capital. Supply of health: creating the physician-Medical school and residency. Physician work hour and wages>Returns to medical training and specialization. Organization of a modern hospital-the market of hospitals.

Module: 3 Health insurance: uncertainty and insurance, The role of asymmetric information, Adverse selection, Moral hazard and its magnitude, The health policy trilemma-health wealth and equity, Strategies for an optimal health insurance system, Regulating health care provision, Controlling cost through price control.

Module: 4 Valuing Health and health damage: Human capital approach: measurement of mortality: value of statistical of life, years of life lost; morbidity valuation: cost of illness, Burden of disease: Meaning and significance, DALY: A measure of the burden, Health Accounting: National health accounts, from SNA to NHA, Health expenditure efforts. Recent policies related to health and nutrition in India.

Suggested Readings:

1. Anthony J. Cuyler and Joseph P.(ed) (2000), *Handbook of Health Economics*, Newhouse, North-Holland, Elsevier Science.
2. Clear, Ann, and David Perkins. 1998. *Economics for Health Care Management*. London: Prentice-Hall.
3. Folland, Sherman, Allen Goodman, and Miron Stano. 2001. *The Economics of Health and HealthCare*. New York: Macmillan, Third Edition.
4. Rice, Thomas. 1998. *The Economics of Health Reconsidered*. Chicago: Health Administration Press.

5. Bhattacharya J, Hyde T and Tu P (2014) Health Economics, New York, Palgrave Macmillan.
6. Jack, W (1999) Principles of Health Economics for Developing Countries. Washington DC, WBI Development Studies, World Bank.
7. Folland S, Goodman AC and Stano M (2013) The Economics of Health and Health Care New Jersey USA, Pearson.

Welfare Economics: MECE1403

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	10	2	0	12
2	Module 2	14	2	0	16
3	Module 3	14	4	0	18
4	Module 4	14	4	0	18

Course Objectives:

To understand the need for welfare economics & take up welfare issues in society in a scientific manner after the completion of the course

Course Outcomes:

CO1: Students will understand the welfare issues related to the economic development of the globe.

CO2: Students will understand the reason for the growth of welfare economics.

CO3: Students will learn about the welfare theories and their implication in the Economy as well as society.

CO4: Students will understand how public choice is related to the welfare of the people.

Module 1: Walrasian Excess Demand and Input-Output Approaches to General Equilibrium Existence, Uniqueness and Stability of Equilibrium. Tatonnement and Non-tatonnement process. Arrow and Debreu respecification of Walrasian economy.

Module 2: Static Properties of General Equilibrium State: Equilibrium of Production and Equilibrium of Consumption – Simultaneous Equilibrium - General Equilibrium and Allocation of Resources – Prices of Commodities and Factors – Factor Ownership and Income Distribution. Relationship between Relative Commodity and Factor Prices (Stolper- Samuelson Theorem) – Relationship between Output Mix and Real Factor Prices, Effect of Changes in Factor Supply in closed Economy (Rybczynsky

Theorem) – Production and Consumption.

Module3: Pareto optimality – Optimum exchange conditions, The production optimum, The consumption optimum; Concept of contract curve; Top-level optimum; Infinite number of non-comparable optima vs. unique social optimum; Compensation criteria– Contributions of Barone, Kaldor and Hicks; The Scitovsky double criterion; Concept of community indifference map, Samuelson's utility possibility curve; Value judgments and welfare economics; Bergson's social welfare function, Arrow's impossibility theorem. Welfare and General Equilibrium.

Module 4: Theory of Public Choice and Policy implications of Public Choice Theory. The divergence between private and social costs; Problems of non-market interdependence; Externalities of production and consumption; External economies and diseconomies; Problem of public goods; Pigovian welfare economics; Second best optima; Marginal cost pricing; Cost-benefit analysis; Interdependent utilities; Attempts to develop dynamic welfare analysis. Sen's Contributions to Welfare Economics – Collective Choice and Social Welfare-Social Choice and Political decision Making.

Suggested Readings:

- 1.Arrow, K. J. (1951), Social Choice and Individual Values, Yale University Press, New Haven.
- 2.Baumol, W. J. (1965), Welfare Economics and the Theory of the State (Second Edition) Longmans, London. 33
- 3.Baumol, W. J. (Ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd. The U.K.
- 4.Myint, H. (1948), Welfare Economics, Macmillan, London.
- 5.Nicholas, B. (Ed.) (2001), Economic Theory and the Welfare state, Edward Elgar Publishing Ltd.,U.K.
- 6.Pigou, A. C. (1962), The Economics of Welfare (4th Edition) Macmillan.
- 7.Koutsoyiannis (1997),Modern Microeconomics, Macmillan, London.
- 8.Dominick Salvator, (2002) Microeconomics Theory and Applications Oxford University Press, New York, 2003.

Political Economy: MECE1404

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	2	0	14

2	Module 2	14	2	0	16
3	Module 3	14	6	0	20
4	Module 4	14	2	0	16

Course Objectives:

To learn about the different traditional views of scholars regarding different economic policies and development issues. The understanding of the history of economic thought will be refined after the completion of the course

Course Outcomes:

CO1: Students will understand the original literature of the political economy and its present relevance.

CO2: Students will understand the transition of different economic ideas in the 90s.

CO3: Students will understand Marxist and Keynesian explanation of economic crisis and solution attached.

CO4: Students will understand the evaluation of notion of various economic thoughts from traditional to modern time period.

Module 1: Institutions and Political Economy- What is political economy and the need to study it - Efficient and inefficient institutions- How do efficient institutions come to exist?- Different traditions in political economy -Classical Political Economy -Marxist Political Economy -New Political Economy.

Module 2: Smith and Ricardo on the Theory of Value -Later Subjectivist Theories of Value - Classicalists on the Determinants of Economic Growth - Classical Theories of Income Distribution Classical Monetary Theory -Classical Public Finance -Say's Law, Gluts, and Business Cycles - Classical Economic Policy in Theory and Practice.

Module 3: Marx and the Labour Theory of Value -Marx's Theory of Money -Marx on Distribution - Marx's Theory of Capital Accumulation and Crises.

Module 4: Keynes vs. Say's Law and Classical Economics -Keynes' Theory of Investment -Keynes on Money and Speculation -Keynes theory of Business Cycle.

Suggested Readings:

1. Rothbard, Murray N., (1995) Economic Thought Before Adam Smith: An Austrian Perspective on the History of Economic Thought (Vol. I), Edward Elgar Publishers, UK.
2. Brook, Illinois, USA. 8. Canterbury, E. Ray, (2003), The Making of Economics, 4th ed., World Scientific Publishing Co. Ltd., Singapore.
3. Roland, G. (2000) Politics, Market and Firms, The MIT Press: Cambridge, Mass.
4. Alesina, A. and Rodrik, D., (1994) -Distributive Politics and Economic Growthl, Quarterly Journal of Economics, 109, 2,465-90.
5. Diamon, L and M.F Plattner (1995) Economic Reform and Democracy, Baltimore: John Hopkins University Press.
6. Roland, G. (2000) Politics, Market and Firms, The MIT Press: Cambridge, Mass.

Population Studies: MECE2401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl. no.	Module	L	T	P	Total
1	Module 1	12	2	0	14
2	Module 2	14	2	0	16
3	Module 3	14	6	0	20
4	Module 4	14	4	0	16

Course Objective:

To understand the size, composition and distribution of human populations over time and across space, and the processes through which populations change, namely the processes of birth, death and migration.

Course Outcomes:

CO1: Students will understand the discipline of demography in economics. Also to have an overview of ancient demographic thought and the multidisciplinary nature of demography.

CO2: Students will understand the importance and basic concepts of fertility, determinants and quantitative measurement of fertility analysis.

CO3: Students will understand the importance and basic concepts of mortality, quantitative measurement of mortality along with the construction of life table.

CO4: Students will understand the importance and basic concepts of migration, measurements of migration, determinants and differentials of migration analysis.

Module 1: Nature and scope of demography and changes in it over time. Multi-disciplinary nature of demography, its links with other social science disciplines. Theories of the population: Pre-Malthusian views on population, Malthusian theory of population, Optimum theory of population. Theories of Demographic transition: Views of F.W. Notestein, R. Freedman, J.C.Caldwell's criticism.

Module 2: Fertility: Basic Concepts used in Fertility Studies, Sources of Fertility Data, Fertility theories: Theory of Social Capillarity, Theory of Change Response, Theory of Diffusion and Cultural Lag, U. N. Threshold Hypothesis, biological theories of Spencer, Gini, Sadler and Doubleday and the Economic theories of Leibenstein and Becker. Measures of fertility: Basic Measures of Fertility: Crude Birth Rate, General Fertility Rate, Age-Specific Fertility Rate, Total Fertility Rate, Order Specific Fertility Rate, Child-Women Ratio.

Module 3: Basic concepts and measures of mortality and morbidity: Crude Death Rate (CDR), Age-Specific Death Rates (ASDR); Infant Mortality, Neonatal and Post-neonatal Mortality Rates; Foetal Wastage – Foetal Death Ratio and Rate; Perinatal Mortality Rate; Maternal Mortality Rate; Standardization of Death Rates Life Tables: Basic concept of a life table, Types and forms of life tables, Construction of life tables based on ASDRs, Applications of model life tables in demographic analysis for areas having limited civil registration and age data.

Module 4: Migration: Concepts, types, determinants of migration, census definition of migrants, issues related to migration; causes and consequences of internal and international migration. Migration theories and model: Ravenstein's laws of migration, Push-pull hypothesis, Lee's theory, Todaro's model of rural-urban migration. Direct and Indirect estimation of migration.

Suggested Readings:

2. Bhende, A.A. & Kanitkar, T.: Principles of Population Studies, Himalaya Publishing House, Bombay.
3. Bogue, D.J. (1971). Principles of Demography, John Wiley, New York.
4. Coale, A.J. and E.M. Hoover (1958). Population Growth and Economic Development in low-income
5. Countries: A Case Study of India's Prospects, Princeton University Press, Princeton.
6. Srinivasan, K.: Basic Demographic Techniques & Application, Sage Publications, New Delhi.
7. Styrock, H. et al. (1973). The Methods and Materials of Demography, US Department of Commerce, Washington, D.C.

Industrial Economics: MECE2402

L:3 T:1 P:0

CR: 4**Total Class Hour: 64**

Sl. no.	Module	L	T	P	Total
1	Module 1	10	2	0	12
2	Module 2	12	2	0	14
3	Module 3	14	2	0	16
4	Module 4	16	4	0	20

Course Objectives:

To learn basic theories of industrial economics and get a clear picture of the actual working of an industry. Their microeconomic foundation will be enhanced with a proper understanding of the course.

Course outcomes:

CO1: Students will learn the alternative theories of the firm as opposed to the traditional theories of the firm

CO2: Students will understand the structure, conduct and performance of the firm under different market conditions.

CO3: Students will be able to learn the different motives and measures of firm Diversification, Integration and Merger

CO4: Students will learn how to interpret the Pricing process and Investment Decision of the firm, the sources of industrial finance, and the factors determining industrial allocation.

Module 1: Introduction and scope of Industrial Economics; Introduction to concepts: plant, firm, industrial sector and industrial structure; Industrial Efficiency: types, determinants, efficiency conditions, decision-making process; Elements of market Structure: diversification, vertical integration, and merger.

Module 2: The organizational structure of a firm; Objectives of firms; Theory of costs: U- shaped and L-shaped Cost curves; Optimum size of the firm; Determinants of profitability and pricing decisions: Product pricing; Research & Development and Innovation; Depreciation, Price fixation.

Module 3: Investment decisions: Time profile and project evaluation; Social Cost-Benefit Analysis; Balancing private and social returns. Industrial Finance and accounting: owned, external and other components of funds, financial statements, balance sheet; Profit & Loss Account; Analysis of

financial ratios and their relationships: assessment of financial soundness.

Module 4: Theories of growth of firms – Downie, Penrose and Marris theories, Sales and growth maximization hypothesis, Constraints on growth; Determinants of Industrial location, approaches to industrial location analysis, economic theories of Industrial location; factors affecting the location, Industrial location trends in India. Industrial policy resolution of 1991 and changes there after. Trends and pattern of FDI in India; Trends and pattern of Indian industry abroad; M&A- Export and import component of Indian industrial sector.

Suggested Readings:

1. Hay and Morris D. J., *Industrial Economics- Theory and Evidence*, Oxford University
2. Shepherd W. C. (1985), *The Economics of Industrial Organization*, Prentice Hall, Inc., London.
3. Vepa R. K. (1988), *Modern Small Industry in India*, Sage Publications.
4. Mookherjee Dilip, (1998), (Ed.) *Indian Industry-Policies and Performance*, OxfordUniversity Press, Delhi.
5. Smith, D.M. (1971). *Industrial location: an Economic and Geographic Analysis*, John Wiley, New York.
6. Divine, P.J. and R.M. Jones et al. (1976). *An Introduction to Industrial Economics*, George Allen and Unwin Ltd., London.

Environmental Economics: MECE2403

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	2	0	14
2	Module 2	14	4	0	18
3	Module 3	12	4	0	16
4	Module 4	12	4	0	16

Course Objectives:

The course will be especially appropriate for students with a major in Economics, Political Science,

Environmental Science, and Biological Sciences. They will be able to take up environmental issues in a more scientific way.

Course outcomes:

CO1: Students will understand the environmental issues with an interdisciplinary focus.

CO2: Students will learn the working of the Environment and the Economy from the neoclassical and ecological perspective.

CO3: Students will be able to understand the valuation of various environmental goods and the problems related to it.

CO4: Students will be able to learn about taxes and subsidies related to Environment.

Module 1: The interface between Economy, Environment and Development; Environment versus development Controversy; Economics of environmental degradation: Pollution as market failure, Pigovian solutions; Buchanan's theory, Coase Theorem;

Module 2: Optimal Extraction Non-renewable Resources; Common Property Management; Failure of Open access Management; Possibilities of collective/Comm Module Management. Externalities – environmental public goods – asymmetric information – risk – uncertainty – problems of free – rider, and moral hazard – transaction costs. Environmental Kuznets curve. Sustainable Development.

Module 3: Environmental valuation; Environmental damages/benefits, social cost benefit analysis, Use values, option values and non-use values- total economic value; Valuation techniques; production based, contingent valuation, hedonic-pricing, travel cost method, risk assessment, environmental impact assessment.

Module 4: Pollution prevention, Control and Abatement: Pollution taxes, subsidies, government spending, tradable permits, refundable deposits, recycling. Environmental policy in India- Environmental Impact Assessment

Suggested Readings:

1. Kolstad, Charles D.,-Environmental Economicsl, Oxford University Press.
2. Hanley, Shogren and White, -Environmental Economics, Macmillan
3. Shanker, U, -Environmental Economicsl, Oxford University Press
4. Bhattacharjya, R., Environmental Economicsl, Oxford University Press
5. Sengupta R., Ecology and Economics: An Approach to Sustainable Development, OUP, 2001
6. Hardin, G., 1968, The tragedy of the Commons. Reprinted In: U. Sankar, ed. Environmental Economics, OUP (2001).

Economics of Gender and Development: MECE2404

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	2	0	14
2	Module 2	14	2	0	16
3	Module 3	14	6	0	20
4	Module 4	14	4	0	16

Course Objectives:

Students will learn how social structures including race, class, sexuality and other factors impact the lived experiences of men and women and its relation with economic development.

Course Outcomes

CO1: Students will understand the relationship between gender and various branches of economics.

CO2: Students will learn about the role of women in economic development.

CO3: Students will learn about the real picture of workforce participation in various sector.

CO4: Students will learn about various theories of gender equality.

Module: 1 Importance of gender studies; women in patriarchal and matriarchal societies and structures- Gender bias in the theory of values, distribution and population, Demography of female population, cause of declining sex and fertility rates in LDCs. Women and their access to nutrition, health education and community recourses. Theories of gender inequality.

Module: 2 Gender Bias in the Theories of Value and Distribution – issues and alternative theories of rationality, consumption, production and exchange – Gender critic of rational choice, externalities, social welfare function and welfare economics – Human capital and discrimination theories.

Module: 3 Engendering macroeconomic perspectives, approaches, and methodologies – the political

economy of macroeconomic modelling – Gendering. Factors effecting decision making by women; property rights, access to and control over economic resources, assets, power of decision making at household, class, community level; economic status of women and its effect in Work Participation Rate and income level. Concept and analysis of women’s work, visible and invisible work, economically and socially productive work.

Module: 4 Women and Development: Engendering developmental theories – Gender Development Index and Gender Empowerment Measures – Visibility of women and biases inherent in data system – Limitation of National Income Statistics - Mainstreaming gender into development policies – Gender planning techniques - Gender-sensitive governance - Paradigm shifts from women’s well-being to women’s empowerment - Democratic decentralization (panchayats) and women’s empowerment in India.

Suggested Readings:

1. Amsden, A.H. : the Economics of Women and Work, Penguin, Harmondsworth.
2. Boreup, E.: Women’s Role in Economic Development, George Allen and Unwin, London.
3. Engles, F.: The origin of the Family, Private and the State, Progress Publication.
4. ILO: Women’s Participation in the Economic Activity of Asian Countries.
5. Kabeer, N. and R. Subrahmanyam (Ed.): Institutions, Relations and Course outcomes: A Framework and Case Studies for Gender-aware Planning.
6. Kalpagam, U.: Labour and Gender: Survival in Urban India.
7. Krishnaraj, M., R.M. Sudarshan and A. Shariff: Gender, Population and Development.
8. A. Papola, T.S. and A.N. Sharma (Eds.): Gender and Employment in India.

Financial Market and Institution: MECE3401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	2	0	14
2	Module 2	14	2	0	16
3	Module 3	16	6	0	20
4	Module 4	12	4	0	16

Course objectives:

Students will learn the works and performance of the financial system in an economy. Various market-oriented instruments will be understandable after completing this course. The student will be able to enhance their knowledge of the share markets and the other parties of the money market.

Course Outcomes:

CO1: Students will understand about the structure of the financial system and how it works.

CO2: Students will learn about various financial institutions and their impact on the countries' economies.

CO3: Students will learn about how to trade in the stocks market and analyze the complexities of the derivatives market

CO4: Students will know the valuation of both debt and equity instruments. They acquire the ability to analyze the profitability of such instruments as an investment destination.

Module 1: The nature of credit, Financial system and its Components: *Instruments, Markets, Institutions and Services*, The Functional Perspective of the Financial System, Financial System in Economic Growth and Global Integration. Time Value of Money, Future Value: Single Cash Flow, Multiple Cash Flows, Annuity, Present Value: Single Cash Flow, Multiple Cash Flows, Annuity, Present Value, Net Present Value, Rate of Return, Internal Rate of Return

Module 2: The money market, Structure and functions, instruments in the money market, call money market and its participants, Volatility in Call Rates, Money Market intermediaries: The discount and Finance House of India and Money Market Mutual Funds, Liquidity Instruments in the Money Market.

Module 3: The Capital market: Its nature and functions, Primary Capital Market: Instruments of resource mobilization- *Public Issues: IPO & FPO, Right Issues, and Private Placement*, Resource mobilization from International Capital Market, Pricing of new issues: the Book Building process, Reverse Book Building and Green Shoe Option, Secondary Capital Market: Organization, Management and Membership, Trading & Settlement, *The Over the Counter Exchange of India*, The Depository System and its operation, Stock Market Index- Method of calculating the index, Mutual Fund and its functional classification, Net Asset Value.

Module 4: Nature of the Derivative Market, Traders and Instruments in a derivative market, Trading Strategies: Hedging with Index futures, Speculation Strategies and Strategies for Arbitrage

Suggested Readings:

2. Bharati Pathak (2009) *The Indian Financial System*: Pearson Education Publication New Delhi
3. Bhattacharya, B.B., *Financial Reforms, and Financial Development in India*, Institute of Management Technology, New Delhi
4. Bhole, L.M. (2008), *Financial Institutions and Markets*; Tata McGraw Hill Company Ltd., New York.
5. Chandra, P. (1997), *Financial Markets*, (4th Edition), Tata McGraw Hill, New Delhi
6. Alexander G J, Sharpe WF & Bailey J V. *Fundamentals of Investments* Pearson Education, Singapore.
7. Bodie Z, Merton R. C. & Cleeton D. L. *Financial Economics*. Pearson/ Prentice Hall.
8. Gupta, S. B. *Monetary Economics: Institutions, Theory and Policy*, S Chand & Co, New Delhi.
9. Madura J. *Financial Institutions and Markets*, Thomson South-Western.

Managerial Economics: MECE3402

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	2	0	16
2	Module 2	12	2	0	14
3	Module 3	14	6	0	20
4	Module 4	12	4	0	16

Course Objectives:

To learn how management is related to various field of economics.

Course Outcomes:

CO1: Students will understand the functioning of a firm from managerial point of view.

CO2: Students will understand demand forecasting and its other perspectives.

CO3: Students will understand the various strategies of price practices.

CO4: Students will acquire knowledge about capital budgeting.

Module 1: Role of Managerial Economists, the significance of managerial economics, Firm

organization: sole proprietorship, partnership, Joint Stock Company, corporation, co- operatives. Theory of firm; profit maximization, Baumol's sales revenue maximization model, managerial utility model- Williamson model, marries model of managerial enterprises: Behavioral theories; Simons sati facing model, Cyert and march's behavioral theory of the firm.

Module 2: Demand forecasting: the purpose of forecasting demand, determining the scope of forecasting, methods of demand forecasting survey method, statistical method.

Module 3: Price practices and strategies, Cost oriented pricing, cost-plus pricing marginal cost pricing rate of return and competition-oriented pricing, going rate pricing, profit policy, planning and forecasting. Break-even analysis planning for profit.

Module 4 Capital budgeting, Meaning and importance of capital budgeting benefit and cost analysis, steps for capital project evaluation, modern techniques for investment appraisal.

Suggested Readings

1. Michael R. Baye, Managerial Economics and business strategy,
2. Managerial Economics, 5th ed, Ivan Png, Taylor & Francis. (Referenced asIP)
3. Charles Wheelan, Naked Economics - Undressing the Dismal Science,Norton
4. Steven Levitt and Stephen Dubner, Super Freakonomics, WilliamMorrow
5. D.N Dwivedi: Managerial Economics, Eight edition
6. R.L Varshney & K.L Maheswari : Managerial Economics , Chand & sons publications, New Delhi.

Agricultural Economics: MECE3403

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	2	0	16
2	Module 2	12	2	0	14
3	Module 3	16	4	0	20
4	Module 4	12	4	0	16

Course Objectives:

To learn about the various problems and prospects related to agricultural economics and how to help in further policy formulation.

Course Outcomes:

CO1: Students will learn about the role of agriculture in the economic upliftment.

CO2: Students will understand the Economics of Agricultural Production and other components.

CO3: Students will learn the decision making process in Farm Management.

CO4: Students will be able to learn how the mathematical tools for analyzing Agricultural Production Functions.

Module 1: Nature and Scope of Agricultural Economics – Agricultural Economics and Resource Economics, Agricultural Economics and Environmental Economics; Primary Sector vs. Secondary Sector - Role of Agriculture in Economic Development - Interdependence between Agriculture and the Rest of the Economy.

Module 2: Farming Systems-Subsistence farming, Peasant Farming-Chhayanovian Farm Household Model, Shifting Cultivation, Cooperative Farming, Commercial Farming.

Module 3: General management and Farm Management, Position and the role of a Farm Manager, Farming objectives, Farm Management Tasks-Planning, Organisation, Implementation, Control, the Decision Making Process in Farm Management-Steps in Decision Making, Farm Size and Productivity, Uncertainty and Risk, Rotation of Crops, Location of Crops. Farm Budgeting-Types

Module 4: Production Functions – Factor-Factor Relationships, Product-Product Relationships; Discrete Production Functions – Continuous Production Functions -. Inverse Production Functions-Duality of Cost and Production. Forms of Production Functions, Original Cobb Douglas Function-Early Generalizations, Cobb Douglas Type of Function - Profit Maximization with the Cobb Douglas Function-Duality and the Cobb Douglas Function; Spillman Production Function, Transcendental Production Function, Cobb Douglas Function with Variable Elasticities, Generalized Power Production function.

Suggested Readings:

1. Fei, Ranis,-Economic Growth: An Evolutionary Perspective.
2. 4. Heady, E.O.and Dhillon, J., -Agricultural Production Functions, Kalyani.

3. Heady, E.O.—Economics of Agricultural Production and Resource Use, Prentice- Hall.
4. Kay, Ronald D., William M. Edwards, and Patricia A. Duffy. — Farm Management McGraw
5. Ray, Debraj,—Development Economics, OUP.
6. Reenen, M.J. Van J.A.H. Davel Farm Management -A Business approach University of South Africa Pretoria
7. Schultz, T.W., "The Economic Organisation of Agriculture, Mc GrawHill.
8. Snodgrass M.M. and L.T.Wallace -Agriculture Economics and Resource Management Prentice Hall of India Pvt. Ltd. New Delhi.
9. Soni, R.N., -Leading Issues in Agricultural Economics.

Labour Economics: MECE3404

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	4	0	18
2	Module 2	14	4	0	18
3	Module 3	14	2	0	16
4	Module 4	10	2	0	12

Course Objective:

To understand the importance of labour in various fields and problems faced by labour in various labour markets.

Course Outcomes:

CO1: Students will learn about various labour related problems in different sector of an economy.

CO2: Students will understand how the labour market plays an important role in developing countries.

CO3: Students will understand wage determination in labour markets.

CO4: Students will be able to learn the growth of labour movements in India.

Module:1 Nature and characteristics of labour markets in developing countries; Paradigms of Labour Market Analysis- Classical, New Classical and dualistic economy; demand for labour in relation to size and pattern of investments; Supply of labour in relation to growth of labour force; Segmented labour markets –Discrimination in Labour market, Labour flexibility, Informal sector

Module: 2 Classical, Neo-Classical, Marginal Productivity and modern theories; Collective bargaining and wage determination- Basic Postulates, Nature of bargaining process, Strategies and tactics, Model of Zeuthen, Dunlop, Ross, Pen and Hicks; Systems of Wage Payment, incentive wage payment, minimum wage, living wage and fair wage; wage differentials and wage regulation; Bonus systems and profit-sharing; economy to high wages; wage policy; Salient features of trade union movements in India.

Module: 3 Concept of work, Measurement and Policy Response, Conditions of work. Labour market discrimination, Race and gender in the labour market: Trade union- determinants of union membership, economic impact of unions-union wage advantage. Efficiency and productivity of unionism.

Module: 4 Growth, Pattern and Structure of Labour Unions in India, Achievements and failures of Labour unions, Introduction to labour statistics, Labour commission in India.

Suggested Readings:

1. Bhagoliwal, T.N.: Economics of Labour and Social Welfare.
2. Datt, G.: Bargaining Power, Wages and Employment: An Analysis of Agricultural Labour Market in India.
3. Government of India: Reports on The National Commission on Labour.
4. Hallen, G.C.: Dynamics of Social Security.
5. Hicks, J.R.: The Theory of Wages.
6. Papola, T.S. and Sharma, A.N. (Ed.): Gender and Employment in India.
7. Punekar, S.D.: Labour Welfare, Trade Unionism and Industrial Relations.
8. Sharma, A.N. and A. Kunda (Ed.): Informal Sector in India: Emerging Perspectives.
9. Giri, V.V.: Labour Problems in Indian Industry.
10. Datt, Rudder: Growth, Poverty and Equity

Financial Operation and Management: MECE4401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	10	2	0	12
2	Module 2	14	2	0	16
3	Module 3	14	4	0	18
4	Module 4	14	4	0	18

Course Objectives: The main objective of this course is to equip the students with practical knowledge of investment and financial market.

Course Outcomes:

CO1: Students will learn with the knowledge about risk and return related to investment.

CO2: Students will learn about the valuation of various debt instruments.

CO3: Students will learn about the cause and consequences of stock market volatility.

CO4: Students will learn about how to manage the risk in investment.

Module 1: The investment setting: securities, Risk and Return and Financial Intermediaries. Process of investing: Investment policy, security analysis, portfolio evaluation. Financial Goals: profit Maximization v/s wealth Maximization. Trading in securities: types of orders, margin purchase, and short sale.

Module 2: Principles of market valuation: the law of One Price and Arbitrage. The valuation of debt instruments: Pure discount bonds. Coupon bonds, Current Yield to Maturity. Interest Rates and Bond Value. Bond duration and Interest rate Sensitivity. Valuing stock: Value of a Common Stock and Dividend Discount Model: Zero Growth, Constant growth and Multiple growth Models. Linkage between share price, earnings and Dividends. The significance of Price-Earning ratio.

Module 3: Measuring risk and return: Risk of stock. Measuring of risk: Volatility of a stock portfolio. Beta of stock and a stock portfolio. Portfolio Risk-Return Analysis: two Asset case. Efficient Portfolio and Mean- Variance Criterion. The Capita asset Pricing Model and its Implications. The Arbitrage pricing theory. Determinants of Beta.

Module 4: Principles of risk and return: The risk management process. Dimensions of risk transfer: hedging, insurance and its basic features. Financial Guarantees, caps and floors on interest rates, options as Insurance. The Diversification Principle. The derivative market. Traders in a Derivation Market, Hedgers, Speculators and Arbitrageurs Instruments in the derivative market.

Suggested Readings:

1. Alexander G. J, Sharpe W. F. & Bailey J. V. (2001) *Fundamentals of Investments*. Pearson Education.
2. Madura J. (2006) *Financial Institutions and Markets*. Thomson.
3. Bodie Z, Merton R. C. & Cleeton D. L. (2009) *Financial Economics*. Pearson/ Prentice Hall.
4. Panday I.M.(2005) *Financial Management* . Vikas
5. Hull J. C. & Basu S. (2010) *Options, Futures and Other Derivatives*. Pearson.
6. **Fabozzi, F.J. (2009)**. Capital markets, Financial Management and Investment Management. John Wiley & Sons. Inc.
7. Madura, J. (2012). Financial Markets and Institutions.

Econometrics -II: MECE4402

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	14	2	0	16
2	Module 2	12	4	0	16
3	Module 3	16	4	0	20
4	Module 4	10	2	0	12

Course Objectives:

To become more efficient in their econometric skills. More practical solutions to the real-world models will be possible after completing the course.

Course Outcomes:

CO1: Students will learn how to move further from the single equation models earlier and take up more practical simultaneous models.

CO2: Students will understand the time-series methodology and its importance.

CO3: Students will learn the panel data models and their uses.

CO4: Students will easily acquainted with the lagged variables and their impact on economic relationships.

Module 1: Introduction, Structural, reduced form and final form model, Rational behind the use of SEM - simultaneous bias and inconsistency of the OLS estimator, Problem of Identification: Rank and Orders conditions. Methods of estimation: ILS, 2SLS, 3 SLS and FIML methods.

Module 2: Models with binary dependent variables- LPM, Probit and Logit Models – Problems in the estimation; Limited Dependent Variable Regression Models – Censored regression (Tobit model), Truncated Regression Models.

Module 3: Stationarity of Time Series ; Random Walk; Auto-regressive (AR) Model , Moving Average Mode (MA) , Auto-regressive Integrated Moving Average (ARIMA) Models, Box-Jenkins approach (identification, estimation and diagnostic checking),; Module Root Tests , Differencing, Dickey-Fuller Tests, Structural Change; Cointegration, Testing for Cointegration -The Engle-Granger Methodology; Concept and Test of Causality, VAR Models. Introduction, Some Examples, Benefits and Limitations; Estimation of panel data regression models: Fixed Effects Approach and Random Effects Approach; Fixed versus Random.

Module 4: Role of Lag in Economics; Reasons for lags; Consequences of applying OLS; Koyck model, estimation, rationalization; Koyck Transformation: Partial adjustment hypothesis and adaptive expectations hypothesis; Almon’s approach lag approach; estimation of distributed lag models.

Suggested Readings:

1. Gujarati, D.N.: -Basic Econometrics, McGraw Hill, New Delhi.
2. Pindyck, R.S.and Rubinfeld, D.L.:-Econometric Models and Economic Forecasts, Mc Graw Hill, New York.
3. Green, William H., Econometric Analysis, Prentice-Hall.
4. Johnston and Dinardo, Econometric Methods, 4th Edition McGraw-Hill International Edition.
5. Baltagi, Badi H., Econometrics, 5th edition, Springer Dougherty, C: -Introduction to Basic Econometrics
6. Wooldridge J., Introductory Econometrics: A Modern Approach, South-Western College Pub.

Mathematical Economics: MECE4403

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
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1	Module 1	14	4	0	18
2	Module 2	14	4	0	18
3	Module 3	12	2	0	14
4	Module 4	12	2	0	14

Course Objectives:

To understand the present economic theories in a simpler and easier mathematical method. Understanding of the course will make student competitive for the nation-wide acceptance of their expertise. This course will make their more sound for the global knowledge base of economics.

Course outcomes:

CO1: Students will learn how mathematical solutions to the various economic theories can be sought for saving time and lengthy procedure.

CO2: Students will be able to learn Mathematical models that is introduced for economic relationships.

CO3: Students will learn how to determined equilibrium price in different kinds of market.

CO4: Market equilibrium and dynamic models will be made clear for the students.

Module 1: Theory of Consumer Behaviour Cardinal and ordinal utility; Ordinal utility maximization; Slutsky equation, compensated demand functions, income, substitution, and price effects; Concept of elasticities—generalizations to n variable case; Separable and additive utility functions; homogeneous and homothetic utility functions; constant elasticity of substitution (CES) and transcendental logarithmic utility functions; indirect utility functions; duality theorem; consumer’s surplus; Theory of revealed preference and index numbers; Linear expenditure systems; Treatment of demand for durable goods; Empirical demand functions; Consumer behavior under risk and uncertainty.

Module 2: Theory of Production Production function — homogeneous and non- homogeneous; Properties of Cobb-Douglas production function; CES; VES and trans-log production function; Simple derivation of short and long-run cost functions; Modern approach to theory of costs; Cost function; Producer’s equilibrium — Laws of return and returns to scale; Constrained optimization of a producer; Generalization to n variable case; Input demand functions; Adding up theorem; Technical progress through production function; Analysis of joint profit maximization and multi-product firm; Production possibility curve; Empirical uses of production function analysis.

Module 3: Price Determination in Various Markets Price determination in perfect competition,

monopoly, monopolistic competition, duopoly, oligopoly and monopsony; Pricing of factors of production; bilateral monopoly.

Module 4: Market Equilibrium Single market equilibrium — Marshallian and Walrasian equilibrium conditions; Lagged market equilibrium; Multi-market equilibrium — General equilibrium systems of Walras and Debreu; Conditions of stability of equilibrium.

Suggested Readings

2. Allen, R.G.D. (1976), *Mathematical Economics*, Macmillan, London.
3. Arrow, K.J. and M. Intrilligator (Eds.) (1982), *Handbook of Mathematical Economics*, Volumes I, II and III, North-Holland, Amsterdam.
4. Henderson, J.M. and R.E. Quandt (1980), *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi.
5. Chung, J.W. (1993), *Utility and Production: Theory and Applications*, Basil Blackwell, London.
6. Ferguson, C.E. (1976), *Neo-classical Theory of Production and Distribution*, Modules 3 and 4
7. Allen, R.G.D. (1974), *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.
8. Chiang, A.C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.

North East Economy: Performance and

Possibilities:MECE4404

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	4	0	16
2	Module 2	12	4	0	16
3	Module 3	12	4	0	16
4	Module 4	12	4	0	16

Course objective:

To understand the various problems faced by the North-Eastern region in the field of economic development and will help to take steps for the removal of such issues.

Course outcomes:

CO1: Students will understand the economic situation of North East India.

CO2: Students will be able to learn the structural transformation of the North-Eastern region.

CO3: Students will learn the growth of agriculture of North East.

CO4: Students will understand the institutional framework of the North Eastern economy.

Module 1: The concept of local economic development-Theories of local economic development-Local economic development practice-Theories and models of local economic development planning-Analytical methods for local economic development planning- Profiling the local economy-Developing local economic development strategy.

Module 2: Structural Transformation and Dimensions of Development North Eastern Region as an economy; Characteristics of the economy; Structural transformation, implications for development, comparison with the Indian economy; demographic features of the economy; Poverty, inequality and human development; Recent trends in employment and unemployment.

Module 3: Sectoral Aspects of NE Economy, Agriculture: features and challenges; Industry: growth, composition and challenges, North East Industrial and Investment Promotion Policy (NEIIPP) 2007; Services sector; Trends, growth and challenges; Rural economy, Diversification of rural employment; Rural Market- characteristics, nature and limitations. Infrastructure and regional economic development, Nature and characteristics of Public finance for NE trends and challenges.

Module 4: Institutions and Development, Institutions and Economic Development; Market and market failure in taking care of Development, Governance and development-government failure and its correction; local self-government and development; Community participation and development, community failure; Role of DONER and NEC; New development initiatives in NE, Vision Document 2020 and Act East Policy.

Suggested Readings

1. Brunner Hans-Peter (Ed.) (2010): North East India Local Economic Development and Global Markets, Sage Publications
2. Banerjee and Kar (1999): Economic Planning and Development of North-Eastern States, Kanishka, ND.
3. Deb, B.J & B. Dutta Ray (2006): Changing Agricultural Scenario in North-East India, Concept Publication, New Delhi.
4. Dikshit, K. R and J K Dikshit (Eds.) (2014): North East India Land People and Economy, Springer

5. Maithani, B.P. (1997): Local Self-Government in North-East India: An Appraisal, NIRD, Hyderabad
6. Menon, S. (Ed.) (2007): India's North East Economy-Problems and Prospects, ICFAI Univ. Press, Hyd.
7. Mishra, B. (2006): Fiscal Policy in North-East India, Akansha Publishing House, ND.
8. Nayak. P. (Ed.) (2010): Growth and Human Development in North- East India, Oxford University Press.
9. RBI (2006): Report of the Committee on Financial Sector Plan for North Eastern Region, RBI.
10. World Bank (2007): Development and Growth in Northeast India The Natural Resources, Water.

SKILL ENHANCEMENT COURSE (SEC) AND ABILITY ENHANCEMENT COURSE (AEC)

SKILL ENHANCEMENT COURSE (SEC)

Statistical Software for Data Analysis and Presentation: MECS 1201

L:1 T:0 P:1

CR: 2

Total Class Hour: 38

Sl no.	Module	L	T	P	Total
1	Module 1	13	0	6	19
2	Module 2	13	0	6	19

Course Objectives :

To understand use various statistical software in various research fields.

Course Outcomes:

CO1: Students will learn the use of computer for presenting and summarizing data.

CO2: students will understand how to use of computer and other statistical software in computing basic statistical tools and other relevant statistical technique.

CO3: Students will be able to achieve hands-on training with an individual computer.

CO4: Students will equipped with application of various statistical tools with the help of software for further research

Module 1: Presentation of data Diagrammatic Presentation- One dimensional –single, subdivided, multiple deviations; Two dimensional- histogram, pie diagram; Three dimensional- rectangular, cube; Pictograms and cartograms, scatter, line and radar diagrams; Tabular Presentation -Single; Double, Multiple

Module 2: Basic statistics Frequency, Summation, maximum, Minimum, Mean, Median, Mode, standard deviation, skewness. Statistical relations Covariance; correlation- Bivariate, Partial, Rank, Correlation matrix; Simple Linear regression

Suggested Readings:

1. C.R.Kothari, Research Methodology: Methods and Techniques, Wishwa Prakashan, New Delhi.
2. Sharma B.A.V and other (1981) Research Methods in Social Sciences. New Delhi Sterling Publishers (P)Ltd.
3. Young, Pauline V (1977) Scientific Social Surveys and Research New Delhi; Prentice Hall of India
4. Black, James, A and Dean J. Champion (1976). Methods and Issues in Social Research, New york: John Wiley and Sons.
5. Goode, William J and Paul K Hatt (1952) Methods in Social Research. Newyork: Megraw- Hill BooksCo.
6. Kerlinger, Fred N. (1965) Foundation of Behavioural Research, New York, Holt, Rinehart and Winston.

Economics of Rural Marketing: MECS2201

L:1 T:1 P:0

CR: 2

Total Class Hour: 38

Sl no.	Module	L	T	P	Total
1	Module 1	13	6	0	19
2	Module 2	13	6	0	19

Course Objective:

To aware about the strategy of rural marketing. This will help to provide efficient market for rural products and students can empower themselves by engaging in rural marketing.

Course Outcomes:

CO1: Students will understand rural marketing system and policies for rural development.

CO2: Students will acquire knowledge related to rural market chain.

CO3: Students will learn about the changing pattern of rural market.

CO4: Students can understand about the scope of marketing of various agricultural products.

Module 1: Rural Marketing System, Types and Functions of market place, trade and origin. Understanding social and economic traits of rural produces, changing profile of rural producers, types and products. Distribution Channel, Co-operative marketing-issues.

Module 2: Rural Market in India-Periodic markets and rural development for development of rural markets and rural market system-Marketing policies. Rural market revolution-the increasing importance of rural, markets and role of co-operative sector. Emerging issues of Retail chain, Direct marketing, contract farming and others.

Suggested Readings:

1. Periodic Markets and rural development in India Concept – Wanamali Sudhir
2. Periodic Markets Hawkers and trade in Africa, Asia, Latin America – RHT Smith
3. Market Distribution Systems – Gormsen Edrdmann
4. Journal of Rural Marketing
5. Marketing in the Developing Countries – KINSEY
6. Rural Marketing – T.P Gopal Swamy
7. Rural Marketing – Rajgopal

ABILITY ENHANCEMENT COURSE (AEC)

Portfolio Management

L:1 T:0 P:1

CR: 2

Total Class Hour: 38

Sl no.	Module	L	T	P	Total
1	Module 1	15	0	4	19
2	Module 2	13	0	6	19

Course Objective:

To understand both the theory and practice of investments and acquire knowledge about the most of the areas that is required by professional security analyst or portfolio manager.

Course outcomes:

CO1: Students will understand investment in different instruments with different income levels.

CO2: Students will be able to have clear understanding of modern developments in investments and portfolio theories.

Module – 1: Basic background reading on investments, return and risk from historical records, risk aversion and capital allocation to risky assets; optimal risky portfolios, index models, capital asset pricing, market efficiency.

Module 2: Bond prices and yields, term structure and interest rates, fixed income portfolio management, equity valuation models.

Suggestive Readings:

1. Bharati Pathak (2009) *The Indian Financial System*: Pearson Education Publication New Delhi
2. Bhattacharya, B.B., *Financial Reforms, and Financial Development in India*, Institute of Management Technology, New Delhi
3. Bhole, L.M. (2008), *Financial Institutions and Markets*; Tata McGraw Hill Company Ltd., New York.
7. Chandra, P. (1997), *Financial Markets*, (4th Edition), Tata McGraw Hill, New Delhi
8. Alexander G J, Sharpe WF & Bailey J V. *Fundamentals of Investments* Pearson Education, Singapore.
7. Bodie Z, Merton R. C. & Cleeton D. L. *Financial Economics*. Pearson/ Prentice Hall.
8. Gupta, S. B. *Monetary Economics: Institutions, Theory and Policy*, S Chand & Co, New Delhi.
9. Madura J. *Financial Institutions and Markets*, Thomson South-Western.
10. Panday I.M. *Financial Management*.Vikas.
11. Pathak B. V. *Indian Financial System*, Pearson Education, Singapore

Human Resource Development: MECA2201

L:1 T:1 P:0

CR: 2

Total Class Hour: 38

Sl no.	Module	L	T	P	Total
1	Module 1	13	6	0	19
2	Module 2	13	6	0	19

Course Objective:

To realize the hidden potential of human resources and advantages of it's efficient uses.

Course Outcomes:

CO1: Students will understand the importance of human resources management.

CO2: Students will understand workforce empowerment in various fields.

CO3: Students will understand appropriate work culture for betterment of enterprises and effective uses of resources.

CO4: Students acquire the ability to analyze the profitability of various instruments in practical field.

Module 1: Nature of Human Resource Management, Need for Human Resource Management, Human Capital Formation: indicators, problems and issues. Human Resource Planning and Man Power Planning, Human Resource Approach.

Module 2: Human Resources Management: Recruitment and sources, Methods, Selection procedure: absenteeism, labour turnover, employees training, steps; rewards and incentives – Determinants and types; motivation – types, methods of increasing motivation, theories (Traditional and Modern).

Suggested Readings:

1. William B. Werther : Human Resources and Personnel Management, Mc.Graw Hill
2. Dwivedi R.S. : Human Relations and Organizational Behaviors-Global perspective, Mac, Millan India.
3. Michael, V.P. : Human Resources Management and Human Relations, Himalaya Publishing House.
4. Subba Rao.P. : Essentials of Human Resources Management and Industrial Relations, Himalaya Publishing House.
5. Rao T.V. Et.al. : Alternative approaches and strategy of human resources development
6. Bhagolowal T.N. : Personnel Management and Industrial Relations, Sahitya Bhawan.
7. A.M. : Personnel and Human Resources Management, Himalaya Publication.
8. Mamoria C.B. : Personnel Management, Himalaya Publishing House.

GENERIC ELECTIVE COURSE (GEC)

Introductory Economics: MCEG3401

L:3 T:1 P:0

CR: 4

Total Class Hour: 64

Sl no.	Module	L	T	P	Total
1	Module 1	12	4	0	16
2	Module 2	12	4	0	16
3	Module 3	12	4	0	16
4	Module 4	12	4	0	16

Course Objectives:

This course is designed to understand economics by the students of another discipline. It will help students of another discipline how to relate economics with their respective courses.

Course Outcomes:

CO1: Students will understand a brief introduction to Economics.

CO2: Students will understand the concept of utility, consumer behavior, demand, and supply.

CO3: Students will learn about the different types of cost associated with production process.

CO4: Students will learn about the types of markets in the Economy and how they get maximise profit.

Module 1: What is economics? What is the need for its study? Basic objectives of economics; Concept of scarcity and choice, production and distribution of outputs-the basic questions (what, how and for whom to produce and distribute etc.).

Module 2: Utility analysis- concept of utility, types of utility: cardinal and ordinal, theories of utility; indifference curve analysis; Concept of demand and supply, Study of consumer behavior-the laws of demand and supply, individual and market demand and supply, attainment of equilibrium, Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus; elasticity of demand and supply-concepts.

Module :3 Production Function, Total, Average and Marginal Physical Products, Law of Variable Proportion, Isoquants, Marginal rate of technical substitution, Properties of isoquant, Returns to scale, Cost analysis, Types of cost, Cost Functions: Short run and long run, Theory of Cost.

Module 4: Meaning of Market, Classification of market, Total, Average and Marginal revenue, Price elasticity of demand, Perfect competition: Characteristics, Price output determination, Long-run equilibrium, short-run equilibrium, Profit Maximization, Monopoly market: Characteristics, Price output determination, Profit maximization, Price discrimination, Monopoly power, Monopolistic market: Characteristics, Profit maximization, price-output determination, Oligopoly market: Characteristics, Types.

Suggested readings

1. Koutsoyiannis, A: Modern Microeconomics, ELBS with Macmillan Publication.
2. Maddala, G.S. and Miller, E.: Microeconomics, Theory and Applications; McGraw Hill
3. Pindyck, R.S., Rubinfeld, D.L. & Mehta: Micro Economics, Pearson Education
4. Salvatore. D.: Micro Economics, Theory and Applications, Oxford University Press.
5. Ahuja, H.L, Advanced Economic Theory – Micro Economic Analysis, S.Chand & Company Ltd.

Money and Banking MECG4401

L:3 T:1 P:0

CR: 4

Total Class Hour: 38

Sl no.	Module	L	T	P	Total
1	Module 1	12	4	0	16
2	Module 2	12	4	0	16
3	Module 3	12	4	0	16
4	Module 4	12	4	0	16

Course Objectives:

This course is for the students of other disciplines. Students will learn the activities of money and banking in a country along with the monetary policies of the country. This will help the students in preparation for various competitive examinations.

Course Outcomes:

CO1: Students will understand the role and functions of money in a country.

CO2: Students will learn different theories related to money and inflation.

CO3: Students will learn about the theories related to interest rate.

CO4: Students will understand the role and functions of the banking system in a country.

Module 1: Nature and Definition of money, Theoretical and Empirical Definition of money, Types and Functions of Money, Measure of the money supply.

Module 2: Value of money and inflation, Demand-pull Inflation, Cost-Push Inflation, Structural Inflation in LDC, the Quantity theory of money, Cambridge Cash Balance approach, the Keynesian approach of demand for money.

Module 3: Interest Rate, Classical theory of Interest rate, Loanable fund theory of interest rate, Keynesian theory of interest rate, Interest rate differentials, Factors affecting the interest rate, term structure of interest rate.

Module 4: Definition of commercial banks, Role, and Functions of commercial banks, Credit creation of commercial banks, Definition of the central bank, Functions of the central bank, Central banks as the controller of credit, Role of the central bank in developing the economy, Banking sector reforms.

Suggested Readings:

1. Ackley, G. (1978), *Macroeconomics: Theory and Policy*, Macmillan Publishing Co., New York.
2. Bhargava, R.N. (1971), *The Theory and Working of Union Finance in India*, Chaitanya Publishing House, Allahabad.
3. Gupta, S.B. (1994), *Monetary Economics*, S. Chand & Company, New Delhi.
4. Houghton, E.W. (Ed.) (1988), *Public Finance*, Penguin, Baltimore.
5. Jha, R. (1998), *Modern Public Economics*, Routledge, London.
6. Mithani, D.M. (1981), *Macroeconomic Analysis and Policy*, Oxford & IBH, New Delhi.
7. Mithani, D.M. (1998), *Modern Public Finance*, Himalaya Publishing House, Mumbai.
8. Musgrave, R.A. and P.B. Musgrave (1976), *Public Finance in Theory and Practice*, Mc Graw-Hill, Kogakusha, Tokyo.
9. Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi