Shri Vile Parle Kelavani Mandal's

MITHIBAI COLLEGE OF ARTS, CHAUHAN INSTITUTE OF SCIENCE & AMRUTBEN JIVANLAL COLLEGE OF COMMERCE AND ECONOMICS (AUTONOMOUS)

NAAC Reaccredited 'A' grade, CGPA: 3.57 (February 2016),
Granted under RUSA, FIST-DST & -Star College Scheme of DBT, Government of India,
Best College (2016-17), University of Mumbai

Affiliated to the
UNIVERSITY OF MUMBAI

Program: T.Y.B.A.

Course: ECONOMICS

Semester V & VI

Choice Based Credit System (CBCS) with effect from the Academic year

2020-21

PROGRAMME OUTCOMES (B.A.):

PO1: understand the core foundations of social sciences.

PO2: appreciate the diversity of opinions, cultures, beliefs and perspectives.

PO3: apply critical thinking and effective communication in real world scenarios.

PO4: uphold rationality and ethical values in the pursuit of effective citizenship.

PO5: utilize the analytical and soft skills acquired to facilitate an entry into the job market.

PO6: pursue the ideal of lifelong learning in a tech-savvy world.

PROGRAMME SPECIFIC OUTCOMES (PSO'S):

On completion of the **B.A. – ECONOMICS**, the learners should be enriched with knowledge and be able to-

PSO1: understand the theoretical foundations of economics.

PSO2: apply economic theory for economic analysis, forecasting and policy making, in the context of real world issues.

PSO3: identify economic problems and use qualitative and quantitative tools for building econometric models, testing the validity of theory and drawing inferences for suggesting possible solutions to the problem.

PSO4: use latest statistical software tools such as Excel and R for economic modeling of research problems and quantitative analysis.

PSO5: have a thorough exposition of contemporary economic issues through debates, discussions, research and report writing.

PSO6: apply critical thinking and reasoning ability for conducting review of literature, undertaking formal economic research and effectively communicating the research outcomes.

Evaluation Pattern

The performance of the learner will be evaluated in two components. The first component will be a Continuous Assessment with a weightage of 25% of total marks per course. The second component will be a Semester end Examination with a weightage of 75% of the total marks per course. The allocation of marks for the Continuous Assessment and Semester end Examinations is as shown below:

a) **Details of Continuous Assessment (CA)**
   25% of the total marks per course:

Continuous Assessment	Details	Marks
Component 1 (CA-1)	**PRESENTATIONS CUM ASSIGNMENTS**	**12 marks**
Component 2 (CA-2)	**CLASS TEST**	**10 marks**

b) **Details of Semester End Examination**
   75% of the total marks per course. Duration of examination will be two and half hours:

Question Number	Description	Marks	Total Marks
Q1.	Answer any two of the following : (Any 2/3) (Based on Module 1)	(7.5 marks each)	(12)
Q2.	Answer any two of the following : (Any 2/3) (Based on Module 2)	(7.5 marks each)	(12)
Q3.	Answer any two of the following : (Any 2/3) (Based on Module 3)	(7.5 marks each)	(12)
Q4.	Answer any two of the following : (Any 2/3) (Based on Module 4)	(7.5 marks each)	(12)
Q5.	Answer any two of the following : (Any 2/4) (Based on all Modules)	(7.5 marks each)	(12)
Total Marks			75

Signature   Signature   Signature

HOD   Approved by Vice –Principal   Approved by Principal

Preamble

The course is designed to provide sound training in microeconomic theory. Since students have already studied the perfect competition and monopoly, the focus of this course is on the study of imperfect competition, general equilibrium theory, welfare economics and game theory.

Program: B.A. (2021-22)					Semester: V	
Course: MICROECONOMICS - III					Course Code: UAMAECO504	
Teaching Scheme					Evaluation Scheme	
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit	Continuous Assessment (CA) (Marks - 25)		Semester End Examinations (SEE) (Marks- 75 in Question Paper)
04	-	-	04	25		75

Learning Objectives:

To understand the relevance of microeconomic phenomena in the real world.

Course Outcomes:

CO1: understand the characteristics and working of imperfectly competitive market models like monopolistic competition, collusive and non-collusive oligopoly.

CO2: understand and apply the concepts of game theory and Nash equilibrium to economic events.

CO3: analyze the criteria of social welfare and apply the general equilibrium framework in the context of welfare economics.

CO4: describe market failures using examples of asymmetric information, adverse selection, moral hazard, market signaling and the principal - agent problem.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Monopolistic Competition and Oligopoly	12

II	Game Theory	12
III	General Equilibrium and Welfare Economics	12
IV	Market Failure	12
	Total	48
PRACTICALS		**-**

Unit	Topic	No. of Hours/Credits
Module I	**Monopolistic Competition and Oligopoly** • Monopolistic competition – Features and equilibrium • Oligopoly – Kinked demand hypothesis • Cournot model and Bertrand model • Collusion, Cartels and Price Leadership	**12**
Module II	**Game Theory** • Basics of Game Theory • Prisoner's Dilemma • Dominant strategy equilibrium • Nash Equilibrium • Ultimatum Game	**12**
Module III	**General Equilibrium and Welfare Economics** • Interdependence in the Economy • Pareto Optimality criterion of Social Welfare • Marginal Conditions of Pareto Optimal Resource Allocation • Kaldor – Hicks Compensation Criterion • Arrow's Impossibility Theorem	**12**
Module IV	**Market Failure** • Missing Markets • Asymmetric Information: The Market for Lemons • Adverse selection & Market Signalling: Insurance markets • The Problem of Moral Hazard • The Principal - Agent Problem: Efficiency Wage Theory • Coase Theorem • Tragedy of Commons	**12**

*To develop scientific temper and interest by exposure through industrial visits and
study/educational tours is recommended in each semester*

Suggested Readings:

Basic Reference :

1. Salvatore, D; Microeconomics: Theory and Applications, Oxford University Press,
   New Delhi 2006, Ch 11 & 12 Mod I, Ch 12 Mod II, Ch 17 Mod III ,Ch 18 & 19 Mod
   IV

Additional References :

2. Koutsoyiannis, Modern Microeconomics, Macmillan Press Ltd., London
3. Mankiw, N. Gregory, Principles of Microeconomics, 7th edition, Cengage Learning
   2012
4. Mansfield, Edwin, Microeconomics: Theory and Applications, 5th Edition, W. W.
   Norton & Company, New York 1985
5. Sen, Anindya (2007), Microeconomics: Theory and Applications, Second Edition
   Oxford University Press, New Delhi, 2007
6. R. Gibbons (1992), A Primer in Game Theory, Harvester Wheatsheaf

Preamble

The paper aims to introduce concepts, theories and policies regarding growth and
development as it has evolved over the years. The contemporary as well as the classical
theories of growth and development are explained. Issues related to population, poverty and
human resources are taken up for discussion to cover all the important areas of development
Economics.

Program: B.A. (2021-22)					Semester: V	
Course: ECONOMICS OF DEVELOPMENT					Course Code: UAMAECO505	
Teaching Scheme				Evaluation Scheme		
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit	Continuous Assessment (CA) (Marks - 25)		Semester End Examinations (SEE) (Marks- 75 in Question Paper)

04	-	-	04	25	75

Learning Objectives:

To introduce concepts, theories and policies regarding growth and development as it has evolved over the years.

Course Outcomes:

CO1: understand the concepts and models of growth and development ranging from the traditional to modern such as Sen's Capabilities Approach.

CO2: describe the concepts of human and sustainable development, HDI and GDI.

CO3: analyze the classical and the contemporary theories of growth and development that have evolved in the recent years.

CO4: describe and analyze the policies adopted across the world economy for alleviation of problems such as overpopulation, poverty and income inequalities

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Principles and Concepts	12
II	Theories of Development : Classical and Contemporary	12
III	Poverty, Inequality and Development	12
IV	Population Growth and Economic Development	12
	Total	48
PRACTICALS		-

Unit	Topic	No. of Hours/Credits
Module I	**Principles and Concepts** • Traditional Economic Models • The new economic view of development • Sen's Capabilities Approach • HDI, GDI • Sustainable Development	**12**
Module II	**Theories of Development : Classical and Contemporary** • Rostow's Stages of Growth • The Harrod – Domar Growth Model • The Lewis theory of Development • Solow's Neoclassical Growth Model • Romer's Endogenous Growth Model	**12**
Module III	**Poverty, Inequality and Development** • Measuring Poverty – (Absolute, Relative, Poverty Gap, HPI) • Measuring Income Inequality – (Size distribution, Lorenz Curve, Gini Coefficient) • Kuznets' Inverted-U Hypothesis • Thomas Piketty's Income Inequality theory • Policy Options (for reducing poverty and excessive income inequalities)	**12**
Module IV	**Population Growth and Economic Development** • Basic Issues: Population Growth and the Quality of Life • Theory of Demographic Transition • Causes of High Fertility in Developing Countries: The Malthusian, Gary Becker's Theory of Fertility • The Consequences of High Fertility: Some Conflicting Opinions	**12**

	• Policy Approaches (w.r.t. Population programmes in developing countries)	

To develop scientific temper and interest by exposure through industrial visits and study/educational tours is recommended in each semester

Suggested Readings:

Basic Reference :
1. Todaro, Michael P. and Stephen C. Smith., Economic Development, 8e. Delhi: Pearson Education, 2004.,Ch 1 Mod I, Ch 4 Mod II, Ch 6 Mod III, Ch 7 Mod IV

Additional References :

2. Thirlwall, A.P., Growth and Development, 8e. New York: Palgrave MacMillan, 2005
3. Meier, Gerald M. and James E. Rauch., Leading Issues in Economic Development, 8e. New Delhi: Oxford Univ. Press, 2006
4. Misra & Puri, Growth and Development, Himalaya Publishers, Mumbai, 2005
5. Jhingan M.L. , The Economics of Development and Planning, Vrinda Publications, 2005
6. Piketty Thomas, The Economics of Inequality, Harvard University Press, 2012.

Preamble

There has been a paradigm shift in the structure of the Indian industrial sector and the policies governing it ever since the new era of globalization and liberalization has ushered in. This paper intends to equip the students with the knowledge about the fundamentals of Industrial Economics and also the latest policies relating to the Indian Industry. This paper also introduces the student to the Indian Labour market.

SVKM's Mithibai College of Arts, Chauhan Institute of Science & Amrutben Jivanlal College of Commerce & Economics (AUTONOMOUS)

Program: B.A. (2021-22)					Semester: V	
Course: INDUSTRIAL AND LABOUR ECONOMICS					**Course Code: UAMAECO506**	
Teaching Scheme				**Evaluation Scheme**		
Lecture (Hours per week)	**Practical** (Hours per week)	**Tutorial** (Hours per week)	**Credit**	**Continuous Assessment (CA) (Marks - 25)**	**Semester End Examinations (SEE) (Marks- 75 in Question Paper)**	
03	-	-	3.5	25	75	

Learning Objectives:

To equip the students with the knowledge about the fundamentals of Industrial Economics and also the latest policies relating to the Indian Industry.

Course Outcomes:

CO1: understand the fundamental concepts of industrial and labour economics.

CO2: describe the structure and profile of the Indian industrial sector and the dynamic changes since globalization and liberalization with reference to mergers, acquisitions and global value chains.

CO3: analyze the theories of industrial location and discuss the problem of dispersion and regional imbalance.

CO4: describe and analyze the issues of industrial productivity and industrial sickness.

CO5: understand and analyze the problems and reforms in the Indian labour market.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Introduction to Industrial Economics	9
II	Industrial Location and Problem of Regional Imbalance	9
III	Industrial Productivity and Industrial Sickness	9
IV	Introduction to Indian Labour Market	9
	Total	36
PRACTICALS		-

Unit	Topic	No. of Hours/Credits
Module I	**Introduction to Industrial Economics** • Meaning and Scope of Industrial Economics • Industrial Profile o Private Sector – Performance and Problems o Cooperatives – Features, types, merits and demerits o Public Sector – Role, Performance and Problems • Motives for Mergers and Acquisition • Digital Network Business Models – Facebook, GOOGLE, Airbnb, Amazon etc.	**9**
Module II	**Industrial Location and Problem of Regional Imbalance** • Determinants of Industrial Location • Theories of Industrial Location o Weber's and Sargent Florence's Theories • Dispersion of Industries and the problem of Regional Imbalance • Global Value Chains (GVCs) : concept, impact and implications	**9**
Module III	**Industrial Productivity and Industrial Sickness** • Concept and Measurement of Industrial Productivity • Factors Affecting Industrial Productivity • Industrial Sickness – Causes, Effects and Remedial Measures • Rationalisation – Concept, Aspects and Impact	**9**
Module IV	**Introduction to Indian Labour Market** • Characteristics of the Indian Labour Market • Child Labour and Female Labour – Problems and Measures • Globalisation and Indian Labour Market	**9**

	• Labour Market Reforms • Causes of Industrial Disputes and their Settlement Mechanism	

To develop scientific temper and interest by exposure through industrial visits and study/educational tours is recommended in each semester

❖ The department faculty and students will undertake an industrial visit with the aim of understanding industrial practises and operations.

Suggested Readings:

Basic References :

- Cherunilam, F. (1994), Industrial Economics : Indian Perspective, Himalaya
- Singh J.K., Labour Economics – Principles, Problems and Practices, Deep Publications Pvt. Ltd., New Delhi

Additional References :

- Agrawal A.N. (2011), Indian Economy, New Age International Publishers, New Delhi
- Barthwal R.R. (2007), Industrial Economics, New Age International Publishers, New Delhi, Ch 1,2 & 8 Mod I, Ch 16 Mod II
- Publishing House, Mumbai, Ch 19 Mod II, Ch 17 & 18 Mod III
- Mishra S.K. and Puri V.K.(2008), Indian Economy, Himalaya Publishing House, Mumbai, Ch 30 & 31 Mod I, Ch 31 & 33 Mod III, Ch 29 & 40 Mod IV
- Datt R. and Sundaram K.P.M. (2009), Indian Economy, S.Chand & Co., New Delhi
- Desai S.S.M. and Bhalerao N (2008), Industrial Economy of India, Himalaya Publishing House, Mumbai
- Ranjana Seth (2010), Industrial Economics , Ane Books Pvt. Ltd., New Delhi
- Reasons Behind Mergers
- Sinha V.C., Sinha P. and Sinha V. (2001), Industrial Economics, Lokbharati Publication, 15 - A, Mahatma Gandhi Marg, Elahabad
- Raykhelkar A.R. and Damji B.H. (2011), Industrial Economics, Vidya Books Publication, Aurangabad, Maharashtra

Preamble

A plethora of data has emerged at an exponential rate and it is the description, interpretation and understanding of these data and drawing of accurate conclusions that is imperative for a student of Economics. The aim of this paper is to provide students with the mathematical and statistical skills and understanding needed for 'knowing why' and 'when' to apply these techniques.

Program: B.A. (2021-22)					Semester: V	
Course: MATHEMATICAL AND STATISTICAL TECHNIQUES FOR ECONOMIC ANALYSIS					Course Code: UAMAECO507	

Teaching Scheme				Evaluation Scheme	
Lecture (per week)	**Practical** (Hours per week)	**Tutorial** (Hours per week)	**Credit**	**Continuous Assessment (CA) (Marks - 25)**	**Semester End Examinations (SEE) (Marks- 75 in Question Paper)**
04	-	-	04	25	75

Learning Objectives:

To develop an understanding of the application of mathematical and statistical tools for economic analysis.

Course Outcomes:

CO1: understand the basic mathematical and statistical techniques of economic analysis.

CO2: apply advanced calculus, higher order derivatives and matrix algebra for economic analysis.

CO3: interpret the application of correlation and regression techniques in formulating economic relationships.

CO4: comprehend the relevance of elementary probability theory in economics.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Derivatives and their applications in various areas of economic analysis	12
II	Linear Algebra	12
III	Correlation and Regression	12
IV	Elementary Probability Theory	12
	Total	48
PRACTICALS		-

Unit	Topic	No. of Hours/Credits
Module I	**Derivatives and their applications in various areas of economic analysis** • Higher order derivatives • Increasing and Decreasing functions: Concavity and Convexity • Extreme Values: Maxima and Minima • Optimisation of Economic functions	**12**
Module II	**Linear Algebra** • Rank and Inverse of a matrix • Cramer's rule • Matrix Inversion Method • Input-Output Analysis • Linear Programming Problems (Formulation of the problem and it's Dual)	**12**
Module III	**Correlation and Regression** • Karl Pearson's Coefficient of Correlation • Spearman's Rank Correlation • Simple Regression Analysis – Method of Least Squares • Regression Coefficients	**12**
Module IV	**Elementary Probability Theory** • Sample space and events • Mutually exclusive, exhaustive and complimentary events • Conditional probability • Binomial probability distribution • Nature and Properties of the Normal Probability Distribution; Standard Scores and the Normal Curve; The Standard Normal Curve (Finding Areas when the Score is Known, Finding Scores when the Area is Known)	**12**

To develop scientific temper and interest by exposure through industrial visits and study/educational tours is recommended in each semester

Suggested Readings:

Basic References :
1. Dowling Edward T., Introduction to Mathematical Economics, Schaum's Outline Series in Economics, Tata McGraw Hill, New Delhi, 2004, Ch 3 & 4 Mod I, Ch 10 Mod II
2. Sancheti D.C. and V.K. Kapoor, Statistics-Theory, Methods and Applications, S. Chand, New Delhi, Vol II Ch 8 & 9 Mod III, Ch 14 Mod IV

Additional References :

3. Dowling Edward T., Theory and Problems of Mathematical Methods for Business and Economics, McGraw –Hill, 1993
4. Gupta S.P., Statistical Methods, S. Chand, New Delhi, Vol I Mod III and IV
5. Lerner Joel J and P. Zima, Theory and Problems of Business Mathematics, McGraw Hill, New York, 1986
6. Pfitzner Barry C., Mathematical Fundamentals of Microeconomics, Biztantra, New Delhi, 2003
7. V. K. Kapoor and S. C. Gupta, Fundamentals of Mathematical Statistics, Sultan Chand &Sons, New Delhi
8. Wisniewski Mik, Mathematics for Economics-An integrated approach, Palgrave Macmillan, 2013
9. Tokunaga Howard. T., Fundamental Statistics for the Social and Behavioural Sciences , Sage Publications, 2015, Mod IV

Preamble

The objective of this course is to impart a basic understanding of econometrics. The student will be able to appreciate the theoretical basis of the subject. At the same time, it will enhance the student's ability to apply the theoretical techniques to the problems of the real world. Topics like forecasting have been introduced to impart this practical orientation.

Program: B.A. (2021-22)					Semester: V	
Course: INTRODUCTION TO ECONOMETRICS					Course Code: UAMAECO508	
Teaching Scheme					Evaluation Scheme	
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit		Continuous Assessment (CA) (Marks - 25)	Semester End Examinations (SEE) (Marks- 75 in Question Paper)
04	-	-	04		25	75

Learning Objectives:

To develop an understanding of the application of econometric tools for economic analysis and forecasting.

Course Outcomes:

CO1: understand the basic concepts of econometric analysis.

CO2: understand the concept of a discrete and continuous random variable, its mathematical expectation and variance along with the properties of theoretical probability distributions.

CO3: use statistical inference theory for hypothesis testing.

CO4: apply classical linear regression model for validation of economic theory.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Idea of a random variable	12
II	Jointly distributed Random variables	12
III	Statistical Inference	12
IV	Regression Analysis	12
	Total	48
PRACTICALS		-

Unit	Topic	No. of Hours/Credits
Module I	**Idea of a random variable** • Concept of a random variable: Discrete and Continuous • Expected values of a random variable • Variance of a random variable • Discrete random variables: Bernoulli, Binomial, Poisson • Continuous random variables: The Normal distribution	**12**
Module II	**Jointly distributed Random variables** • Joint and Marginal distributions for bivariate random variables • Conditional Probability • Conditional Mean and Variance • Covariance • Central Limit Theorem	**12**
Module III	**Statistical Inference** • Concepts and steps in Hypothesis Testing (Population, Sample, Population Parameter, Sample Statistic, Null and Alternative Hypothesis, Test of significance, Critical Region, One-tail and Two-tail tests, Type I and II Errors) • Basic Statistical Methods for Hypothesis testing – o The Standard Normal distribution (significance testing for mean when the population variance is known) o The t distribution (hypothesis testing when population variance is unknown) o The Chi – square distribution (testing for sample variance with known population variance) o The F distribution (hypothesis testing for comparing sample variance)	**12**
Module IV	**Regression Analysis**	**12**

	- Two variable regression model (Hypothetical Example) - The concept of the PRF and SRF - Classical assumptions of regression - Derivation of the OLS estimators and their variance - Tests of Hypothesis, Confidence Intervals for OLS estimators - Measures of Goodness of Fit: R square and adjusted R square	

To develop scientific temper and interest by exposure through industrial visits and study/educational tours is recommended in each semester

Suggested Readings:

Basic Reference :
1. Gujarati Damodar, <u>Basic Econometrics</u>, Ch 1 Mod I, Ch 5 & 6 Mod IV

Additional References :

2. Gujarati Damodar, <u>Econometrics by Example</u>, McGraw Hill, New York
3. Hatekar Neeraj (2009), <u>Econometrics: The First Principles A Friendly Introduction</u>
4. Kapoor V. K. (2011), <u>Operations Research Problems & Solutions</u>, Sultan Chand & sons
5. Lipschutz (Schaum Series), <u>Theory and Problems of Statistics</u>
6. Gupta S.P., <u>Statistical Methods</u>, S. Chand, New Delhi, Vol II Ch 1 & 2 Mod I & II, Vol II Ch 3 Mod III
7. Tokunaga Howard. T., <u>Fundamental Statistics for the Social and Behavioural Sciences</u> , Sage Publications, 2015, Mod III and IV

Preamble

The main objective of this paper is to strengthen a student's critical thinking and reasoning ability at planning and conducting economic research and to enable them to communicate the outcomes of their research effectively. The students will be assigned broad areas of research interests in Economics and will be guided to conduct research using a wide variety of qualitative and quantitative tools. Modules on structure of research, theory, types and methodology of research will be instructed. The learner is then expected to undertake the practice by carrying out a research assignment and presenting it in the form of a research report.

Program: B.A. (2021-22)	Semester: V

Course: PROJECT				Course Code: UAMAECO509	
Teaching Scheme				**Evaluation Scheme**	
Lecture (per week)	**Practical** (Hours per week)	**Tutorial** (Hours per week)	**Credit**	**Continuous Assessment (CA) (Marks – 100)**	**Semester End Examinations (SEE)**
03	**-**	**-**	**3.5**	**100**	**N.A.**

Learning Objectives:

The main objective of this paper is to strengthen a student's critical thinking and reasoning ability at planning and conducting economic research and to enable them to communicate the outcomes of their research effectively.

Course Outcomes:

CO1: apply critical thinking and reasoning ability for planning and conducting formal economic research.

CO2: use a variety of qualitative and quantitative tools for the purpose of doing research.

CO3: use statistical software such as Excel for data management and analysis.

CO4: communicate effectively the findings of the research undertaken.

- ❖ A RESEARCH METHODOLOGY WORKSHOP of three hours will be conducted for students in Semester V to enable understanding and inculcate skills required for their research project. The topics covered in the sessions will include
    - Introduction to Research Methodology
    - Research Problem and Design
    - Sample Surveys and Statistical Methods
    - Data Analysis using Excel –
        - I.   Pivot tables and Charts
        - II.   Measures of Central Tendency and Dispersion

Preamble

This course introduces the students to formal modelling of a macroeconomic theory with analytical tools. It discusses determination of exchange rates and the benefits and costs of fixed and flexible exchange rate and also takes a student through the history of evolution of exchange rates and crises.

Program: B.A. (2021-22)					Semester: VI	
Course: MACROECONOMICS - III					Course Code: UAMAECO604	
Teaching Scheme				Evaluation Scheme		
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit	Continuous Assessment (CA) (Marks - 25)	Semester End Examinations (SEE) (Marks- 75 in Question Paper)	
04	-	-	04	25	75	

Learning Objectives:

To understand the relevance of macroeconomic phenomena in the real world.

Course Outcomes:

CO1: familiar with basic concepts of open economy macroeconomics such as balance of payments, exchange rates and working of the foreign exchange market.

CO2: understand and analyze the monetary approach to balance of payments.

CO3: compare the advantages and disadvantages of fixed and flexible exchange rates and discuss the relevance of Mundell Fleming model in the context of impossible trinity.

CO4: describe the evolution of international monetary history leading up to the Global financial crisis and Euro crisis.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Open Economy	12

II	Monetary Approach to the Balance	12
III	The Mundell Fleming Model	12
IV	International Monetary History	12
	Total	48
PRACTICALS		**-**

Unit	Topic	No. of Hours/Credits
Module I	**Open Economy** • The Balance of Payments and Balance of Trade • Exchange rate Concepts (Fixed, Flexible, Real and Nominal) • The Foreign Exchange Market: Players and Functions • Factors affecting Exchange Rate: BOP theory • Purchasing power Parity theories	**12**
Module II	**Monetary Approach to the Balance of Payments** • Introduction • Automatic Adjustments • The Monetary Approach under Fixed Exchange Rates • The Monetary Approach under Flexible Exchange Rates • Exchange Rate Overshooting	**12**
Module III	**The Mundell Fleming Model** • Swan Diagram • IS – LM – BP Model with Fixed Exchange Rates • IS – LM – BP Model with Flexible Exchange Rates • The Policy Mix	**12**
Module IV	**International Monetary History** • The Gold Standard • The key issues debated at Bretton Woods • The collapse of the Bretton Woods system and fixing of the Dollar Standard • The European Monetary Union and emergence of Euro • The Global Financial Crisis • The Euro Crisis	**12**

To develop scientific temper and interest by exposure through industrial visits and study/educational tours is recommended in each semester

Suggested Readings:

Basic Reference :

1. Froyen, R. T.; Macroeconomics : Theory and Policy, Pearson Education Asia, Delhi 2001, Ch 14 & 15 Mod II & III

Additional References :

1. Ahuja H.L., Macroeconomics : Theory and Policy, S Chand & Co. Pvt. Ltd., New Delhi
2. Dornbusch R S, Fischer and R Startz, Macroeconomics, 8th Ed, Tata McGraw Hill, New Delhi, 2004
3. Dwivedi D N, Macroeconomics : Theory and Policy, 3e Tata McGraw Hill, New Delhi 2010, Ch 26 & 27 Mod I
4. Blanchard, Oliver Macroeconomics (4th edition, 9th edition), Pearson education, New Delhi, India
5. Sikdar, S. (2006), Principles of Macroeconomics, OUP, New Delhi, Ch 7 Mod II and III
6. Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003
7. Salvatore, D.; International Economics, Prentice Hall, New York, 1997, Ch 21 Mod IV
8. Robert Feenstra & Alan Taylor, International Macroeconomics, 2nd ed.
9. Yannis Varoufakis, *The Global Minotaur*

Preamble

This course develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It then builds on the models of open economy macroeconomics, focusing on national policies as well as international monetary systems. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

Program: B.A. (2021-22)					Semester: VI	
Course: INTERNATIONAL ECONOMICS					Course Code: UAMAECO605	
Teaching Scheme				Evaluation Scheme		
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit	Continuous Assessment (CA) (Marks - 25)		Semester End Examinations (SEE) (Marks- 75 in Question Paper)

04	-	-	04	25	75

Learning Objectives:

To develop a systematic exposition of models that explains the composition, direction, and consequences of international trade and the determinants and effects of trade policy.

Course Outcomes:

CO1: understand the nature, scope and subject matter of international economics.

CO2: analyze international factor movements and trade controversies.

CO3: describe the various forms of economic integration such as SAARC, ASEAN.

CO4: compare the various instruments of trade policy and their relative advantages and disadvantages.

CO5: describe and evaluate the theories of international trade and discuss their application to the real world.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	International Factor Movement	12
II	Theories of International Trade	12
III	Trade Policy	12
IV	Balance of Payments	12
	Total	48
PRACTICALS		-

Unit	Topic	No. of Hours/Credits
Module I	**International Factor Movement** • Meaning, Nature and Scope of International Economics • Factors determining labour mobility o A One-Good Model – Wage Convergence o Lee's Theory of International Migration • Factors determining capital mobility • Classification of International capital flows -(ECBs, short term borrowings and lending, FDI, FPI)	**12**
Module II	**Theories of International Trade** • Absolute Advantage • Comparative Cost Advantage • The Heckscher–Ohlin Theory • Linder's Theory of Volume of Trade and Demand Pattern • Vernon's Product Cycle Theory	**12**
Module III	**Trade Policy** • Instruments of Trade Policy (Tariff and Non-Tariff Barriers) • Forms of Economic Integration (SAARC & ASEAN) • From GATT to WTO • Controversies in Trade Policy (with respect to Environment, Labour Standards, and Culture)	**12**
Module IV	**Balance of Payments** • Meaning and Structure of BOP • BOP always balances • BOP disequilibrium – Types and Causes • Measures to correct BOP disequilibrium – Monetary and Non Monetary	**12**

*To develop scientific temper and interest by exposure through industrial visits and
study/educational tours is recommended in each semester*

Suggested Readings:

Basic References :

1. Cherunilam Francis, *International Economics*, 2009, 5th Edition, Tata McGraw-Hill
   Education Private Limited, New Delhi
2. Dominick Salvatore, International Economics: Trade and Finance, John Wiley
   International Student Edition, 10th edition, 2011, Ch 2 & 5 Mod II, Ch 13 Mod IV

Additional References :

3. Paul Krugman, Maurice Obstfeld, and Marc Melitz, International Economics: Theory
   and Policy, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012,
   Ch 1 Mod I
4. Jhingan M L,International Economics, 6e Vrinda Publications,Delhi, Ch 13 Mod II,
   Ch 55 & 56 Mod III
5. Gordon Hanson, 'The Rise of Middle Kingdoms: Emerging Economies in Global
   Trade', Journal of Economic Perspectives, Spring 2012
6. Melitz M. and Trefler D., 'Gains from Trade When Firms Matter', Journal of
   Economic Perspectives, Spring 2012

Preamble

The basic purpose of this paper is to acquaint students with various components of the Indian
financial system, its working and the trends and turns that have taken place over the years
especially since financial sector reforms.

Program: B.A. (2021-22)					Semester: VI	
Course: INDIAN FINANCIAL SYSTEM					Course Code: UAMAECO606	
Teaching Scheme				Evaluation Scheme		
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit	Continuous Assessment (CA) (Marks - 25)		Semester End Examinations (SEE) (Marks- 75 in Question Paper)
03	-	-	3.5	25		75
Learning Objectives:						

To acquaint students with various components of the Indian financial system, it's working and trends in recent years.

Course Outcomes:

CO1: understand the various components of Indian financial system and indicators of financial development.

CO2: analyze financial sector reforms since 1990s.

CO3: familiar with the operations and growth of financial markets and services.

CO4: examine RBI's monetary policy and transmission mechanism of monetary policy.

CO5: describe and evaluate the developments in the Indian banking sector since 1990s.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Indian Financial System: Structure	9
II	Banking in India since 1990s	9
III	Money and Capital Markets in India	9
IV	Non-Banking sector of the Financial System	9
	Total	36
PRACTICALS		**-**

Unit	Topic	No. of Hours/Credits
Module I	**Indian Financial System: Structure** • Meaning and components of the Financial System • Financial System and Economic Development • Indicators of Financial Development: FR, FIR, NIR and IR • Overview of financial sector reforms since 1990s	**9**
Module II	**Banking in India since 1990s** • Developments in Commercial banking sector since 1990s • Management of Non-Performing Assets (NPAs) • Capital Adequacy Norms - Basel Accord III • Monetary policy of the RBI • Transmission Channels of Monetary policy.	**9**
Module III	**Money and Capital Markets in India** • Money Market: Features and Components • Reforms in the money market • Capital Market: Structure of the Indian Capital Market • Recent Developments in the Capital Market • Interlink between Money Market and Capital Market • Overview of Debt Market in India	**9**
Module IV	**Non-Banking sector of the Financial System** • Non-Bank Finance Companies (NBFCs) in India and their progress • Developments in India's Insurance sector • Progress of Mutual Funds industry in India • Credit Rating Agencies in India	**9**

*To develop scientific temper and interest by exposure through industrial visits and
study/educational tours is recommended in each semester*

❖ The department faculty and students will undertake a study visit to NSE / BSE /
Mutual Fund / Insurance Company / Broking firm with the aim of understanding
financial markets.

Suggested Readings:

Basic Reference :

1. Pathak, Bharati (2008): The Indian Financial System –Markets, Institutions, and
Services, (2nd Edition), Pearson Education, New Delhi, Ch 1 Mod I, Ch 13 & 14 Mod
II, Ch 4,5,6,8,10 Mod III, Ch 13,15,16,19 Mod IV

Additional References :

2. Bhole, L. M. (2008): Financial Institutions and Markets, Growth and Innovation, Tata
McGraw Hill, New Delhi, Ch 6 Mod II
3. Khan, M.Y. (2007): Financial Services, Tata McGraw Hill, New Delhi
4. Reserve Bank of India (various issues) Report on Currency and Finance, RBI,
Mumbai
5. Rakesh Mohan & Partha Ray (2017), Indian Financial Sector: Structure, Trends &
Turns; IMF Working Paper (WP/17/7). (https://www.imf.org > Issues > 2017/01/20)

Preamble

A plethora of data has emerged at an exponential rate and it is the description, interpretation
and understanding of these data and drawing of accurate conclusions that is imperative for a
student of Economics. The aim of this paper is to provide students with the mathematical and
statistical skills and understanding needed for 'knowing why' and 'when' to apply these
techniques.

Program: B.A. (2021-22)					Semester: VI	
Course: MATHEMATICAL AND STATISTICAL TECHNIQUES FOR ECONOMIC ANALYSIS					Course Code: UAMAECO607	
Teaching Scheme				Evaluation Scheme		
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours	Credit	Continuous Assessment (CA) (Marks - 25)		Semester End Examinations (SEE) (Marks- 75 in Question Paper)

		per week)			
04	**-**	**-**	**04**	**25**	**75**

Learning Objectives:

To develop an understanding of the application of mathematical and statistical tools for economic analysis and forecasting.

Course Outcomes:

CO1: understand the basic mathematical and statistical techniques of economic analysis.

CO2: comprehend the economic applications of advanced calculus such as partial derivatives and integration.

CO3: apply time series analysis for economic forecasting of trends and measurement of seasonal variations.

CO4: use vital statistics for basic demographic analysis.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Partial derivatives	12
II	Integral Calculus	12
III	Times Series Analysis	12
IV	Vital Statistics	12
	Total	48
PRACTICALS		**-**

Unit	Topic	No. of Hours/Credits
Module I	**Partial derivatives** • Second order partial derivatives • Optimisation of multivariable functions • Constrained optimisation with Lagrange multiplier • Marginal productivity, Income and Price elasticity of demand • Homogenous production functions (Cobb-Douglas)	**12**
Module II	**Integral Calculus** • Economic applications • Present value of Cash Flows (present value of a sum to be received in future and present value of a stream of future income) • Consumer's and Producer's Surplus • Learning curve • Gini Coefficient	**12**

Module III	**Times Series Analysis**
	• Components of Time Series
	• Methods of Estimating Trend
	    o Graphical Method
	    o Least Squares Method
	    o Moving Averages Method (3,4 and 5 yearly)
	• Measurement of seasonal variations by the Method of Simple Averages
		12

Module IV	**Vital Statistics** • Definition and Uses • Methods of Collection • Fertility Rates (Total Fertility Rate, General Reproduction Rate and Net Reproduction Rate) • Mortality Rates (Crude Death Rate, Specific Death Rate, Infant Mortality Rate and Maternal Mortality Rate)	**12**

To develop scientific temper and interest by exposure through industrial visits and study/educational tours is recommended in each semester

Suggested Readings:

Basic References :

1. Dowling Edward T; Introduction to Mathematical Economics, Schaum's Outline Series in Economics, Tata McGraw Hill, New Delhi, 2004, Ch 5 & 6 Mod I, Ch 14 & 15 Mod II
2. Sancheti D. C. and V. K. Kapoor; Statistics-Theory, Methods and Applications, S. Chand, New Delhi, Ch 11 Mod III, Ch 23 Mod IV

Additional References :

3. Lerner Joel J and P. Zima; Theory and Problems of Business Mathematics, McGraw Hill, New York, 1986
4. Dowling Edward T; Theory and Problems of Mathematical methods for Business and Economics, McGraw –Hill, 1993
5. Gupta S.P.; Statistical Methods, S. Chand, New Delhi, Mod III and Mod IV
6. Tokunaga Howard. T., Fundamental Statistics for the Social and Behavioural Sciences , Sage Publications, 2015

Preamble

The objective of this course is to impart a basic understanding of econometrics. The student will be able to appreciate the theoretical basis of the subject. At the same time, it will enhance the student's ability to apply the theoretical techniques to the problems of the real world. Topics like forecasting have been introduced to impart this practical orientation.

Program: B.A. (2021-22)					Semester: VI	
Course: INTRODUCTION TO ECONOMETRICS					Course Code: UAMAECO608	
Teaching Scheme				Evaluation Scheme		
Lecture (per week)	Practical (Hours per week)	Tutorial (Hours	Credit	Continuous Assessment (CA) (Marks - 25)	Semester End Examinations (SEE) (Marks- 75 in Question Paper)	

		per week)			
04	**-**	**-**	**04**	**25**	**75**

Learning Objectives:

To develop an understanding of the application of econometric tools for economic analysis and forecasting.

Course Outcomes:

CO1: well versed with the basic concepts of econometric models and model specification.

CO2: analyze the meaning, detection, measures and consequences of failures of classical assumptions of classical linear regression model such as heteroscedasticity, multi-collinearity and auto-correlation.

CO3: apply various methods of economic forecasting and use of different measures of forecast performance.

CO4: understand the use and application of linear programming problem and transportation problem.

Outline of Syllabus: (per session plan)

Module	Description - Title	No of Hours
I	Econometric Model Specification	12
II	Failure of Classical Assumptions	12
III	Forecasting	12
IV	Linear Programming	12
	Total	48
PRACTICALS		**-**

Unit	Topic	No. of Hours/Credits
Module I	**Econometric Model Specification** • Identification: Structural and reduced form • Omitted Variables Bias • Ramsey's RESET • Errors in Measurement • Endogeneity and Bias	**12**
Module II	**Failure of Classical Assumptions** • Multi-collinearity : Meaning, Implications and Detection • Auto-correlation : Meaning, Consequences and Durbin-Watson test • Heteroskedasticity : Meaning, Consequences and the Goldfeld - Quandt test	**12**
Module III	**Forecasting** • Forecasting with a) moving averages b) linear trend c) exponential trend- CAGR • Forecasting with linear regression • Measures of forecast performance: Mean Square Error and Root Mean Square Error • Limitations of Econometric forecasts	**12**
Module IV	**Linear Programming** • Linear programming problem • Graphical Solution to LPP • Simplex method: (Initial Basic Solution only) • Transportation Problem (North West Corner Rule and Vogel's Approximation Methods only)	**12**

To develop scientific temper and interest by exposure through industrial visits and study/educational tours is recommended in each semester

Suggested Readings:

Basic Reference :

1. Gujarati Damodar, Basic Econometrics, Ch 13 Mod I, Ch 10,11,12 Mod II, Ch 22 Mod III

Additional References :

2. Gujarati Damodar, Econometrics by Example, McGraw Hill, New York
3. Hatekar Neeraj (2009), Econometrics: The First Principles A Friendly Introduction, Mod I
4. Kapoor V. K. (2011), Operations Research Problems & Solutions, Sultan Chand & sons, Ch 1,2,3,4,5 Mod IV
5. Lipschutz (Schaum Series), Theory and Problems of Statistics, Mod IV
6. Jeffrey M. Woolridge, Econometrics, Cengage Learning India Edition, 2009, Mod II
7. Studenmund A.H., Using Econometrics : A Practical Guide, 7th Ed. Pearson

Preamble

The main objective of this paper is to strengthen a student's critical thinking and reasoning ability at planning economic research and to enable them to communicate the outcomes of their research effectively. The students will be assigned broad areas of research interests in Economics and will be guided to conduct research using a wide variety of qualitative and quantitative tools. Modules on structure of research, theory, types and methodology of research will be instructed. The learner is then expected to undertake the practice by carrying out a research assignment and presenting it in the form of a research report.

Program: B.A. (2021-22)				Semester: VI	
Course: PROJECT				Course Code: UAMAECO609	
Teaching Scheme				Evaluation Scheme	
Lecture (Hours per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit	Continuous Assessment (CA) (Marks - 100)	Semester End Examinations (SEE)

03	-	-	3.5	100	N.A.

Learning Objectives:

The main objective of this paper is to strengthen a student's critical thinking and reasoning ability at planning and conducting economic research and to enable them to communicate the outcomes of their research effectively.

Course Outcomes:

CO1: well versed with APA style of referencing, especially in text referencing and citations.

CO2: undertake review of literature using plagiarism guidelines.

CO3: formulate a research problem and chart out conceptual framework highlighting the research methodology.

CO4: apply econometric, mathematical and statistical skills imbibed across the entire program.

CO5: document the research findings as per the accepted norms.

❖ A RESEARCH METHODOLOGY WORKSHOP of three hours will be conducted for students in Semester VI to enable understanding and inculcate skills required for their research project. The topics covered in the sessions will include
  - Data Collection and Preparation
  - Statistical Inference
  - Data Analysis using Excel –
    I. Correlation
    II. Hypothesis Testing
    III. Linear Regression