

COURSE STRUCTURE

M.A Economics

Semester-I

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-111	Micro Economics- I	4	40	60	100
2	MAE-112	Macro Economics-I	4	40	60	100
3	MAE-113	Mathematics for Economics	4	40	60	100
4	MAE-114	Economics of Development	4	40	60	100
Total			16	160	240	400

Semester-II

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-221	Micro Economics- II	4	40	60	100
2	MAE-222	Macro Economics- II	4	40	60	100
3	MAE-223	Statistical Methods	4	40	60	100
Choice Based Complementary Electives courses (students are required to opt any one out of the following courses)						



1		Fundamental of English	4	40	60	100
2		Fundamental of Arabic Language	4	40	60	100
3		Applied Calculus	4	40	60	100
4		Software Skills in Information technology	4	40	60	100
5		Computer Application & Operations	4	40	60	100
6		Basics of Computing	4	40	60	100
7		Basics of Tourism	4	40	60	100
8		Tourism Resources of Jammu & Kashmir	4	40	60	100
9		Mysteries of Green Plants: The corner Stone of Life	4	40	60	100
10		Botany in Rural Development	4	40	60	100
11		Fundamental of Biotechnology	4	40	60	100

Semester-III

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-331	International Economics	4	40	60	100

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2	MAE-332	Public Finance	4	40	60	100
3	MAE-333	Basic Econometrics	4	40	60	100
Choice Based Complementary Electives courses (students are required to opt any one out of the following courses)						
4	MAE-334	Demography	4	40	60	100
5	MAE-335	Industrial Economics	4	40	60	100
6	MAE-336	Environmental Economics	4	40	60	100
7	MAE-337	Indian Financial System	4	40	60	100
8	MAE-338	Islamic Economics	4	40	60	100
Total			16	160	240	400

Semester-IV

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-441	Theory of Economic Growth	4	40	60	100
2	MAE-442	International Political Economy	4	40	60	100
3	MAE-443	Indian Economy	4	40	60	100
4	MAE-444	Dissertation (Viva-Voce 50& project work50)				100
Choice Based Complementary Electives courses (students are required to opt any one out of the following courses)						
5	MAE-445	Agricultural Economics	4	40	60	100
6	MAE-446	J&K Economy	4	40	60	100
7	MAE-447	Research Methodology& Computer Application	4	40	60	100
8	MAE-449	Political Economy	4	40	60	100
9	MAE-450	Advanced Econometrics	4	40	60	100
Total			16	160	240	400

M.A. Economics Programme

Department of Economics

Course Objectives and Outcomes

Semester -I

Course Title: Micro Economics –I

Course Code: MAE-111

Course Objectives:

The course provides an introduction to a core area of economics known as Microeconomics. It considers the operation of a market economy and the problem of how best to allocate society's scarce resources. The course considers the way in which various decision making units in the economy (individuals and firms) make their consumption and production decisions and how these decisions are coordinated. This course also includes the economic behavior of individual units, in particular consumers and firms; the general equilibrium theory; expected utility and uncertainty; welfare economics; and the fundamentals of the game theory.

Contents:

This course comprises of five units:

Unit I: Choice and Demand

Theory of Consumer Behaviour, Utility and Indifference Curve Approaches, Indirect Utility Function, Budget Line, Utility Maximisation Problem, Income and Substitution Effect- Slutsky and Hicks, Ordinary Demand Curve and Compensated Demand Curve, Applications of Indifference Curve Analysis, Revealed Preference Hypothesis, Market Demand and Elasticity- Market Demand Curves .

Unit II: Theory of Production and Costs

Production Function, Isoquants, Returns to Factor and Returns to Scale, Technical Progress, Equilibrium of the firm, Expansion Path, Cobb-Douglas, CES, VES Production Function, Theory of Costs and their relationship in traditional Cost Theory, Modern Cost Theory, Economies and Diseconomies.

Unit III: Market Structure

Price and Output under Perfect Competition-short run and long run equilibrium of a firm, short run supply curves, Equilibrium of a Firm and industry- short run and long run,

Monopoly- short run and long run equilibrium price and output determination, Various Forms of Price Discrimination, Price and Output Determination under Monopolistic Competition- short run and long run analysis.

Unit IV: Oligopoly

Non-collusive oligopoly,-Cournot, Bertrand, Kinked Demand Curve and Stackelberg Models, Theory of Games-zero-sum and non-zero sum games, Nash Equilibrium, Prisoner's Dilemma, Repeated and Sequential Games, Collusive Oligopoly-cartels and Price Leadership Models.

Unit V: Factor Pricing

Neo-Classical Approach, Marginal Productivity Theory, Factor Pricing in Imperfect Product and Factor Market, Product Exhaustion Theorems, Elasticity of Technical Substitution and Factor Shares, Technical Progress and Income Distribution, Pricing of Fixed Factors of Production.

Course Delivery

- Lectures
- Presentations
- Group Discussions

Assessment

- Written Assignment and Presentation: 14 marks
- Mid Term Test: 16 marks
- Attendance: 10 marks
- Internal Exam: 40 marks
- External Exam: 60 marks

Course Outcomes:

On the successful completion of the course, students will be able to:

CO1: Explain the various types of markets and how competitive markets organize the allocation of scarce resources and the distribution of goods and services.

CO2: Relate the basic economic theory and principles to current microeconomic issues and evaluate related public policy

CO3: Use economic models to analyze a situation in terms of economics

CO4: Communicate their knowledge and understanding of economic issues using written, verbal and visual expression

CO5: Understand the broader social consequences of economic decisions making

References:

1. Hal, R. Varian (2010) 8th ed.; *Intermediate Microeconomics – A Modern Approach*, EWP and WW Norton and Co, Inc, New York
2. Henderson, J. M., & Quandt, R. E. (1971). *Microeconomic theory: A mathematical approach*. New York: McGraw-Hill.
3. Koutsoyiannis, (1979) 2nd ed.; *Microeconomics*, Macmillan Press, London Walter.
4. Pindyck, R.S., Rubinfeld D. and Mehta P.L. (2012) 7th ed.; *Microeconomics*, Pearson Education South Asia
5. Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995); *Microeconomic theory*. New York: Oxford University Press.
6. Stapleton, D. C., & Nicholson, W. (2002); *Workbook, Microeconomic theory: Basic principles and extensions, eighth edition [by] Walter Nicholson*, Mason, Ohio: South-Western/Thomson Learning.
7. Salvatore, D (2010) 8th ed; *Macroeconomics; Theory and Applications*, Oxford University Press, New Delhi.; Modern

Course Title: Macro Economics-I

Course Code: MAE-112

Course Objective:

The Objective of the course of Macroeconomics-I is to give student's thorough understanding of the principles of economics as applicable at the Macro level, dealing with the economy as a whole. It also deals with the study of National Income-Accounting.

Content:

Unit I Unit 1: National Income and Social Accounting

National Product– Concept and Measurement, National Income and Welfare, GNP, welfare and basic Needs; Circular flow of income in two, three and four sector economy. Social accounting– concept and importance; Main features and types of social accounts; Matrix presentation of social accounting. Balance of payment accounting;

Unit-II: Classical Approach

Classical Framework, Say's law of markets, Output and Employment in Classical Theory, Classical Model Without Saving and Investment, Classical Model Without Saving and Investment, Classical Theory of Money, Theories of Interest-Classical, Loanable funds

Unit III: Keynesian Approach

Simple Keynesian Model, Consumption function; Keynes's law of consumption; absolute income, relative income, life cycle income and permanent income hypothesis; Investment function, Keynesian approach (MEC) approach; Accelerator principle; Keynesian Multiplier– static and dynamic, Keynesian models of Income and employment, Aggregate demand and aggregate supply function– Income determination in three sector model; Income determination in the four sector model including foreign spending.

Unit IV: Theories of Trade Cycle

Concept of multiplier, Balanced budget multiplier, Foreign trade multiplier, Anatomy and indicators of trade cycle; Multiplier-accelerator interaction theories of trade cycle– Samuelson, Hicks; Keynes and Kaldor model of trade cycle; Real business cycle theory; Control of trade cycle.

Unit V: Neo- classical and Keynesian Synthesis

IS-LM model; Derivation of IS-LM curves; Factors causing shift in the IS-LM schedule; Extension of IS-LM model with government sector; Extension of IS-LM with labour market and flexible price; Monetary and fiscal policy– tools and relative effectiveness

Course Delivery:

- Presentation

- Lectures
- Group Discussion

Assessment:

- Presentation/Assignment: 14 marks
- Mid Term Test 16 marks
- Attendance: 10 marks
- Exam (Internal) 40 marks
- Exam (External) 60 marks

Course Outcomes:

On the successful completion of the course, students will be able to:

- CO 1 National Income and Social Accounting:** Application of Techniques for Data Collection data on factor incomes generated by economic sectors, Importance of Primary sector, Secondary sector and Tertiary sectors, Use of Methods for Calculation the National Income to measure their relative contributions to national income.
- CO 2 Classical Approach:** Reference to different group of economists, their personal opinion about Income and output determination. Role of saving and Investment for capital formation for production of Goods and services in the economy. How investment is made for establishment of further producing economic activity in classical view. To understand features of Classical model, supply determined nature of output.
- CO 3 Keynesian Approach:** Reference to different group of economists, their personal opinion about Income and output determination. Application of modern approach to Income generation.Pitfalls in conventional approaches to aggregate demand.
- CO 4 Neo Classical and Keynesian Synthesis:** Reference to different group of economists, their personal opinion about Income and output determination. : Reference to different group of economists, their personal opinion about Income and output determination.
- CO 5 Inflation and Unemployment:** How to overcome the obstacles like Inflation and decline in real value of money over time in order to raise the level of employment and income generation. In this section we study Classical and modern economists view of inflation, factors determining the Cost push and demand pull inflation]

References:

1. Ackley, G., *Macroeconomics: Theory and Policy*, Macmillan, New York. 2nd Ed.
2. Blackhouse, R. and A. Salansi (eds.); *Macroeconomics and Real World* (2 Vols.) Oxford University Press, London. 3rd Ed.
3. Bhole, L. M. (1985); *Impacts of monetary policy*. Bombay: Himalaya Pub. House.
4. Branson, W.A.; *Macroeconomics Theory and Policy*, Harper and Row, New York.
5. Dornbusch, R. and F. Stanley; *Macroeconomics*, McGraw Hill, Inc., New York.
6. Hall, R.E. and J.B. Taylor; *Macroeconomics*, W.W. Norton, New York.
7. Heijdra and Vander Ploeg; *Foundations of Modern Macroeconomics*, Oxford University Press.
8. Mankiw N.G. and Romer, D. (eds.); *New Keynesian Economics*, (2 Vols.) MIT Press, Cambridge.
9. Romer D.L.; *Advanced Macroeconomics*, McGraw Hill Company Ltd. New York.
10. Rakshit M.; *Studies in Macroeconomics of Developing Countries*, Oxford University Press, New Delhi.
11. Rakshit, M., & Rakshit, M. (2009); *Macroeconomics of post-reform India: Selected papers*. New Delhi: Oxford University Press.
12. Rangarajan, C., Ahluwalia, M. S., Venugopal, R. Y., & Tarapore, S. S. (2002); *Macroeconomics and monetary policy: Issues for a reforming economy*. New Delhi: Oxford University Press.
13. Scarfe, B.L.; *Cycles, Growth and Inflation*, McGraw Hill, New York.
14. Shapiro, E. (1970); *Macroeconomic analysis*, New York: Harcourt, Brace & World.

Course Title: Mathematical Economics

Course Code: MAE – 113

Objectives: The objective of this course is to impart students with the knowledge of basics of mathematical aspects which are applicable in economics related issues.

Contents: This course consists of five units.

Unit I: Basic Concepts

Concept of variable, constant and parameter; Set theory– sets and set operations; Concept of relation and function– types of function; Limit and continuity, Equations– linear, quadratic and simultaneous equation.

Unit II: Differential Calculus

Derivative– rules of differentiation; Partial derivatives; Higher order differentiation; Euler's Theorem; Uses of differentiation in economics– constrained optimization, Lagrangian multiplier, problems of maxima and minima in single and multi-variable functions. Profit maximisation Comparative and Static Dynamics, Linearization of Functions.

Unit III: Integral Calculus

Concept of integration– simple rules of integration, indefinite and definite integral; Fundamental theorem of integral; Properties of definite integral; Application of integrals in economics– consumer's surplus, producer's surplus and growth rates.

Unit IV: Differential and Difference Equation

Concepts; Solutions of first order differential and difference equations; Applications of differential and difference equation– phase diagram, stability conditions, lagged income determination model, Cobweb model, Samuelson multiplier acceleration interaction model.

Unit V: Matrix Algebra

Concept of matrix– their types, simple operations on matrices; Determinants & their basic properties; Inverse of matrix; Jacobian, Hessian and higher order Hessian rule; Rank of a matrix; Solution of a system of linear equations using matrices; Solution of simultaneous equations through Cramer's rule. Input-Output Put Analysis, Hawkins-Simon Condition, IS-LM Model,

Course Delivery:

-Lectures

-Presentations

Assessment:

-Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

Course outcomes:

CO-1: Brief revision of some basic mathematical concepts to be able to understand subsequent advanced mathematical tools.

CO-2: Understand the fundamental concepts of Optimization Techniques for constrained and unconstrained problems.

CO-3: Compute Differential Functions and their use in Economics.

CO-4: Understand basics of Integral Calculus with applications in economics.

CO-5: To be able to perform basic operations on matrices and their application in Economics.

References:

1. Allen, R. G. D. (2003), *Mathematical Analysis for Economists*, The Macmillan Press, Delhi.
2. Boumal, J. W. (2000), *Economic Theory and Operation Analysis*, Prentice Hall of India, Delhi.
3. Chiang, C. A. (1984), *Fundamental Methods of Mathematical Economics*, McGraw Hill
4. D. T. Edward, (2008); *Introduction to Mathematical Economics*, Tata McGraw Hill, Delhi.
5. Dowling, E. T. (2001), *Schaum's outline of theory and problems of introduction to mathematical economics*, New York: McGraw Hill.
6. Edward, D. T. (2008), *Introduction to Mathematical Economics*, Schaum's outline, Tata McGraw- Hill, Delhi.
7. Gupta, S. C. and Kapoor, V. K., *Fundamentals of Mathematical Statistics*, Himalayapublishing House, New Delhi.
8. Henderson, M. J. (2006), *Microeconomics Theory*, Tata McGraw- Hill, New Delhi.
9. Yamane, T. (1995), *Mathematics for Economists*, Prentice Hall of India, New Delhi

Course Title: Economics of Development

Course Code: MAE-114

Course Objectives:

This is an advanced course in development economics. This course aims to provide students with an economic understanding of the origins of uneven patterns of economic development, as well as an understanding of policies that can be applied in developing countries and how we can measure their effectiveness.

Contents

Unit I: Social and Institutional Aspects of Development

Development and Underdevelopment- Perpetuation of Underdevelopment, Measuring Development and Development Gap, Poverty-Absolute and Relative – Measures of Poverty and Their Merits and Demerits, Inequality – Measures of Inequality, Effects of Inequality, Population Problems, Theory of Demographic Transition; Population as Limits to Growth and as Ultimate Source, Economic Development and Institutions- Markets and Market Failure, State and State Failure.

Unit II: Theories of Development

Classical Theory of Capitalistic Development, Growth and Stagnation, Marxian Model of Growth and Collapse and Schumpeter Theory of Economic Development, Partial Theories of Growth and Development- Vicious Circle of Poverty, Circular Causation, Dualism- Technical and Social; Lewis Model, Ranis and Fei Model, Dependency Theory of Development, Strategies of Development-Big Push, Balanced Growth, Unbalanced Growth, Critical Minimum Effort Thesis, Low Level Equilibrium Trap.

Unit III: Sectorial Aspects of Development

Role of Agriculture in Economic Development, Transformation of Agriculture and Rural Development, Complementarily between Agriculture and Industry, Rationale and Pattern of Industrialization in developing countries, Choice of Techniques and Appropriate Technology.

Unit IV: Economics Policies, Planning and Development

Role of Monetary and Fiscal Policies in Developing Countries, Inflation and Economic Growth, Empirical Evidence, Aid Versus Trade, Technology Inflow, MNCs activity in developing countries, Burden of Borrowing-IMF and World Bank Policies in Developing Countries. Need for Investment Criteria- Present versus Future, Need for planning, and Review of Indian Plans Models.

Unit V: Development Theory- International Aspects

International Trade as an engine of growth, Static and Dynamic Gains of Trade, Prebisch-Singer versus Free Trade, Import Substitution versus Export Promotion, Dual Gap Analysis, WTO and Developing Countries.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

-Internal Exam: 40 marks

-External Exam: 60 marks

Course Outcomes:

On the successful completion of the course, students will be able to:

CO1: To acquaint them with the social and institutional aspects of development.

CO2: To familiarize them with major theories of economic development particularly focusing on underdeveloped economies.

CO3: Understanding of the role of Agriculture, Rural development and industries in Economic Development.

CO4: Analyse macroeconomics policies and planning in Economics development.

CO5: Understanding the development theories under the International perspective.

References

1. Gills M, Perkins, Romer and Snodgrass “*Economics of Development*” W.W. Norton and Company, New York.
2. Meir, G.M. and J.E. Rauch (6th Edition, 1997), “*Leading Issues in Economic Development*”
3. Misra and Puri, “*Economics of Development and Planning -Theory and Planning*” Himalaya Publishing House. Mumbai.
4. Ray Debraj (16th Edition, 2010) “*Development Economics*” Oxford University Press. New Delhi.
5. Thirwal, A P (8th Editions, 1999/2006), “*Growth and Development*” Palgrave Macmillan, U.K.
6. Todaro, M.P. and Smith(8th Edition, 2003) “*Economic Development*” Pearson Education, Delhi

Semester – II

Course Title: Microeconomics - II

Course Code: MAE-221

Course Objectives: This course builds on the microeconomic principles studied in the Microeconomics I course and provides an analysis of the way in which the market system functions as a mechanism for coordinating the independent choices of individual economic agents. It develops a basis for evaluating the efficiency and equity implications of competition and other market structures, and a perspective on the appropriate role of government. Included are the study of consumer choice, production and cost, market structure, and market failure. Given the emphasis on applications, it will put more emphasis on the mastery of theoretical concepts and important part of the course.

Course Description : This covers advanced topics in Microeconomics like advanced theories of firm, distribution theories, General Equilibrium, Welfare Economics and also covers uncertainty.

Contents

Unit I: Other Theories of Firm

Critical Evaluation of Marginal Analysis, Average Cost Pricing, Bain's Limit Pricing Theory and Sylos-Labini Model, Baumol's Static and Dynamic Models of Sales Revenue Maximisation, Marris's Model of Managerial Enterprise, Williamson's Model of Managerial Discretion. Coase Concept of the Firm.

Unit II: Distribution Theories

Macro Theories of Distribution- Assumptions, Principles, Limitations and Comparative Analysis of Ricardo, Marx, Kalecki and Kaldor.

Unit III: General Equilibrium

General Equilibrium Analysis-Interdependence of Markets, Efficiency in Exchange, Walrasian Equilibrium, Walras Law, Existence, Stability and Uniqueness of Equilibrium, Efficiency and Equilibrium, Pure Exchange Model, Equity-Efficiency Trade off.

Unit IV: Welfare Economics

Welfare Economics, Individual and Social Welfare, Pigou's Concept of Welfare, Social Welfare Criteria-Pareto, Kaldor-Hicks and Bergson, Maximisation of Social Welfare-Grand Utility Possibility Frontier, Determination of Welfare Maximizing Configuration, Arrow's Impossibility Theorem, Theory of Second Best.

Unit V: Uncertainty and Information

Decision making under uncertainty, The Expected Utility Theory of Von Neumann and Morgenstern, Attitude towards risk, Measures of Risk Aversion, Insurance, Asymmetric Information, Market for Lemons and Market Signaling, Principle- Agent Problems, Incentives Framework in Private and Public Enterprises, Efficiency Wage Theory, Moral Hazard.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

-Internal Exam: 40 marks

-External Exam: 60 marks

Course Outcomes

On successful completion of this course students will be able to:

CO1: Explain consumers' and firms' behavior using mathematical tools

CO2: Develop communications skills through the presentation of your work, interactions during tutorial sessions, and appropriate use of the discussion board

CO3: Apply economic theory to diverse real-world situations

CO4: Analyze economic problems and prescribe solutions

CO5: Model economic situations in a logical, rigorous, and precise manner

References

- 1) Baumol, W. J. (1967). *Business Behavior: Value and Growth*. New York: Harcourt, Brace & World.

- 2) Henderson, J. M., & Quandt, R. E. (1971). *Microeconomic theory: A mathematical approach*. New York: McGraw-Hill.
- 3) Koutsoyiannis (1979) 2nd Ed Microeconomics, Macmillan Press, London Walter.
- 4) Pindyck R. S. and Rubinfeld, D. L. (1999), Microeconomics, Prentice Hall of India
- 5) Salvatore, D. (2003). *Microeconomics: Theory and applications*. New York: Oxford University Press.
- 6) Varian, H. R. (1999). *Intermediate microeconomics: A modern approach*. New York: W.W. Norton & Co.
- 7) Walter Nicholson (1992) 5th Ed, Microeconomic Theory: Basic Principles and Extensions, The Dryden Press, USA

Course Title: Macro Economics- II

Course Code: MAE-222

Course Objective:

Macroeconomics in this paper establishes the functional relationship essential for the proper comprehension of the different issues and policies at aggregate level. Macroeconomics is more scientific and blends itself with empirical economic knowledge. This equips the students to understand systemic facts and latest theoretical developments for analysis. Macroeconomic imbalances and correcting policies are part of the New Economic Policy implemented in India.

Contents

Unit I: Supply of Money

Model of bank deposit determination; H- theory of money supply; Money multiplier; Budget and money supply; RBI approach to money supply; Components of money supply in India, Money supply in open economy. Monetary Policy in India; Status and Issues.

Unit II: Demand for Money

Classical approach to demand for money– Fisher's and Cambridge approach; Keynes' liquidity preference approach; Post-Keynesian approaches to demand for money– Baumol's approach of transaction demand for money; Tobin portfolio optimization approach; Friedman's quantity theory; Patinkin's real balance effect; Pigou's effect.

Unit V: Inflation and Unemployment

Classical, Keynesian and monetarist approach to inflation; Demand pull and cost push inflation; Bent Hansen model of demand pull inflation; Structuralist theory of inflation; Phillips curve – short run and long run; Keynesian views of the output-inflation trade off; Tobin views on Phillips curve; Natural rate of unemployment hypothesis; NAIRU and Phillips curve; Strategies to control inflation. Indian Inflation Status and Issues

Unit IV: Macroeconomics in Open Economy

IS-LM model in open economy; LM curve and the balance of trade; Zero capital mobility; Implication of capital mobility for macroeconomic policy; Mundell-Fleming model; Relative effectiveness of monetary and fiscal policies under imperfect and perfect capital mobility.

Unit V: Recent Developments in Macroeconomic Theory

Monetarism– central propositions, reformulation of quantity theory of money; Newclassicaleconomics– theory of rational expectations and its implication; New classical macroeconomics, Supply side economics. New Keynesian Economics

Course Delivery:

- Presentation
- Lectures
- Group Discussion

Assessment:

- Presentation/Assignment: 14 marks
- Mid Term Test 16 marks
- Attendance: 10 marks
- Exam (Internal) 40 marks
- Exam (External) 60 marks

Course Outcomes

CO 1 Supply of Money: Addressing the subject matter of Money supply determination through bank deposit determination, It also portrays the role played by money supply in determination money supply. It signifies the role of RBI in money creation.

CO 2 Demand for Money: Introduces the students to Classical neo classical view about money. And different opinions about demand for money.

CO 3 Inflation and Unemployment: study Classical and modern economists view of inflation, factors determining the Cost push and demand pull inflation, Types of inflation, Structural theory of inflation and relevance of Phillips Curve in developed nations thereof. Relationship between Inflation and unemployment.

CO 4 Macroeconomics in Open Economy: Introduces students with IS and LM Model and simultaneous equilibrium between Both Goods and Money market. The role played by Investment and marginal efficiency of capital for determining the rate of interest and Income equilibrium.

CO 5 Developments in Macroeconomic Theory: Recent developments in the monetary economics. Theories of rational expectations and new Keynesians economics.

References:

1. Bhole, L. M. (1985). *Impacts of monetary policy*. Bombay: Himalaya Pub. House.

2. Dornbusch, Fischer and Startz, *Macro Economics*
3. D.N. Dwivedi (2007), *Macroeconomics*, Tata McGraw Hill, New Delhi.
4. Fleming N. *Monetary Economics*, Macmillan Studies in economics
5. Gibson, W.E. & G.C. Kaufman (Ed.) , *Monetary Economics*, Readings of current issues.
6. Shukla, P.R. & Roy Chowdhary, *Money, Inflation & Development*. S.K. (Ed.)
7. Gupta S.B., *Monetary Economics*.
8. Srivastava M.N. *Perspective in Monetary Theory*.
9. Rakshit, M., & Rakshit, M. (2009). *Macroeconomics of post-reform India: Selected papers*. New Delhi: Oxford University Press.
10. Rangarajan, C., Ahluwalia, M. S., Venugopal, R. Y., & Tarapore, S. S. (2002). *Macroeconomics and monetary policy, Issues for a reforming economy*. New Delhi: Oxford University Press.
11. Rosalind Levacic and Alexander Reibmann, *Macroeconomics – An Introduction to Keynesian – Neoclassical Controversies*.
12. Shapiro, E. (1970). *Macroeconomic analysis*. New York: Harcourt, Brace & World.

Course Title: Statistical Methods

Course Code: MAE – 223

Course Objectives:

The course introduces basic and advanced statistical concepts and methods that are vital for understanding and interpretation of various economic issues and concepts. The course is essential for conduct of research and basic data analysis, which has been increasingly become popular in all walks of life. Statistics is one of the most useful subjects in academic, professional and corporate world. In this respect the course is aimed at enhancing the understanding, interpretation and data analysing skills of students.

Contents: This course comprises of five units

Unit I: Elementary Statistics

Introduction to Basic Statistics; Data Collection Methods; Types of Data; Frequency Distribution: Measures of Central Tendency; Measures of Dispersion, Range, Quartile Deviation, Mean Deviation, Standard Deviation, Moments Skewness and Kurtosis, with their characteristics.

Unit II: Correlation and Regression

Correlation- Methods of Measuring Correlation– Graphical Methods and Algebraic Methods– Karl Pearson's Coefficient of Correlation and Spearman's Rank Correlation Coefficient; Properties of Correlation Coefficient; Partial and Multiple Correlations; Simple Linear Regression, Multiple Regression.

Unit III: Probability and Distribution

Meaning and Definition of Probability– Classical and Empirical Definitions of Probability; Deterministic and non-Deterministic Experiments; Types of Events; Laws of Addition and Multiplication; Conditional Probability and Concept of Independence; Baye's Theorem and its Applications. Probability Distributions, Normal Distribution, Binomial Distribution, Poisson Distribution& their Characteristics.

Unit IV: Theory of Sampling and Estimation

Sampling & Types of Sampling Techniques. Sampling Design– Steps in Sampling Design, Characteristics of a Good Sample Design; Concept of Estimator and; Estimation– Types of Estimators and their Properties; Characteristics of Good Estimator– Small and Large Sample Properties; Standard Error of an Estimate.

Unit V: Hypothesis Testing

Testing of Hypothesis; Level of Significance, Confidence Limits and Critical Region; Type I and Type II Error; One Tailed and Two Tailed Tests; Parametric Tests– A Conceptual Introduction of Z– Test, T– Test, Chi– Square Test, F– Test. Introduction to Nonparametric Methods, Principal Components and Factor Analysis, Analysis of Variance – One Way.

Course Delivery

-Lectures

-Presentations

Assessment:

-Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

Course Outcomes:

CO-1: Introducing the basic Statistical concepts and appreciate the importance and use of Descriptive statistics.

CO-2: To be able to understand and use correlation and regression analysis in data analysis and interpretation.

CO-3: To understand data and Probability Distributions as fundamental tools for Inferential Statistics.

CO-4: To understand the basics of Sampling and data collection using sampling techniques.

CO-5: To be able to understand basics of hypothesis testing and some basic techniques and tests used in data analysis and research.

References

1. Chou, Y. (1975), *Statistical Analysis*, Holt, Reinhart and Winston, New York.
2. D. G. Rees (1987), *Foundation of Statistics*, Chapman & Hall.
3. Gupta, S.P. (2014), *Statistical Methods*, 43rd edit, Sulthan Chand & Sons, New Delhi
4. Hogg, R.V. and Craig, A.T. (1995), “*Introduction to Mathematical Statistics*”, Prentice- Hall International, inc. EngleWod Cliff, N.J., Fifth Edition

5. Hogg, R.V. and Tanis E.A. (1993), "*Probability and Statistical Inference*" Macmillan Publishing Company, New York, Fourth Edition
6. J. A. Rice (1995), *Mathematical Statistics and Data Analysis*, 2nd Edition, Duxbury Press
7. Lindgren, B. W., &McElrath, G. W. (1966). *Introduction to Probability and Statistics*. New York: Macmillan.
8. Mood, A.M. Graybill, F.A. and Boes, D.C. (1974), "*Introduction to the Theory of Statistics*", Mcgraw-Hill Book Company, New York, Third Edition.
9. Nagar, A.L and R.K, Das (1985), *Basic Statistics*, Oxford University Press, New Delhi.
10. R. L. Schaeffer (1990), *Introduction to Probability and its Applications*, Pws-Kent
11. S. C. Gupta (1993), *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi.
12. Sukhatme, P. V. and B. V. Sukhatme (1970), *Sampling Theory of Survey with Applications*,Lowa State University Press, Ames.

Course Title: The Principles of Banking

Course Code: ECO-221

Course Objectives: This course links the fields of macroeconomics and central banking. The role of money in the economy and the impact of monetary policy on the macro economy are examined. The course aims at providing students with the means to analyse monetary questions and institutions. It is not a course designed to further technical expertise in the instruments used in financial markets.

Theories will be introduced during the lectures. Practical applications to current issues in money and banking will be discussed during the bi-weekly seminar. This course links the fields of macroeconomics and central banking. The role of money in the economy and the impact of monetary policy on the macroeconomy are examined. The course aims at providing students with the means to analyze monetary questions and institutions. It is not a course designed to further technical expertise in the instruments used in financial markets.

Course Outcomes:

On successful completion of this course, students will be able to:

CO1: Identify the economic principles underlying the operation of financial intermediaries.

CO2: Explain how central banks conduct monetary policy.

CO3: Use models to analyze monetary and macroeconomic issues.

CO4: Conduct a theoretical analysis of real-world issues and phenomena.

CO5: Explain the importance and relevance of money in economic world.

References:

1. Geoffrey Crowther : An Outline of Money, Read Book Publisher
2. Lockett, D.G., : Money and Banking, McGraw-Hill Kogakusha, Ltd.
3. L.V. Chandler : An Introduction to Monetary Economics, Manchester University Press.

4. L.V. Chandler, and S.M. Goldfield : The Economics of Money and Banking, Harper and Row, New York
5. McCallum, B.T., : Monetary Economics: Theory and Policy, New York: Macmillan Publishing Company 6.
6. Sethi, T.T. : Monetary Economics,; S. Chand and Co., New Delhi 12.
7. Suraj B. Gupta : Monetary Economics– Institutions, Theory and Policy, S.Chand& Company Ltd, New Delhi.
8. Suraj B. Gupta : Monetary Planning, Oxford University Press, India

Semester –III

Course Title: International Economics

Course Code: MAE-331

Course Objective: The course aims to familiarize students with different schools of thought investigating how international trade is beneficial for all trading countries, and factors affecting the dynamics of imports and exports of an economy. The course is intended to acquaint students about various policy options available for monetary authorities to deal with situations of macroeconomic instability at a time when economies are increasingly becoming globalized. Besides, it also aims at enhancing awareness about the anatomy of the international economic crisis that affected global economy, in the past several decades.

Course Title: International Economics

Course Code: MAE-331

Course Objective: The course aims to familiarize students with different schools of thought investigating how international trade is beneficial for all trading countries, and factors affecting the dynamics of imports and exports of an economy. The course is intended to acquaint students about various policy options available for monetary authorities to deal with situations of macroeconomic instability at a time when economies are increasingly becoming

globalized. Besides, it also aims at enhancing awareness about the anatomy of the international economic crisis that affected global economy, in the past several decades.

Contents:

UNIT -I: Theory of International Trade – I

Significance and scope of International Economics, Economic Basis of International Trade, Contributions of Adam Smith, David Ricardo and J. S, Mill to the theory of International Trade, Theory of Opportunity Cost.

UNIT -II: Theory of International trade- II

Modern Theories of International Trade: Heckscher-Ohlin Theory of I rude and its empirical verification, Rybeznski Theorem, The Stolper – Samuelson Theorem, Factor-Price-Equalization Theorem, International Trade in Specific Factors Model, Imperfect Competition and Iuernational Trade: Concept of Intra-Industry Trade, its Basis Measurement and Significance, New Theories of Trade : Kravis and Linder.

UNIT- III: Gains from Trade and International Trade Policy

Concepts of Terms of Trade, their uses and limitations, Hypotheses of Secular Deterioration in Terms of Trade, Reasons for Deterioration in Commodity Terms of Trade and Policy Implications for Developing Countries; Trade as Engine of 30 Growth: Concept of Immiserizing Growth, Empirical Evidence and Policy Issues; Theory of Interventions: Tariffs, Quotas and Non-Tariff Barriers to International Trade, Economic Effects of Tariffs and Quotas (Partial and General Equilibrium Analysis); Theory of Optimum Tariff, Concepts of Nominal and Effective Tariffs.

UNIT -IV: Balance of Payments

Meaning and Components of Balance of Payments, Equilibrium and Disequilibrium in the Balance of Payments (BOP), Process of Adjustment under Fixed and Flexible Exchange Rate Regimes, Expenditure Changing and Expenditure Switching Policies for Balance of Payments (BOP) Adjustment, Policies for Achieving Internal and External Equilibrium simultaneously: Mundell- Flemming Model, The Monetary Approach to the Theory of Balance of Payments (BOP) adjustment.

UNIT-V: Contemporary Issues in International Economics: Reform of the International Monetary System, International Capital Flows. International Debt Crisis. Global Financial crisis of 2008; Asian crisis of 1997; Financial Crisis in Emerging Market. Problems of international banking, Problems of international finance for developing countries); Financial and economic crisis - Recent financial crises (Mexico 1994, Asia 1997-98, Russia 1998, Sub-prime mortgage crisis of 2008-09, What was the same, and what was different in 2008-09, European crisis in 2010-15, Russian crisis in 2014-15)

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

Course Outcomes:

CO1: After going through this course, the students will be able to explain logically why international trade is beneficial for trading countries.

CO2: They will have understanding of the modern theoretical insights regarding different aspects of the international trade not covered by the traditional theories.

CO3: They will understand the gains from trade and the implications of various trade policies on the welfare of nations.

CO4: The students will be familiarized with various concepts regarding the Balance of Payments and available policy options to achieve equilibrium in both internal and external sectors of the country.

CO5: They will be acquainted with contemporary issues in international economics including various financial crisis across the world over past few decades.

References

1. Bhagwati J. (1988) *Protectionism*, Cambridge University Press,Massachusetts.
2. Bhagwati, J. (Ed.) (1981) *International Trade: Selected Readings*,Cambridge University Press, Massachusetts.
3. Carbaugh R.J. (1999) *International Economics*, International ThompsonPublishing New York.
4. Dana, M.S. (2000) *International Economics: Study Guide & Workbook*,Routledge Publishers, London.
5. Dominick Salvatore (2004)*International Economics*, John Wiley & SonsInc.
6. H.G Mannur (1998) *International Economics*, Vikas Publishers, New Delhi.Dunn R. M. & J .H. Mutti (2000) *International Economics*, Routledge,London.
7. Jagdish N. Bhagwati et al (2003), *Lectures on International Trade*, OxfordUniversity Press, New Delhi.

8. Paul R. Krugman and Maurice Obstfeld (2007), *International Economics: Theory and Policy*, Pearson Education, New Delhi.
9. Sodersten Bo (1991) *International Economics*, The Macmillan Press Ltd. London.

Course Title: Public Finance

Course Code: MAE-332

Course Objectives:

The Course aims to equip the students with focused and relevant knowledge about the theoretical and empirical developments in Public Finance and to give students a thorough understanding of the principles of public Economics that apply to Macro Economic issues Like Inflation, Indian Tax Policy, Issues in the social Sector, and Public finance system in view of Indian Budget. Procedures connected to Horizontal and vertical Devolution in view of rate of Unemployment and Growth.

Contents:

Unit -I: Issues in Macro Economics Definition and measurement of inflation, Types of inflation, Impact of inflation, Measures to control Inflation. Monetary and Fiscal Policies: Objectives, Instruments. Inflation, Measurement of Inflation: WPI & CPI in India- System of weighting and issues in computation,

Unit- II : Indian Tax Policy

Features and Assessment of The Indian Tax System, Role of Taxation (Tax Policy), Role of public Borrowing in mobilization of Resources, External Finance, Grants Vs Foreign Loans, Role of deficit financing in mobilization of resources, Surpluses of the public Enterprises,

Unit- III : Issues in Social sector and Public policy

Social Sector - Theoretical Paradigms : Approaches & Definition, Theories of Social Sector: Social Exclusion & Inclusion, Social Development Index , Human Resource Development & Human Development : Differences and Linkages, Measurement of Various Forms of Human Development – Special characteristics of Education, Health, Nutrition

Unit-IV: The Public Budget and Federal Finance

The Kinds of Budget, Classification of Budgets: Economic Classification and Functional Classification, Performance and Programme Budgeting System (PPBS), Zero-Base

Budgeting, Balanced Budget-Arguments for Balanced Budget, Arguments against Balanced Budget, The Balanced Budget Multiplier, Fiscal Policy and Stability

Unit-V: Wages and Unemployment

Business cycle- features, phases, causes and consequences, Wage rigidity and structural unemployment, Relationship between Inflation and unemployment in closed and open economy, Monetary and Fiscal policies as Stabilizers, Fiscal Road map and debt relief to the states.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

Course Outcomes:

On completion of the course students would be able to:

CO1: Understand the sources of finance both public and private, demonstrate the role of government to correct market failures and possible advantage of public financing.

CO2: Attain the advantages and knowledge of public investments and other government expenditures.

CO3: Understand the causes of growing public expenditures for various programmes and policies within and outside the country.

CO4: Understand the possible burden, benefits and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system.

CO5: Understand the needs of public borrowing from all possible sources to meet necessary public investment/expenditures. Also be alerted to find sources for repayment.

References

1. A.R. Prest, Public Finance in Theory and Practice. Atkinson,
2. Atkinson, A.B. and J.E. Siglitz (1980), Lectures on Public Economics, Tata McGraw Hill, New York.
3. Bhatia, H. L. (2009). *Public finance*. Vikas Publishing House PVT Ltd.
4. Buchanan, J. M. (1970), The Public Finances, Richard D. Irwin, Homewood.
5. Jha, R. (1998), Modern Public Economics, Routledge, London. Datt, R. & Sundaram, P.K, Indian Economy.
6. Musgrave, R. A. (1959), The Theory of Public Finance, McGraw Hill, Kogakhusa, Tokyo.
7. Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogokusha, Tokyo.

Course Title: Basic Econometrics

Course Code: MAE-333

Course Objective: The course is intended to familiarize students with different types of econometric models and the procedure to use them for the analyses of complex datasets.

Contents:

Unit-I: Basic Econometrics

Nature, meaning and scope of Econometrics; Methodology of Econometrics; Nature and types of Data for econometrics; Concept of Population and sample Regression Function; Linear regression model – Assumptions, Estimation (through OLS approach) and properties of estimators; Gauss-Markov Theorem; Interval estimation and Hypotheses testing, Tests of significance and confidence interval approach

Unit II: Extension of Two Variable Linear Regression Models

Functional forms of Regression Models; Log-Linear Model, Semilog Models, Reciprocal Models, Logarithmic Reciprocal Model. Multiple Regression Model– Assumptions and Estimation; Concept of Coefficient of Determination for Linear and Multiple Regression Model (r^2 and R^2 And Adjusted R^2)

Unit III: Problems in Regression Analysis

Multicollinearity– reasons, consequences, methods of detection, important remedial measures. Heteroscedasticity- reasons, consequences, methods of detection (Spearman rank correlation test, Goldfeld and Quandt test, Glejser test), important remedial measures; Autocorrelation- reasons, consequences, methods of detection (Durbin-Watson statistic), important remedial measures.

Unit IV: Dummy Variable and Qualitative Response Models

Dummy variable – use of dummy variables, regression with dummy dependent variables for measuring the change of parameter. Qualitative Response Models- linear probability model (LPM); Logit Model; Probit Model; Tobit Model.

Unit V: Dynamic Econometric Models

Autoregressive and distributed lag models; Role of lag in economics; Endogenous lagged variable– Koyak geometric lag model, Nerlove's Partial adjustment model, Cagan's adaptive expectations model; Exogenous lagged variable– Almon approach to distributed-lag models

Note: Emphasize will be laid down the practical application from all technique in each unit

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

Course Outcomes:

CO1: The students will be familiarized with the basic concepts of econometrics including the procedure of hypothesis testing and various types of data.

CO2: They will be acquainted with various concepts regarding multiple regression analysis.

CO3: They will be able to identify various econometric issues in regression analysis and take appropriate remedial measures.

CO4: They will be able to make use of dummy variable and qualitative response variable regressions to analyze qualitative variables.

CO5: They will be able familiarized with dynamic models and their uses.

References:

1. Baltagi, B. H. (2011). *Econometrics*. Berlin: Springer,
2. Greene, W. H. (2003). *Econometric analysis*. Upper Saddle River, N.J: Prentice Hall
3. Gujarati, D. N. (1992). *Essentials of econometrics*. New York: McGraw-Hill.
4. Gujarati, D. N. (2005). *Basic Econometrics*. Tata McGraw Hill, New Delhi.
5. Gujarati, D. N. (2011). *Econometrics by Example*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
6. Kennedy, P. (1998). *A Guide to Econometrics*. Cambridge, Mass: MIT Press
7. Kmenta, J. (1971). *Elements of econometrics*. New York: Macmillan.
8. Maddala, G. S. (1977). *Econometrics*. New York: McGraw-Hill.
9. Salvatore, D., & Reagle, D. P. (2002). *Schaum's Outline of Theory And Problems of Statistics and Econometrics*. New York: McGraw-Hill.

Course Title: Environmental Economics

Course Code: MAE-336

Objectives: Environmental challenges are the highlight of present day world, which has been the focus of public and policy makers at the local national and global level. In this regard the course is meant to provide some insights into the application of economic theory in the design and implementation of public policy related to management of Natural resources and solution of environment problems. Units incorporated in this paper are devoted to issues environmental economics, the models of optimal use of natural resources, sustainable development, and environmental resource problems and regulation in India.

UNIT-I: Concepts and Measurement of Environmental Values

Environmental and resource economics: Concepts; Environment and emerging development issues, Markets and externalities; Property rights and externalities; Common property resources; Environmental valuations: Method based on observed market behaviour; Hedonic property model, household production model (travel cost method and household health production function); Methods based on response to hypothetical markets, Contingent valuation method.

UNIT-II: Theory of Environmental Policy

Environmental externalities -Pigouvian taxes and subsidies, marketable pollution permits and mixed instruments; Coase bargaining solution and collective action; Informal regulation and the new model of pollution control; Monitoring and enforcement of environmental regulation; Environmental institutions and – grassroots movements; Global environmental externalities and climatic change; Tradable pollution permits and international carbon tax; Trade and environment in WTO regime.

UNIT-III: Natural Resource Management and Sustainable Development

Theories of optimal use of exhaustible and renewable resources; Environmental and development trade off: Concept of sustainable development; Measurement and indicators of sustainable development; Integrated environmental and economic accounting; Measurement of environmentally corrected GDP; Macroeconomic policies and environment.

UNIT-IV: Environmental and Natural Resource Management Policies in India

Mechanism for environment regulation in India; Environmental laws and their implementation; Policy instruments for controlling water and air pollution: Groundwater governance institutions and laws; Integrated water resource management approach.

UNIT-V: Forest Resources

People's participation in natural resource management; National forest policy; Institution of joint forest management and the joint protected area management; Social forestry-rationale and benefits.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

Course Outcomes:

CO-1: To understand the basic issues, concepts and Valuation methods used in the study of environmental economics.

CO-2: To be able to appreciate the various theoretical mechanisms for solution to environmental problems at local and as well as global level.

CO-3: To understand the issues in the management of different types of resources and implications for sustainability of development.

CO-4: To have a broader understating of Environmental issues and policy framework in India.

CO-5: To be able to understand the management and regulation of forest resources in India.

Reading List:

1. Boumal, W.J. and W.E, Oates (1988), The Theory of Environmental Policy, 2nd Edition, Cambridge University Press, Cambridge.
2. Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
3. Fisher, A.C. (1981), Resource and Environmental Economic Cambridge University Press. Cambridge.
4. Hanley, N., J.F. Shogern and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.
5. Hussen, A.W. (1999), Principles of Environmental Economics, Ruledge, London.
6. Jeroen, C.J. M. Van Den Bergh (1999), Handbook of Environmental and Resource Economics, Edward Elcyar Publishing Ltd., U.K.
7. Kolstad, C.D. (1999), Environmental Economics; Oxford University Press, New Delhi.

8. Sankar U. (ed.) (2001), Environmental Economics, Oxford University Press, New Delhi.
9. Tietenberg, T. (1994), Environmental Economics and Policy, HarperCollins, New York.
10. Arrow. K. J. (1970), The Organization of Economic Activity: Issues Pertinent to Choice of Market versus Non-market allocation in Public Expenditure and Policy Analysis (ed.), Haveman. R.H. and J. Margols, Markham, Chicago.
11. Crones, R. and T. Sandler (1989), The Theory of Externalities and Public Goods, Cambridge University Press, Cambridge.

Semester – IV

Course Title: Theory of Economic Growth

Course Code: MAE-441

Course Objectives :- After Having Acquainted With Various Aspects Of Development Economics Students In This Course Will Have To Deal With Various Growth Models, Problems Of Resource Allocation..

Contents

Unit I: Concept and Importance of Economic Growth - Sources of Economic Growth. Stylized facts of Economics growth with special references to Indian data

Unit II: Early Growth Models

Classical Theory Of Economic Growth, Harrod's Model Of Growth, Domar Model Of Growth, Relevance Of The Harrod-Dornar Model To Contemporary Developing Economics,

Unit - III: The Neo-Classical Models and the Models of the Cambridge School

Solow's Model Of Growth, Meade's Model, The Neo-Classical Model And The Golden Rule Of Accumulation, Cambridge Models Of Economic Growth- Joan Robinson's Model, Kaldor's Model, Pasinetti's Model, Samuelson And Modigliani On The Pasinetti Paradox

Unit -IV: The Two Sector Model

The Extension Of The Neo-Classical Model Of Two-Sectors- Uzawa's Two- Sector Model Of Growth, Money And Economic Growth Optimum Growth Models introduction And The Ramsey Model, Technical Progress: Different Types Of Technical Progress, Learning By Long Arrow's Model.

Unit -V: Endogenous Growth Models and Growth Accounting

Models of Endogenous Growth-Introduction - The AK Model, The Production Function Approach To Economic Growth; Growth Accounting- Empirical Evidence Limits To Growth. Convergence: definition, types.

Course Delivery:

- Presentation
- Lectures
- Group Discussion

Assessment:

- Presentation/Assignment: 14 marks
- Mid Term Test 16 marks
- Attendance: 10 marks
- Exam (Internal) 40 marks
- Exam (External) 60 marks

Course Outcomes:

CO1 Introduction to Economic Growth Addressing the subject matter of developmental economics. Portrays the magnitude of development gap between developed and Underdeveloped Countries. Addressing the stylized facts of economic Growth with special reference to India.

CO2 Early Growth Models Introduction of various theories of economic growth. Classical (Adam Smith, Malthus, Ricardo, and Harrod-Dommer and their application to developing countries like India.

CO3 Neoclassical Models and Models of Cambridge School. To Understand the applicability and relevance of 3rd generation (Neoclassical) Models Growth models in Indian economy.

CO4 Two Sector model To Analyze the difference in ideas of growth for formation and application of growth models in Indian economy, technical progress.

CO5 Endogenous Growth models and Growth Accounting To Understand methods and procedures connected to growth accounting,

References:

1. Barro, R. And X. Sala-I-Martin, Economic Growth, Prentice Hall India, New Delhi.
2. Branson, W, Macroeconomic Theory And Policy, Harper And Row
3. Chiang, A.C. Element Of Dynamic Optimization, Mcgraw Hill
4. Sen, A.K., Growth Economics, Penguin, Harmondsworth.
5. Solow, R.M. Growth Theory An Exposition, Oxford University Press, Oxford.
6. Wan, I-I. Y., Economic Growth, Harcourt, Brace, Jovanovich New York.
7. Chiang, A.C. Fundamental Methods In Mathematical Economics, Mcgraw Hill.

8. Robinson, J, The Accumulation Of Capital, Macmillan.
9. Domar, B, Essays In The Theory Of Economic Growth, Oxford University Press.
10. Thirlwall, A.P. Growth And Development, Palgrave.
11. Harrod R.F., Towards A Dynamic Economics, Macmillan.
12. Evans, M. Macroeconomic Activity, Harper And Row
13. Kaldor N., Essays In Economic Growth And Stability, Gerald Ruckworth

Course Title: International Political Economy

Course Code: MAE- 442

Course Objectives:

This paper deals with theoretical and practical aspects of interaction between International Politics and Economics. It provides insights into significant issues that need critical consideration in the era of globalisation. The basic objective of this course is to enable the students to graduate from the basics of the discipline to a higher level of critical analysis of the issues that determine global economic frame of reference.

Contents:

Unit-I: International Political Economy

International Political Economy: Meaning, Traditional Schools of International Political Economy. The invention of the world economy, The Economic Revolution. Origins of the Third World, Major problems of third world economies, inequality, structural transformation. Ancient and Medieval Economic Growth.

Unit II: The International Trade System

The International Trade System: Meaning; the Creation of the Post-war Trade System; Evolution of the Multilaterals Trade System; The Problem of Trade Cooperation; The Politics of Trade Liberalization; Multilateral Institutions an Trade Cooperation; Protection: Protection and its Consequence the structure of Protection in the Advanced Industrialized Countries; The Economic Consequences of Protection.

Unit -III: The Theory of Regional Blocks

Forms of Economic Cooperation; Static and Dynamic effects of a Custom Union: Production effect; Consumption Effects. European Union (EU) and North American Free Trade Agreement (NAFTA). Economic Progress of SAARC, SAFTA, etc. for Asian Economic Cooperation; Problems and Prospects of forming customs union in the Asian Region: Globalization: meaning; essential conditions for Globalization; implications and impact of Globalization.

Unit-IV: International Trade and Financial Institutions

The international Monetary System: The rise and fall of Gold Standard and Bretton Wood System (the interwar periods); Present International Monetary System 1M17: Objectives; functions; Conditionality clause of the IMF; The Collapse of Bretton Wood System; World Bank: and its contribution - limitations. GATT and WTO: GATT and Trade Liberalization: The Doha Declaration; WTO and Developing Countries with Special reference to India; Trade Related Investment Measures (TRIMs), Trade related aspects of Intellectual property (TRIPs) and General Agreement of Trade in Services (GATS).

Unit- V: Current Development and Problems in the International Economy

Asian Crisis and the lessons for the developing countries like India; Impact of Trade Reforms Since 1991 on Balance of Payments, Multinational Corporations: Definitions, benefits; domestic politics and MNCs; The Host Country Dilemma; Regulating MNCs activity in Developing Countries; international Regulation of MNCs. International Devt: Debt-Growth link; Magnitude of Debt Problem; Causes of Debt problem; Remedial and preventive measures; Reasons for sharp rise in India's External Debt.

Course Delivery

- Lectures
- Presentations
- Group Discussions

Assessment

- Written Assignment and Presentation: 14 marks
- Mid Term Test: 16 marks
- Attendance: 10 marks

Course Outcomes:

- CO-1:** To understand the basic theoretical framework and various issues in the focus of International political economy.
- CO-2:** To understand the evolution of international trade system and appreciate the role of Multilateral institutions in Economic coordination among countries.
- CO-3:** To understand the basics concepts relating to regional trade cooperation and evaluate the progress of some prominent regional trading arrangements.
- CO-4:** To understand the evolution and functioning of international trade and financial institutions.
- CO-5:** To understand the dynamics between international institutions, MNCs and third-world countries with reference to India.

References:

1. Bhagwati J. (Ed.) (1981), International Trade: Selected Readings Cambridge University Press
2. Carbaugh, R.J. (1999), International Economic International Thompson Publishing, New York.
3. Chacholiades, M (1999) International Trade : Theory an Policy, McGraw Hill, Kogakusha, Japan.
4. Dana, M.S. (2000), International Economics: Study, Guide and Work Book (5th Edition), Rouledge Publishers, London.
5. Dunn, R.M. and J.H. Mutti (2000), International Economic Rouledge, London.
6. Kenen, P.B. (1994), The International Economy, Cambridg University Press, London.
7. Kindleberger, C.P. (1973), International Economics, R.I Irwin, Homewood. 54
8. King, p.G (1995), International Economics and International Economic Policy A Reader, McGraw Hill International Singapore.
9. Krugman, P.R. and M. Obstfeld (1994) International Economics: Theory and Policy, Glenview, Foresman. Oatley, Thomas (2004), international Political Economy Pearson Education (Singapore) Pvt. Ltd. Indian Branch 482 F.I.E. Paparganj. Delhi.
10. Salvatore. Dominic (2006) Theory and Problems of International Economics, Tata McGraw Hill Pub. Co. Ltd. New Delhi

Course Title: Indian Economy

Course Code: MAE-443

Course Objective: The knowledge of economic theory bears fruits only when it is applied to address economic issues facing a nation. Using theoretical wisdom to address practical economic issues effectively is possible only if the economist is fully aware about the nature of the economy, the complexity of economic issues, and the outcomes of the policy interventions. The course aims to familiarize students with features of Indian economy, both at the aggregate level and the sectoral level. It is intended to provide students the knowledge regarding trends in various parameters of growth and development over the last few decades. Sectoral performance and the effect of economic reforms carried out over the years on various fronts are studied, in detail, to enhance students' understanding regarding the dynamics of the economy.

Contents:

Unit-I: An Overview of Indian Economy

Understanding the Indian Economy; The Colonial Period; Post-Independence Economy; Planning for the Economy – Objectives, Strategy and Achievements, Relevance of Planning in the Context Globalization, Five Year Plans and different Sectors of the Economy– Twelfth Five Year Plan (2012-2017), Growth of GDP and Per Capita Income, Regional Variations, Performance of different Sectors; Sectoral Contribution to GDP

Unit-III: The Agricultural Sector

Land Reform, Agricultural Growth and Productivity, Green Revolution and After; issues relating to public and private capital formation in agriculture, Price; Subsidy and Taxation Policies, Crop and Livestock Insurance, Food security and PDS, Agricultural Labour and Rural Unemployment, Rural Employment Schemes, Evaluation of Rural Credit Policies, Financial Sector Reforms and Rural Credit, Microfinance- Self-Help Groups and NGO's, Agricultural Marketing, WTO and Indian agriculture.

Unit-IV: The Industrial Sector

Industrial Growth in India: Trends and Prospects, Public Sector Enterprises and Their Performance, Industrial Sickness, Privatisation and Disinvestments Debate; Growth and Pattern of Industrialization; Small-Scale Industries: Definition, Performance and Policy, Productivity in Industrial Sector; Exit Policy - Issues in Labour Market Reforms; Approaches for Employment Generation; Industry and WTO.

Unit-III: Economic Reforms

Rationale of Internal and External Reforms; Key Economic Reforms introduced in India and their impact; Financial Sector Reforms– Banking Sector Reforms and Narasimham Committee, Financial Sector Legislative Reforms Commission (FSLRC); Fiscal policy reforms– Tax reforms since 1991; Fiscal consolidation and FRBM Act; Goods and service Tax (GST) Inclusive growth in India; Financial Inclusion.

Unit V: External Sector and Economic Reforms

Structure of India's foreign trade– Trends in volume, direction, and composition; Background of economic reforms– trade policy reforms, Recent trade policy Exchange rate policy– exchange rate management in India; Issue of current and capital account convertibility; Role of FDI and MNCs; Globalisation of Indian economy; WTO and its impact. Start-Up India and Make in India Policy.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

Course Outcomes:

CO1: After going through this course, the students will be fully aware about the features of Indian economy including planning strategies and its achievements.

CO2: They will gain in-depth knowledge regarding the dynamics of India's agricultural sector and study various issues facing or linked to agricultural sector besides the policy reforms.

CO3: They will be familiar with the dynamics of industrial performance and will gain understanding of the issues facing industrial sector despite much of policy reforms.

CO4: They will be familiarized with key reforms across different sectors of the economy.

CO5: They will gain in-depth knowledge regarding India's trade with other countries and study various reforms and initiatives aimed to boost India's trading capacity.

References

1. Basu, K. (1994). *Agrarian Questions*. Delhi: Oxford University Press.
2. Dandekar, V. M. (1996). *The Indian economy: 2*. London: Sage.
3. Datt, R., & Sundharam, K. P. M. (1966). *Indian economy*. New Delhi: Niraj Prakashan.
4. Kapila, U. (2007). *India's economic development since 1947*. New Delhi: Academic Foundation.
5. Kapila, U. (2014). *Indian Economy: Performance and Policies*. Academic Foundation
6. Misra and Puri, "Economics of Development and Planning -Theory and Planning" Himalaya Publishing House. Mumbai.
7. Mookherjee. D. (1997); *Indian Industry, Policies and Performance* – Oxford University Press, New Delhi.

Course Title: Agriculture Economics

Course Title: MAE -445

Course Objectives:

The Objective of this paper is to acquaint students with developments in Agriculture, production and Productivity, models for agricultural development, price and marketing of agricultural products and policy issues that are relevant to Indian agricultural economics. This gives the students understanding about theoretical developments in agricultural economics.

Contents:

Unit-I: Agriculture Economic-Nature and scope

Nature and scope of agriculture economics: Role of agriculture in economics development: Contribution of land, Capital and labour in agricultural development, Different types of farming: Risk and uncertainty in agriculture sources, expectation and variation measure to control farm risk: Supply and demand behaviour in agriculture: Farm mechanisation: Sustainable agricultural development.

Unit –II Agriculture and economic development

Basic models, For agricultural development –Schultz’s transformation of traditional agriculture model .Lewis unlimited supply of labour model, Fei- Ranis model of agricultural growth, Mellor’s model of agricultural development, Boserup’s. Model of agricultural development; Linkage between agriculture and industry –some empirical evidences; complementarily between agriculture and industry

Unit; III Agricultural production and Productivity

Agricultural production –resources use and efficiency ; Production function analysis in agriculture; factor combination and resource substitution ;size of form and law of returns ;factor product ,and factor –factor an products –product -product relationship, cost and profits in agriculture ;Farm budgeting and planning an Regional variations in agriculture production and productivity in India

Unit; IV Market structure and agricultural prices

Agricultural marketing function and marketing efficiency –Market structure and imperfection ;Marketing channels –marketing costs and margins ,reason for higher marketing cost of agricultural products ;difference between marketable surplus and marketed surplus ,factor effecting marketable surplus and measures to increase marketable surplus –state policy with respect to agricultural marketing ,estimation of price spread ,price determination in agriculture ,managing price change –brand choice criteria competitions ,contract farming ,mall ,mandies and market laid price changes-E marking .

Unit V-Role of agriculture and problems of agricultural development in India

Contribution of agriculture in national economy ,Trends in agricultural production and productivity ;causes of its backwardness ,scope an measures for agricultural development ,land utilization pattern ,optimum land use pattern ;cropping pattern determinants of cropping patterns, land under food and non-food crops, future cropping pattern ;Agriculture in five year plans ;issues and problems in rural industrialization and development of agro –based industries.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

-Written Assignment and Presentation: 14 marks

-Mid Term Test: 16 marks

-Attendance: 10 marks

-Internal Exam: 40 marks

-External Exam: 60 marks

Course Outcomes:

CO1: Understand the nature and scope of agriculture and their role in economic development.

CO2: They will be familiar with the theoretical models underpinning the role of agricultural sector and its linkage with industry.

CO3: Understand the dynamics of agricultural production and productivity and its underlying factors.

CO4: Analyse the Market structure and agricultural prices in India and their role in agricultural development.

CO5: Understand the role of agricultural sector in economic development and identify various issues holding back agricultural sector in India's growth trajectory.

References:

- 1) Bhaduri, A. *The Economic Structure of Backward Agriculture*, Macmillan, Delhi.
- 2) Bilgrami, S.A.R. *Agricultural Economics*, Himalaya Publishing House, New Delhi.
- 3) Chaudry, P, *Indian Agricultural Development*, George Allen & Unwin, London.
- 4) Dr. Subhash Bhave *Agribusiness Management in India –Text & Cases*
- 5) Dantwala M.L. (ed.)(1991), *Indian Agricultural Development since Independence*, Second Revised Edition, Oxford & IBH Publishing Co.
- 6) Heady E.o. (1961), *Economics of Agricultural Production and Resource Use*, New York Englewood Cliffs Prentice-Hall.
- 7) K. Subbarao (1989), *Agricultural Marketing and Credit*, ICSSR.
- 8) Mellor J.W (1969), *The Economics of Agricultural Development*, Vhora & Co. Cornell University Press.
- 9) Penson J.B., Capps Oral, Rosson CP. (1996), *Introduction to Agricultural Economics*, Prentice Hall, Inc.
- 10) Rao, Hamumantha C.H. *Agricultural growth, Rural poverty and environmental degradation in India*, Oxford University Press, New Delhi