

P.G. 2nd Semester

**Paper: ECO801C (Core)
Microeconomics-II**

Credits: 4 = 4+0+0

Unit-I: Market failure (10)

Externalities, Public goods, asymmetric information; Uncertainty and expected utility, uncertainty and Asymmetric information.

Unit –II: Game theory (15)

Overview of game theory; Static games, Normal form games, predicting a game's outcome, Multiple Nash equilibria, No Nash equilibrium and Mixed strategies: application; Cooperation, application; Dynamic games, sequential games, Repeated games; Auctions: elements of auctions, bidding strategies in private-value auctions: applications

Unit-III: General Equilibrium Analysis (15)

An overview of the two person, two commodity pure exchange model; Production: The Robinson Crusoe economy; Alternative technologies: returns to scale; Production and trading, comparative advantage, Efficient product mix, competition, Pareto efficiency, Production and the First Welfare Theorem, Production and the Second Welfare Theorem; Production and consumption; Decentralized Resource Allocation; Efficiency and equity: role of the government, efficiency, equity, efficiency versus equity, theory of the second best.

Unit –IV: Welfare economics (12)

Welfare aggregation of preferences, social welfare functions, welfare maximization, individualistic social welfare functions, fair allocations, envy and equity; Externalities; Quasilinear preferences and the Coase Theorem; Production externalities: interpretation of the conditions; Market signals; Tragedy of the Commons and the efficient utilization of common resources.

Unit –V: Information Technology: (10)

Systems Competition, The Problem of Complements, Relationships among Complementors, Competition with Switching Costs; Markets with Network Externalities, Market Dynamics, Network Externalities in Computer Software, Implications of Network Externalities, Two-sided Markets ; Rights Management

Readings:

- Henderson, J. and Quandt, R.E. Microeconomic Theory: A Mathematical Approach. McGraw-Hill Inc., USA; 3rd revised edition (1980)
- Varian, H.R. Intermediate Microeconomics: A Modern Approach, Eighth Edition
- Nicholson, W. Snyder, C. Microeconomic Theory Basic Principles and Extensions, Cengage; 11th edition (2014)
- Perloff, J. M. Mason, C. Robert, Whaples, M. Microeconomics Theory & Applications with Calculus, Pearson Education Inc. (2013)

Paper: ECO802C (Core)
Macroeconomics-II
Credits: 4 = 4+0+0

Unit 1: Aggregate Demand (AD), Aggregate Supply (AS), and Great Depression: (15)

Aggregate demand and supply curves; AD Curve: Flexible prices and AD curve, shifting of AD curve with monetary and fiscal policies; AS curve: Alternative shapes of short run AS (SAS) curve, SAS curve when nominal wage rate is constant; Fiscal and Monetary expansion in the short and long run; Classical Macroeconomics: The QTM and self-correcting economy; The Keynesian Revolution: The failure of self-correction.

Unit 2: Macroeconomic Economic Controversies: unemployment and inflation. (15)

-Inflation and unemployment: the moderate monetarist position; the new classical position; the modern Keynesian position; the role of expectation; advances in business cycle theories-real business cycle theory

Unit 3: Growth Theory (15)

Determinants Growth, Harrod- Domar Model: Instability of Equilibrium, Solow's Neoclassical Model and Steady State Growth, the Alternative Theory: Kaldor's theory of Distribution and Growth

Unit 4: Further Issues in Growth Theory (15)

The Convergence Debate; Role of Technical Progress; Learning by Doing; Human Capital, Immigration and the Solow puzzles; Endogenous Growth Theories, Accounting for Sources of Economic Growth.

Recommended Readings:

- N. Gragory Mankiw, Macroeconomics
- Brian Snowden and H R Vane, Modern Macroeconomics
- Levacic and Rebman: Macroeconomics: An Introduction to Keynesian Neo- Classical Controversies
- Soumen Sikdar, Principles of Macroeconomics
- Ola Olson, Essentials of Advanced Macroeconomic Theory
- David Romer, Advanced Macroeconomics

Robert J Gordon, Macroeconomics, Twelfth Edition, PHI Learning Private Limited, New Delhi, 2011

Paper: ECO803C (Core)
Mathematical Methods for Economics-II

Credits: 4 = 4+0+0

Unit – 1: Calculus for Dynamic Analysis (15)

First and second order differential equation and its solutions – application to dynamic stability of market and simple growth process (Harrod-Domar), First order difference equation and its solution application of difference equation – lagged market model (Cobweb) and Harrod's model of growth.

Unit – 2: Optimization with inequality constraint (15)

Linear programming, General formulation Transportation problem, diet problem and production problem – Simplex method of solution for well behaved and ill behaved functions (two variables, two constraints only) – Concept of duality, Formulation of dual equations.

Unit-3: Game Theory (15)

An overview: Pure and mixed strategy, saddle point solution theory, Nash equilibrium-economic application, Prisoner's dilemma economic application, repeated games, finitely repeated Prisoner's Dilemma and infinitely repeated Prisoner's Dilemma.

Unit-4: Production Function (15)

Forms of Production Function; Cobb-Douglas and CES production function: Estimation; Elasticity of Substitution of C-D and CES production function; Comparison between C-D and CES production function.

Recommended Readings:

- A.C. Chiang, "Fundamental Methods of Mathematical Economics", McGraw Hill.
- S. Baruah, "Basic Mathematics and its Economics Applications", MacMillan
- J. M. Henderson and R. E. Quandt, "Micro-economic Theory – A Mathematical Treatment"
- R.G.D. Allen, "Mathematical Analysis for Economists."
- Mouhammed, "Introduction to Mathematical Economics", Prentice Hall of India
- M. Metwally, "Mathematical Treatment of Micro-Economics."
- Hoy. M. et.al.,: Mathematical Economics

Paper: ECO804C (Core)
Elements of Econometrics
Credits: 4 = 4+0+0

Unit 1: Classical Linear Regression 15

Concept, The General Linear Regression Model – Quantitative and Qualitative Explanatory Factors – Least Square Assumptions – OLS Estimators and their Properties – The Coefficient of Determination – Test of Hypothesis about Regression Coefficients – Prediction with the Linear Regression Equation

Unit2: Further Topics in Linear Regression 15

Consequences of Omission of Relevant Regressors and Inclusion of Irrelevant Regressors; Multi-collinearity: Effects, Detection and Remedies, Dummy Variable Trap; Heteroscedasticity: Consequences, Tests and Remedy; Auto-correlated Disturbances: Consequences, Detection and Remedy

Unit 3: Introduction to Stochastic Time Series 15

The Idea of a Stochastic Time Series - Stationary and Non-stationary –Simple Random Walk and Random Walk with a Drift–Unit Root: Dickey Fuller Tests – Spurious Regression–Integrated Series and Co-integration (concept only)

Unit 4: Introduction to Simultaneous Equation Model 18

Structural and Reduced Forms – Simultaneity Bias – Informal Introduction to Identification Problem, Indirect Least Squares and Two Stage least Squares.

Recommended Readings:

- Christopher Daugherty, Introduction to Econometrics, OUP
- Damodar Gujarathi, Basic Econometrics, McGraw Hill.
- Jeffery M Wooldridge, Introductory Econometrics: a Modern Approach
- Johnston and Dinardo, Econometric Methods, McGraw Hill

Paper: ECO805C (Core)
Research Methodology for Social Sciences
Credits: 4 = 4+0+0

Unit – 1: Meaning and types of research 12

Meaning, Research methods versus methodology, Research approaches - Types of research- Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative ,Conceptual vs. Empirical ,Other types of research, Qualities of a researcher, Significance of research and significance of research; types of research: Quantitative, qualitative, mixed method

Unit 2: The research process; Steps in formulating a research problem; 12. Formulation of research problem in qualitative research, Formulation of objectives and hypothesis; types of hypothesis, Data Collection and Sampling - Types of sampling, Determination of the size of sample, Sampling Procedure, Choice of Sampling Technique,

Unit – 3: Research Design 12

Meaning and feature of good research design; Types of research design -exploratory research design- descriptive and diagnostic research design hypothesis-testing research design; Characteristics of a good research design

Unit – 4: Data collection and preparation 16

Experiment and survey; collection of primary data; collection of secondary data; criteria for selection of appropriate method for data collection; case study method; steps in data preparation;

Measures of central tendency; measures of dispersion; measures of skewness and kurtosis; covariance; correlation; chi square test; hypothesis test for mean, Small sample Large sample test; chi square test; Analysis of variance

Unit –5: Report Writing and Presentation 12

Structure and Components of Research Reports -Characteristics of a good report - Framework of a Report -Parts of a Research Report; Format and Presentation of a Report -Importance of Presentation of a Report -Common Components of a Format
–Precautions-Presentation of Reports

Recommended Readings

- Bhandarkar, P.L. and T.S. Wilkinson, *Methodology And Techniques Of Social Research*. Himalaya Publishing
- Kothari, C.R., *Research Methodology: Methods and Techniques*, New Age International
Druckman, Daniel, *Doing Research*, Sage

Paper: ECO806C (SEC)
Monetary and Fiscal Policy
Credits: 2 = 2+0+0

Unit 1:

Basic concepts 8

Stocks and flow, continuous and period analysis, time series and cross section data analysis, income and wealth; problems in the measurement of national income, alternative measures of income aggregates, inventories and inventory valuation adjustment; real and nominal income

Unit 2: Monetary policy 12

Concept of monetary policy; objectives of monetary policy; instruments of monetary policy; effectiveness of monetary policy; Monetary policy and economic growth; transmission lag; monetary policy in less developed countries.

Unit 3: Elements of fiscal policy 12

Principles of public finance; Nature of public goods; canons of taxation; concept of public debt; fiscal policy: role and objectives; built in flexibility; functional finance; anti-inflationary fiscal policy and fiscal policy for full employment; pump priming; role of fiscal policy in less developed countries

References

- Vaish, M.C. 2017 Macro economic theory, Vikas Publishing House
- Ghosh, A. 2014. Public finance, Prentice Hall India Learning Private Limited; 2nd Revised edition (2014)