

GATE Economics (XH-C1): Syllabus

1. MICRO-ECONOMICS

Theory of Consumer Behaviour: Cardinal Approach and Ordinal Approach; Consumer Preferences; Nature of the utility function; Marshallian and Hicksian demand functions; Duality Theorem. Slutsky equation and Comparative Statics. Homogeneous and Homothetic Utility Functions; Euler's Theorem

The Theory of Revealed Preference: Weak Axiom of Revealed Preference and Strong Axiom of Revealed Preference

Theory of Production and Costs: Short-run and Long-run Analysis

Existence, Uniqueness and Stability of Market Equilibrium: Walrasian and Marshallian Stability Analysis. The Cobweb Model

Decision making under Uncertainty and Risk

Asymmetric Information: Adverse Selection and Moral Hazard. Theory of Agency costs. The Theory of Search

Non-Cooperative games: Constant sum game, Mixed Strategy & Pure Strategy, Bayesian Nash Equilibrium, SPNE, Perfect Bayesian Equilibria

Theory of Firm: Market Structures - Competitive and Non-competitive equilibria and their efficiency properties. Structure-Conduct-Performance Paradigm

Factor Pricing: Marginal productivity Theory of Distribution in Perfectly Competitive markets; Theory of Employment in Imperfectly Competitive Markets — Monopolistic Exploitation

General Equilibrium Analysis- Welfare Economics: Fundamental Theorems, Social Welfare Function. Efficiency Criteria: Pareto Optimality.



2. MACRO-ECONOMICS

National Income Accounting: Closed Economy Concepts and Measurement and Open Economy Issues

Determination of output and employment: Classical & Keynesian Framework,

Theories of Consumption: Absolute Income Hypothesis, Relative Income Hypothesis, Life Cycle Hypothesis, Permanent Income Hypothesis and Robert Hall's Random Walk Model

Investment Function Specifications - Dale Jorgenson's Neoclassical Theory of Capital Accumulation and Tobin's, Keynesian Stabilization Policies, (Autonomous)

Multipliers and Investment Accelerator

Demand and Supply of Money, Components of Money Supply, Liquidity Preference and Liquidity Trap, Money Multiplier, Interest Rate determination

Central Banking: Objectives, Instruments (Direct and Indirect) of Monetary Policy, Prudential Regulation, Quantitative Easing (Unconventional Monetary Policy), Commercial Banking, Non-Banking Financial Institutions, Capital Market and its Regulation

Theories of Inflation and Expectations Augmented Phillips Curve

Real Business Cycles, Adaptive Expectations Hypothesis, Rational Expectation Hypothesis and its critique

Closed Economy IS – LM Model and Mundell Fleming Model: Monetary and Fiscal Policy Efficacy. The Impossible Trinity

3. STATISTICS, ECONOMETRICS and MATHEMATICAL ECONOMICS

Index Numbers and Construction of Price Indices

Probability Theory: Concepts of probability, Probability Distributions [Discrete and Continuous], Central Limit Theorem

Sampling Methods & Sampling Distribution, Statistical Inferences, Hypothesis Testing

Linear Regression Models and the Gauss Markov Theorem, Heteroscedasticity, Multicollinearity and Autocorrelation



Sputious Regressions and Unit roots

Simultaneous Equation Models : Recursive and non-recursive. Identification Problem

Differential Calculus and its Applications, Static Optimization Problems and Applications

Linear Algebra : Matrices, Applications of Cramer's Rule, Input-Output Model

Linear Programming

Difference equations and Differential equations with applications.

4. INTERNATIONAL ECONOMICS

Theories of International Trade, International Trade under Imperfect Competition, Gains from Trade, Terms of Trade, Trade Multiplier

Tariff and Non-Tariff barriers to trade, Dumping and Anti-Dumping Policies

GATT, WTO and Regional Trade Blocks; Trade Policy Issues

Balance of Payments: Composition, Equilibrium and Disequilibrium and Adjustment Mechanisms

Foreign Exchange Market and Arbitrage, Exchange rate determination

IMF & World Bank

5. PUBLIC ECONOMICS

Market Failure and Remedial Measures: Asymmetric Information, Public Goods, Externality

Regulation of Market : Collusion and Consumers' Welfare

Public Revenue: Tax & Non-Tax Revenue, Direct & Indirect Taxes, Progressive and non-Progressive Taxation, Incidence and Effects of Taxation

Public expenditure, Public Debt and its management

Public Budget and Budget Multiplier, Tax Incidence, Fiscal Policy and its implications

Environment as a Public Good, Market Failure and Coase Theorem, Cost-Benefit Analysis



6. DEVELOPMENT ECONOMICS

Theories of Economic Development: Adam Smith, David Ricardo, Karl Marx, J. Schumpeter, W. Rostow, Balanced & Unbalanced Growth, Big Push Approach,

Indicators of Economic Development: HDI, SDGs, MDGs

Poverty and Inequalities – Concepts and Measurement Issues

Social Sector Development: Health, Education, Gender, Fertility, Morbidity, Mortality, Migration, Child Labor, Age Structure, Demographic Dividend

Models of Economic Growth: Harrod-Domar, Solow, Ramsey

Technical Progress – Disembodied & Embodied, Endogenous Growth Models

7. INDIAN ECONOMY

Economic Growth in India: Pattern and Structure

Agriculture, Industry & Services Sector: Pattern & Structure of Growth, Major Challenges, Policy Responses

Rural & Urban Development: Issues, Challenges & Policy Responses

Flow of Foreign Capital, Trade Policies

Infrastructure Development: Physical and Social; Public-Private Partnerships,

Reforms in Land, Labour and Capital Markets

Poverty, Inequality & Unemployment

Functioning of Monetary Policy in India

Fiscal Policy in the Indian context: Structure of Receipts and Expenditure, Tax Reforms-Goods and Services Tax, Issues of Growth and Equity

Fiscal Federalism, Centre-State Financial Relations and Finance Commissions of India; Sustainability of Deficits and Debt, The Fiscal Responsibility and Budget Management Act 2003, Demonetization and aftermath

India's balance of payments, Composition of India's Trade, Competitiveness of India's exports, India's exchange rate policy