

Ph.D. Entrance Test - SYLLABUS - 2021

Economics

Part - 1

Research Methodology (50%)

Course Contents:

Unit – I

Theory of research: pure and applied research, methodological issues in social sciences, formulation of research problems, theoretical frame and hypothesis formulation. **Research Plan:** criteria for good research, broad aspects of research in social sciences: ideal research plan and its different stages. **Types of research:** descriptive study, analytical study, historical study, survey study and case study

Unit – II

Selection, definition and measurement of variables – reliability and validity of measurement, data collection method: primary and secondary sources of data; time series and cross-sectional data; participant observation method, interview method, and questionnaire method – translation of data – presenting and revision – selection and training of field work – field problems in data collection. Sampling techniques – economics and logic of sampling – sampling procedure – random sampling, purposive sampling and stratified sampling; Analysis and interpretation of data – editing, coding, tabulation and preparation of report writing and bibliography

Unit – III

Statistical methods – basic statistical concepts and techniques – measurement of central tendency – measurement of variability – skewness and kurtosis – correlation – bivariate regression technique – statistical description and inference

Unit – IV

Theory of Probability: Concepts- Events, sample space, Random variable, probability distribution functions, Normal and Binomial Distributions

Part - 2

Subject Syllabus : Economics Core Subject (50%) (UGC NET PAPER SYLLABUS II)

Unit-1 : Micro Economics

- ☐ Theory of Consumer Behaviour
- ☐ Theory of Production and Costs
- ☐ Decision making under uncertainty Attitude towards Risk
- ☐ Game Theory – Non Cooperative games
- ☐ Market Structures, competitive and non-competitive equilibria and their efficiency properties
- ☐ Factor Pricing
- ☐ General Equilibrium Analysis
- ☐ Efficiency Criteria: Pareto-Optimality, Kaldor – Hicks and Wealth Maximization
- ☐ Welfare Economics: Fundamental Theorems , Social Welfare Function
- ☐ Asymmetric Information: Adverse Selection and Moral Hazard

Unit-2 : Macro Economics

- ☒ National Income: Concepts and Measurement
- ☒ Determination of output and employment: Classical & Keynesian Approach
- ☒ Consumption Function
- ☒ Investment Function
- ☒ Multiplier and Accelerator
- ☒ Demand for Money
- ☒ Supply of Money
- ☒ IS – LM Model Approach
- ☒ Inflation and Phillips Curve Analysis
- ☒ Business Cycles
- ☒ Monetary and Fiscal Policy
- ☒ Rational Expectation Hypothesis and its critique

Unit- 3 : Statistics and Econometrics

- ☒ Probability Theory: Concepts of probability, Distributions, Moments, Central Limit theorem
- ☒ Descriptive Statistics – Measures of Central tendency & dispersions, Correlation, Index Numbers
- ☒ Sampling methods & Sampling Distribution
- ☒ Statistical Inferences, Hypothesis testing
- ☒ Linear Regression Models and their properties – BLUE
- ☒ Identification Problem
- ☒ Simultaneous Equation Models – recursive and non-recursive
- ☒ Discrete choice models
- ☒ Time Series Analysis

Unit-4 : Mathematical Economics

- ☒ Sets, functions and continuity, sequence, series
- ☒ Differential Calculus and its Applications
- ☒ Linear Algebra – Matrices, Vector Spaces
- ☒ Static Optimization Problems and their applications
- ☒ Input-Output Model, Linear Programming
- ☒ Difference and Differential equations with applications

Unit-5 : International Economics

- ☒ International Trade: Basic concepts and analytical tools
- ☒ Theories of International Trade
- ☒ International Trade under imperfect competition
- ☒ Balance of Payments: Composition, Equilibrium and Disequilibrium and Adjustment Mechanisms
- ☒ Exchange Rate: Concepts and Theories
- ☒ Foreign Exchange Market and Arbitrage
- ☒ Gains from Trade, Terms of Trade, Trade Multiplier

- ☒ Tariff and Non-Tariff barriers to trade; Dumping
- ☒ GATT, WTO and Regional Trade Blocks; Trade Policy Issues
- ☒ IMF & World Bank

Unit-6 : 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
- ☒ Fiscal Policy and its implications

Unit-7 : Money and Banking

- ☒ Components of Money Supply
- ☒ Central Bank
- ☒ Commercial Banking
- ☒ Instruments and Working of Monetary Policy
- ☒ Non-banking Financial Institutions
- ☒ Capital Market and its Regulation

Unit-8 : Growth and Development Economics

- ☒ Economic Growth and Economic Development
- ☒ Theories of Economic Development: Adam Smith, Ricardo, Marx, Schumpeter, Rostow, Balanced & Unbalanced growth, Big Push approach.
- ☒ Models of Economic Growth: Harrod-Domar, Solow, Robinson, Kaldor
- ☒ Technical progress – Disembodied & embodied; endogenous growth
- ☒ Indicators of Economic Development: PQLI, HDI, SDGs
- ☒ Poverty and Inequalities – Concepts and Measurement
- ☒ Social Sector Development: Health, Education, Gender

Unit-9 : Environmental Economics and Demography

- ☒ Environment as a Public Good
- ☒ Market Failure
- ☒ Coase Theorem
- ☒ Cost-Benefit Analysis and Compensation Criteria
- ☒ Valuation of Environmental Goods
- ☒ Theories of Population
- ☒ Concepts and Measures: Fertility, Morbidity, Mortality

- ☒ Age Structure, Demographic Dividend
- ☒ Life Table
- ☒ Migration

Unit-10 : Indian Economy

- ☒ Economic Growth in India: Pattern and Structure
- ☒ Agriculture: Pattern & Structure of Growth, Major Challenges, Policy Responses
- ☒ Industry: Pattern & Structure of Growth, Major Challenges, Policy Responses
- ☒ Services: Pattern & Structure of Growth, Major Challenges, Policy Responses
- ☒ Rural Development – Issues, Challenges & Policy Responses
- ☒ Urban Development – Issues, Challenges and Policy Responses.
- ☒ Foreign Trade: Structure and Direction, BOP, Flow of Foreign Capital, Trade Policies
- ☒ Infrastructure Development: Physical and Social; Public-Private Partnerships
- ☒ Reforms in Land, Labour and Capital Markets
- ☒ Centre-State Financial Relations and Finance Commissions of India; FRBM
- ☒ Poverty, Inequality & Unemployment