

Ph.D. Entrance Test - SYLLABUS - 2022

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: Concept 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 NonTariff 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 & NonTax 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
- ☐ Nonbanking 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