

Ph.D. Entrance Test - SYLLABUS

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

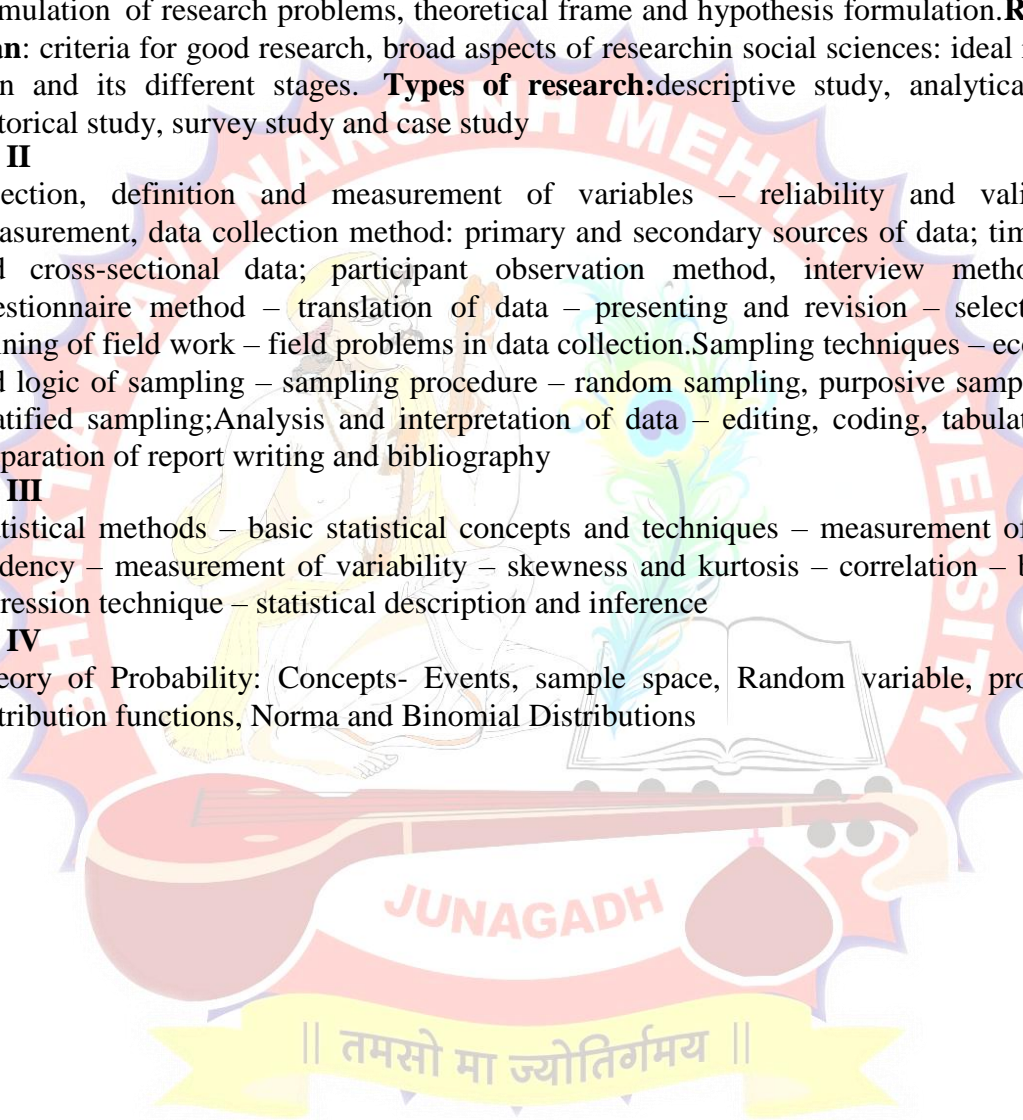
Selection, definition and measurement of variables – reliability and validity of measurement, data collection method: primary and secondary sources of data; time series and cross-sectional data; participant observation method, interview method, and questionnaire method – translation of data – presenting 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

॥ तमसो मा ज्योतिर्गमय ॥