

## **SYLLABUS FOR PH.D. ENTRANCE TEST (ECONOMICS)**

### **DEPARTMENT OF ECONOMICS SYLLABUS FOR PH.D. ENTRANCE TEST (ECONOMICS)**

#### **Part I: Research Methodology**

##### **Module I: Basics of Research**

Meaning and Types of Research; Objectives of Research; Motivation for Research; Criteria of good Research; Research problem and identification; Literature review.

##### **Module II: Research Methodology**

Research method and Research Methodology; Research Design; Types of Research design; Sampling methods; Determination of sample size.

##### **Module III: Data Collection**

Data types and sources; Primary vs. Secondary Data Collection; Methods of primary data collection; Data Processing and Tabulation.

##### **Module IV: Statistical Methods**

Measures of Central Tendency; Measures of Dispersion; Correlation and Regression Analysis; Probability Distributions; Hypothesis Testing.

##### **Module V: Econometric Methods**

Ordinary Least Square Method (OLS); Assumptions; Estimation and Properties; Multiple Regression Analysis; Econometric Problems; Multicollinearity; Autocorrelation; Heteroscedasticity; Time Series, Cross Section and Panel Analysis; Dummy Variable and Qualitative Response Models.

## **Part-II Core Economics**

### **Module I: Micro Economic Analysis**

Demand Analysis- Marshallian, Hicksian and Revealed Preference Approaches Consumer Behaviour under Conditions of Uncertainty, Theory of Production and Costs, Pricing and output under different forms of market structure, Collusive and non-collusive oligopolies, Cournot, Sweezy: Different models of objectives of the firm- Baumol, Morris and Williamson, General Equilibrium and Welfare Economics-Game theory- Nash =m.

### **Module II: Macro Economics**

Classical approach; Implications – Keynesian approach- concepts – Determinants of Effective Demand; Equilibrium in the Product and Money Markets – the combined IS-LM model: Theories of consumption function – Absolute Income Hypothesis, Relative Income Hypothesis, Permanent Income Hypothesis, Life-Cycle Hypothesis- Investment Demand- Marginal Efficiency of Capital: Economic Fluctuations \_ Hicks and Samuelson: Inflation and Unemployment- the Philips Curve, Long-run Philips' Curve, Money-Role, functions; Supply of Money, Money Supply Determination-H- theory and money multiplier; Demand for money- Classical and Keynesian Approaches to Demand for Money, Friedman's Quantity Theory of Money, Portfolio and Tobin's approach; Commercial Banks and Credit Creation; Central Bank and Methods of Credit Control.

### **Module III: Growth and Development**

Growth and development-comparison; Harrod and Domar models; Neo-classical growth models of Solow and Meade; Endogenous growth models- AK model and Romer model; Sustainable Development – various measures of economic development – Human Development Index – Capability approach to development Strategies of Development – Big push, Balanced growth, Unbalanced growth, Critical minimum effort thesis, Low Level Equilibrium trap.

### **Module IV: Public Economics**

Efficiency in resource allocation; Role of government- allocation, distribution and stabilization; Optimal provision of Private and Public goods, Free Riders Problem, Public Expenditure –Wagner's law of increasing state activities, Wiseman-Peacock hypothesis; Budget- Types of budget; concepts of deficits – Reforms in Budgeting (Indian Context)- Zero Base Budgeting and Performance Budgeting; Public Revenue- Sources of Revenue- Tax Revenue- Effects of taxes on production, consumption, work efficiency; Cost Benefit Analysis- Public debt- Issues in Management

### **Module V: International Economics**

Theories of absolute cost and comparative cost advantage; Opportunity cost theory; Heckscher-Ohlin theory; Factor Price Equalisation theorem; Stolper-Samuelson and Rybczynski theorem; Leontiff Paradox; Intra-industry trade and its measurement; Equilibrium and dis-equilibrium in the balance of payments; Elasticity, absorption, Monetary and Portfolio-balance approach to balance of payments adjustment, Foreign trade multiplier; Tariff and Non-Tariff instruments of Trade Policy, Comparison of Tariff and Quota, Learner's Symmetry, Aggregate Measures of Protection, Nominal and Effective Rate of Protection. GATT and Trade rounds, Multi-lateral trading system and the World Trade Organization (WTO)