

Department of Economics, IUST-Awantipora
Syllabus for Ph. D Entrance Test (ECONOMICS)

Part-I: Core Economics

Module I: Micro Economic Analysis

Module II: Macro Economics

Module III: Money, Banking and Finance

Module IV: Growth and Development

Module V: Public Economics

Module VI International Economics

Module VII: Environmental Economics

Module VIII: Indian Economy

Part-II: Research Methodology

Module I: Research and Types of research

Module II: Research Formulation

Module III: Sampling

Module IV: Statistical Methods-I

Module V: Statistical Methods-II

Module VI: Mathematical Economics

Module VII: Econometric Analysis

Module VIII: Report Writing and Ethics

Time Duration – 90 Minutes

Maximum Marks: 80

Part-I	40 Multiple Choice Questions	40x1=40
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Part-II	40 Multiple Choice Questions	40x1=40
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Department of Economics
Syllabus for Ph.D. Entrance Test (ECONOMICS)

Part-I: 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 & Williamson, General Equilibrium & Welfare Economics.

Module II: Macroeconomics

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 &
Samuelson; Inflation and Unemployment- the Philips Curve, Long-run Philips' Curve.

Module III: Money, Banking & Finance

Money-concepts, role, functions and constituents; 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; Banking– evolution, role and functions; commercial banks- role and
credit creation; central Bank–role and credit control; money and capital markets- function and
instruments; SEBI- role and function.

Module IV: 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 V: 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 VI: 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).

Module VII: Environmental Economics

Environment and the economy—inter-linkages and trade-off; Market failure and environmental degradation—public goods, externalities and Common Property Resource (CPRs); Sustainability— concept and indicators, Environmental accounting; environmental Valuation methods- Hedonic pricing approach, Travel cost approach, Contingent valuation technique; environmental regulations- Coasian approach; Pigovian taxes: Command and control methods; Tradable pollution permits; Liability Laws; poverty, population and environment.

Module VIII: Indian Economy

National Income accounting: Trends and major issues – performance of different sectors – problems of poverty, unemployment, migration, inflation & environment – Economic reforms in India – India on the eve of economic reforms-objectives, nature & structures of economic reforms – impact of economic reforms –India & WTO- India & GATS.

Part-II: Research Methodology

Module I: Research and Types of research

Research and Types of research: Meaning of Research, Objectives of Research, Motivation in Research; Research methods vs. Methodology. Types of research– Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical; Research Process; Criteria of good Research.

Module II: Research Formulation

Defining and formulating the research problem; Selecting the problem; Importance of literature review in research; Sources of Literature Review –primary and secondary sources, reviews, treatise, monographs, patents and web; Identifying research gap areas from literature review; Development of working hypothesis

Module III: Sampling

Sampling design- Meaning, logic and application of sampling, sampling terminology: Universe, population, sampling frame, Determination of sample size; Methods of sampling- random sampling methods and non-random sampling methods; Criteria of choosing an appropriate sampling method.

Module IV: Statistical Methods-I

Introduction to statistics –Meaning, scope and limitations of statistics – Data: types and sources; Organisation and presentation of data: frequency distribution, tabulation, diagrammatic and graphical presentation; Survey techniques- Questionnaire construction and interview schedule.

Module V: Statistical Methods-II

Measures of central tendency: Mean, median, mode; measures of dispersion and skewness; Correlation Analysis: Tests of Significance and Covariance - Regression Analysis – analysis of variance (ANOVA), Test of Hypothesis - steps involved in hypothesis testing, Methods of hypothesis testing- chi-squared test, t-test and z-test; Nature and methods non-parametric statistical test; Application of Statistical tools with SPSS.

Module VI: Mathematical Economics

Linear and Non-linear functions and their applications in economics - Application of Differential and Integral Calculus in consumer behaviour and production theories – Matrix algebra and its application

Module VII: Econometric Analysis

Ordinary Least Square: Assumptions, Estimation and Properties; Multiple Regression with two explanatory variables; General linear Regression models. Econometric Problems: Multicollinearity, Heteroscedasticity and Autocorrelation; Time Series Analysis: concepts and components; Determination of Linear trend and seasonal indices; Dummy Variables-techniques;

Module VIII: Report Writing and Ethics

Application of software tools, use of library databases, review of articles, exploring various data sources, understanding bibliography, structuring of a thesis/report, use of different referencing styles e.g. APA, Report Writing, presentations, and Research Proposal. Ethical considerations in research- Copy right – royalty - Intellectual property rights and patent law- Reproduction of published material – Plagiarism - Citation and acknowledgement - Reproducibility and accountability.