



SYLLABUS FOR Ph.D. ENTRANCE TEST

PART-A

RESEARCH METHODOLOGY

अनुसंधान पद्धति

Part-A shall consist of 50 objective type compulsory questions of 1 mark each based on research methodology. It shall be of generic nature, intended to assess the research aptitude of the candidate. It will primarily be designed to test reasoning ability, data interpretation, and quantitative aptitude of the candidate.

भाग-ए में शोध पद्धति पर आधारित 1 अंक के 50 वस्तुनिष्ठ प्रकार के अनिवार्य प्रश्न होंगे। यह सामान्य प्रकृति का होगा, जिसका उद्देश्य उम्मीदवार की अनुसंधान योग्यता का आकलन करना है। यह मुख्य रूप से उम्मीदवार की तर्क क्षमता, डेटा व्याख्या और मात्रात्मक योग्यता का परीक्षण करने के लिए डिज़ाइन किया जाएगा।

Unit-1

Data Interpretation:

Bar charts - Simple, Stacked, Composite Bar charts, Caselets & Tables, Data Analysis, Data comparison from Table, Graphs, Line Graphs, Data Sufficiency, Pie charts.

डेटा व्याख्या :

बार चार्ट – सरल, स्टैकड, समग्र बार चार्ट, केसलेट और टेबल, डेटा विल्लेषण, टेबल से डेटा तुलना, ग्राफ़, लाइन, ग्राफ़, डेटा पर्याप्तता, पाई चार्ट।

Unit-2

Quantitative Ability:

Simplifications, Number system, Averages, Ratio & Proportion, LCM and HCF, Percentages, Profit and Loss, Interest (Simple and Compound), Speed, Time and Distance, Area, Time and Work, Number System, Progressions, Algebra

मात्रात्मक क्षमता :

सरलीकरण, संख्या प्रणाली, औसत, अनुपात और अनुपात, एलसीएम और एचसीएफ, प्रतिशत, लाभ और हानि, ब्याज (साधारण और यौगिक), गति, समय और दूरी क्षेत्र समय और कार्य, संख्या प्रणाली, प्रगति, बीजगणित

Unit-3

Logical Reasoning:

Analogy, Classification, Series, Coding-Decoding, Direction Sense, Mathematical Operations, Arithmetical Reasoning, Inserting the Missing Character, Number, Ranking and Time Sequence Test, Eligibility Test, Representation through Venn-diagrams, Number & symbols ordering, Comprehension questions, Statement & assumptions, Statement & conclusions, Statement & actions.

तार्किक विचार :

सादृश्य, वर्गीकरण, श्रृंखला, कोडिंग-डिकोडिंग, डायरेक्शन सेंस, गणितीय संचालन, अंकगणितीय तर्क, लापता को सम्मिलित करना, संख्या, रैंकिंग और समय अनुक्रम परीक्षण, पात्रता परीक्षा, वेन-आरेखों के माध्यम से प्रतिनिधित्व, संख्या और प्रतीकों का क्रम, बोध प्रश्न, कथन और धारणाएँ, कथन और निष्कर्ष, कथन और कार्य।

Unit-4

Research Aptitude:

Data, Measures of Central Tendency, Dispersion: Standard Deviation, Correlation and Simple Regression, Meaning, types & Characteristics of Research. Research Ethics, Mean, Median and Mode.

अनुसंधान योग्यता :

डेटा, केंद्रीय प्रवृत्ति के माप, फैलावरु मानक विचलन, सहसंबंध और सरल प्रतिगमन, अर्थ, प्रकार और अनुसंधान के लक्षण। अनुसंधान नैतिकता, माध्य, माध्यिका और विधा।

Unit-5

General Knowledge & Awareness:

Current Affairs, Books and Authors, Famous Personalities, music, Awards, Sports, Indian Politics, Geography, Indian History, Science and Technology & Inventions.

सामान्य ज्ञान और जागरूकता :

करंट अफेयर्स, किताबें और लेखक, प्रसिद्ध व्यक्तित्व, संगीत, पुरस्कार, खेल, भारतीयराजनीति, भूगोल, भारतीय इतिहास, विज्ञान और प्रौद्योगिकी और आविष्कार।



Ph.D. Entrance Exam Syllabus (Paper-II)

Part II : Subject Specific Paper Economics (50 Marks)

Topic
<p>Microeconomics</p> <p>Theory of Consumer Behaviour, Theory of Production and Costs, Decision making under uncertainty Attitude towards Risk, Market Structures, General Equilibrium Analysis, Pareto-Optimality, Kaldor – Hicks and Wealth Maximization, Welfare Economics, Fundamental Theorems, Social Welfare Function, Asymmetric Information: Adverse Selection and Moral Hazard</p> <p>Reference:</p> <ol style="list-style-type: none">1. Koutsoyiannis, A. (1979), Modern Micro Economics, Macmillan Press, London.2. Dominick Salvatoure: Microeconomics Theory and Analysis.
<p>Macroeconomics</p> <p>National Income: Concepts and Measurement, Determination of output and employment: Classical & Keynesian Approach, Consumption and 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, Money and Banking</p> <p>Reference:</p> <ol style="list-style-type: none">1. Barro, Robert J. & Sala-i- Martin, Xavier (1995), Economic Growth, MacGraw Hill.2. Blanchard, Olivier (2000), Macroeconomics, Prentice Hall3. Mankiw Gregory (2002), Macroeconomics, 5th Edition, Worth Publishers



Quantitative Economics

Differential Calculus and its Applications, Static Optimization Problems and their applications, Input-Output Model, Linear Programming, Difference and Differential equations with applications. Linear Regression Models and their properties – BLUE, Time Series Analysis. Probability Theory, Game Theory-Strategic Games, Nash equilibrium and Mixed Strategy games.

Reference:

1. Henderson, J.E. and R.E. Quandt (1988), Microeconomic Theory - A Mathematical Approach, McGraw Hill.
2. Greene, W. (2008), Econometrics Analysis, Pearson
3. Osborne, M.J. An Introduction to Game Theory, Oxford University Press, 2004

International Economics

Theories of International Trade, Gains from Trade, Terms of Trade, Trade Multiplier, Balance of Payments, Exchange Rate: Concepts and Theories, Foreign Exchange Market and Arbitrage, Tariff and Non-Tariff barriers to trade; Dumping GATT, WTO and Regional Trade Blocks; Trade Policy Issues, IMF & World Bank.

Reference:

1. International Trade by Krugman & Obstfeld
2. Ronald Findlay, International Trade and Development Theory, Columbia University Press, 1973



Development Economics

Economic Growth and 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, endogenous growth, Indicators of Economic Development: PQLI, HDI, MDPI, GII, SDGs, Poverty and Inequality- Concepts and Measurement.

Reference:

1. Basu Kaushik (1997): "Analytical Development Economics: The Less Developed Economy Revisited".
2. Debraj Ray (1999): 'Development Economics'. OUP Ravallion & Chen (2001): 'Measuring Pro-poor Growth'. World Bank

Public Economics

Market Failure: Asymmetric Information, Public Goods, Externality, Regulation of Market- 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, Environment as a Public Good, Market Failure.

Reference:

1. Microeconomics of Market Failure – Bernard Salanie
2. Economics of Taxation - Bernard Salanie