



PURNEA UNIVERSITY, PURNIA

#### Paper-I

Research Methodology + Economics

Full Marks: 100

Duration of Examination: 2 Hours
Questions shall consist of 3 parts:

Part-A: Short Questions (06 in number of which 04 to be answered, each carrying 10 marks) = 40

Part-B: Long Answer Question (04 to be asked of which 02 to be answered, eachearrying 30 marks) = 60

- Introduction to Research: What is Research; Why is Research Conducted; Stages
  in Research; Changing Nature and Expanding Scope of Research; Why Research
  Methodology.
- 2. Introduction to Major Research Methods: Natural Observation; Historical Research; Ethnographic Research; Cross-Sectional Study; Longitudinal Study; Cohort Study; Case Study; Correlational Research; Action Research; Quantitative and Qualitative Research; theoretical research, applied research and empirical research; Experimental Research: Cause and Effect Relationships, Hypothesis in Experiments, Principles of Experimentation, Classification of Experiments, Experimental Design, Requirements of a Good Experiment; Reasoning in Research: Introduction to Logical Terms; Evidences; Inductive and Deductive Reasoning; Fallacious Reasoning; Formal and Informal Fallacies; Common Fallacies.
- 3. Research Design: Study designs in quantitative research; Study designs in qualitative research; Other commonly used philosophy-guided designs; Choice of Variables; Constructing hypotheses, Mechanisms and Design for Data Collection; Collection of Primary Data: Observation, Interview, questionnaire and schedule Sample Surveys and Designed Experiments, Estimation without Sampling, Methods of data collection in qualitative research; Collection of Secondary Data; Data Integration; Using Publications and the Library; Using Academic Databases: Search Engines, Citation Indexes and Citation Analysis, Government of India Initiatives for

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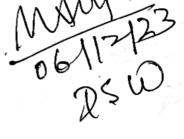
e-ShodhSindhu, Shodhganga, INFLIBNET: Knowledge Management-ShodhGangotri, and N-List Projects.

- 4. Data analysis: Statistical analysis: Thematic analysis; Analysing narrative; Discourse analysis; Content analysis; Grounded Theory; Using computers in data analysis.
- 5. Ethics and Related Issues in Research; Concepts in Ethics in Research; Intellectual Property Rights; Scientific Values: Needed a Code of Conduct; Fraud and Misconduct in Science; Plagiarism: What is Plagiarism, Acknowledge Sources Appropriately, Paraphrasing, Direct and Indirect Quotations, Plagiarism Checking: ShodhShuddhi, UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, LNMU Plagiarism Policy and Regulations-2018.
- 6. Writing a Research Proposal: Introduction; The research problem; Objectives of the study; Hypotheses to be tested; Study design; Measurement procedures; Analysis of data; Structure of the report; Problems and limitations.
- 7. The Structure of a Thesis: Thesis Vs Dissertation; Parts of a Thesis; Preliminary Pages of a Thesis: Title Pages, Certificate Pages, Acknowledgements, Table of Contents, List of Tables, List of Figures, Dedication; The Subject Proper: Introduction, Review of Literature, Materials and Methods, Results, Analysis/ Discussion, Summary/Conclusion, References, Appendixes; The Abstract; Formatting Requirements of a Thesis: Margins, Page Numbering, Design and Formatting of Chapters, Numbering the Sections, Lay-Out of Tables, Language and Style, Typeface and Fonts, Paper and Text Spacing; Thesis Editing.

## Ph D Coursework Paper-II

# Research Methods in Economics

- 1. Research Methodology in Economics: Research Methodology and its Constituents; Theoretical perspectives: Positivism and post-positivism, Critical theory. Interpretivism, and Pragmatism; Approaches to Social Enquiry: quantitative, qualitative, and mixed approach; Forms of Quantitative Approach: Inferential approach, Experimental approach, Simulation approach.
- 2. Eight Steps in Economic Research Process: Defining Research Problem; Delineating Objectives of Research; Reviewing Literature; Formulation of Hypothesis; Research Design; Collection of Data: Source, tools, and methods; Analysis of Data; Report Writing.
- 3. Data Collection for Economic Research: Method of Data Collection; Tools of Data Collection; Sampling Design: Population and Sample; Non-Random Sampling; Random or Probability Sampling: Precision of Estimates - Standard Errors and Confidence Intervals, Assessment of Precision - Unknown Population Variance, Assessment of Precision-Parent Population has a Non-Normal Distribution, Determination of Sample Size; Methods of Random Sampling: Simple Random Sampling (With Replacement), Simple Random Sampling (Without Replacement), Stratified Sampling, Cluster Sampling, Sampling with Probability Proportional to Size, Multi-Stage Sampling; The Choice of an Appropriate Sampling Method.
- 4. Models and Modelling in Economics: Why models, Introducing Modelling Exercise; Types of Models: Probability Models, Models Based on Differential Equations, The ANOVA Model, Regression Models; Simulation - Models and Solutions. Models of Explanation in Economics: Classical Political Economy and Ricardo's Method; Robbins, Positivism and Apriorism in Economies; Hutchison and Logical Empiricism in Economics; Milton Friedman and Instrumentalism in Economics; Paul Samuelson and Operationalism; Amartya Sen on Heterogeneity of Explanation in Economics.



- 5. Data Processing and Analysis in Economics: Data Preparation and Analysis; The Univariate Distribution; Bivariate Analysis; Multivariate Analysis; Index Construction and Scaling Methods; Inferences: Strategy of Hypothesis Testing, Sampling Distribution, Level of Significance, and region of Rejection, Parametric and Non-Parametric Tests of Significance.
- Introduction to IBM SPSS: The IBM SPSS 20 Data View Screen; Naming and Defining Variables in Variable View; Entering Data; Doing Basic Analyses; Modifying Data Procedures.
- 7. The Literature Review; Importance of the Literature Review; Planning a Literature Search; Locating Relevant Literature; Managing Information; Reliability of a Source; Writing a Review. References: Importance of Referencing in Documents; Citation and Listing Systems of References; Common Documentation Styles; CSE Style: The Name-Year System; Citation of Sources in the Text; Listing References in the "References" Section; Reference Management Software.

### Books Recommended:

- Steven G. Medema, Warren J. Samuels. Foundations of Research in Economics: How Do Economists Do Economics? Edward Elgar (UK).
- Catherine Hakim. Research Design Successful Designs for Social Economics Research.
   Taylor & Francis (London).
- Adolfo Figueroa. Rules for Scientific Research in Economics: The Alpha-Beta Method. Springer International Publishing (NY).
- Don E. Ethridge, Don Ethridge. Research Methodology in Applied Economics. Wiley (New Jersey, USA)
- Mirjana Radović-Marković, Beatrice Avolio Alecchi. Qualitative Methods in Economics. Taylor & Francis (London).

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