

**Course Content of Research Methodology for Ph.D. Entrance
Pt. Ravishankar Shukla University, Raipur**

1. Introduction to Research

Meaning and Importance of Research, Types of Research, Research Design and Stages, Selection and Formulation of Research Problem, Objective(s) and Hypothesis Developing Research Plan – Exploration, Description, Diagnosis, Experimentation, Determining Experimental and Sample Design.

2. Data Collection Method and Sampling Techniques

Sources of Data – Primary and Secondary, Types of Data – Categorical (nominal and ordinal), Numerical (discrete, continuous, ratio and interval), Methods of Data Collection: Survey, Interviews (in-depth or Key Informant interviews), Focus Group Discussion, Observation, Records or Experimental Observations. Probability Sampling, Random, Stratified, Cluster, Systematic Sampling, Non probability Sampling: Convenience Judgement, Snowball, Quota Sampling

3. Data Analysis


Statistical Graphics – Histograms, Frequency Polygon, Ogive, Dotplots, Stemplots, Bar Graphs, Pareto Charts, Pie Charts, Scatterplots, Boxplots Descriptive Analysis – Frequency Distributions, Measures of Central Tendency, Measures of Variation/Dispersion, Skewness and Kurtosis


4. Scientific Writing and Presentation


Structure and Components of Scientific Reports – Types of Report – Technical Reports and Thesis – Significance – Different steps in the preparation – Layout, Structure and Language of Typical Reports – Illustrations and Tables – Bibliography, Use of Software, Referencing and Foot Notes. Preparation of the Project Proposal – Title, Abstract, Introduction – Rationale, Objectives, Methodology – Time frame and Work Plan – Budget and Justification – References and Citation, and literature Survey

5. Research Ethics

Research Ethics Committees/Institutional Review Board – Roles and Importance, Intellectual Property rights – Commercialization, Royalty Reproduction of Published Material – Citation and Acknowledgement, Plagiarism and Plagiarism Software


19-9-2024
(Prof. K. K. SHOSH)


19-9-2024
(Prof. Asti Pangarika)


19/9/24
(Prof. Padma Bohse)

REFERENCE BOOKS FOR RESEARCH METHODOLOGY

1. Research Methodology Methods and Techniques by C R Kothari and G Garg

New Age International Publishers

2. Research Methodology: A Step By Step Guide For Beginners, by Ranjit Kumar

Pearson

3. Research Methodology A Hand Book by R P Mishra

4. Research Methodology by Richa Verma, S Verma and Kumar Abhishek

Booksclinic Publishers