

INDIRA UNIVERSITY, PUNE

SCHOOL OF INFORMATION TECHNOLOGY- MSC CS

Backlog Examination (2025 Pattern) April/ May – 2026 - Semester – I

Subject Name: Research Methodology
Subject Code: 25PSC119T

Max. Marks: 50
Time: 2:30 Hrs.

Instructions

- All Questions are Compulsory.

CO #	Cognitive Ability	Course Outcome
CO1	Remember	Recall and describe key concepts of research methodology.
CO2	Understand	Explain the scientific method and research techniques.
CO3	Apply	Formulate research problems, objectives, and hypotheses, Implement ethical data collection techniques from diverse sources.

Q1.	Attempt any 5 out of 7. (2 mark each) 1. State methods of quantitative analysis. 2. How ANOVA test is useful in research field? 3. What do you mean by "Validity threat" in research? 4. What do you mean by research problem 5. What do you mean by inferential analysis? 6. Why informed consent is important in research? 7. How surveys are applicable in every field of research?	(10 Marks)	CO1
Q2.	Attempt any 4 out of 6 (5 marks each) 1. Explain the purpose of a concept group in experimental research. 2. Describe the process of sampling and explain its importance in research. 3. Write Difference between Qualitative, Quantitative and Mixed research. 4. What do you mean by research methodology? Explain its importance and purpose. 5. Explain the concept of theoretical research? Explain its advantages and disadvantages. 6. Explain the concept of sampling? Write its different types.	(20 Marks)	CO2
Q3.	Attempt any 2 out of 3 questions. (5 marks each) 1. Discover how data analysis can be done in qualitative research, Explain it with its types. 2. Develop the concept of hypothesis testing with its types. 3. Identify in detail the steps involved in review process.	(10 Marks)	CO3
Q4	Compulsory question. Develop the concept of research. What are the guidelines given for it.	(10 Marks)	CO3
