

INDIRA UNIVERSITY, PUNE

SCHOOL OF INFORMATION TECHNOLOGY- M.SC (CA)

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Research Methodology
Subject Code: 25PCA119T

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

Instructions

- All Questions are Compulsory.

CO #	Cognitive Ability	Course Outcome
CO3	Apply	Formulate research problems, objectives, and hypotheses, Implement ethical data collection techniques from diverse sources.
CO4	Analyze	Analyze quantitative and qualitative data using statistical tools.
CO5	Evaluate	Evaluate and present research findings professionally and effectively.
CO6	Construct	Employ ethical practices to design and conduct research.

Q1.	Attempt any 5 out of 7. (2 mark each)	(10 Marks)	CO3
a)	Identify research bias concept in research area		
b)	Identify different measures of central tendency		
c)	Identify, how ANOVA test is applied in research field?		
d)	Identify different types of validity threat		
e)	What do you mean by research problem? How it is applicable in research?		
f)	Construct the list of advantages of data analysis		
g)	Construct the list of types of Data analysis in research field		
Q2.	Attempt any 4 out of 6 (5 marks each)	(20 Marks)	CO4
a)	Analyze the process of sampling and explain its importance in research		
b)	Analyze the significance of a literature review in the research process		

c)	What do you mean by Empirical research? Analyze its advantages and limitations	
d)	Analyze the importance of Peer review in research field	
e)	Explain the role of reviewer and publisher in research process. Analyze its importance in research area	
f)	List different study designs which are applicable in survey?	
Q.3.	Attempt any 2 out of 3 questions. (5 marks each)	(10 Marks) CO5
a)	Explain types of quantitative research	
b)	Explain the concept of hypothesis testing. Identify its importance	
c)	Explain the concept of research paper. Discover its purpose	
Q.4	Compulsory question. (10 marks each)	(10 marks) CO6
a)	A retail company, Shop Ease, wanted to understand customer satisfaction levels with its online shopping experience. The company noticed a slight decline in repeat customers over the past six months and decided to conduct a data-driven analysis to identify the root causes. Solve the case based on following parameters. A) No of data collected B) Apply different data analysis methods C) Write down the findings based on data	
