

Indian Statistical Institute
Documentation Research and Training Centre
MS(LIS) 2021-23, Semester III
Paper 14: Elements of Statistics and Research Methodology
Date: 25/11/2022

Time: 10.00 - 13.00

Maximum Marks: 100

Note: Read the instructions carefully. The Question Paper consists of three parts A, B and C. Scientific calculators are allowed.

Part A: Attempt all questions. Each question carries five marks each. 5*5

1. What is Research and why do we need it?
2. Explain different types of research.
3. What are the different types of Experimental Research Design?
4. What is the Empirical Research Method Cycle?
5. Explain Hypothesis Testing with its limitations and advantages.

Part B: Attempt any three questions. 10*3

1. What is the Z-test, T-test and F-test? Write down the Difference between them.
2. Explain Basic and Action Research. Write down the difference between them.
3. Write down the difference between Primary and Secondary Research Methods.
4. Conduct a two-tailed F-test on the following samples.

	Sample 1	Sample 2
σ	11.45	9.12
n	41	20

Part C: Attempt any three questions. 15*3

1. Define the Research Process and write down the steps.
2. What is Literature Review and explain all the steps for conducting literature review.
3. What is Technical writing and how can we apply this in Library and Information Science?
4. Write a note on Reference Management Tools and Compare any two tools of your choice.