

**P.G. Semester-IV Examination, 2023****Library and Information Science****Course ID : 43751****Course Code : LIS-401-CC****Course Title : Research Methodology**

Time : 4 Hours

Full Marks : 80

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **four** of the following questions:

5×4=20

- a) Distinguish between research methods and research methodology.
- b) Discuss the purpose of literature review?
- c) Write a short note on Delphi method.
- d) Explain how inductive reasoning and deductive reasoning are applied in "Spiral of scientific method".
- e) Difference between Quantitative research and Qualitative research.
- f) Write a short note on SPSS.

*[Turn over]*

g) Explain Bradford's law of Bibliographic Scattering.

2. Answer any **five** of the following questions:

12×5=60

a) What is research design? Explain the needs for research design. What are the advantages and disadvantages of simple random sampling and stratified random sampling? 2+4+6

b) Briefly discuss the steps in research process. 12

c) Define observation method. Discuss the purpose of observation method. Enumerate the areas in LIS research suitable for participant observation. 2+5+5

d) What do you mean by hypothesis and process of hypothesis testing? 4+8

e) Discuss what is historical research. Enumerate the purpose of historical research. What are the steps involved in conducting historical research? 2+5+5

f) Briefly discuss various kind of chart and diagram used in data analysis. 12

g) What is Spearman's Rank method? Find out the Spearman's Rank correlation and analyse it.

Student :                      A B C D E F G H I

Rank before training : 1 4 3 2 6 8 9 5 7

Rank after training : 7 4 2 3 8 6 5 9 1

2+10

h) What is citation analysis? Discuss the purpose of citation analysis. Define h-index and g-index.

2+4+6