

U.G. 4th Semester Examination - 2021**STATISTICS****[HONOURS]****Skill Enhancement Course (SEC)****Course Code : STAT-H-SEC-T-2****(Research Methodology)**

Full Marks : 20

Time : 1 Hour

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.**Notations and symbols have their usual meaning.*

1. Answer any **two** questions: $5 \times 2 = 10$
- a) Explain the following in the context of Research Design:
- i) Research Hypothesis
 - ii) Experimental and Control Units
- b) Distinguish between:
- i) Statistic and Parameter
 - ii) Confidence Level and Significance Level.

- c) Describe how multivariate techniques can be used in research studies.
- d) Discuss the different characteristics of a good research report.

2. Answer any **one** question: $10 \times 1 = 10$

- a) i) What is stratified sampling? Discuss its advantages over simple random sampling.
- ii) Write a note on chi-square test.
- b) "The procedure of testing hypothesis requires a researcher to adopt several steps" - Describe in brief these steps.

(Internal Assessment : 5)
