

**U.G. 4th Semester Examination - 2020****STATISTICS****[HONOURS]****[Skill Enhancement Course]****[Research Methodology]****Course Code : STAT(H)-SEC-T-2**

Full Marks : 20

Time : 2 Hours

*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: 5×2=10
- a) What is meant by research? Explain its significance in modern times.
  - b) What is pilot survey? Explain its importance in survey sampling.
  - c) Describe some of the important research designs used in experimental hypothesis-testing research study.
  - d) Describe the role of different graphical representations of data.

2. Answer any **one** question: 10

- a) Explain the meaning of the following in context of research design:
  - i) Extraneous variable
  - ii) Experimental and Control groups.
- b) Describe the different types of research, clearly pointing out the difference between an experiment and a survey.

(5 marks for Internal Assessment)

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