

**M. SC. (APPLIED STATISTICS)
(MSCAST)**

Term-End Examination

June, 2026

MST-023 : RESEARCH METHODOLOGY

Time : 3 Hours

Maximum Marks : 50

Note : (i) *Question No. 1 is compulsory.*

(ii) *Attempt any **four** questions from the remaining question nos. 2 to 6.*

(iii) *Use of scientific calculator (non-programmable) is allowed.*

(iv) *Symbols have their usual meanings.*

1. State whether the following statements are *True* or *False*. Give reasons in support of your answers : 5×2=10

(a) The difference between the sample results and the results obtained through a census using the identical procedure is known as sampling error.

- (b) The population that is being sampled is also called the universe.
 - (c) Upto 20% similarities in research papers is allowed by UGC.
 - (d) High association between two variables does not imply cause and effect relationship.
 - (e) The process of questionnaire design is called a schedule.
2. (a) Define Research Design. Explain the need and features of a good research design. 5
- (b) Define research proposal. Explain various key elements of a research proposal. 5
3. (a) Distinguish between Research Methods and Research Methodology. 5
- (b) Under what circumstances would you prefer cluster sampling over simple random sampling ? 5

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4. (a) Explain the process of identification of a research problem. 5
- (b) Distinguish between primary data and secondary data. 5
5. (a) Explain various types of Research Designs. 5
- (b) Define plagiarism. Explain the types of plagiarism with suitable examples. 5
6. Write short notes on : 5+5
- (a) Objectives of Research
- (b) Criteria of good Research

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