

**2021**

**STATISTICS— GENERAL**

**Paper : SEC-A-2**

**(Research Methodology)**

**Full Marks : 80**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**1. Answer *any fifteen* questions from the following:** 2×15

- (a) What is the difference between primary and secondary data?
- (b) Mention two methods of collecting data.
- (c) Why do we use sample study?
- (d) What is fundamental research?
- (e) What is a frequency distribution?
- (f) State the difference between discrete and continuous variables.
- (g) What do you mean by hypothesis?
- (h) What is a parameter?
- (i) Define type I error in the context of testing of hypothesis.
- (j) What is pilot survey?
- (k) What is sampling frame?
- (l) What do you mean by simple random sampling?
- (m) Point out the difference between SRSWR and SRSWOR.
- (n) Mention a situation (with reason) where complete enumeration is not feasible.
- (o) Give an example of ordinal data.
- (p) What is stratified sampling?
- (q) Mention a problem the researchers may face.
- (r) What is extraneous variable?
- (s) Can you suggest any method for pre-testing a questionnaire?
- (t) Point out a difference between questionnaire and schedule.

**Please Turn Over**

2. Answer **any six** questions from the following:

5×6

- (a) Discuss the objectives of research.
- (b) Give some examples of qualitative and quantitative phenomena with proper reason.
- (c) Discuss some criteria of good research.
- (d) Discuss the characteristics of survey.
- (e) What do you mean by sampling and non-sampling errors?
- (f) Discuss the difference between complete enumeration and sample survey.
- (g) What do you mean by probability sampling and non-probability sampling?
- (h) Discuss the main steps of a sampling design.

3. Answer **any two** questions from the following:

10×2

- (a) Discuss the role of research in important areas.
  - (b) Discuss the different steps of a research process.
  - (c) Discuss, in detail, the four types of measurement scales.
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