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?
- (1) 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.

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

- (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

5×6

- (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.
