2020

STATISTICS — GENERAL

Paper: **SEC-A-2** (3)

(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) What is the difference between applied and fundamental research?
- (c) What do you mean by longitudinal research?
- (d) What are independent and dependent variables?
- (e) 'Emperical research relies on experience or observations and it is data based research.'

 Examine the statement with reason.
- (f) What do you mean by a hypothesis?
- (g) What is cluster sampling?
- (h) Explain the difference between population and sample.
- (i) What do you mean by sampling frame?
- (j) Give an example of probability sample and non-probability sample.
- (k) What are parameters?
- (l) What is the difference between survey and experiment?
- (m) What is pilot survey?
- (n) What is extraneous variable?
- (o) Measures of physical dimensions are examples of ordinal scale.— State true or false with reason.
- (p) Give an example of a ratio scale with justification.
- (q) What do you mean by type II error?
- (r) What do you mean by open-ended question?
- (s) Define dichotomous variable with example.
- (t) What do you mean by qualitative research?

- 2. Answer any six questions from the following:
 - (a) What do you mean by research?
 - (b) Discuss the objectives of research.
 - (c) Explain the concepts of Research Method and Research Methodology.
 - (d) Discuss the basic principles of an experimental design.
 - (e) What do you mean by sampling and non-sampling errors?
 - (f) Discuss some factors to determine sample size.
 - (g) Discuss the sources of secondary data.
 - (h) How do you choose a sampling design?
- 3. Answer any two questions from the following:

(a) Discuss the different steps of a research process.

- (b) Discuss the problems usually faced by the researchers in India.
- (c) Discuss the guidelines for constructing a good questionnaire.

10×2

5×6