

**2021**

**STATISTICS — HONOURS**

**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 :

2×15

- (a) What is the difference between ordinal scale and ratio scale of measurements?
- (b) Distinguish between conceptual and empirical research.
- (c) Define double blind study.
- (d) Why pilot survey is used?
- (e) Describe Likert scale.
- (f) Distinguish between survey research and experimental research.
- (g) What is coverage error?
- (h) Give some criteria of good research.
- (i) Distinguish between polytomous variable and dichotomous variable.
- (j) What are the major sources of non-sampling error?
- (k) What do you mean by closed ended question and open ended question?
- (l) What is null hypothesis and why is it important?
- (m) What do you mean by validity of a research instrument?
- (n) What is the differences between qualitative and quantitative research?
- (o) Define with example extraneous research.
- (p) What are the precautions of using secondary data?
- (q) Define Rating scale.

2. Answer **any six** questions :

5×6

- (a) Distinguish between scientific method of research and non-scientific method of research. Describe some characteristics of scientific method of research.
- (b) Describe stratified random sampling. In which situation this method of sampling is used?
- (c) What ethics rule should be considered when conducting a research?

**Please Turn Over**

- (d) How do you tackle the error due to non-response?
- (e) What is sampling error? Why is it important?
- (f) What is a dependent variable? What does the researcher need to be careful, when selecting and using dependent variables?
- (g) How do you define a research problem? Explain the necessity of defining a research problem.
- (h) Discuss the precaution measure to avoid incorrect conclusion about a hypothesis.

3. Answer **any two** questions :

10×2

- (a)
    - (i) Describe the main points, one should take care at the time of constructing a questionnaire.
    - (ii) Develop a questionnaire to estimate unemployment rate of a place by clearly defining the concept of employment and unemployment.
  - (b)
    - (i) Describe different methods of presenting reports of a research.
    - (ii) Describe different methods of collecting data.
  - (c)
    - (i) Describe the process of interpreting the result of a research and drawing inference.
    - (ii) Give some precaution measure at the time of interpretating the result of research.
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