

2017

M.LI.Sc.

1st Semester Examination

RESEARCH METHODOLOGY

PAPER—MLI-109

Subject Code—08

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

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

Answer all questions.

1. (a) Write short notes on any one of the following :

1×5

(i) Purposive sampling.

(ii) Interview method.

(b) Distinguish between the concepts belonging to any two pairs of concept :

$2\frac{1}{2} \times 2$

(i) Research method and research methodology.

(Turn Over)

- (ii) Probability sampling and non-probability sampling.
- (iii) Conceptual research and empirical research.

2. (a) (i) Define 'little Science' and 'big Science' and distinguish between them.
- (ii) Discuss the importance of literature survey in research.
- (iii) Describe the questionnaire method of data-collection. Distinguish between open-ended questionnaire and close-ended questionnaire.

5+4+6

Or

- (b) (i) Describe 'Derek De Solla Price' empirical research in the context of growth of literature of a subject.
- (ii) Under what circumstances do you recommend quota sampling and snow-ball sampling? Justify your answer with proper reasoning.
- (iii) State with reason the type of sampling in the following situation :

Suppose a research team wants to determine the Intelligence Quotient (IQ) of college students across West Bengal. No, assume that the team

has selected 2000 students from science stream, 3000 students from commerce stream and 4000 students from arts and humanities stream. The total number of students in science, commerce, arts and humanities streams in all colleges of West Bengal are 51,000, 74,000 and 02,000 respectively.

- (iii) Do you think that Random Sampling is done "Randomly"? Justify your answer, from probabilistic viewpoint. 5+5+3+2

3. (a) (i) Indicate the research type, with proper reasoning in case of any *three* of the following : $2\frac{1}{2} \times 3$

- (1) Study Ranganathan's description of the concept of subject in the light of Infinity (∞) concept of mathematics.
- (2) Study of some salient features of the annual variations of rainfall in North-East India.
- (3) "Google is not fun" : an investigation of how university students of West Bengal do online searching.
- (4) Development of growth and decay model of the research in Space Science in developing countries.

(ii) Explain how inductive logic and deductive logic are applied at different Stages of Spiral of scientific method. 4½

(iii) State basic objectives of research. 3

Or

(b) (i) Discuss the problems usually faced by researchers in India.

(ii) Describe different criteria of good research.

(iii) Define 'Hypothesis'.

(iv) Explain the importance of library in research.

5+5+3+2
