

NOVEMBER/DECEMBER 2019

MCM34 — RESEARCH METHODOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

1. (a) Define research and discuss the need for research.

Or

- (b) What is the necessity of defining a research problem? Explain.

2. (a) Explain various non-probability sampling technique.

Or

- (b) Explain different types of scale of measurement.

3. (a) Explain the importance of tabulation in the field of social research.

Or

- (b) What points one should observe while using percentages in research studies?



4. (a) The forecast of a product for the first week of March was 600 units, where as the actual demand turned out to be 500 units:

(i) Find the forecast for the second week of March by assuming the smoothing constant.

(ii) Find the forecast for the third week of March if the actual demand of the second week is 620 units.

Or

- (b) The factor loading matrix in a factor analysis with 5 variables and two factors is as shown in the following table.

Variable	Factor	
	1	2
1	-0.875	-0.350
2	-8.840	-0.400
3	-0.614	-0.700
4	-0.600	-0.650
5	-0.625	-0.475

Plot the factor loading on a two-dimensional plane ($F_1 - F_2$ plane) and find the revised factors loadings using the varimax factor rotation method

5. (a) "Report writing is more an art that hinges practice and experience". Discuss.

Or

- (b) What are the advantages and disadvantages of SPSS?

SECTION B — ($3 \times 15 = 45$ marks)

Answer any THREE questions.

6. Explain briefly experimental design with examples.
7. Discuss the main considerations to be kept in mind while framing the questions in a questionnaire.
8. Describe the important statistical measures often used to summarize the survey / research data.
9. Define multivariate analysis. Explain various types of multivariate analysis.
10. Narrate the various steps involved in writing such a report.

