MCM34 — RESEARCH METHODOLOGY

Time : Three hours   Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

1. (a) State the different types of research and explain them.

Or

(b) Describe how the identification and the statement of problem are made.

2. (a) Critically evaluate the different methods of probability sampling technique.

Or

(b) Write a short note on 'Likert type scale'. With proper examples.

3. (a) Narrate the characteristics of a good table.

Or

(b) Explain the validity of the measures mean and standard deviations.

4. (a) A company has the sales pattern (in units) during 1994 to 2002, as shown the following :

   (i) Fit a linear regression for the data.

   (ii) Compute the sales forecast for the year 2006

Year :	1994	1995	1996	1997	1998
Sales (in lakhs of units) :	10	12	15	27	33

Year :	1999	2000	2001	2002
Sales (in lakhs of units) :	38	44	49	60

   Or

   (b) What is factor loadings? Also explain the concept of factor rotation.

5. (a) What are the types of report? Explain them in brief.

   Or

   (b) Explain the procedure of entering data in SPSS.

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

   Answer any THREE questions.

6. Describe the different steps involved in a research process.

7. Enumerate the different methods of collecting data.

8. Explain different types of analysis of data, pointing out the significance of each.

9. The results of survey on the sales of a product (Y) as a function of time period (X) are summarized below :

	X	Y
Mean	25	150
Standard deviation	2	8
Co-efficient of correlation	0.9	

   (a) Fit the regression line of Y on X and estimate the value of Y when X is 10

   (b) Fit regression line of X on Y and estimates the value of X when Y is 96.

10. Discuss the guideline for reviewing the draft of a report.

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