NOVEMBER 2025

52503/125E1B/ 141E1B/127E1B/ 126E1B/220E3B/ 241E3B/226E3B/ 227E3B/225E3B/ 120E1B

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. What is secondary data? What are its sources?

2. Define contingency table with its layout.

3. What are the advantages of diagrammatic representations?

4. What is histogram?

5. State the merits and demerits of Arithmetic mean.

6. Find the median of 159 152 155 168 175 172 160 163 158 167.

7. Mention any two uses of mode.

8. What you mean by dispersion?

9. Compute the range and its coefficient : 12 8 9 10 4 14 15.

10. Define relative measure. Give an example.

11. Define negative correlation with an example.

12. State the applications of chi-square test.

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. What is sample survey? List the advantages of this method over census method.

14. What are the main objectives of tabulation?

15. Write a note on frequency polygon and ogives.

16. Represent the following data by a suitable diagram.

Item:	Food	Cloth	Rent	Medicare	Miscellaneous
Expenditure (in Rs.):	2400	200	800	150	450

17. Calculate the median from the following data.

Marks:	10-25	25-40	40-55	55-70	70-85	85-100
No. of students:	6	20	44	26	3	1

18. What is quartile deviation? State its merits and demerits.

19. Draw a scatter diagram when (a) $r = 0$ (b) $r = +1$ (c) $r = -1$ (d) $r < 0$ (e) $r > 0$

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions each in 500 words.

20. Explain the important methods of collecting primary data.

21. The following table gives the profit of certain number of companies.

Profit (Rs. in '000)	0-9	10-19	20-29	30-39	40-49	50-59	60-69
No. of companies:	5	10	15	30	20	15	5

Draw the O-gives. Hence find out the percentage of companies with profit 45 and 55.

52503/125E1B/ 141E1B/127E1B/ 126E1B/220E3B/ 241E3B/ 226E3B/ 227E3B/225E3B/ 120E1B

22. Calculate the mean and mode from the following data.

Class interval	11-20	21-30	31-40	41-50	51-60	61-70	71-80
Frequency:	42	38	120	84	48	36	31

23. The age distribution of 80 policy holders insured through an agent is given below.

Age Group	Number of Policy Holders	Age Group	Number Of Policy Holders
16-20	8	41-45	7
21-25	15	46-50	3
26-30	13	51-55	2
31-35	20	56-60	1
36-40	11		

Calculate the mean deviation from the median

24. Find the correlation coefficient from the following data :

X	1	3	5	7	9
Y	2	4	6	8	10

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52503/125E1B/ 141E1B/127E1B/ 126E1B/220E3B/ 241E3B/ 226E3B/ 227E3B/225E3B/ 120E1B