22. Calculate mean and median for the given below:

C.I :	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80
f:	42	38	120	84	48	36	31

23. Find the quartile deviation from the frequency distribution:

C.I :	351 - 500	501 - 650	651 - 800	801 – 950	951 – 1100
f:	48	189	88	47	28

24. Ten competitors in a musical test were ranked by three judges A, B and C in the following order:

A :	1	6	5	10	3	2	4	9	7	8
B:	3	5	8	4	7	10	2	1	6	9
C:	6	4	9	8	1	2	3	10	5	7

Using rank correlation method, discuss which pair of judges has the nearest approach to common likings in music.

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Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$ Answer any TEN questions.

- 1. What is secondary data?
- 2. How you define ordinal data?
- 3. State any two advantages of diagrammatic representation.
- 4. Define sub-divided bar diagram.
- 5. What you mean by mean?
- 6. State any two advantages of mode.
- 7. Define Range.
- 8. What is standard deviation?
- 9. Define negative correlation.

- 10. What is scatter diagram?
- 11. What you mean by complete enumeration?
- 12. Write the sources of collecting primary data.

PART B —
$$(5 \times 5 = 25 \text{ marks})$$

Answer any FIVE questions.

- 13. Explain the discrete and continuous frequency distribution.
- 14. Represent the following data by means of a percentage bar diagram.

Item	Cost of 1	production	n (in Rs.)	
	1992	1993	1994	
Raw material	5000	6600	9000	
Labour	2000	3000	3000	
Overhead	2000	1800	1800	
Others	1000	600	1200	
Total	10,000	12,000	15,000	

2 52503/125E1B/ 141E1B/120E1B/ 127E1B/126E1B/ 220E3B/241E3B/ 226E3B/227E3B/ 225E3B 15. Calculate mode from the following data:

C.I :	0 - 19	20 - 39	40 - 59	60 - 79	80 - 99
f:	5	20	35	20	12

16. Compute the mean deviation from means for the following:

x:	2	4	6	8	10
f:	1	4	6	4	1

- 17. Explain the types of correlation.
- 18. Explain the contingency table.
- 19. Draw a histogram and frequency polygon from the following:

П	Size:	30 – 40	40 - 50	50 - 60	60 - 70	70 - 80
4	Freq:	3	5	12	8	4

PART C —
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 20. Discuss the collection of primary and secondary data.
- 21. Draw the both Ogive curves from the following:

C.I :	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90
f:	20	25	36	46	52	31	28	22

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