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(21223) Roll No. 23093500008.62

M.I.B.-I Sem.

NP-3223

M.I.B. Examination, Dec.-2023

Business Statistics

(MIB-106)

Time : Three Hours] *[Maximum Marks : 75*

Note : Attempt questions from **all** Sections as per instructions.

Section - A

(Very Short Answer Type Questions)

Note : Answer **all** the **five** questions. Each question carries **3** marks. Very short answer is required not exceeding **75** words. $5 \times 3 = 15$

1. Is statistics art and science both?

2. What are the differences between primary and secondary data?

3. What is range? Discuss its uses.

4. Calculate Q_1 and Q_3 from the following data:

    6, 9, 12, 8, 14, 13, 10, 8, 11

5. If median is 31 and arithmetic Average is 33 then the value of mode will be?

Section - B

(Short Answer Type Questions)

Note : Answer any **two** questions out of the following **three** questions. Each question carries **7½** marks. Short answer is required not exceeding 200 words. $2 \times 7½ = 15$

6. Find Median from the following data:

Mid value:	5	10	15	20	25	30	35
Frequency:	4	6	10	7	6	5	2

7. Explain the term "Dispersion". What are the various methods of measuring dispursion.

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8. Calculate quartiles and third decile from the following data:

Central size:	2.5	7.5	12.5	17.5	22.5
Frequency:	7	18	25	30	20

Section - C

(Detailed Answer Type Questions)

Note : Answer any **three** questions out of the following **five** questions. Each question carries **15** marks. Answer is required in detail. $15 \times 3 = 45$

9. What is statistical quality control? Explain its most popular method in detail.

10. Define probability and Explain the importance of this concept in statistics.

11. Find coefficient of correlation by rank difference method:

X :	20	22	24	25	30	32	28	21	26	35
Y:	16	15	20	21	19	18	22	24	23	25

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12. From the data given below, find the missing frequency when median is 24:

Marks :	0-10	10-20	20-30	30-40	40-50
No. of students:	15	20	?	14	6

13. From the following data, calculate started diviation and its coefficient:

Age (less than) :	10	20	30	40	50	60	70	80
No. of Persons :	15	30	53	75	100	110	115	125