

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)

CLASS: BBA/IMBA
BRANCH: BBA/IMBA

SEMESTER: I
SESSION : MO/2024

SUBJECT: MN107 BUSINESS STATISTICS

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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- Q.1(a) Explain the difference between primary and secondary data. [2] CO 1 BL 2
- Q.1(b) Given the following ages of 20 participants in a workshop: [3] CO 1 BL 3
22, 24, 25, 26, 23, 27, 28, 29, 24, 25, 26, 23, 22, 24, 25, 27, 28, 29, 30, 31
Create a frequency distribution table using the appropriate age intervals.

- Q.2(a) Draw the frequency polygon for the following data [2] CO 3 BL 4

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of students	8	12	20	30	15	10	7

- Q.2(b) Draw Less than and More than Ogive to the following data. Mark the median on the graph. [3] CO 1 BL 4

Class Interval	Frequency
0-100	10
100-200	20
200-300	30
300-400	40
400-500	30

- Q.3(a) Write the merits and demerits of the Median. [2] CO 3 BL 2
- Q.3(b) The frequency distribution below represents the weights in pounds of a sample of packages carried last month by a small airfreight company. [3] CO 2 BL 3

Class-interval	Class Frequency
10.0-10.9	1
11.0-11.9	4
12.0- 12.9	6
13.0-13.9	8
14.0-14.9	11

Compute the Arithmetic mean.

- Q.4(a) Find the harmonic mean for the given data 3, 6, 8, 9, 12, 15. [2] CO 2 BL 3
- Q.4(b) Describe the characteristics of a good Average. [3] CO 3 BL 2

- Q.5(a) Explain different types of Measures of variation? [2] CO 3 BL 2
- Q.5(b) Calculate the Mean Absolute Deviation (MAD) for the following sales data: [3] CO 3 BL 3
Sales: 30, 25, 35, 20, 40