

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

CLASS: BBA/IMBA/B.SC  
BRANCH: MANAGEMENT/VC

SEMESTER: I  
SESSION: MO/2025

SUBJECT: MN25119 STATISTICS FOR MANAGERS

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) | Differentiate between primary data and secondary data.  | [2] | 1 2 |
| Q.1(b) | Discuss how statistics is applied in decision-making processes in business.   | [3] | 4 4 |
| Q.2(a) | The marks of 50 students are:<br><b>Marks Interval Frequency</b><br>0-10            5<br>10-20          8<br>20-30          12<br>30-40          10<br>40-50          9<br>50-60          6<br>Draw a Frequency Polygon | [2] | 2 3 |
| Q.2(b) | From the following data, construct an exclusive form frequency distribution table.<br>12, 15, 18, 19, 22, 25, 27, 29, 31, 35, 36, 40, 41, 45, 47  | [3] | 2 3 |
| Q.3(a) | What are the characteristics of a good average?   | [2] | 3 4 |
| Q.3(b) | Calculate the Median from the following data:<br><b>Class Interval      Frequency</b><br>0-10                5<br>10-20               10<br>20-30               20<br>30-40               10<br>40-50               5   | [3] | 3 3 |
| Q.4(a) | Find the Harmonic mean of: 4, 16, 64  | [2] | 3 3 |
| Q.4(b) | Find the average wage of 50 workers for the following data.<br>Wages (₹)      0-10    10-20    20-30    30-40    40-50<br>No of workers    6        8        10        12        9                                      | [3] | 3 3 |
| Q.5(a) | Find the Range of the following data: 12, 8, 15, 10, 20, 18.  | [2] | 3 3 |
| Q.5(b) | The marks obtained by 10 students are:<br>15, 17, 18, 20, 22, 25, 28, 30, 32, 35.<br>Find the mean deviation about the mean.  | [3] | 2 2 |