

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

**CLASS: IMSc
BRANCH: QEDS**

**SEMESTER : 1st Semester
SESSION : MO/2025**

SUBJECT: ED25103 STATISTICAL METHOD - I

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
-

- Q.1(a) Define the following: population, census, sample in statistics [2] 1 CO
- Q.1(b) Find the frequency distribution table from the age distribution of 20 people: [3] 1
51, 65, 68, 87, 76, 56, 69, 75, 89, 80, 61, 66, 73, 86, 79, 70, 71, 54, 87, 78
- Q.2(a) Create a Pie Chart of the family for migration in a village with the following details: [2] 1
- | Purpose | Employment | Education | Climate | Relocation |
|------------|------------|-----------|---------|------------|
| # families | 25 | 10 | 5 | 10 |
- Q.2(b) Create a bar chart of the following data distribution: [3] 1
- | Year | 1989 | 1990 | 1991 | 1992 | 1993 |
|------------------|------|------|------|------|------|
| Profit (million) | 10 | 12 | 18 | 25 | 42 |
- Q.3(a) Compute the mean of grouped data in frequency distribution table of Q.1(b) [2] 2
- Q.3(b) Compute the mode of the grouped data in frequency distribution table of Q.1(b) [3] 2
- Q.4 Define merit and demerits of mean, median and mode of a given data. [5] 2
- Q.5(a) Find mean, median, mode, Range, and IQR of the data: 15,18,19,20,20,20,21,23,23,24,24,25. [2] 2
- Q.5(b) Find variance, skewness and kurtosis of the data: 15,18,19,20,20,20,21,23,23,24,24,25. [3] 2

:::::14/10/2025:::::M