

CHAPTER: DATA HANDLING

1-mark questions

1. Mean Calculation: What is the mean of the numbers 2, 4, 6, 8, 10?

- Step 1: the sum of numbers: $2 + 4 + 6 + 8 + 10 = 30$

- Step 2: the mean: $30 \div 5 = 6$

Answer: 6

2. - Answer: Line graph

3. Median

- Step 1: Arrange numbers in ascending order: 1, 3, 5, 7, 9

- Step 2: Find the middle number: 5

- Answer: 5

4. Range Calculation:

- Step 1: Find the highest and lowest numbers: 50 and 10

- Step 2: Calculate the range: $50 - 10 = 40$

- Answer: 40

5. Mode Calculation:

- Step 1: Identify the number with the highest frequency or most repeated number: 4

- Answer: 4

2-mark questions

6. Mean Calculation:

- Step 1: Calculate the sum of numbers: $2 + 3 + 1 + 4 + 2 = 12$

- Step 2: Calculate the mean: $12 \div 5 = 2.4$

- Answer: 2.4

7. Mode Calculation:

- Step 1: Identify the color with the highest frequency (highest repewated number): Red

- Answer: Red

8. Median Calculation:

- Step 1: Arrange scores in ascending order: 70, 75, 80, 85, 90
- Step 2: Find the middle score: 80
- Answer: 80

9. Mean Calculation:

- Step 1: Calculate the sum of numbers: $20 + 22 + 25 + 24 + 23 = 114$
- Step 2: Calculate the mean: $114 \div 5 = 22.8$
- Answer: 22.8

10. Range Calculation:

- Step 1: Find the highest and lowest temperatures: 30°C and 25°C
- Step 2: Calculate the range: $30 - 25 = 5$
- Answer: 5

3-mark questions

11. Mean, Median, Mode :

- Step 1: Calculate the mean: $(5 + 3 + 4 + 6 + 2) \div 5 = 20 \div 5 = 4$
- Step 2: Arrange numbers in ascending order: 2, 3, 4, 5, 6
- Step 3: Find the median: 4
- Step 4: Identify the mode: No mode
- Answer: Mean = 4, Median = 4, No mode

12: Bar Graph and Mode of Class Strength

To represent the data using a bar graph:

Class 1 | ***** | 20

Class 2 | ***** | 25

Class 3 | ***** | 30

Class 4 | ***** | 25

The mode is the class strength that appears most frequently. Since Class 2 and Class 4 both have 25 students, and no other class strength is repeated, this data has two modes: 25 students.

13: Mean, Median, and Range of Student Scores

Mean:

Calculate the sum of scores: $80 + 70 + 90 + 85 + 75 = 400$

Divide the sum by the total number of subjects: $400 \div 5 = 80$

Median:

Arrange the data in ascending order: 70, 75, 80, 85, 90

The middle value is the median: 80

Range:

Maximum score - Minimum score: $90 - 70 = 20$

14: Mean and Range of Company Sales

To find the mean and range of company sales:

Mean:

Calculate the sum of sales: $1000 + 1200 + 1500 + 1800 + 2000 = 7500$

Divide the sum by the total number of months: $7500 \div 5 = 1500$

Range:

Maximum sales - Minimum sales: $2000 - 1000 = 1000$