

MCQ Questions for Class 10 Maths Chapter 14 Statistics

Question 1: The mean of the observations 5, 10, 15, 20 is:

Options:

- (A). 10
- (B). 12.5
- (C). 15
- (D). 20

Correct Answer: (B). 12.5

$$\text{Mean} = (5 + 10 + 15 + 20) / 4 = 12.5$$

Question 2: The median of the data 4, 8, 10, 12, 14 is:

Options:

- (A). 8
- (B). 10
- (C). 12
- (D). 14

Correct Answer: (B). 10

Question 3: The mode of the data 3, 5, 5, 7, 9 is:

Options:

- (A). 3
- (B). 5
- (C). 7
- (D). 9

Correct Answer: (B). 5

Question 4: Which measure of central tendency is based on the middle observation?

Options:

- (A). Mean
- (B). Median
- (C). Mode
- (D). Range

Correct Answer: (B). Median

Question 5: The total number of observations is represented by:

Options:

- (A). f
- (B). x
- (C). $\sum f$
- (D). fx

Correct Answer: (C). $\sum f$

Question 6: The class mark of class interval 20 - 30 is:

Options:

- (A). 20
- (B). 25
- (C). 30
- (D). 35

Correct Answer: (B). 25

Class Mark = $(20 + 30) / 2 = 25$

Question 7: Which graph is used to represent continuous frequency distribution?

Options:

- (A). Histogram
- (B). Pie Chart
- (C). Bar Graph
- (D). Line Graph

Correct Answer: (A). Histogram

Question 8: The mode is the value that occurs:

Options:

- (A). Least frequently
- (B). Only once
- (C). Most frequently
- (D). Twice

Correct Answer: (C). Most frequently

Question 9: The cumulative frequency is obtained by:

Options:

- (A). Multiplying frequencies
- (B). Adding frequencies successively
- (C). Dividing frequencies
- (D). Subtracting frequencies

Correct Answer: (B). Adding frequencies successively

Question 10: The median of 2, 4, 6, 8, 10, 12 is:

Options:

- (A). 6
- (B). 7
- (C). 8

(D). 9

Correct Answer: (B). 7

$$\text{Median} = (6 + 8) / 2 = 7$$

Question 11: The range of the data 12, 18, 25, 30 is:

Options:

(A). 12

(B). 18

(C). 25

(D). 18

Correct Answer: (D). 18

$$30 - 12 = 18$$

Question 12: The arithmetic mean is also known as:

Options:

(A). Average

(B). Frequency

(C). Median

(D). Range

Correct Answer: (A). Average

Question 13: The class interval 40 - 50 has width:

Options:

(A). 5

(B). 10

(C). 15

(D). 20

Correct Answer: (B). 10

Question 14: Which measure of central tendency may not exist uniquely?

Options:

- (A). Mean
- (B). Median
- (C). Mode
- (D). Range

Correct Answer: (C). Mode

Question 15: An ogive is formed using:

Options:

- (A). Frequencies
- (B). Cumulative frequencies
- (C). Mean values
- (D). Class marks

Correct Answer: (B). Cumulative frequencies

Question 16: The mean of first four even numbers is:

Options:

- (A). 4
- (B). 5
- (C). 6
- (D). 8

Correct Answer: (B). 5

$$\text{Mean} = (2 + 4 + 6 + 8) / 4 = 5$$

Question 17: The median class in grouped data is found using:

Options:

- (A). Highest frequency
- (B). Lowest frequency
- (C). $N/2$
- (D). Total frequency

Correct Answer: (C). $N/2$

Question 18: The frequency polygon is obtained by joining:

Options:

- (A). Class limits
- (B). Class marks
- (C). Frequencies only
- (D). Mean values

Correct Answer: (B). Class marks

Question 19: The mode of 7, 9, 9, 10, 12 is:

Options:

- (A). 7
- (B). 9
- (C). 10
- (D). 12

Correct Answer: (B). 9

Question 20: The graphical method to find median uses:

Options:

- (A). Histogram

(B). Frequency polygon

(C). Ogive

(D). Pie Chart

Correct Answer: (C). Ogive

Question 21: The lower limit of class interval 15 - 25 is:

Options:

(A). 10

(B). 15

(C). 20

(D). 25

Correct Answer: (B). 15

Question 22: The upper limit of class interval 30 - 40 is:

Options:

(A). 30

(B). 35

(C). 40

(D). 45

Correct Answer: (C). 40

Question 23: The midpoint of class interval 50 - 60 is:

Options:

(A). 50

(B). 55

(C). 60

(D). 65

Correct Answer: (B). 55

Question 24: If all frequencies are equal, then the graph formed is:

Options:

- (A). Uneven
- (B). Symmetrical
- (C). Zig-zag
- (D). Circular

Correct Answer: (B). Symmetrical

Question 25: The mean of observations 6, 8, 10 is:

Options:

- (A). 6
- (B). 7
- (C). 8
- (D). 9

Correct Answer: (C). 8

Mean = $(6 + 8 + 10) / 3 = 8$

