

## CHAPTER-12 | Statistics

## QUIZ-01

1. What type of data is best represented using a bar graph?

- A. Continuous data                      B. Categorical data  
C. Grouped data                          D. Frequency data

(B)

**Explanation:** Bar graphs are best suited for representing categorical or discrete data with distinct categories.

2. What is the class mark of the interval 140 - 150?

- A. 140    B. 145  
C. 150    D. 155

(B)

**Explanation:** Class mark =  $(\text{Upper limit} + \text{Lower limit}) / 2 = (150 + 140) / 2 = 145$ .

3. In a histogram, the area of each rectangle is proportional to :

- A. Height                                      B. Width  
C. Class interval                          D. Frequency

(D)

**Explanation:** In histograms, the area of each rectangle represents the frequency of the corresponding class.

4. Which graphical tool is suitable for comparing two sets of similar data?

- A. Bar graph                                  B. Histogram  
C. Frequency Polygon                      D. Line graph

(C)

**Explanation:** Frequency polygons help compare multiple datasets on the same graph using class marks.

5. What modification is done in histograms with unequal class widths?

- A. Change class intervals                  B. Use bar graph  
C. Adjust rectangle heights              D. Use pie chart

(C)

**Explanation:** Heights are adjusted to maintain area proportionality with frequency when class widths vary.

6. Which of the following graphs does not have gaps between bars?

- A. Bar graph                                  B. Line graph  
C. Histogram                                  D. Pie chart

(C)

**Explanation:** Histograms are used for continuous data and do not have gaps between bars.

7. What is shown on the x-axis in a bar graph representing monthly expenses?

- A. Expenses                                  B. Months  
C. Frequency                                  D. Values

(B)

**Explanation:** The variable 'month' is plotted on the x-axis, while expenses are on the y-axis.

8. Which of these is essential to construct a frequency polygon without a histogram?

- A. Frequencies                                  B. Class width  
C. Class marks                                  D. Cumulative frequency

(C)

**Explanation:** To draw a frequency polygon without histogram, class marks are required.

9. In a frequency polygon, which point is used before the first class?

- A. Class width                                  B. Zero frequency midpoint  
C. Cumulative frequency                      D. Class interval

(B)

**Explanation:** A zero frequency class before the first interval is assumed, and its midpoint is used to start the polygon.

10. Which of the following is not a graphical representation discussed in the chapter?

- A. Bar Graph                                  B. Histogram  
C. Frequency Polygon                          D. Pie Chart

(D)

**Explanation:** Pie chart is not covered in this chapter; only bar graph, histogram, and frequency polygon are discussed.