

1. What is the measure of central tendency that represents the middle value of a dataset?
  - a. Mean
  - b. Median
  - c. Mode
  - d. Range
2. Which statistic is not affected by outliers in a dataset?
  - a. Mean
  - b. Median
  - c. Mode
  - d. Range
3. The difference between the maximum and minimum values in a dataset is known as:
  - a. Mean
  - b. Median
  - c. Mode
  - d. Range
4. What is the square root of the variance?
  - a. Range
  - b. Standard Deviation
  - c. Mean
  - d. Median
5. Which of the following is not a measure of central tendency?
  - a. Mean
  - b. Median
  - c. Mode
  - d. Variance
6. What is the middle value of a dataset when it is arranged in ascending order?
  - a. Mean
  - b. Median
  - c. Mode
  - d. Variance
7. Which measure of central tendency can be applied to both numerical and categorical data?
  - a. Mean
  - b. Median
  - c. Mode
  - d. Range

8. What is the measure of variability that represents the difference between the upper and lower quartiles?

- a. Variance
- b. Standard Deviation
- c. Interquartile Range (IQR)
- d. Mean

9. What is the primary purpose of descriptive statistics in data analysis?

- a. To make predictions about future events.
- b. To summarise and describe the main features of a dataset.
- c. To test hypotheses and draw conclusions.
- d. To identify relationships between variables.

10. Quartiles divide a dataset into how many equal parts?

- a. Two
- b. Three
- c. Four
- d. Five

11. Which measure of central tendency is influenced the most by extreme values?

- a. Mean
- b. Median
- c. Mode
- d. Range

12. What do we call the values that fall outside the upper and lower fences?

- a. Outliers
- b. Quartiles
- c. Medians
- d. Modes

13. The sum of the squared differences between each data point and the mean is called?

- a. Range
- b. Variance  $\times (n-1)$
- c. Interquartile Range (IQR)
- d. Standard Deviation

14. Which statistic represents the most frequently occurring value in a dataset?

- a. Mean
- b. Median
- c. Mode
- d. Range

15. The first quartile (Q1) represents the:
- a. Lower 25% of the data
  - b. Lower 50% of the data
  - c. Upper 25% of the data
  - d. Upper 50% of the data
16. What does the standard deviation of a dataset indicate?
- a. The square root of the variance.
  - b. The difference between the maximum and minimum values.
  - c. The centre point of the data.
  - d. The spread or dispersion of the data around the mean.
17. The middle 50% of the data is represented by:
- a. Mean
  - b. Median
  - c. Interquartile Range (IQR)
  - d. Standard Deviation
18. The range is a measure of:
- a. Central tendency
  - b. Variability
  - c. Dispersion
  - d. Symmetry
19. In a perfectly symmetrical dataset, the mean, median, and mode:
- a. Are all equal
  - b. Are all different
  - c. Are unrelated
  - d. Depend on the sample size
20. What is the primary advantage of using the median over the mean?
- a. It is easier to calculate
  - b. It is less affected by outliers
  - c. It always represents the centre of the data
  - d. It is suitable for both numerical and categorical data