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 summarize 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

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 center 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 center of the data

d. It is suitable for both numerical and categorical data