Resource: 4-NumericalDescriptiveMeasures_Dispersion.pdf

Total Weightage: 5 (auto-calculated)
Time Limit: 10 minutes

1. Which of the following is a disadvantage of using the range as a measure of dispersion?

(Difficulty: medium, Marks: 1)

1) It is influenced by outliers.
2) It is not influenced by outliers.
3) It considers all values in the data set.
4) It is not affected by extreme values.

2. What does a lower value of the standard deviation for a data set indicate?

(Difficulty: medium, Marks: 1)

1) The values are spread over a relatively smaller range around the mean.
2) The values are spread evenly across the dataset.
3) The values are clustered far from the mean.
4) The values are spread over a relatively larger range around the mean.

3. Which theorem states that for any number k greater than 1, at least $(1 - 1/k^2)$ percentage of the data values lie within k standard deviations of the mean?

(Difficulty: medium, Marks: 1)

1) Empirical Rule
2) Central Limit Theorem
3) Chebyshev's Theorem
4) Bayes' Theorem

4. What is the primary reason for studying dispersion in a set of data?

(Difficulty: medium, Marks: 1)

1) To describe the center of the data
2) To compare the spread in two or more distributions
3) To calculate the mean of the data
4) To identify outliers in the data

5. Which of the following is the most used measure of dispersion?

(Difficulty: medium, Marks: 1)

1) Range
2) Mean deviation
3) Standard deviation
4) Variance