Central tendency and its types

1. Tick (✓) the correct answer.

A. What is a measure of central tendency?

i) A single value that describes the way in which a group of data cluster around a central value.

ii) A single value that describes how spread out a group of data us.

iii) Several values that describes the way in which a group of data is spread out.

iv) Several values that describe the way in which a group of data cluster around a central value.

B. Which of the following in NOT a measure of central tendency?

- i) Mean
- ii) Median
- iii) Mode
- iv) Variance

C. Which of the following is NOT true regarding the mean?

i) The mean is calculated by dividing the sum of the data by the total number of data.

ii) The mean is also called the average.

iii) The mean is the preferred measure of central tendency because it considers all the values in the data set.

iv) The mean is good for data sets that contain outliers.

D. In which of these situations would you use the mode to measure the central tendency of the data?

i) Sam asks the students in his class to identify their favorite colours and wants to know which colour is the most common.

ii) Justin records the temperature at noon every day for two weeks and wants to know the temperature of a typical day.

iii) Juliana measures the height of all the girls on her soccer team and wants to know the typical height of a soccer player.

iv) You would use the mean in all of these situations.

E. When is median a better choice than mean?

i) When the data is normally distributed and has no outliers.

- ii) When the data is skewed or has outliers.
- iii) When the standard deviation is very small.
- iv) When the data is non-numerical.