## Summary

- Literally, dispersion means deviation, difference or spread of certain values from their central value.
- In relation to statistical series, it means, deviation of various items of a series from its central value.
- Moreover, the word "measure refers to a method of measuring certain values.
- Thus, the phrase measure of dispersion refers to various possible methods of measuring the dispersions of different values from average value or any other extreme value.
- In measuring the dispersion we shall be interested in the amount of variation or its degree but not its direction.
- The various measures of central tendency give us one single figure that represents the entire data.
- The averages alone cannot adequately describe a set of observations, unless all the observations are alike.
- We also need to make a note that at times the data set may have the same central values but contain a lot of disparities in the formation of the distributions.
- So the characteristics that we can emphasis are:
    - There could be two distributions with the same mean but with different dispersions.
    - There could be two distributions with the same dispersion but with unequal means (X1 and X2).
    - There could be two dispersions with unequal means and unequal dispersions.
- The above characteristics of the data gives out the need for a measure to support and supplement the data, and a measure of dispersion is designed to state the extent to which the individual measures differ on an average from the mean.