Measure of central tendency: A value around which the data has tendency to congregate or cluster.

Measure of dispersion (scatter): around average a value which measures the degree to which the data are or not spread out .

Mode :highest (most) frequency in set of observation.
Median:the middle value in ordered data (From the lowest to the highest values).

Mean: is the sum of value of all observation divided by the total number of observation.

Range: the distance from the smallest to the largest .
Standard deviation:the mean (average)distance of all data values from the over all mean of all values.

Variance: the average of squared deviation of observation from the mean in a set of data.

Coefficient of variation: it is representing by measuring the variation in relation to the percentage of mean of that data.

Individual measurement = sample
Set of average = population
Standard error: the standard deviation for a set of average .

Multimodal: have more than one point of concentration.
Unimodal: have single point of concentration.
Kurtosis: the state or quality of flatness or peakedness of a distribution.

Large kurtosis: high concentration of data in the middle and out on the tails, but little in between.

Little kurtosis: flat in the middle and has thin tails.

Standard normal

1) mean $=0$
2) Standard deviation=1

Sampling error: difference between sample statistics and population parameters.

Standard error : the average standard deviation of the sample mean from the population mean of the population.
S.D ( single sample).
S.E ( all sample).

Confidence Interval: the range of the variability of population mean around the sample mean.

Hypothesis: statement about parameters in a population or populations.

Null hypothesis $\left(\mathrm{H}^{\circ}\right)$ : this is usually a statement of no difference.

Level of significance: probability of type I error. (الفا)
$B(ب ي)$ ): probability of type II error.

اذا p أكبر من نسبة 5\% هون بصير استقبال ل H1 ورفض ل H1
اذا p اقل من نسبة 5\% هون بصير استقبال H1 ورفض ل لـ

