# Glossary

1. **Distribution free tests:** These are based on very mild and fewer assumptions.
2. **$F_n(x)$ =** Empirical cumulative distribution function of a random variable X.
3. **F(x) =** Cumulative distribution function of a random variable X.
4. **Run :** A run is defined as a sequence of letters of one kind surrounded by a sequence of letters of the other kind and the number of elements in a run is usually referred to as the length(L) of the run".

5. **Length of run(L) :** Number of letters of one kind in a sequence of letters say, in sequence $x_1$, $x_2$, $y_1$, $y_2$, $y_3$, $y_4$; here, we have in order, a run of x = 2 (i.e. L = 2), a run of y = 4,(i.e. L= 4).

6. **Ranks:** It refers to the data transformation in which numerical or ordinal values are replaced by their rank when the data are sorted.

7. **Goodness of fit** : It is to test the hypothesis that he sample observations $x_1$, $x_2$, …, $x_n$ is from specified distribution $F_0$ against the alternative that it is from some other distribution
8. **Parameter :** The constant of a population.
9. **Statistic :** Function of the sample observations or it is a sample constant
10. **Median :** It is the middle most value in the given set of orderly data.