## **STATISTICS**

- 1.Total Variation = Residual Variation + Regression Variation
- 2.Binomial
- 3.2
- 4.Type I Error
- 5. Size of the test
- 6.Increase
- 7. Hypothesis
- 8. Minimize errors
- 9.0

# 10. Bayes Theorem

The conditional probability of an event, based on the occurrence of another event, is equal to the likelihood of the second event given the first event multiplied by the probability of the first event.

$$P(A/B) = (P(B/A) P(A))/P(B)$$

# 11. Z-Score

A Z-score is a numerical measurement that describes a value's relationship to the mean of a group of values. Z-score is measured in terms of standard deviations from the mean. If a

Z-score is 0, it indicates that the data point's score is identical to the mean score.

## 12. T-Test

A **t-test** is an inferential statistic used to determine if there is a significant difference between the means of two groups and how they are related.

## 13.Percentile

A measure used in statistics indicating the value below which a given percentage of observations in a group of observations fall.

#### 14. ANOVA

# **Analysis Of Variance**

An **ANOVA** test is a way to find out if survey or experiment results are significant. In other words, they help you to figure out if you need to reject the null hypothesis or accept the alternate hypothesis.

# 15. How can ANOVA help?

ANOVA is helpful for testing three or more variables. It is similar to multiple two-sample t-tests. However, it results in fewer type I errors and is appropriate for a range of issues