# **GLOSSARY**

# 1. Average

The result obtained by adding several quantities together and then dividing this total by the number of quantities.

#### 2. Constant

A specific quantity that is always invariable.

#### 3. Correlation

It is the simultaneous change in value of two numerically valued random variables.

# 4. Covariance

Covariance is a measure of how much two random variables change together.

# 5. Distribution

A set of numbers and their frequency of occurrence collected from measurements over a statistical population.

# 6. Expectation

The expected value of a random variable.

# 7. Integral

A number computed by a limiting process in which the domain of a function, often an interval or planar region, is divided into arbitrarily small units, the value of the function at a point in each unit is multiplied by the linear or areal measurement of that unit, and all such products are summed.

#### 8. Negative Covariance

Indicates that higher than average values of one variable tend to be paired with lower than average values of the other variable.

# 9. Parameter

In Statistics, a quantity, such as a mean, that is calculated from data and describes a population.

#### 10. Positive Covariance

Indicates that higher than average values of one variable tend to be paired with higher than average values of the other variable.

#### 11. Summation

The act or process of determining a sum.

# 12. Variable

A quantity capable of assuming any of a set of values.

#### 13. Variate

It is a random variable with a numerical value that is defined on a given sample space.

#### 14. Variance

The square of the standard deviation.

# 15. Zero Covariance

If the two random variables are independent, the covariance will be zero.