# **Glossary**

#### 1. Curve

The graph of a function on a coordinate plane.

### 2. Distribution

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

### 3. Kurtosis

In Statistic, it is a measure of the concentration of a distribution around its mean.

# 4. Monograph

A scholarly piece of writing of essay or book length on a specific, often limited subject.

## 5. **Moment Generating Function**

In probability theory and <u>statistics</u>, the moment-generating function of any random variable is an alternative definition of its <u>probability distribution</u>. Thus, it provides the basis of an alternative route to analytical results compared with working directly with <u>probability density functions</u> or <u>cumulative distribution functions</u>.

#### 6. Normal Distribution

A theoretical frequency distribution for a set of variable data, usually represented by a bell-shaped curve symmetrical about the mean.

## 7. Origin

The point of intersection of coordinate axes, as in the Cartesian coordinate system.

### 8. Parameter

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

# 9. **Probability**

A number expressing the likelihood that a specific event will occur, expressed as the ratio of the number of actual occurrences to the number of possible occurrences.

## 10. Probability Density Function

A function of a continuous random variable, whose integral across an interval gives the probability that the value of the variable lies within the same interval.

### 11. Skewness

In Statistic, it is a measure of the symmetry of a distribution around its mean.

## 12. **Symmetry**

An exact correspondence in position or form about a given point, line, or plane.

#### 13. Variate

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

### 14. Variable

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

#### 15. Variance

The square of the standard deviation.