Glossary

1. Regression

The statistical tool with the help of which we are in a position to estimate or predict the unknown vales of one variable from known values of another variable is called regression.

2. Simple Regression

The regression study, which confines itself to a study of only two variables, is called simple regression.

3. Multiple Regression

The regression analysis, which studies more than two variables at a time, is called multiple regressions.

4. Scatter Diagram

Scatter Diagram is a type of mathematical diagram using Cartesian coordinates to display values for two variables for a set of data.

5. Regression Line

A regression line is a line drawn through a Scatterplot of two variables. The line is chosen so that it comes as close to the points as possible.

6. Coefficient

A coefficient is a multiplicative factor in some term of an expression (or of a series); it is usually a number, but in any case does not involve any variables of the expression.

7. Correlation

Correlation refers to any of a broad class of statistical relationships involving dependence.

8. Random Variable

A random variable or stochastic variable is a variable whose value is subject to variations due to chance (i.e. randomness, in a mathematical sense).

9. Homogeneous

Homogeneous is of the same or similar nature or kind.

10. Root Mean Square

The root mean square (abbreviated as RMS or rms), also known as the quadratic mean, is a statistical measure of the magnitude of a varying quantity. It is especially useful when variates are positive and negative.

11. Standard Deviation

Standard deviation (represented by the symbol σ) shows how much variation or "dispersion" exists from the average (mean, or expected value).

12. Regression Analysis

Regression analysis includes many techniques for modelling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables.

13. Homescedastic

In statistics, a sequence or a vector of random variables is homoscedastic, if all random variables in the sequence or vector have the same finite variance. This is also known as homogeneity of variance.

14. Heteroscedasticity

In statistics, a collection of random variables is heteroscedastic if there are subpopulations that have different variability's from others. Thus, heteroscedasticity is the absence of homoscedasticity.

15. Experimental Error

An experimental error may be caused due to human inaccuracies like a wrong experimental setup in a science experiment or choosing the wrong set of people.