[Glossary]

Correlation

Subject:	Business Economics
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Unit No. & Title:	Unit – 3 Multivariate Analysis
Lecture No. & Title:	Lecture – 1 Correlation

Glossary

Correlation coefficient: It is a numerical measure which shows the degree and direction of the relationship between the correlated variable and is usually denoted by 'r'.

Correlation: Correlation means the direct or indirect cause and effect relationship between two variables of a bi-variate data. i.e. when the changes in the values of two variables is simultaneous and the value of one variable changes due to the change in the value of other variable then two variables are called correlated.

Karl Pearson's product moment method: The ***Karl Pearson's*** correlation coefficient is a ratio of covariance between two variables to the product of their standard deviations.

Multiple Correlation: It means the correlation between one variable and the linear combination of other variable.

Negative correlation: It means the changes in the values of two variables are in opposite direction. For example population and per capita income of a country.

Positive correlation: It means the changes in the values of two variables are in same direction. For example unemployment and poverty in a region.

Probable Error: An average of the absolute differences between population correlation coefficient and all possible sample correlation coefficients is called probable error (PE).

Scatter diagram method: This method shows the graphical presentation of the data, by taking the values of variable x on $x - axis$ and values of variable y on $y - axis$.

Spearman's Rank Method: When the characteristic under study is not measured in terms of numbers then it is known as qualitative data or attributes and for that types of data, Spearman’s Rank Method is used.