

[Summary]

Regression

Subject:

Course:

Paper No. & Title:

Business Economics

B. A. (Hons.), 1st Semester, Undergraduate

Paper – 102 Statistics for Business Economics

Unit No. & Title:

Unit – 3 Multivariate Analysis

Lecture No. & Title:

Lecture – 2 Regression

Summary

- A mathematical or functional relationship between two variables is called regression.
- The least square principle is "draw a line which minimize the distance between the points and a line"
- A line obtained by applying least square principle is called regression line or a line of average relationship or best fitted line.
- A numerical measure which shows probable change in the values of dependent variable for a unit change in the value of independent variable is called regression coefficient.
- In practice a regression line of dependent variable on independent variable is obtained.
- In the case of perfect correlation two regression lines are coinside and vice-versa.
- In the case of no linear correlation two regression lines are perpendicular to each other and vice-versa.
- Two regression lines intersect each other at the point (\bar{x}, \bar{y})
- The standard error of the estimates measures the variability or scatter of the observed values around the regression line.