



Dempo Charities Trust's  
DHEMPE COLLEGE OF ARTS & SCIENCE  
Miramar, Panaji-Goa

## BASIC STATISTICS AND ECONOMETRICS COURSE

### **Course objective:**

To develop in students the data analysis and interpretation skill with a theoretical background.

### **Course Content:**

#### **Module I:**

Introduction to statistics – Data sources and data organisation. Measures of central tendency – Mean, Median and Mode.) Measures of dispersion (Range, Standard Deviation and coefficient of variation.

#### **Module II:**

Introduction to the Theory of probability – Probability density function, Theoretical distributions – Introduction to normal distribution, standard normal distribution , t- distribution ,chi-square and F-distribution.

#### **Module III:**

Statistical testing – Null and alternative hypothesis- Z test , t test , F test ,ANOVA

#### **Module IV:**

Introduction to Econometrics-assumptions- OLS procedure to estimate regression coefficients- Econometric model building (simple and multiple) and interpretation – Rsquare ,F values and P value. Functional forms in econometrics.

**Module V:**

Problems of Econometrics-Heteroscedasticity, autocorrelation and multicollinearity

**Course outcome:**

Students will be able to analyse, interpret socio economic data and derive conclusions and policy prescriptions.