Consolidated Course Papers for S.Y.B.C.A. (SEM - III & SEM – IV)
Academic Year of Implementation: 2021-2022

Course: 301: Statistical Methods

Course Code	301
Course Title	Statistical Methods
Credit	2
Teaching per Week	2 Hrs
Minimum weeks per Semester	15 (Including Class work, examination, preparation etc.)
Review / Revision	June 2021
Purpose of Course	To develop statistical problems solving abilities relevant to Computer Science.
Course Objective	1. To make students understand various statistical methods. 2. To develop the ability to compute descriptive statistics including diagrammatic representation and interpretation. 3. To be able to carry out simple linear regression analysis.
Pre-requisite	None
Course Out come	Ability to use computers to analyze data.
Course Content	**Unit 1. Introduction and Presentation of statistical data** Types of variables Univariate, bivariate and multivariate data Univariate and bivariate frequency distributions **Unit 2. Measure of central tendency-mean, median and mode** **Unit 3. Measures of dispersion (absolute as well as relative)** Mean deviation Standard deviation Coefficient of mean deviation and coefficient of variation **Unit 4. Correlation** Introduction Types of correlation and scatter diagrams Rank correlation coefficient **Unit 5. Regression** Concept of dependent and independent variables Introduction to liner regression Line of regression (with one independent variable) Methods should be explained conceptually and corresponding examples should be given. No proof should be given to any of the methods.

Reference Book	1. Introduction to mathematical statistics, Hogg R V & Craig A L - Tata McGraw Hill 2. An introduction to the theory of statistics, Yule U G & Kendall MG – C. Griffin & Co. 3. Statistical Methods, S. P. Gupta – Sultan Chand & Co
Teaching Methodology	Class Work, Discussion, Self-Study, Seminars and/or Assignments
Evaluation Method	30% Internal assessment. 70% External assessment.