ST. JOSEPH'S EVENING COLLEGE (AUTONOMOUS)

DEPARTMENT OF COMPUTER APPLICATIONS
TEACHING LESSON PLAN FOR PROBABILITY AND STATISTICS
BCA 1st Semester (June, 2018 to September, 2018)

Objective of the subject: To help students understand applications of statistics in the field of computer.

Name of the Faculty: Mr. John Paul J

Time/Hours required – 60 hrs

Sl. No.	Module and Topics	No. of Hours.	Teaching methods	Evaluation of Learning process
Unit I	Definition, Function and Scope of Statistics.	4	Lecture	Exercise problems
Unit II	Arithmetic Mean, Weighted A.M., Median, Mode, Geometric and Harmonic Mean, their Merits and Demerits.	6	Lecture	Exercise problems and Assignment problems
Unit III	Range, The Interquartile Range or Quartile Deviation, Average (Mean), Deviation Standard Deviation, Coefficient of Variation, Skewness, Moments & Kurtosis.	10	Lecture	Exercise problems and Assignment problems
Unit IV	Introduction, Karl Pearson's Coefficient of Correlation, Rank Correlation Coefficient, Coefficient of determination.	6	Lecture	Exercise problems and Assignment problems
Unit V	Difference Between Correlation & Regression, Regression Lines, Regression Equations, Regressions Coefficient. Method of least squares.	8	Lecture	Exercise problems and Assignment problems

Unit VI	Introduction, Events & Different Types of Events, Addition and Multiplication Law, Conditional Probability, Baye's Theorem.	6	Lecture	Exercise problems and Assignment problems
Unit VII	Random Variables, Probability Function, Binomial Poison and Normal Distribution.	4	Lecture	Exercise problems and Assignment problems
Unit VIII	Chi Square (X2) Distribution and Its Properties, Chi - Square Test, Application of Chi - Square Distribution: Chi-Square Test for Population Variance, Chi- Square Test of Goodness of Fit, Independence of Attributes, T- Distribution and Its Properties, Application of T - Distribution to Testing Hypothesis About Population Mean, Difference Between Two Means, Correlation Coefficient.	16	Lecture	Exercise problems and Assignment problems