

CLO1, CLO2	Elements of Statistics: Nature and scope of statistics, Nature & representation of statistical data; Attributes and variables; population and sample, discrete and continuous variables.	Lecture Discussion Problem Based Learning (PBL)	Essay Type Answer Exercise
CLO1, CLO2	Method of data collection: Interviews, Questionnaires and surveys, Observations, Documents and records, Focus groups, Oral histories.	Lecture Discussion Problem Based Learning (PBL)	Essay Type Answer Home Exercise
CLO1, CLO2	Sampling procedure: Simple random, stratified, systematic and cluster sampling technique.	Lecture Discussion Problem Based Learning (PBL)	Essay Type Answer Exercise
CLO1	Measures of location: Characteristics of an ideal measure; Arithmetic mean; Geometric mean; Harmonic mean; Median; Mode.	Lecture Discussion Problem Based Learning (PBL) Demonstration	Essay Type Answer Exercise
CLO1, CL02	Measure of dispersion: Characteristics of an ideal measure: Absolute & Relative measures; Range; Standard deviation; Mean deviation; Quartile deviation; Quartiles; Deciles; Percentiles; Coefficient of dispersion; Coefficient of variation; Skewness and kurtosis.	Lecture Group Assignment Problem Based Learning (PBL)	Essay Type Answer Report Exercise
CLO4	Elements of Probability: Meaning and definition of probability; A priori and a posteriori probability; Basic terminology of probability; Random variables; Probability function; Expectation of sum and products.	Lecture Discussion Problem Based Learning (PBL)	Essay Type Answer Exercise
CLO4	Probability Distribution: Binomial, Poisson, Normal & Exponential distribution.	Lecture Problem Based Learning (PBL)	Essay Type Answer Home Exercise

CLO3, CL02	Regression and correlation: Relationship between variables; Fitting of regression lines; Simple correlation; Rank correlation; Multiple correlation and regression.	Lecture Group Assignment Problem Based Learning (PBL)	Essay Type Answer Report Exercise Presentation
CLO3	Tests of Significance: Tests of means, Variance, Correlation coefficient, regression coefficient and associations, model validation.	Lecture Individual Assignment Problem Based Learning (PBL)	Essay Type Answer Exercise Presentation