DSE-E13: Probability Distributions

The students will acquire:

CO 78-Knowledge of important univariate distributions such as Laplace, Cauchy, Lognormal, Weibull, Logistic, Pareto, Power Series Distribution.

CO 79- Knowledge of Multinomial and Bivariate Normal Distribution.

CO 80- Knowledge of Truncated Distributions.

CO 81- Information of various measures of these probability distributions.

CO 82-Acumen to apply standard continuous probability distributions to different situations.

DSE-E14: Statistical Inference-I

The students will acquire:

CO 83- Knowledge about important inferential aspect of point estimation.

CO 84- Concept of random sample from a distribution, sampling distribution of a statistic, standard error of important estimates such as mean and proportions.

CO 85- Knowledge of various important properties of estimator,

CO 86- Knowledge about inference of parameters of standard discrete and continuous distributions.

CO 87- Concept of Fisher information and CR inequality.

CO 88- Knowledge of different methods of estimation.

DSE-E15: Design of Experiments

The students will acquire:

CO 89- Knowledge of basic terms used in design of experiments.

CO 90- Concept of one-way and two-way analysis of variance.

CO 91- Knowledge of various designs of experiments such as CRD, RBD, LSD and factorial experiments.

CO 92- Knowledge of using an appropriate experimental design to analyze the experimental data

DSE-E16: R-Programming and Quality Management

The students will acquire:

CO 93- Importance of R- programming

CO 94- Knowledge of identifiers and operators used in R.

CO 95- Knowledge of conditional statements and Loops used in R.

CO 96- Knowledge of quality tools used in Quality management.

CO 97- Knowledge of process and product control used in Quality management.

DSE-F13: Probability Theory and Applications

The students will acquire:

CO 98- Knowledge about order statistics and associated distributions

CO 99- Concept of convergence and Chebychev's inequality and its uses

CO 100- Concept of law large numbers and central limit theorem and its uses.

CO 101- Knowledge of terms involved in reliability theory as well as concepts and measures.

DSE-F14: Statistical Inference-II

The students will acquire:

CO 102- Concept of interval estimation.

CO 103- Knowledge of interval estimation of mean, variance and population proportion.

CO 104- Knowledge of important aspect of test of hypothesis and associated concept.

CO 105- Concept about parametric and non-parametric methods.

CO 106- Knowledge of some important parametric as well as non–parametric tests.

DSE-F15: Sampling Theory

The students will acquire:

CO 107- Basic knowledge of complete enumeration and sample, sampling frame sampling distribution, sampling and non-sampling errors, principle steps in sample surveys, sample size determination, limitations of sampling etc.

CO 108- Concept of various sampling methods such as simple random sampling, stratified random sampling, systematic sampling and cluster sampling.

CO 109- An idea of conducting sample surveys and selecting appropriate sampling techniques.

CO 110- Knowledge of comparing various sampling techniques.

CO 111- Knowledge of ratio and regression estimators.

DSE-F16: Operations Research

The students will acquire:

CO 112- Concept of Linear programming problem.

CO 113- Knowledge of solving LPP by graphical and Simplex method.

CO 114- Knowledge of Transportation, Assignment and Sequencing problems.

CO 115- Concept of queuing theory.

CO 116- Knowledge of simulation technique and Monte Carlo technique of simulation.