

Course Outcomes (COs): Statistics

B.Sc. Part III Statistics (Introduced in the year 2020-21)	
Semester V	
Probability Distributions (DSE 1004E1)	
CO No.	On completion of the course, student will be able to:
CO1	Understand the concept of standard continuous distributions.
CO2	Apply standard continuous probability distributions to different real life data/situations.
CO3	Learn the concept of truncated distribution and its applications
CO4	Learn Multinomial distribution and Bivariate Normal Distribution.
CO5	Understand necessity of order statistics and its distributions.
CO6	Implement various laws of probability to get solution for different problems in Statistics.
CO7	Understand basic concepts of stochastic processes and their applications.
CO8	Apply Queuing theory and its real-life situations.
Sampling Theory & Operations Research (DSE 1004E2)	
CO No.	On completion of the course, student will be able to:
CO1	Design and execute sample surveys and learn various sampling methods
CO2	Conduct sample surveys and select appropriate sampling techniques.
CO3	Compare various sampling techniques.
CO4	Learn different methods of estimation using auxiliary variables
CO5	Convert practical situations to the format of linear programming problem and solve Linear Programming Problems.
CO6	Understand special cases of LPP viz. transportation problem, assignment problem.
CO7	Learn different decision-making environments
CO8	Simulate random numbers from different distributions.
Semester VI	
Statistical Inference (DSE 1004F1)	
CO No.	On completion of the course, student will be able to:
CO1	Get acquainted with notion of parameter and estimator.

CO2	Understand concept of point estimation and learn important properties of estimator.
CO3	Understand concept of CR inequality.
CO4	know different methods of estimation.
CO5	Understand concept of interval estimation.
CO6	Learn concept of testing of hypothesis and different test procedures.
CO7	Learn nonparametric statistical inference.
CO8	Learn comparative study of parametric test and non-parametric tests.
Design of Experiments, Quality Management & Data Mining (DSE 1004F2)	
CO No.	On completion of the course, student will be able to:
CO1	Understand the basic terms in design of experiments carry out one-way and two-way analysis of variance.
CO2	Apply appropriate experimental design in real life.
CO3	Understand concept of efficiency of design and ANOCOVA.
CO4	Understand factorial experiments and confounding.
CO5	Learn concepts of quality and tools used in quality management.
CO6	Learn various control charts for monitoring process control
CO7	Understand different sampling plans for product control.
CO8	Know basics of data mining.




HEAD
 DEPARTMENT OF STATISTICS
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