

Programme Specific Outcome (PSO)

After successfully completing B.Sc. Statistics Programme students will be able to:

PSO1: Develop a positive attitude towards statistics as an interesting and valuable subject of study.

PSO2: Acquire good knowledge of the basic concepts of statistics which include the major areas of Mathematical and Applied Statistics.

PSO3: Practical's done will enable students to analyze and interpret data and also to draw valid conclusions. This will enable students to face real life applications.

PSO4: To understand and develop the necessary computer skill in practical by using MS-Excel, R- software.

PSO5: Peruse as higher studies in Statistics in reputed institute of our country like IITs, ISI and central universities and to appear in several competitive examination like MPSC, UPSC, RBI, Railways, SSC.

PSO6: To pursue advanced studies and research in statistics.

Course Outcome (CO) - F. Y. B. Sc. (2023-24)

Course Title: - DSC 7A – DESCRIPTIVE STATISTICS – I

Upon Completion of this course the students will be able to:

CO1: Meaning and scope of Statistics, various statistical organizations

CO2: Data and types of data, various data presenting methods

CO3: Population, sample and various methods of sampling.

CO4: Various measures of central tendencies and dispersion

CO5: Moments, skewness and kurtosis.

Course Title: - DSC – 8A ELEMENTARY PROBABILITY THEORY

Upon Completion of this course the students will be able to:

CO1: Distinguish between random and non-random experiments

CO2: Acquire knowledge of concepts of probability

CO3: Use the basic probability rules, including additive and multiplicative laws.

CO4: Understand concept of conditional probability and independence of events.

CO5: Understand concept of univariate random variable and its probability distributions.

CO6: Acquire knowledge of mathematical expectation of univariate random variable.

Course Title: - DSC – 7B DESCRIPTIVE STATISTICS – II

Upon Completion of this course the students will be able to:

CO1: Correlation coefficient and interpret its value.

CO2: Regression coefficients, interpret its value and use in regression analysis.

CO3: Qualitative data including concept of independence and association between two attributes

CO4: Vital statistics and concept of mortality and fertility and growth rates.

Course Title: - DSC – 8B DISCRETE PROBABILITY DISTRIBUTIONS

Upon Completion of this course the students will be able to:

CO1: Bivariate discrete distributions, independence of bivariate r.v.s., Mathematical expectation of bivariate discrete random variable.

CO2: One point distribution, two point distribution, Bernoulli distribution.

CO3: Uniform distribution, Binomial distribution, Hypergeometric distribution.

CO4: Poisson distribution, Geometric distribution and Negative binomial distribution.

Course Outcome (CO) - S. Y. B. Sc. (2023-24)

Course Title: - DSC – C7– Probability Distributions – I

Upon Completion of this course the students will be able to:

CO1: Bivariate discrete distributions with real life situations.

CO2: Continuous random variable and find the various measures, probabilities using its probability distribution.

CO3: Transformation of univariate continuous random variable.

CO4: Some standard continuous probability distributions with real life situations.

CO5: The relations among the different distributions.

Course Title: DSC – C8 Statistical Methods–I

Upon Completion of this course the students will be able to:

- CO1:** Obtaining multiple linear regression equations and their applications.
CO2: The concept of multiple correlations, partial correlation and their computations.
CO3: Need, construction and utility of various index numbers.
CO4: The concepts related to national income and different methods of estimation of national income.

Course Title: - DSC – D7 Probability Distributions – II

Upon Completion of this course the students will be able to:

- CO1:** some standard continuous probability distributions with real life situations
CO2: finding the various measures of continuous random variable and probabilities by using its probability distributions
CO3: the relationships among different distributions
CO4: continuous bivariate r.v.s. And probability distributions of their transformations.
CO5: concept of sampling distribution of a statistic.
CO6: some sampling distributions of a statistic: Normal, Chi-Square, t and F distributions with their applications and interrelations

Course Title: DSC – D8 Statistical Methods – II

Upon Completion of this course the students will be able to:

- CO1:** The concept and use of time series analysis.
CO 2: The meaning, purpose and use of Statistical Quality Control, construction and working of control charts for variables and attributes.
CO 3: Applying the appropriate small sample tests and large sample tests in various situations.