

DEPARTMENT OF STATISTICS

PROGRAMME SPECIFIC OUTCOMES

Student of B.Sc. with major in Statistics should

- PSO 1: Student should be able to recall basic facts about statistics and should be able to display knowledge of conventions such as notations, terminology.
- PSO 2 : A student should get adequate exposure to global and local concerns that explore them many aspects of mathematical sciences.
- PSO 3: Student is equipped with statistical modeling ability, problem solving skills, creative talent and power of communication necessary for various kinds of employment.
- PSO 4: Student should be able to apply their skills and knowledge that is translate Information presented verbally into statistical form, select and use Appropriate statistical formulae or techniques in order to process the Information and draw the relevant conclusion.
- PSO 5: Enabling students to develop a positive attitude towards statistics as an interesting and valuable subject of study.

TARA GOVT DEGREE & P.G COLLEGE SANAREDDY

COURSES AND THEIR OUTCOMES

DEPARTMENT OF STATISTICS

Semester-1:Course(Descriptive Statistics and Probability)-4 Credits

CO1 Translate real world problems into probability models

CO2 The Students will be equipped with the Application of Random variables in Real time problems

CO3 Students will be able to draw the descriptive statistics for the data and interpret the data with the appropriate graphs.

Semester-2:Course(Probability Distributions)-4 Credits

CO1 Derive various descriptive statistics and verify the existence of reproductive property of distribution using generating functions, their limitations and advantages of continuous distributions

CO2 Understand the importance and application of normal distribution.

CO3 Distinguish between discrete and continuous distribution.

Semester-3:Course(Statistical methods and theory of Estimation)-5 Credits

CO1 The course is aimed at exposing the students to learn the various statistical methods and estimation of parameters in distribution theory

CO2 Establish the linear relationship between the two variables by using scatter plots and other correlation methods

CO3 Acquire the ability to engage in independent and lifelong learning in the broadest context of socio economic and technological changes

Semester-4:Course(Statistical inference)-4 Credits

CO1 The purpose of this paper is to draw the inference to the population parameters based on sample tests

CO2 Practical exposure to the small sample test , chi-square and non-parametric tests by using MS-EXCEL

CO3 Recognize the need for and have to ability to engage in independent, lifelong learning and adapt to technological changes to be globally competent

DSC-2E Semester-5: Course(Sampling theory, time series, index number and demand analysis)-3 Credits

CO1 Perform a sample survey, understand the errors in sample design , apply the necessary sampling technique based on the objective

CO2 The utility of index numbers are to provide a value useful for comparing magnitudes of related variables to each other and to measure the changes in this magnitude over time

CO3 Understand the time series data, compute and eliminate trend component using different methods and calculate seasonal indices by various methods

DSC-2E Paper-VI(A) Semester-5: Course(Statistical Quality Control and the reliability)—3 Credits

CO1 Students will be able to apply the control charts for variables and attributes to the problem to ensure that the production process is under control or not

CO2 To arrive on the decision regarding the sample size while implementing acceptance sampling plans

CO3 Understand the concept of natural tolerance limits, specification limits, process capability index and modifying control charts

DSC-2F Paper-VII Semester-6: Course(Design of experiments, vital statistics, official statistics, business forecasting

CO1 To make students understand the function of important statistical organizations like NSSO and CSO

CO2 Students are taught different measures of fertility , mortality and population growth.

CO3 Know the Functioning of various statistical organisations

DSC-2F Semester -6 Course(Operations Research)- 3 Credits

CO1 Students are taught how to find the optimum sequence to a given job sequencing problem

CO2 Students will be able to find optimum solution to a given linear programming problem using various methods.

CO3 Students are taught how to find the optimum sequence to a given job sequence problem.

Generic Elective – GE – 1Basic Statistics – 1 – 2 credits

CO1: The primary reason for teaching probability is to provide students with understanding and to develop their critical thinking about the role of probability in their lives and in mathematics.

CO2: Probability is widely used in all sectors in daily life like sports, weather reports, blood samples , predicting the sex of the baby in the womb, congenital disabilities, statics and many.

CO3: Measures of central tendency or averages give us one value for the distribution and this value represents the entire distribution.

SEC – 4 : Statistical Techniques in Data Mining – 2 Credits

CO1: The main objective of learning methods is prediction and description.

CO2: Data mining is used to explore increasingly large databases and to improve market segmentation

CO3: The main objective of data mining is to identify patterns, trends.