Objectives of Department of Statistics

- To inspire knowledge across different areas in Statistics and Actuarial Science.
- To impart knowledge on Statistical concepts like Data Collection, Measures of Central Tendency and Dispersion, Probability and Distributions, Statistical Methods, Inference, Sampling methods, Experimental Designs, Economical and Vital Statistics, SQC, reliability and Operations Research.
- To impart knowledge on Actuarial Science concepts like basics of Economics, Financial Accounting and Mathematics, Surviving models, life contingences, Business communication, Actuarial Statistics , Mortality and Insurance,
- To equip our students with good quality to appear for competitive examinations.
- To make the students to understand the needs of Statistics and Actuarial Science in Science ,Technology and various industries like manufacturing, construction, insurance, IT, etc.
- To inculcate research atmosphere among students by assigning projects.

The Department of Statistics is offering B.Sc. courses MSCs and MSAs, B.Sc. Professional (B.Voc.) for undergraduate courses.

Course Outcomes of Statistics:

SEM-I: Paper-I: (Descriptive Statistics and probability)
After completion of this course the student is able to:

CO1: Understand the have the basic knowledge on data collection and various statistical

elementary tools.

CO2:Have the critical thinking in the theory of probability and its applications in real life

problems.

SEM-II: Paper-II:(Mathematical Expectations and Probability distributions)
After completion of this course the student is able to:

CO1: Made a bridge between the elementary statistical tools and probability theory.

CO2: Apply the theoretical discrete probability distributions like binomial, Poisson, etc., in the

relevant application areas.

CO3: Apply the theoretical continuous probability distributions like Normal, Exponential, etc., in

the relevant application areas.

SEM-III: Paper-III:(Statistical Methods and Inference)
After completion of this course the student is able to:

CO1: Find the inter-relation between two or more phenomena with the help of curve fitting and

correlation-regression analysis.

CO2: Understand the basic components of sampling and have the knowledge on exact sampling

distributions which are essential for estimating and testing hypothetical statements.

CO3: Find a best estimator with reference the different criteria in case of real life applications.d

questionnaires.

SEM-IV: Paper-IV: (Testing of hypothesis)
After completion of this course the student is able to:

CO1: Understand critically the problems that are faced in testing of a hypothesis with reference

to the errors in decision making.

CO2: Apply the different testing tools like t-test, F-test, chi-square test, sign test, run test, etc to

analyse the relevant real life problems.

SEM-V: Paper-V:(Sampling theory and Design of Experiments)
After completion of this course the student is able to:

CO1: Know the various sampling methodologies and their efficiencies in theoretical and

practical aspects.

CO2: Analyse the different mathematical models with the help of statistical deigns and

appropriate data and made valuable conclusions by proper evaluation.

SEM-V: Paper-VI: (Applied Statistics)
After completion of this course the student is able to:

CO1: Apply the statistical tools in business, economical and commercial areas with the help of

time series, index numbers, etc.

CO2: Analyse such problems and to make better decisions for future in their fields.

SEM-VI: Paper-VII: (SQC and Optimization Techniques)
After completion of this course the student is able to:

CO1: Understand the concepts of quality control in industry.

CO2: Apply various tools to examine the quality of a process and product.

CO3: Apply probability methods in the areas of mechanical, electrical and electronics.

CO3: Know the different optimal techniques to solve physical problems.

SEM-VI: Paper-VIII-Cluster: (Operations research)
After completion of this course the student is able to:

CO1: Know the different optimal techniques to solve physical problems.

CO2: Apply the various optimization techniques in areas of manufacturing, transportation, job

assignment, inventories of stock, project monitoring.

SEM-VI: Paper-VIII-Cluster: (Econometrics):

After completion of this course the student is able to

1. understood econometric Model

2. estimate and test the parameters,

3. Apply the models in the relevant areas for forecasting and verification of economic theory.