

Program code of revised B.Sc (M.S.CS) is 07.

Number of Papers taught during (2013-2018) last five years:

P-1. Basic statistics and Theory of probability

P-2. Distribution Theory

P-3. Statistical methods and theory of Estimation.

P-4: Statistical inference.

P-5. Design of Sample survey and Time series.

P-6(a). Operations research, vital statistics and Indian official statistics.

P-6(b). Econometric methods.

P-7. designs of Experiments and index numbers.

P-8(a). Demand analysis, statistical quality control and Reliability.

P-8(b) Operations research-II

Employability of the course B.Sc (M.S.CS):

students who finish their under graduation in statistics as one of the main subject acquire good knowledge in all aspects of statistical data analysis and hence the offer competitiveness in grabbing Govt jobs at clerical to executive level.

Also they find opportunities in computer software, banking and data analytics. Most of the students who wish to continue further studies shall be ahead in getting seats in their P.G programs.

Program specific Outcomes for B.Sc (M.S.CS) Statistics:

- PO1:** Acquiring enough knowledge of Statistical data analysis for various types of data (Secondary & Primary) in terms of measuring central value , spread and shape of the frequency distribution.
- PO2:** Learning foundation concepts of probability and its complexities.
- PO2:** Learning foundation concepts of random variable univariate and bivariate probability distributions and various definitions
- PO4:** Learning mathematical expectation and various statistical measurements in terms of expectation for univariate and bivariate probability distributions and various generating functions
- PO5:** Learning discrete distributions and continuous distributions understanding various properties of these probability distributions.
- PO6:** understanding correlation and regression and principal of least squares, multiple and partial correlation coefficients for three variables.
- PO7:** Analysis of categorical data association and independence of attributes.
- PO8:** understanding sampling distributions and exact sampling distributions viz t, F and chi-square.
- PO9:** understanding theory of estimation, criterion of good estimator viz unbiasedness, consistency, efficiency and sufficiency.

- PO10: Being able to test statistical hypothesis for large and small samples also understanding non parametric statistical test procedures.
- PO11: Designing sample surveys their advantages over census and estimating population parameters based on various sampling techniques.
- PO12: understanding various components of time series and analyzing time series data.
- PO13: Understanding various forms of Mathematical linear programming problems viz . Linear programming problem(L.P.P), Transportation problem assignment problem transshipment problem and job sequencing problem also learning how to solve them.
- PO14: Understanding vital statistics and Indian official statistics.
- PO15: Understanding inference for economic phenomena.
- PO16: Designing methods of various statistical experiments for the analysis of variance in the data.
- PO17: understand economic barometers viz Index numbers and their construction.
- PO18: Understand demand and supply analysis
- PO19: Understand statistical quality control of production process through control charts and product control through sampling inspection plans also designing them.
- PO20: Understand frame and solve game theory and network problems with their applications.

Course outcomes:

- CO1: Given a statistical data condensing, analyzing and interpreting .
- Co2: understand given probability distribution and its statistical characteristics.
- Co3: Analyze bivariate statistical (Probability distributions) correlation and regression also multiple and partial correlation for three variables .
- CO4: Describe estimation theory and statistical inference.
- CO5: Analyze economic data Viz time series data, demand and supply data and whole sale and retail price and quantity index numbers.
- CO6: Solve mathematical linear programming problems, statistical quality control problems, econometric problems, and reliability.
- Co7: Describe vital and Indian official statistics.
- CO8: Compute various statistical measures and executing various statistical tests and techniques using MS-Excel.