## Bsc mathematics

## PO

PO-1 impact analytical and problem solving skills to enhance a broad range of real life issues PO-2 collect, analyze and organize quantitative data to evaluate and critique conclusions PO-3 understand and demonstrate the principles of Calculus, Algebra, Geometry, Analysis, Mechanics, Trigonometry, Statistics, Sequences and Series and Operations Research PO-4 apply critical thinking skills to solve complex real world problems PO-5 crack various competitive examinations like TNPSC, Bank exams, TET, SSC, RRB etc

## PSO

PSO-1 imbibe the fundamental knowledge, skills and competencies in mathematics PSO-2 gain necessary computer skills and knowledge to excel in professional career in related disciplines

PSO-3 develop a critical appreciation of the use of information and communication technology in mathematics

PSO-4 approach challenges with curiosity, critical thinking and creativity PSO-5 participate in life-long learning process in different disciplines of mathematics

## COURSE OUTCOMES

## REAL ANALYSIS AND COMPLEX ANALYSIS

CO-1 Understand the sequences and their convergence, Cauchy and monotone sequences and sandwich lemma

CO-2 Determine the concept of continuity, limits and uniform continuity CO-3 Analyze the derivatives of the real valued functions and higher orders CO-4 Evaluate convergence of Infinite Series

CO-5 Analyze the concept of Darboux integrability and fundamental theorems of calculus

## NUMERICAL METHODS

CO-1 Learn the concept of solving quadratic, exponential, logarithmic equations
CO-2 Determine the concept of problem solving ability in finite differences
CO-3 Study the characteristics of finite difference operators
CO-4 Acquire knowledge in central differences and interpolation formulae
CO-5 Make use of different methods to solve homogeneous and nonhomogeneous linear difference equations

## DISCRETE MATHEMATICS

CO-1 Understand the statements \& notations, Connectives, tautological implications and other connectives

CO-2 Study about the Normal forms, the theory of inference for the statement and predicate calculus CO-3 Demonstrate the fundamental concepts of Trees, spanning trees, Rooted and binary trees CO-4 Analyse about Grammars and languages and discuss about computability theory CO-5 Evaluate the concepts of Lattices and Boolean algebra with their properties and the representation and minimization of Boolean Functions

