Dept. of Mathematics

Course outcome

B. Sc Maths – 3 year degree course

Students will be able to understand following mathematical problems and their solutions - Hyperbolic functions, Higher order derivatives, Reduction formulae, derivations and illustrations of reduction formulae, Techniques of sketching conics, reflection properties of conics, Triple product, introduction to vector functions, operations with vector-valued functions, Polar representation of complex numbers, Equivalence relations, Functions, Composition of functions, Systems of linear equations, Power series solution of a differential equation, Laplace transform and inverse transform, Limits of functions, Cauchy's mean value theorem. Taylor's theorem, Symmetries of a square, Dihedral groups, Properties of cyclic groups, Group homomorphisms, Partial Differential Equations – Basic concepts and Definitions, Mathematical Problems, Introduction of Heat equation, Wave equation and Laplace equation, Systems of linear differential equations, Algorithms, System of linear algebraic equations, Numerical differentiation, Numerical Integration, Riemann integration, Limit superior and Limit inferior, Definition and examples of rings, Linear transformations, null space, Multivariate Calculus, Automorphism, Metric Spaces and Complex Analysis, Linear Programming, Number Theory, Analytical Geometry, Industrial Mathematics, Boolean Algebra and Automata Theory, Probability and Statistics, Bio-Mathematics, Mathematical Modeling