

DEPARTMENT OF MATHEMATICS

COURSE OUTCOMES

18 SCHEME

Course Code	Course Name	Course Outcomes-On completion of this course the students will be able to
18MAT11	CALCULUS AND LINEAR ALGEBRA	CO1: Able to find the angle between radius vector and tangent, Pedal Equations, curvature, radius of curvature and their applications. CO2: Able to find the Taylor's and Maclaurin's series, indeterminate forms, partial differentiation, Maxima and Minima for a function of two variables. CO3: Able to apply the concept of change of order of integration and variables to evaluate multiple integrals and their applications. CO4: Able to solve linear and non-linear ordinary differential equations. CO5: Able to solve the system of linear equations and to compute the Eigen value, Eigen vectors for diagonalization.
18MAT21	ADVANCED CALCULUS AND NUMERICAL METHODS	CO1: Able to find the velocity, acceleration, gradient, curl and divergence CO2: Able to solve linear ordinary differential equations. CO3: Able to form and solve partial differential equations.

		CO4: Able to solve the infinite series and power series solutions. CO5: Able to solve algebraic and transcendental equations, interpolating polynomials, Intermediate values and evaluation of integrals using appropriate numerical techniques.
18MAT31	TRANSFORM CALCULUS, FOURIER SERIES AND NUMERICAL TECHNIQUES	CO1: Solve initial and boundary value problems of ODE using Laplace Transforms. CO2: Find the Fourier series, half range Fourier series and Fourier coefficients of periodic functions. CO3: Find the Fourier and inverse Fourier transforms of a periodic function. CO4: Solve the finite difference equations using Z-transforms. CO5: Apply appropriate numerical methods to solve ordinary differential equations. CO6: Apply Euler's equation to find the maxima or minima of the functional.
18MAT41	COMPLEX ANALYSIS, PROBABILITY AND STATISTICAL METHODS	CO1: Able to solve problems on analytic functions using Cauchy – Riemann equations and to solve the complex line integrals, conformal and bilinear transformations. CO2: Able to analyse and solve the probability distribution problems. CO3: Able to apply the concept of statistics for curve fitting, correlation and regression. CO4: Able to construct joint probability distributions, define hypothesis, analyse and



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		interpret the hypothesis for the given sampling distribution and to solve stochastic process problems.
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