MATHS

COURSE OUTCOMES

B.A/B.Sc. 1st year

S.No	Subject code	Subjects	Subject Category	Course Outcome
1.	MATH101TH	Differential Calculus	DSC	CO-1: Understanding the fundamental concepts of calculus including limits, continuity and differentiability and applying theorems related to differentiability and limits. CO-2: Analyze and describe asymptotic behavior of functions involving limits at infinity and use derivatives to locate and classifying extrema, and graphing of the function.
2.	MATH102TH	Differential Equations	DSC	CO-1: Familiarize with ordinary and partial differential equations, its order and degree and the concept of Linear and non-linear differential equations. CO-2: Ability to formulate and solve differential equations for various mathematical models, first-order non-linear differential equations, linear differential equations of higher order etc. using different techniques and its applications in science and technology.

B.A./B.Sc. 2nd Year

S.No	Subject code	Subjects	Subject Category	Course Outcome
3.	MATH201TH	Real Analysis	DSC	CO-1: Understanding the concept and tests of sequences and series by using limits. CO-2: To acquaint with the use of Power series to represent function and to solve Mathematical problem.
4.	MATH202TH	Algebra	DSC	CO-1: Familiarization the students about group theory and its classification, which has numerous applications in mathematics and beyond. CO-2: Understand the fundamental concepts of rings, fields and integral domains.

5.	MATH309TH	Integral Calculus	**SEC-1**	CO-1: Understanding integration properties, Reduction formulae, double and triple integral. CO-2: Using the application of the properties of definite integral in calculating areas, volumes and surfaces of solid of revolution in Cartesian and parametric form.
6.	MATH310TH	Vector Calculus	**SEC-2**	CO-1: Understanding the concept of scalar and vector product of the 3 and 4 vectors, fundamental vector calculus operators with its broad applications. CO-2: Able to apply Gauss, Greens and Stokes theorem having wide range of applications in applied mathematics

B.A/B.Sc. 3rd Year

S.No	Subject code	Subjects	Subject Category	Course Outcome
7	MATH301TH	Matrices	**DSE**	CO-1: Understanding different types of matrices, its rank /nullity and reduction into normal form. CO-2: Ability to solve systems of linear equations and find eigenvalues and corresponding eigenvectors for a square matrix.
8	MATH304TH	Numerical Methods	**DSE**	CO-1: To assess the approximation techniques to formulate and apply appropriate strategy to solve real world problems CO-2: Use the concepts of interpolation and integration techniques for mathematical problems arising in various fields.
9	MATH313TH	Probability and statistics	**SEC-3**	CO-1: Able to calculate the mathematical expectation, moments and generating functions, distribution of function of random variables CO-2: Able to analyse different type of probability distribution function and their application to real world situation.
10	MATH317TH	Transportation and Game Theory	**SEC-4**	CO-1: To acquaint them with the principles of game theory and its applications in business and management contexts. CO-2: Interpret the transportation models' solutions and infer solutions to the real-world problems.