

B.Sc MATHEMATICS– MODEL-1

COURSE OUTCOME

SEMESTER & COURSE CODE	COURSE OUTCOME
SEMESTER 1	
MM1CRT01 Foundation of Mathematics	To learn a mathematical topic, a person needs to actively construct mathematical arguments on this topic, a major goal of this course is to teach the students how to understand and how to construct correct mathematical arguments.
SEMESTER 2	
MM2CRT01 Analytic Geometry, Trigonometry and Differential Calculus	To establish a correspondence between geometric curves and algebraic equations. Recognize the equation, vertex, focus, directrix and sketch the graph of corresponding equation.
SEMESTER 3	
MM3CRT01 Calculus	Expand a function using Taylor's and Maclaurin's series. Determine the length of an arc. Learn about concavity, points of inflexion, curvature, evolutes and involutes. Conceive the concept of asymptotes and obtain their equations and learn about envelopes.
SEMESTER 4	
MM4CRT01 Vector Calculus, Theory of Numbers & Laplace Transform	Define vector equation for lines and planes. Define and interpret the concepts of divisibility, congruence, greatest common divisor and prime.
SEMESTER 5	
MM5CRT01 Mathematical analysis	Determine the basic topological properties of subsets of the real numbers. Describe the real line as a complete, ordered field.
MM5CRT02 Differential Equations	Understands different types of differential equations.
MM5CRT03 Abstract Algebra	Analyze properties implied by the definitions of groups and rings. Analyze and demonstrate examples of ideals and quotient rings. Solve problems from the Algebra related to Group Theory and basic Ring Theory.

MM5CRT04 Environmental Mathematics Human Rights	To define the scope and importance of Multidisciplinary nature of environmental studies, the natural resources and ecosystem.
MM5GET02 Applicable Mathematics	To understand types of numbers and to improve arithmetic skill, Understands basic mathematics. With emphasis on algebra, Familiar with short cut methods to solve problems.
SEMESTER 6	
MM6CRT02 Graph Theory and Metric Spaces	Describe various aspects related to graphs Recognize properties of graphs Model and solve real-world problems using graphs and trees, both quantitatively and qualitatively
MM6CRT03 Complex Analysis	Identify analytic functions, harmonic functions and elementary functions Understand the significance of differentiability for complex functions and be familiar with the Cauchy-Riemann equations.
MM6CRT01 Real Analysis	To understand the concept of continuity and uniform continuity of functions. To analyze the various properties of continuous functions.
MM6CRT04 Linear Algebra	Solve systems of linear equations Analyze vectors in R^n geometrically and algebraically