COURSE OUTCOMES (Cos):

Course Out Come B.Sc. Mathematics	
SEM-I Differential and integral calculus	
CO1	Functions of two variables, limit of function of two variables, partial derivatives
CO2	Theorems on total differentials, composite functions, differentiate of composite functions
CO3	Definition of curvature
CO4	Lenth of place curves
CO5	Volume and surface revolution
SEM-II : DIFFERENTIAL EQUATIONS	
CO1	Differential equation of first order and first degree
CO2	Differential equation of first order but not first degree
CO3	Higher order linear differential equation
CO4	Partial Differential Equation
SEM-III REAL ANALYSIS	
CO1	Sequences: Limits of Sequences- A Discussion about Proofs-Limit Theorems for SequencesMonotone Sequences and Cauchy Sequences - Subsequences-Limit sup's and Limit inf's - SeriesAlternating Series and Integral Tests
CO2	Continuity: Continuous Functions -Properties of Continuous Functions - Uniform Continuity - Limits of Functions
CO3	Differentiation: Basic Properties of the Derivative - The Mean Value Theorem - L'Hospital Rule - Taylor's Theorem.
CO4	Integration: The Riemann Integral - Properties of Riemann Integral- Fundamental Theorem of Calculus.
SEM-IV ALGEBRA	
CO1	Groups: Definition and Examples of Groups- Elementary Properties of Groups-Finite Groups - Subgroups -Terminology and Notation -Subgroup Tests - Examples of Subgroups. Cyclic Groups: Properties of Cyclic Groups - Classification of Subgroups Cyclic Groups.
CO2	Definition and Notation -Cycle Notation-Properties of Permutations -A Check Digit Scheme Based on D5. Isomorphisms ; Motivation- Definition and Examples - Cayley's Theorem Properties of Isomorphisms - Automorphisms-Cosets and Lagrange's Theorem Properties of Cosets 138 - Lagrange's Theorem and Consequences-An Application of Cosets to Permutation Groups -The Rotation Group of a Cube and a Soccer Ball.
CO3	Normal Subgroups and Factor Groups: Normal Subgroups-Factor Groups -Applications of Factor Groups -Group Homomorphisms - Definition and Examples -Properties of Homomorphisms -The First Isomorphism

	Theorem
CO4	Introduction to Rings: Motivation and Definition -Examples of Rings - Properties of Rings - Subrings. Integral Domains: Definition and Examples - Fields Characteristics of a Ring
CO5	Ideals and Factor Rings: Ideals -Factor Rings -Prime Ideals and Maximal Ideals. Ring Homomorphisms: Definition and Examples-Properties of RingHomomorphisms.
SEM-V LINEAR ALGEBRA	
CO1	Vector spaces
CO2	Rank-Change of basis
CO3	Diagonalization
CO4	Orthogonality and least square
SEM-VI INTEGRAL TRANSFORMS	
CO1	Solution of algebrai and transcendental equations
CO2	Interpolation polynomial
CO3	Newton's integration and differentiation
CO4	Solution of differentiation equations by numerical methods