I	Course Code	**MA 224002**
II	Course Title	**Abstract Algebra**
III	Credit Structure	L T P C 3 0 0 3
IV	Prerequisite (If any)	NIL
V	Course Content	Sets and Functions, Equivalence relation, Integers. Groups, subgroups, Lagrange's theorem, Normal subgroups, Quotient groups, Homomorphism, First Isomorphism theorem, Automorphism, Cayley's theorem, Permutation groups, external direct product of groups, classification of finite abelian groups. Rings, Example of rings of Polynomials, matrices, quarternions and continuous functions. Integral domains, division ring, homomorphism of rings, Ideals, Quotient rings. Fields, extension fields, vector spaces, finite fields.
VI	Text/References	• Topics in Algebra, I. N. Hernstein. • Contemporary Abstract Algebra, Joseph A Gallian, Narosa Publication • Abstract Algebra, David S. Dummit and Rechard M. Foote