

MTH 300 ABSTRACT ALGEBRA I: (3 Units) (L30: P0: T 15)

Pre-requisite -MTH 101, 203

Group: definition, examples including permutation groups. Subgroups, cosets. Lagrange's theorem and applications. Cyclic groups. Rings: definition examples including \mathbb{Z} , \mathbb{Z}_n , rings of polynomials and matrices. Integral domains, fields. Polynomial rings, factorization. Euclidean algorithm for polynomials H.C.F. and L.C.M. of polynomials.