

M339 (Ring Theory)

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References:

1. Topics In Algebra(I. N. Herstein)
2. ١٩٨٧. "جلال نعوم" مقدمة في الجبر الحديث
3. Abstract Algebra(Paul Garrett)
4. Abstract Algebra Theory and applications (Thomas W. Judson)

Syllabus:

Ring and its properties, zero divisors, Integral domain, Field, Sub ring, the characteristic of the ring with some properties, Imbedded a ring in a ring with identity, idempotent and nilpotent element with some properties, Boolean ring with some of their properties and application, ring homomorphism's, ring, fundamental theorems, Ideals, Principal ideal ring, quotient ring, prime and primary ideals, maximal ideals and relation between them, radical Jacobson, polynomial rings with some properties, division Algorithm, remainder theorem, and factorization theorem.