

MAM 2201 - ALGEBRAIC STRUCTURES

- UNIT – I** Numbers (Chapter 1 of Text 1 excluding Sections 1.9 and 1.10)
 Groups (Sections 2.1 to 2.8) of Text 1
- UNIT – II** Groups (Sections 2.9 to 2.11), Rings (Sections 3.1 to 3.3) of Text 1
- UNIT – III** Rings (Sections 3.4 , 3.5 and 4.1 to 4.6) of Text 1
- UNIT – IV** Modules (Section 4.5) of Text 2,
 Extension fields (Section 5.1), Roots of Polynomials (Section 5.3),
 More about Roots (Section 5.5) of Text 2
- UNIT – V** Finite fields, Wedderburn's theorem on finite division rings,
 A Theorem of Frobenius (Section 7.1, 7.2, 7.3) of Text 2

TEXT BOOK

- (1) N. Lauritzen, Concrete Abstract Algebra, Cambridge, 2003
- (2) I.N.Herstein, Topics in Algebra, Second edition (2006).

References :

- 1) Serge Lang Algebra 3rd edition Addisen Wesley 1993.
- 2) P.M. Cohn Basic Algebra Groups, Rings and Fields Springer 2003.
- 3) Artin Algebra, Prentice Hall 1991.

.....