

DEPARTMENT OF MATHEMATICS,

UNIVERSITY OF KARACHI,

Course Outline

MATH 603: COMMUTATIVE RINGS.

Course contents:

Ideals and their operations. Maximal prime and primary ideals. Certain radicals of a ring. Rings with chain conditions. Divisibility theory in integral domains. Rings of fractions. Polynomial rings and integral domains.

Books Recommended:

1. Herstein, I. H., Topics in Algebra, Second Edition, John Wiley, 1975.
2. Arf, E., Galois Theory, Second Edition, Notre Dame Press, 1966.
3. Kaplansky, I., Fields and Rings, University of Chicago Press, 1969.
4. Atiyah, M. F. and Macdonald, I. J., Introduction to Commutative Algebra, Addison Wesley, 1969.
5. Kaplansky, I. H., Commutative Rings, University of Chicago press, 1974.