

DEPARTMENT OF MATHEMATICS,

UNIVERSITY OF KARACHI,

Course Outline

MATH 604: FIELD THEORY.

Course contents:

Field extensions, the degree of an extension. Galois group. Normality and separability. Field degrees and group orders Normal closures. The Galois correspondences. Solution of equations by radicals. Finite fields.

Books Recommended:

1. Herstein, I. H., Topics in Algebra, Second Edition, John Wiley, 1975.
2. Artin, 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.