

MA-614 BANACH ALGEBRAS

Banach Algebra: Ideals, Homomorphisms, Quotient algebra, Wiener's lemma. Gelfand's Theory of Commutative Banach Algebras: The notions of Gelfand's Topology, Radicals, Gelfand's Transforms.

Basic properties of spectra. Gelfand-Mazur Theorem, Symbolic calculus: differentiation, analytic functions, integration of A-Valued functions. Normed rings. Gelfand-Naimark theorem.

RECOMMENDED BOOKS:

1. Rudin, W., Functional Analysis; McGraw Hill Publishing Company Inc. New York.
2. M.A. Naimark, M., Normed Algebras; Wolters Noordhoff Publishing Groningen. The Netherlands 1972.
3. Zelazko, W., Banach Algebras; American Elsevier Publishing Company Inc. New York, 1973.
4. Rickart, C.E., Banach Algebras; D. Van Nostrand Company Inc. New York 1960.