

## **MAM 2103 TOPOLOGY I**

- UNIT – I** Navie Set Theory, Topological Spaces, connected & Compact spaces
- UNIT – II** Continuous Functions, Product Spaces, the Tychonoff Theorem
- UNIT – III** Separation axioms, Separation by continuous Functions, More separability
- UNIT – IV** Complete metric spaces, Applications
- UNIT – V** Nets and Filters, Convergence of Nets, Convergence of filters, Ultra Filters and Compactness

### **TEXT BOOK**

- [1] (For Units 1 to 4): I.M. Singer and J.A. Thorpe – Lecture Notes on elementary Topology ad Geometry, Springer Verlag 1967 (Chapters 1 & 2)
- [2] (For Unit 5) : K.D. Joshi – Introduction to General Topology, Wiley Eastern (1983) (Chapter 10)