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ANDHRA UNUIVERSITY
DEPARTMENT OF MATHEMATICS
M.A./M.Sc MATHEMATICS
I SEMISTER

M 103 TOPOLOGY

UNIT I
Finite sets- Countable and uncountable sets-infinite sets and the axiom of choice –well ordered sets- the maximum principle
Sections 6,7,9,10 and 11 of Chapter 1

UNIT II
Topological spaces- Basis for a Topology- The order topology-The product topology on $X \times Y$-the subspace topology- closed sets and limit points
Sections 12 to 17 of Chapter 2

UNIT III
Continuous functions – the product topology-Metric spaces- the metric topology
Sections 18 to 21 of Chapter 2

UNIT IV
Connected spaces-connected subspaces of the real line-Compact spaces-compact subspaces of the real line-limit point compactness – Local compactness
Sections 23,24,26 to 29 of Chapter 3

Extent and content as in the book: Topology by James R.Munkers,Second edition,Pearson education Asia-Low price edition

*PLEASE SET TWO DIFFERENT QUESTION PAPERS.
*KINDLY ADHERE TO THE