

S X -S 22)

ANDHRA UNIVERSITY
DEPARTMENT OF MATHEMATICS
M.A/M.SC MATHEMATICS
II-SEMESTER

2009-10 AB

M 203 TOPOLOGY -II

UNIT I

The countability axioms-the separation axioms, Normal Spaces, the Urysohn lemma-

Sections 30 to 33 of Chapter 4.

UNIT II

The Urysohn metrization theorem- the Tietze extension theorem. - The Tychonoff's theorem- the Stone-Čech compactification

Sections 34 to 35 of Chapter 4 and 37 and 38 of Chapter 5.

UNIT III

Local finiteness-The Nagata-Smirnov Metrization theorem - Complete metric spaces

Sections 39, 40 of chapter 6, Section 43 of chapter 7.

UNIT IV

Compactness in metric spaces-Point wise and compact convergence- Ascoli's theorem - Baire space

Sections 45, 46 and 47 of chapter 7 and Section 48 of Chapter 8.

Content and extent as in the book

Topology by James R. Munkres, Second edition, Pearson education, Asia-low price edition