

Rings of Continuous Functions

by

LEONARD GILLMAN

*Professor and Chairman
Department of Mathematics
University of Rochester*

AND

MEYER JERISON

*Professor of Mathematics
Purdue University*



D. VAN NOSTRAND COMPANY, INC.

PRINCETON, NEW JERSEY

TORONTO

LONDON

NEW YORK

CONTENTS

CHAPTER	PAGE
0 FOREWORD	1
1 FUNCTIONS ON A TOPOLOGICAL SPACE	10
2 IDEALS AND \mathbf{z} -FILTERS	24
3 COMPLETELY REGULAR SPACES	36
4 FIXED IDEALS. COMPACT SPACES	54
5 ORDERED RESIDUE CLASS RINGS	66
6 THE STONE-ČECH COMPACTIFICATION	82
7 CHARACTERIZATION OF MAXIMAL IDEALS	101
8 REALCOMPACT SPACES	114
9 CARDINALS OF CLOSED SETS IN βX	130
10 HOMOMORPHISMS AND CONTINUOUS MAPPINGS	140
11 EMBEDDING IN PRODUCTS OF REAL LINES	154
12 DISCRETE SPACES. NONMEASURABLE CARDINALS	161
13 HYPER-REAL RESIDUE CLASS FIELDS	171
14 PRIME IDEALS	194
15 UNIFORM SPACES	216
16 DIMENSION	240
NOTES	266
BIBLIOGRAPHY	278
LIST OF SYMBOLS	285
INDEX	287