

CONTENTS

CHAPTER 1 SET THEORY	1
1.1 SETS	1
1.1.1 Basics of Sets.....	1
1.1.2 Operations on Sets.....	3
1.1.3 Relations.....	7
1.1.4 Functions.....	12
1.1.5 Algebra of Sets.....	15
1.2 THE REAL NUMBER SET.....	20
1.2.1 Introduction.....	20
1.2.2 The real number Set.....	27
1.2.3 The extended real number Set.....	35
1.2.4 Some useful tools.....	37
1.2.5 Representation of a real number.....	41
1.3 THE COMPLEX NUMBER SET.....	43
1.3.1 Introduction.....	43
1.3.2 Algebraic form of the complex numbers.....	45
1.3.3 Trigonometric form of the complex numbers.....	46