

CONTENTS

CHAPTER - I :	INTRODUCTION	1
1.1.	Priliminaries	1
1.1.1.	Definitions	4
1.1.2.	Notations	6
1.2.	Intersection graphs	7
1.3.	Interval graphs	8
1.3.1.	Interval graphs and their applications	8
1.3.2.	Some characterizations of interval graphs	10
1.3.2.	Interval graphs and interval orders	16
1.3.3.	Notions related to interval graphs	18
1.4.	Unit interval graphs	23
1.4.1.	Semiorder	24
1.5.	Efficiency of algorithms	27
1.6.	Boxicity, cubicity and other dimensions	28
1.7.	Circular-arc graphs	34
1.8.	Related Topics	38
1.9	Ferrers digraphs and Ferrers dimension	42
1.9.1.	Characterizations of digraphs with F.D.2	46
CHAPTER - II :	INTERVAL DIGRAPHS	48
2.1.	Introduction	48
2.2.	Intersection digraphs	52

2.3.	Characterization of interval digraphs by consecutive ones	55
2.4.	Characterization of interval digraphs in terms of adjacency matrix	61
2.5.	Interval digraphs and Ferrers dimension	70
CHAPTER - III	AN INTERVAL DIGRAPH IN RELATION TO ITS ASSOCIATED BIPARTITE GRAPH	77
3.1.	Introduction	77
3.2.	Interior edges	80
CHAPTER - IV	CIRCULAR-ARC DIGRAPHS	108
4.1.	Introduction	108
4.2.	Elementary characterization	112
4.3.	Adjacency matrix characterizations	116
4.4.	Circular-arc digraphs and Ferrers dimension	128
	CONCLUSION	136
	BIBLIOGRAPHY	139