

CONTENTS

CONTENTS

	Page No.
INTRODUCTION	1
REVIEW OF LITERATURE	6
CHAPTER 1 PRELIMINARIES ON FUZZY SETS AND INTUITIONISTIC FUZZY SETS	13
1.1 Preliminaries on fuzzy sets and fuzzy topology	13
1.2 Intuitionistic fuzzy sets	17
1.3 Intuitionistic fuzzy topological spaces	22
CHAPTER 2 FUZZY n - NORMED LINEAR SPACE AND QUASI α- n- NORMED LINEAR SPACE	27
2.1 Fuzzy n - normed linear space	27
2.2 Complete fuzzy n - normed linear space	35
2.3 Best approximation sets in α - n - normed space	41
2.4 Quasi α - n - normed linear space	51
CHAPTER 3 CARTESIAN PRODUCT OF INTUITIONISTIC FUZZY n - NORMED LINEAR SPACES	62
3.1 Intuitionistic fuzzy n - normed linear space	62
3.2 Generalised cartesian product of intuitionistic fuzzy n - normed linear spaces	71
CHAPTER 4 FUZZY n - INNER PRODUCT SPACE AND INTUITIONISTIC FUZZY n - INNER PRODUCT SPACE	83
4.1 Fuzzy n - inner product space	83
4.2 Intuitionistic fuzzy n - inner product space	89
SUMMARY AND CONCLUSION	94
REFERENCES	95