

CONTENTS

Chapter	Title	Page No.
	Introduction	1
	Review of Literature	15
1	Preliminaries	
	1.1 Fuzzy Structures	21
	1.2 BCK/BCI-Algebras	33
	1.3 Z-Algebras	37
2	Fuzzy Subalgebras of Z-Algebras	
	2.1 Fuzzy Z-Subalgebras in Z-Algebras	40
	2.2 Fuzzy Z-Ideals in Z-Algebras	51
3	Classes of Fuzzy Ideals in Z-Algebras	
	3.1 Fuzzy H-Ideals in Z-Algebras	60
	3.2 Fuzzy p-Ideals in Z-Algebras	68
	3.3 Fuzzy Implicative Ideals in Z-Algebras	82
4	Fuzzy α-Translations and Fuzzy β-Multiplications of Z-Algebras	
	4.1 Fuzzy α -Translations and Fuzzy β -Multiplications of Fuzzy Z-Subalgebras in Z-Algebras	100
	4.2 Fuzzy α -Translations and Fuzzy β -Multiplications of Fuzzy Z-Ideals in Z-Algebras	110
	4.3 Z-Homomorphism on Fuzzy α -Translations and Fuzzy β -Multiplications of Z-Algebras	116
	4.4 Cartesian Product on Fuzzy α -Translations and Fuzzy β -Multiplications of Z-Algebras	122

Chapter	Title		Page No.
5	Intuitionistic Fuzzy Structures in Z-Algebras		
	5.1	Intuitionistic Fuzzy Z-Subalgebras in Z-Algebras	130
	5.2	Intuitionistic Fuzzy Z-Ideals in Z-Algebras	143
6	Intuitionistic L-Fuzzy Structures in Z-Algebras		
	6.1	Intuitionistic L-Fuzzy Z-Subalgebras in Z-Algebras	151
	6.2	Intuitionistic L-Fuzzy Z-Ideals in Z-Algebras	155
7	Interval -Valued Fuzzy Structures in Z-Algebras		
	7.1	Interval-Valued Fuzzy Z-Subalgebras in Z-Algebras	158
	7.2	Interval-Valued Fuzzy Z-Ideals in Z-Algebras	164
8	Interval -Valued Intuitionistic Fuzzy Structures in Z-Algebras		
	8.1	Interval-Valued Intuitionistic Fuzzy Z-Subalgebras in Z-Algebras	170
	8.2	Interval-Valued Intuitionistic Fuzzy Z-Ideals in Z-Algebras	181
9	Cubic Structures in Z-Algebras		
	9.1	Cubic Z-Subalgebras in Z-Algebras	191
	9.2	Cubic Z-Ideals in Z-Algebras	200
	Summary and Conclusion		208
	Bibliography		212
	Publications		218
	Paper Presented		219
	Plagiarism Report		