TABLE OF CONTENTS

			Page
TITLE	PAG	E	i
		ATE OF PANEL APPROVAL	
		Γ	
		ON	
ACKN	OWL	EDGMENT	v
		CONTENTS	
LIST C)F N	OTATIONS	i x
LIST C)F FI	GURES	xii
CHAP'	TER		
1		INTRODUCTION	1
1	1.1	Background of the Study	
	1.2	Statement of the Problem	
	1.3	Objectives of the Study	
	1.4	Methodology	
	1.5	Significance of the Study	
2		PRELIMINARIES	7
	2.1	Strong Derivative	7
	2.2	McShane and Henstock Integrals	
	2.3	Inner Variation	
	2.4	The Cantor set P	37
3		EQUI-INTEGRABILITY AND EGOROFF'S	
		THEOREM	47
	3.1	Equi-integrability	47
	3.2	Egoroff's Theorem	
4		UNIFORM DIFFERENTIABILITY	92
	4.1	Uniformly Strongly Differentiable	
	4.2	Uniformly Differentiability	109
5		LIPSCHITZ AND GENERALIZED	
		AC FUNCTIONS	111
	5.1		111

5.2	Lipschiptz and Generalized AC Functions	118
6	HARNACK EXTENSIONS	144
6.1	Harnack Extension on Intervals in \mathbb{R}	144
6.2	Harnack Extension on Intervals in \mathbb{R}^2	182
7	SUMMARY AND RECOMMENDATIONS	190
7.1	Summary	190
7.2		
BIBLIOGI	RAPHY	220
CURRICULUM VITAE		
CERTIFIC	CATE OF AUTHENTIC AUTHORSHIP	224