

CONTENTS

Notations and Conventions	1
CHAPTER-I : (ω) PROXIMAL LIMITS AND (ω) PROXIMAL CONTINUITY	
§1. Introduction	4
§2. Preliminaries	5
§3. (ω) sparse sets	9
§4. (ω) proximal limits and (ω) proximal continuity	20
CHAPTER-II : (ω) PROXIMAL DERIVATES	
§1. Introduction	45
§2. Preliminaries	45
§3. Definitions and properties	49
CHAPTER-III: PBV- ω AND PAC- ω FUNCTIONS	
§1. Introduction	84
§2. Preliminaries	84

§3. PBV- ω functions 87

§4. PAC- ω functions 97

CHAPTER-IV : PROXIMAL PERRON-STIELTJES INTEGRAL

§1. Introduction 113

§2. Preliminaries 115

§3. The (PPS)-integral 119

§4. Integration by parts formula for
the (PPS)-integral 140

CHAPTER-V : PROXIMAL DENJOY-STIELTJES INTEGRAL

§1. Introduction 148

§2. Preliminaries 149

§3. The (PDS)-integral 151

§4. A characterisation of the
(PDS)-integral 170

§5. The construction of the
(PDS)-integral 182

§6. The (GPDS)-integral 198

REFERENCES 204