TABLE OF CONTENTS

CHAPTER -1 INTRODUCTION		
	Title	Page No
1.1	Allergic Rhinitis	01
1.2	Oral Dispersible Tablet	03
1.3	Chewable Tablets	23
1.4	Bilayer Tablets	26
CHAPTER - 2 REVIEW OF LITERATURE		
2.1	Review of orodispersible tablets	37
2.2	Review of chewable tablets	51
2.3	Review of Bi layered tablets	59
2.4	Review of Loratadine	67
2.5	Review of Phenylephrine	79
2.6	Drug profile	86
	2.6.1 Loratadine	86
	2.6.2 Phenylephrine	90
CHAPTER - 3 SCOPE AND OBJECTIVES OF THE STUDY		
3.1	Objectives	97
3.2	Plan of Work	98
	3.2.1 Oral dispersible Tablets	98
	3.2.2 Chewable Tablets	99
	3.2.3 Bilayer Tablets	100

CHAPTER – 4 MATERIALS AND METHODS		
4.1	Materials	102
4.2	Methods	123
4.2.1 Formulation, Design and Evaluation of Loratadine orally disintegrating tablets		
4.2.1.1	Preformulation study	123
4.2.1.1.4	Standard curve for Loratadine using 0.1M phosphate buffer pH 2.0	125
4.2.1.2	Formulation of Loratadine orally disintegrating tablets	125
4.2.1.3	Evaluation of ODT tablets	127
4.2.1.4	*In vitro* dissolution studies	129
4.2.1.5	Stability studies	130
4.2.2 Formulation, Development and Evaluation of chewable tablets containing non- sedating antihistamine		
4.2.2.1	Preformulation study	130
4.2.2.2	Formulation of Loratadine chewable tablets	132
4.2.2.3	Evaluation of physical characteristics of the blend	135
4.2.2.4	Evaluation of chewable tablets	138
4.2.2.5	*In vitro* dissolution studies	140
4.2.2.6	Stability studies	141
4.2.3 Formulation, Development and Evaluation of Loratadine and Phenylephrine hydrochloride extended release tablets		
4.2.3.1	Preformulation study	141
4.2.4.1	Preparation of immediate release layer of Loratadine	144

4.2.4.2	Evaluation of immediate release layer of Loratadine blend	145
4.2.4.3	Preparation of phenylephrine HCl sustained release layer	148
4.2.4.4	Evaluation of phenylephrine HCl sustained release blend	150
4.2.4.5	Evaluation of bilayer tablets	153
4.2.4.6	*In vitro* dissolution studies	155
4.2.4.7	Stability studies	155
CHAPTER – 5 RESULTS AND DISCUSSION		
5.1 Formulation, Design and Evaluation of Loratadine orally disintegrating tablets		
5.1.1	Preformulation study	156
5.1.1.4	Standard curve for Loratadine using 0.1M phosphate buffer pH 2.0	160
5.1.2	Formulation of Loratadine orally disintegrating tablets	161
5.1.3	Evaluation of ODT tablets	163
5.1.4	*In vitro* dissolution studies	164
5.1.5	Stability studies	166
5.2 Formulation, Development and Evaluation of chewable tablets containing non- sedating antihistamine		
5.2.1	Preformulation study	168
5.2.2	Formulation of Loratadine chewable tablets	173
5.2.4	Evaluation of physical characteristics of the blend	176
5.2.5	Evaluation of chewable tablets	177
5.2.7	*In vitro* dissolution studies	178
5.2.8	Stability studies	180

5.3 Formulation, Development and Evaluation of Loratadine and phenylephrine hydrochloride extended release tablets		
5.3.1	Preformulation study	181
5.3.2.1	Preparation of immediate release layer of Loratadine	191
5.3.3	Physical characteristics and particle size distribution of the blend of Loratadine	193
5.3.2.2	Preparation of phenylephrine HCl sustained release layer	191
5.3.4	Physical characteristics and particle size distribution of the blend of Phenylephrine HCl	195
5.3.5	Evaluation of bilayer tablets	197
5.3.6	*In vitro* dissolution studies	198
5.3.7	Stability studies	201
SUMMARY AND CONCLUSION		
	Summary and Conclusion	204
	Bibliography	217
	List of publications	243