CONTENTS

CHAPTER NO	T I T L E	PAGE NO
CHAPTER- I	INTRODUCTION AND SURVEY	2-25
1.1	Introduction	
1.2	Survey of Literature	
1.3	Classification	
1.3a	Low pass RC Filter (Passive)	
1.3b	High Pass RC Filter (Passive)	
1.3c	Band Pass RC Filter (Passsive)	
1.3d	Band Stop RC Filters(Passive)	
1.4	Active Filters RC Filter	
1.4a	Low Pass Active RC Filter	
1.4b	High Pass Active RC Filter	
1.4c	Band Pass Active RC Filter	
1.4d	Band Stop Active RC Filter	
CHAPTER-II	APPROXIMATIONS	27-47
2.1	Introduction	
2.2	Butterworth Approximation	
2.3	Chebyshev Approximation	
2.4	Bessel Approximation	
2.5	Elliptic-Function Approximation	
2.6	Comparision	
2.7	Frequency Transformation	
CHAPTER-III	SENSITIVITY	49-59
3.1	ω and Q Sensitivity	
3.2	Multi-Element Deviations	

3.3 Gain Sensitivity

3.4 Factors Affecting Gain Sensitivity

CHAPTER-IV STATE VARIABLE ANALYSIS AND SYNTHESIS 61-68

4.1 State Variables

4.2 State Variable Realization

4.3 Realization of a Second Order Function

CHAPTER-V ACTIVE R FILTER 70-101

5.1 Active R Filters

5.2 Soderstrand Circuit

5.3 R.L. Patil Circuit

5.4 Modified Circuit

5.5 Theoretical Analysis

5.6 Design Considerations

5.7 Experimental Details

CHAPTER-VI SUMMARY AND CONCLUSIONS 103-108

6.1 Summary

6.2 Conclusions

REFERENCES 110-123