ACKNOWLEDGEMENTS

I sincerely express my deep sense of gratitude and indebtedness to my research supervisor, Dr. R. Rangarajan, Reader, Department of Mathematics, University of Mysore, Mysore for his inspiring guidance, eminent supervision, critical suggestions, advice and constant encouragement.

I take this opportunity to thank Prof. D. Soner Nandappa, Prof. and Chairman, Department of Mathematics, University of Mysore, for his timely help and valuable advices.

I express sincere thanks to the teachers of Mathematics Department, University of Mysore: Prof. E. Sampathkumar, Prof. S. Bhargava, Prof. B. S. Kiranagi, Prof. Padmavathamma, Prof. Huchegowda, Prof. H. N. Ramaswamy, Prof. Chandrashekara Adiga, Prof. D. D. Somashekar, Prof. K. R. Vasuki and Prof. Veena Mathad and also the office staff Smt. Geetha for their help in the submission of my thesis to the University.

I express my thanks to all research friends, Nanjundaswamy, R. Siddaramu, N. Ravikumar, P. S. Guruprasad, Hamood A.K. Alhaddad, R. Rajendra, P. Sivakota Reddy, Muneer Basha, Rahmani, Rangaswamy and Mrs. B. Gayatridevi for their help.

I also record my sincere and profound thanks to the Principal Dr. D.B. Fakruddin and HOD Saher Fathima Khanum and staff members C.S. Nagabhushana, Zahedunnisa, Umme Samla of Department of Engineering Mathematics of HKBK Engineering College, Bangalore, for their wholehearted encouragement in completing my research work.

Special thanks for the family of my guide: Madam Dr. C. Amruthavalli, Master R. Mukund and baby R. Mayura.

I would not have completed this task, but for the love and understanding shown by my family members. With proud privilege, I place on record my sincere gratitude to my husband Gautam, father-in-law Paramesh Chandra Goswami, mother-in-law Niru Goswami and my brother Shyam.

CHANDRALI BAISHYA