ACKNOWLEDGEMENT

I wish to record my deep sense of gratitude and profound thanks to my research supervisor Dr. R. Viswanathan, Professor and Head, School of Science and Humanities, Kongu Engineering College, Perundurai, for his keen interest, inspiring guidance, constant encouragement towards my research at all stages and to bring this thesis into fruition.

I am very grateful to the Doctoral Committee Members, Dr. P. Prakash, Assistant Professor, Department of Mathematics, Periyar University, Salem, and Dr. T. Kathirvalavakumar, Professor and Head, Department of Computer Science, VHNSN College, Virudhunagar, for their valuable suggestions and encouragement throughout the period of my research.

I am extremely indebted to thank Dr. G. Rajendran, who was Professor and Head, Department of Science and Humanities, Kongu Engineering College, Perundurai, who is no more now, for his valuable suggestions and support for my research work.

I also thank the faculty and non-teaching staff members of the Department of Science and Humanities, Kongu Engineering College, Perundurai, for their valuable support throughout my research. I am much indebted to thank all the members of my family for their invaluable moral support at every stage of progress in my research work. Finally, I like also to thank all those who have helped me directly or indirectly in the successful completion of my research work.

GOMATHI M