ACKNOWLEDGEMENT

Words are inadequate to express my sincere gratitude and heartfelt thanks to my admired research supervisor Prof. G. Sarojamma, Department of Applied Mathematics, Former Vice-Chancellor, for her valuable guidance, suggestions, constant encouragement, moral support, love and affection shown throughout my research work in bringing this thesis to a successful completion.

M. Sesha Sailaja
ACKNOWLEDGEMENTS

I express my sincere thanks to all my teachers Prof. A. Leela Ratnam, Head of the Department, Prof. B. Maheswari, Dean, Academic Affairs, Mrs. C. Venkata Lakshmi, Asst. Professor, Department of Applied Mathematics, Sri Padmavati Mahila Visvavidyalayam, Tirupati for their encouragement and support.

I am very much delighted to take this opportunity to render my heartfelt and profound sense of gratitude to Prof. D.R.V. Prasada Rao, Professor, Department of Mathematics, Sri Krishnadevaraya University, Anantapur for his help.

I am indebted to Dr. B. Ramana, Academic Consultant, SPMVV, Tirupati who extended her help to me throughout the period of research and in the preparation of thesis.

Last but not the least I have deep sense of respect and gratitude to my husband Sri A.S.P. Chakravarthi for his moral support extended during my research work. I thank my beloved son Chi. Yesesvi Sai for his cooperation. My deep sense of gratitude is due to my father Sri M. Satyanarayana Rao and my mother Smt Satya Vani for their inspiration and without whose constant encouragement, it would not have been possible for me to complete my research work. I also express my heart full thanks to my brother Mr. M.V.S.R.Kirshore & sister Mrs. K. Madhavi for their cooperation during the course of the work.

I am obliged to my grand-father Late. Dr. M. B. V. I. R Sarma M.A. Ph.D. who had been a motivating factor for me to pursue my research work. I am always thankful to him.
My special thanks are due to my Father-in-law Sri A.V. Ramkishore and Mother-in-law Smt Annapurna Visalakshi for their constant support and encouragement to complete research.

I am thankful to the authorities of the Sri Padmavati Mahila Visvavidyalayam, Tirupati for providing necessary facilities to carry out my research work.

I shall always remain thankful to all those who have directly and indirectly helped me in my research work.

M. Sesha Sailaja