ACKNOWLEDGEMENTS

I wish to express my deep sense of gratitude to my teacher and Research Supervisor Prof. C. Subba Rami Reddy, M.Sc., Ph.D., Department of Statistics, for accepting me as his student and suggesting a novel and fascinating problem for execution. Despite his busy schedule, he spared sufficient time and gone through this thesis with patience. His thorough discussions and critical analysis are responsible for the present form of my work. He has been the sole inspiration for me. I considered it as good fortune to work under him. It is only to felt and experienced. I am deeply moved by his paternal affection, personal care and constant encouragement. These mere words won’t suffice for expressing my gratitude for what all I learnt from him. I also thank Mrs. Y. Uma Rami Reddy for her maternal affection, encouragement and blessings.

I express my thanks to Prof. P. Balasiddamuni, Professor, Dept. of Statistics & EC Member, Sri Venkateswara University, Tirupati for his help and moral support.

I express my thanks to Prof. M. Venkatramanaiah, Chairman, Board of Studies (Statistics), Sri Venkateswara University, Tirupati for his help and moral support.

I express my thanks to Prof. M. Subbarayudu, Head, Dept. of Statistics, Sri Venkateswara University, Tirupati for his help and moral support.

I express my thanks to Prof. K.V.S Sarma, Dean, Faculty of Science, Prof. P. Rajasekar reddy, Prof. R. Abbaiah, Principal, S.V.U. College of Science for their kind co-operation and spiritual support.

I express sincere gratitude to Dr. B. Sarojamma, for her constant encouragement and help to formulate the thesis in the present form.

I express my sincere thanks to my old teachers for their continuous support and encouragement throughout my career.

I express my sincere thanks to the Principal Rev. Fr. T. Amal Arockia Raj, S.J. and to the Loyola Management for their extended co-operation and encouragement in completing the Research work.
I express my heartfelt gratitude to my parents Smt. Subbamma and Late Y.M. Rama Subba Reddy for their blessings and also I wish to thank other members of the family.

I express my affectionate thanks to my better half Smt. Saraswathi and my son Y.M. Chandra Keerthi Reddy, his wife Prathyusha and my daughter smt S. Swathi, her husband Sareddy Kranthi Kalyan Reddy for their co-operation during the time of Research work.

I express my sincere thanks to my colleagues’ of the Department Sri H. Ravi Sankar, Dr. J. Prabhakar Naik , Sri N.Venkata Subbaiah and Sri P. Sreenatha Naidu for their co-operation in completing the Research work.

Last but not least my sincere thanks to Sri B. Hari Mallikarjuna Reddy, Academic Consultant and other well wishers and finally to Sri M. Naresh, Research Scholar for helping me in typing work.

Y.M. CHENNA REDDY