ACKNOWLEDGEMENTS

I express my deep sense of gratitude to my Teacher and Research Supervisor Prof. L. CHANDRA MOHAN, M.Sc., Ph.D., Dip. in Stat., Head of the Department of Mathematics, for accepting me as his student and suggesting a novel and fascinating problem for my research. Despite of his very busy schedule, he has spared sufficient time in guiding my work. My heart felt gratitude to Prof. C. SUBBARAMI REDDY, M.Sc., Ph.D., F.S.S. (London), for accepting to be my Research Co-supervisor. Their thought provoking discussions and critical analysis are responsible for the present form of my work. They have been a constant source of inspiration throughout my research work. I am deeply moved by their affection, personal care and persistent encouragement. Infact, these words won’t suffice for expressing my gratitude for what I have learned from them.

I thank Mrs. PRAMEEKA KUMARI CHANDRA MOHAN and Mrs. UMA SUBBARAMI REDDY for their maternal affection, encouragement and blessings.

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

I am very much thankful to Prof. P. GOVINDARAJULU, Prof.S. VENKATA RAMANA, Dr.N.BHASAR REDDY, Dr.S.SREENATH, Dr. S.RAMA KRISHNA, Dr. M. PADMAVATHAMMA, faculty members, Department of Mathematics, S.V.University, Tirupati, who have been co-operative to me in different ways.

I am thankful to Prof. L. NAGAMUNI REDDY, Professor of Mathematics (Retd.) and former Rector of S.V.University and to Prof. K. VASUDEVA REDDY, Professor of Philosophy (Retd.), S.V.University, Tirupati for their moral support and encouragement.
I express my deep sense of thanks to Prof. K. NARASAIAH CHETTY, Principal, SKIT, Sri Kalahasti for his co-operation and support.

I thank my well wishers Dr. B.KRISHNA REDDY, Dr.K.SIVA SHANKAR REDDY, Dr.A.V. CHANDRA SEKHAR, Dr.K.PURUSHOTHAM REDDY, K. HARINATHA REDDY for their moral support.

I am equally grateful to my colleagues Dr. N. VASUMATI, Mr. M.M. MUNISEKHAR, Dr. P. KOTHANDARAMI REDDY, Dr.Ch.RAMU, Dr.K. THYAGARAJAN, Dr. G.V. SUBBA REDDY, Mr.C.RAMACHANDRAIAH, Mr.K.MADHU MURTHY, Mr.P.RAVEENDRA BABU for their help.

I thank my research colleagues Mr. M. RAMESH and Mr.K.RAMESH REDDY for their help and co-operation.

Above all I wish to express my personal sentiments, love and affection to my mother Late Smt. S. PARVATHAMMA, father Srl S. VENKATA REDDY, my beloved wife A. SREEDEVI and other members of my family, without whose blessings, constant advice and moral support this venture would never have been materialized.

I thank P. KARTHIK and P. MURALI of Karthik ‘e’ Corner, Balaji Colony, Tirupati for their meticulous care in typing this thesis.

(S. SRINIVASA REDDY)