ACKNOWLEDGEMENTS

I would like to express my deep indebtedness and gratitude to my research guide PROF. K. PUSHPANJALI, Professor and Chair Person, BOS in the Department of Statistics, S. K. University, Anantapur, for her advocacy and whole hearted support in helping me to accomplish my thesis work. I have benefited immensely from her vision, ideals and her systematic way of functioning. Without her constant encouragement and patient reviewing, my thesis would not have come out in its present shape.

I am also indebted to PROF. K L A P SARMA Head, Department of Statistics, S. K. University, Anantapur, for his constructive criticism and guidance which enabled me to pursue my thesis work in a very challenging manner. I owe it to him for his excellent feedback which shaped my thesis effectively.

I am deeply grateful to PROF. P. MD. AKHTAR, Professor, Department of Statistics, S. K. University, Anantapur for his cooperation, guidance and constant help in the progress of the research work.

I am thankful to PROF. Y. KRISHNA REDDY, DIRECTOR, RGUHIT, Y S R (DIST), RTD Professor, Department of Statistics, S. K. University, Anantapur for his interest and inspiration provided for the progress of the research work.
My sincere thanks are due to OR & SQC Department Professors viz.,

**Dr. C. Umashankar**, **Dr. A. A. Chari**, **Dr. S. M. Varma**, **Dr. Y. Raghunatha Reddy** & **Dr.G.Y.Sagar** Rayalaseema University, Kurnool for their interest and encouragement during the research work.

My sincere gratitude to the Principal, CBIT, **Dr. B Chennakeshava Rao** and Head, Department of Mathematics **Prof.K.Rama Rao** and the faculty members of the department for their constant help and guidance in the course of my thesis work.

My sincere thanks to **Prof.Y.V.Gopala Krishna Murthy** and **Prof.Ayub Khan**, **Prof. D. Ramakrishna** and **Prof. Chakrapani** and **Mr.B. Ranga Swamy** and **Dr.B. Venkata Ramudu** who all are my academic manifold for their persistent guidance and encouragement.

My heartful thanks to my parents, the source of my blissful existence, my wife the cause for my carved presence, my daughter as my learning inspiration and my dearest friend **Mr. B.Rajendra** for their constant support to complete my research work successfully.

(B R Sreedhar)