Acknowledgments

First and foremost, it is my immense pleasure to express my deep and sincere gratitude to my supervisor Dr. N. Ch. Bhatra Charyulu, Assistant Professor in Statistics, Department of Statistics, O.U. for his constant guidance, encouragement and hearty support given to me during the course of this work which helped me to complete it successfully. He has not only been my supervisor, but also a great mentor for my graduate life.

I am grateful to Dr. K. Vani, Head, Department of Statistics for providing necessary facilities during the course of work and Dr. C. Jayalakshmi, Chairperson, Board of Studies in Statistics, Department of Statistics, Osmania University, Hyderabad for their constant encouragement offered during the course of my research work.

My sincere thanks to my revered professors, Prof. M. Krishna Reddy, Prof. M. Gopal Rao, Prof. P. Lakshmi Manga and Prof. V. V. Haragopal for their valuable suggestions and encouragement and help in several respects during the study. I would like to express my sincere thanks to, Dr. Jayasree and Dr. Jyothirani Faculty Members, Department of Statistics, Osmania University for their constant encouragement throughout the period of my research work.

I am grateful to University Grants Commission, New Delhi for providing financial assistance in the form of junior and senior research fellowships under Moulana Azad National Fellowship for Minority Student’s scheme.

I am thankful to my seniors Ramesh, Dr. Naveen, Dr. Ramu, Dr. Venu and my co-scholars and my well wishers their help and support in carrying out the research work.
I extend my thanks to, Mr. Gopal, Mr. Rangaiah, Mr. Srinivas non-teaching staff, Department of Statistics, for their secretarial help during the period of my research work.

Words are inadequate to express my gratitude for the moral support from my family members, my father Sri. SK. Janimiya, my mother Smt. Meerambi and my brothers Dr. Marebabu, Khader Babu and sister in laws.

Last but not least I am also grateful to my wife Seema and my son Saahil Without the affection, always believed in me and stood by me in my decisions. Without affection, support and encouragement I may not complete this thesis.

- SK. AMEEN SAHEB