* A C K N O W L E D G E M E N T *

I wish to express my deep sense of gratitude to Dr. R. N. Rattihalli, Head, Department of Statistics, Shivaji University, Kolhapur, for his valuable guidence, unfailing patience and constant encouragement during the course of this dissertation.

I am greatful to the Dr. S. R. Kulkarni, Dr. D. T. Shirke, Mrs. H. V. Kulkarni, for their time to time valuable discussions, I had with them during the M. Phil. course.

I am very much thankful to my friend Mr. N. P. Madhure, for inspiring me to complete this dissertation. I am also thankful to Mr. Mahadik and Miss. Magdum for their unfurgatable company. I also wish to thank the non-teaching staff of the Deptt. Of Statistics for their kind co-operation.

I am greatful to my mother-in-law and father-in-law and other family members for their kind co-operation. I specially thank to my parents for their constant encouragement during the course work.

Above all I must thank the ALMIGHTY without whose grace nothing is possible for me.

S. M. Kumbhar