ACKNOWLEDGEMENT

Research is never a solo work. Behind the exterior of an individual research lie numerous people - visible and invisible. Gratitude is due to my advisor Dr. V. A. Kalamkar whose ready guidance and expertise have gone a long way in building this Thesis. The support of my family members has been the rock of my strength during my research days. I am grateful to my parents who nurtured my desire to grow and evolved and without whose support I would not have started and completed this research work. Words can't be enough to thank my husband Nimesh Shah for his unflinching support and patience. I thank my daughter Twisha for being so understanding, for sharing my responsibilities and for putting up with my occasional absences. I am also grateful to my son Jaival for diffusing the pressure and for giving me moments of joy.

I would like to express my deep gratitude to Dr. K. Muralidharan, professor and head, Department of Statistics, Faculty of Science, The M. S. University of Baroda, for his kind support.

I would like to express my deep sense of gratitude to all Professors of Department of Statistics, Faculty of Science, The M. S. University of Baroda, for the their kind support.

I am thankful to Librarian and office staff of the Department of Statistics, Faculty of Science, The M. S. University of Baroda.

My friends and Ex. Colleagues also deserve my gratitude who are directly or indirectly associated in this work.