ACKNOWLEDGEMENT

The success story of this assignment is not complete without the special mention of the key personality, Dr. S. P. Kane, Reader, Department of Statistics, Nagpur University, Nagpur. I owe the credit of developing my taste of Statistics to him. Hence, I consider it a great honor to have had an opportunity to work under him. I express my deepest sense of gratitude and shall ever be indebted to him for his valuable guidance, constant inspiration, innovative ideas, acumen, co-operation and utmost understanding.

I am thankful to Dr. M. R. Patil, Director, Govt. Vidarbha Institute of Science and Humanities (GVISH), Amravati, for extending all possible help to undertake the studies. My thanks are to my teacher and Head, Department of Statistics, GVISH, Amravati, Dr. R. G. Kedia, for his valuable support and encouragement throughout this work.

I am grateful to my teachers, Shri. V. G. Bhamburkar, Principal, Shri Shivaji Science College, Amravati, and Dr. A. Ghosh, Reader, Department of Statistics, GVISH, Amravati, who have always blessed me for my entire academic endeavor. I am also thankful to Dr. M. N. Deshpande, Ex-Director, Institute of Science, Nagpur, and Dr. M. T. Bharambe, Reader, Department of Statistics, Institute of Science,
Nagpur for their motivation to undertake this work. I feel it necessary to mention the special help accorded by Dr. Rajesh Singh, Head, Department of Statistics, Amravati University, Amravati.

I shall fail in my duty if I do not mention the co-operation and help rendered to me by my colleagues and friends Smt. P.B. Lakhani, Smt. N.S. Pandharikar, Smt. M.V. Alsi, Smt. M.M. Rahatgaonkar, Smt. N.S. Bedre, Smt. M.K. Mathankar. My special thanks to Shri. A.K. Khamborkar who is ever ready to help me. Thanks to all the teaching and non-teaching staff of my department.

I would like to thank librarian and library-staff of Nagpur University, Amravati University and GVISH for timely co-operation and providing me references and books as and when needed.

I am deeply indebted to my parents Shri. S.T. Joshi and Smt. S.S. Joshi and my parents-in-law for their divine blessings. My eldest sister Dr. A.S. Gudadhe, Lecturer, Department of Mathematics, GVISH, has been the permanent source of inspiration, which will never run dry. My special thanks to my best friend Dr. Smt. Neela Kane for her timely suggestions and some valuable pieces of advice which proved of immense help while the work was in progress.

I can't express in words my feelings towards my husband Shri. Rajendra G. Kolhekar, for his pivotal role in boosting up my morale and for
his support, understanding and all kind of help during this period of ordeal. I feel deeply obliged to my daughters Chi. Rucha and Chi. Ketaki who have shown admirable tolerance and allowed me to work when they should have rightfully claimed their share of my time and company.

Mrs. Sadhana R. Kolhekar