ACKNOWLEDGEMENT

It gives me great pleasure to express my sincere feelings of gratitude to research guide Dr. L. N. Katkar, Reader in Mathematics, Department of Mathematics, Shivaji University, Kolhapur for his able guidance and constant encouragement in my present research work and in preparing the dissertation without which it was not possible for me to complete the same to the satisfaction. In Indian culture, we regard guru that is teacher, is all in all to a disciple, hence we consider 'Guru as God' and in my case it is cent percent true because, his guidance, help and words of encouragement helped me and given energy to complete this work, besides lot of hurdles.

I am also thankful to Dr. M.S. Choudhari, Professor and Head, Department of Mathematics, Shivaji University and his colleagues in Dept. Dr. Mrs. Y. S. Pawar, Dr. C. S. Manjarekar, Dr. G. H. Patil for their valuable suggestions. I owe my special thanks to Mr. D. S. Khairmode for his co-operation in completing this work.

I am really greatful to Mr. Ashok Patil, School committee chairman, Mr. A. A. Molaj, Headmaster and Mr. A. B. Sambhushete, Vice-principal, Sangli Highschool and Junior college for their co-operation, convenient adjustments and timely help so as to enable me to complete and submit my dissertation in good time.

Dr. Uday Naik and Dr. Mrs. B. U. Naik of Willingdon College, Sangli, made me available, their computer for this work and I thank them with all my mind for their above valuable help. My thanks are also due to their elder son Master Pavan Naik

who helped in the computer work.

I am also grateful to Prof. A. A. Mudalgi, Head, Dept. of Mathematics, Smt.

Kasturbai Walchand College, Sangli and Dr. P. V. Koparde, Head, Dept. of

Mathematics, Jaysingpur College, Jaysingpur for motivating and inspiring me to

undertake and complete the research work.

I am also extremely thankful to the Librarian, Shivaji University, Kolhapur

and her staff for their co-operation in making me available the required books for this

work.

I have to mention my special thanks to my colleague and friend Shri.

Milind Mohire for his every kind help, words of encouragement and useful practical

suggestions from time to time to complete this work.

I cannot forget to mention my deep sense of gratitude to my loving mother

Smt. Kusum Ainapure whose blessings throughout my educational career have been

fruitful. Last but not least, I am indebted to my wife Mrs. Padmaja Ainapure and my

daughter, baby doll Rutuja of 2 years for their for cooperation during my M.Phil.

research work.

Place: Kolhapur

Date: 25/05/2004.

Chandrakant Ainapure