I express my profound sincere gratitude to my teacher and research supervisor Prof. K. SUVARNA, Department of Mathematics, Sri Krishnadevaraya University, Anantapur, for suggesting this problem. She gave tireless efforts through discussions and valuable suggestions that ensured the success of this undertaking. I am in great debt to my teacher, who not only instructed me in Mathematics, but also opened the path for higher knowledge in that discipline. Her critical advice as a teacher and friendly nature has greatly helped me to submit this thesis in the present form. I hereby record my sincere and affectionate gratitude for what all she has done.

I am thankful to Head and Chairman, Board of Studies, Department of Mathematics Prof. U. Rajeswara Rao, Department of Mathematics, Prof. D. R. V. Prasad Rao, Prof. R. Siva Prasad, Prof. A. Mallikarjuna Reddy, and Dr. G. Shobhalatha, Department of Mathematics, Sri Krishnadevaraya University, Anantapur, for their help and valuable suggestions during my research.

I express my sincere thanks to Prof. P. Narasimha Rao (Retd.), Department of Mathematics, Sri Krishnadevaraya University, Anantapur for his suggestions and encouragement.

I also express my sincere thanks to Prof. K. Ramakrishna Reddy, Department of MBA, Sri Krishnadevaraya University, Anantapur, for his constant help and suggestions in my course of research work.
I take this opportunity to express my deep sense of gratitude to my beloved father Mr. S. Munavar Basha, my mother Mrs. D.S. Zamruth Hunisa, my brother D.S. Ifthakar Ahamed, my sisters S. Naseema Begum, D.S. Reshma and my sister’s sons S.Md. Roshan, D.S. Imam Mohiuddin and S.Md. Jaffer Hussain for their encouragement and cooperation at every stage of my work.

I am thankful to the authorities of Sri Krishnadevaraya University for providing necessary facilities to carry out my research work.

I am thankful to Mr. Madhu and Mr. Raju, Department of Mathematics, for their cooperation throughout this work.

My acknowledgement would not be completed if I do not mention in particular the help rendered in terms of time and academic services of my research colleagues Dr. (Smt.) D. Bharathi, Dr. (Smt.) Sarada Devi, Dr. P. Gayathri, Dr. A. Padmavathi, Smt. Madhavi, Mr. P. Pratap Reddy, Mr. Sreenivas Reddy, S. Jafar, K. Jaya Lakshmi, A. Rajeswari Bhat, Mr. Kalyan Chakravathy, Mr. D. Prabhakar Reddy and Mr. K. Madhusudhan Reddy, for their cooperation in the course this work.

Finally my thanks to Mr. S. Venkata Swamy, Programmer for typing this work neatly.

Place: Anantapur

Date: 16-09-2010.