Acknowledgements

To carry on research work one needs guidance, co-operation and encouragement from different persons in places and circumstances. I take this opportunity to express my profound indebtedness to those persons who have helped me during research endeavor. I express deep sense of gratitude to esteemed supervisor Dr. B.J. Gireesha, Assistant Professor, Department of Mathematics, Kuvempu University, Shankaraghatta for enlightened guidance and invaluable discussions. It is my privilege to do this work under the guidance of Dr. B.J. Gireesha. His affection and wholehearted support at various stages are immemorial for me.

I express my sincere thanks to our beloved teachers, Prof. C.S. Bagewadi, Sri. Gnaneendra Prabhu, Dr. S.K. Narasimhamurthy and Dr. Venkatesha for their kind cooperation and encouragement throughout the course.

I deeply extend my sincere gratitude to Dr. M. Subhas Abel, Professor, Department of Mathematics, Gulbarga University, Gulbarga for their help and suggestions during the research work.

I extend my special thanks to Dr. Siddabasappa, Dr. H.G. Nagaraja, Dr. B.C. Prasanna Kumar, Dr. P. Venkatesh, Dr. G.T. Srinivasa, Dr. Anjan Kumar, Dr. S.T. Aveesh, Dr. Mahesha, Dr. C.S. Vishalakshi, Dr. Pradeep Kumara and Dr. H.J. Lokesha for many valuable suggestions and discussions which are indeed helped to improve the thesis.

It's my pleasure in expressing grateful thanks to my friends and fellow researchers: G.S. Roopa and S. Manjunatha who have lent considerable research support.

I am very much grateful to my research friends Ajith, P.T. Manjunatha, K.T. Pradeep Kumara, Mallikarjuna Y. Kumbar, N.G. Rudraswamy, G.M. Pavithra, Latha Kumari, Gurupadavva, Bharathi, S.R. Ashoka, M. Ramesh, Naveen, Mahanthesha, Kavya, Chethana, B.S. Anitha, D.M. Vasantha, P.U. Praveen and Pradeep for their good wishes. Also my sincere thanks to all my colleagues and friends who have directly or indirectly helped me for completion of my thesis.
My special thanks to Smt. Ambika, Sri. Basavaraju, Annapurnamma and office staff, Department of Mathematics, for their valuable help.

I would like to express my hearty merit towards Smt. Shobha Gircesha, Smt. Shobha venkatesh, Dr. Anand, and Nandecsh for all the emotional support and concern.

I thank the staff of Kuvempu University Library and Library of IISc, Bangalore for providing very useful information for my research work.

I remember my parents, who have borne and burnt of my upbringing and education. I am indebted to them. It would not have been possible to carry this research endeavor without the encourage assistance of my family members.

My thanks are due to the authorities of UGC for the financial support under RGNF scheme during my research work leading to Ph.D degree under meritorious fellowship.

It is difficult to recall the individual names of friends, well wishers and research scholars, who were of immense help in one way or the other. I am thankful to all of them.

Place: Shankaraghatta

Date: 03/12/12

Ramesh G.K