Acknowledgement

I very humbly acknowledge my gratefulness to Dr. K.S Adhao, Reader and Head, Department of Mathematics, Amravati University, Amravati for his valuable guidance as well as affectionate encouragement, and willingness to spare time at any moment despite of his very busy schedule.

I am also highly obliged to Dr. G. S. Khadekar, Reader, Department of Mathematics, Nagpur University, Nagpur for helping me with his penetrating insight as well as authoritative knowledge on the subject to develop some deep implications. I gratefully admire his unexampled generosity and kindness to me throughout the work.

I should also like to thank warmly to Ex-professor, Hon’ble Vice Chancellor Dr. T.M. Karade, who in his sensible advise and stimulating conversations, extended me substantial help as well as encouragement.

It would indeed be an unpleasant miss on my part if I do not thank heartily to Dr. A. G. Deshmukh, Reader and Head, Department of Mathematics, Government Vidarbha Institute of Science and Humanities, Amravati who initiated me to do research and for his unfailing encouragement that inspired me.

I also owe sincere thanks to Dr. C. L. Mahajan, Ex-chairman (B.O.S. Mathematics), Prof. A. H. Mehare, Chairmen (B.O.S. Mathematics), Dr. J. N. Salunke, Dr. S. D. Katore, Dr. V. G. Mete, Prof. S. P. Kandalkar who have been a constant source of encouragement to me.

I owe special debt of gratitude to Principal, Dr. D. M. Ambhore, Jijamata Mahavidyalaya, Buldana for his liberal attitude in sanctioning the leaves while doing this work. I also owe sincere thanks to Dr. S. P. Bhalke, Dr. R. B. Deshmukh, Prof. A. S. Patil, Prof. S. V. Ambekar, Prof V. G. Mahajan,
Prof. N. B. Deshmukh for their grand help and constructive suggestions from time to time for the improvement.

I must humbly acknowledge gratefulness to Dr. K. C. Deshmukh, Reader and Head, Department of Mathematics, Nagpur university, Nagpur.

I am also grateful to Prof. R. W. Warade, Prof. M. N. Gaikwad, Prof. A. V. Avchar, Prof. Avinash Nagpure, Prof. M. S. Borkar for their timely assistance and valuable suggestions.

I express my gratefulness to the families of Dr. Karade, Dr. Adhao, Dr. Salunke, Dr. Khadekar, Dr. Nareshchandra Kathole and Sau. Vidya Kathole for the co-operation they have extended to me.

In the end, I am extremely indebted to my revered parent for inspiration. As well I am thankfully acknowledge my indebtedness to my lovable wife Sau. Jyoti and daughters Apurva and Ishani for extending me affectionate encouragement and noble inspiration which sustained my interest throughout the work.