Acknowledgements

I am privileged to acknowledge my deep gratitude to Dr. Sushil Kumar Tomar, Professor, Department of Mathematics, Panjab University, Chandigarh, an eminent scholar, who as a matter of good luck became my supervisor. Dr. Sushil Kumar Tomar is always in great demand of the students as a Supervisor and coveted teacher. He is kind and gracious as he was always there whenever I needed his guidance and help for the conceptual clarity despite his extremely busy schedule. There are no appropriate words in the dictionary to express my heartfelt gratitude which I owe to him. His constructive criticism and valuable suggestions at every step of my work has not only shaped the present version but also broadened my perspective during the entire course of my study. In fact, without his invaluable guidance my thesis could never have been completed.

I am highly obliged to Dr. Ashwani Kumar Bhandari, Professor and Chairperson, Department of Mathematics, Panjab University, Chandigarh for providing the necessary facilities during the course of my research work.

One of the greatest joys of this work is that it gave me an opportunity to make some truly wonderful friends who provided a very pleasant working environment and helped me in every little bit.

I am thankful to all my senior colleagues Dr. Dilbag Singh, Dr. Sanasam Sarat Singh, Dr. Aarti Khurana, Dr. Ashish Arora and staff members of the Department of Mathematics, Panjab University for their co-operation and assistance in the completion of this thesis. I am also thankful to the Principal and staff members of Post Graduate College, Nalagarh, District Solan (Himachal Pradesh) for their valuable co-operation. Finally, I express my deepest gratitude to my parents, my wife Mrs. Jaswinder Kaur and my brothers for their unconditional support in all spheres of my life.

Dated: 1. 6. 2010

Place: Chandigarh

Jaswant Singh