ACKNOWLEDGEMENTS

I would like to express my sincere gratitude and indebtedness to my revered teachers Dr. R. K. Mishra, Associate Professor and Dr. Sukhjit Singh Dhaliwal Professor, Department of Mathematics, SLIET Deemed University, Longowal, Sangrur who have been the main driving force behind initialization and continuation of this research study and ultimately leading to its successful completion. Words are insufficient to acknowledge the help they have rendered in the form of their expert and valuable guidance. Sparing of valuable time, untiring efforts and above all their timely help as and when required, which made the difficult terrain of research work inspiring, motivating and easier to pass through.

Special thanks to Dr. R. K. Mishra for his moral support, motivation and hospitality. He always met me with smiling face and solved very tough problems in very simple way. He was always ready to help me in solving my difficulties in personal meetings, on phone and email.

I am also thankful to our worthy Principal Dr. M. S. Grewal for being so kind, co-operative and generous during the whole period of research work.

I would like to give thanks to Dr. R. K. Gupta, Dr. Lakhwinder Singh, Dr. J. S. Oberoi and Dr. A. P. S. Sethi for the sincere help and co-operation rendered by them in different way.

I am indebted to my parents for all the pain and sufferings, through which they have undergone to bring me up to this level. Very special thanks for their blessing, moral support and continual encouragement for higher studies.

I would like to express my deepest gratitude to my wife Dr. Sukhjeet Kaur who has been the main inspiring force to initialize this study and without whose moral support and co-operation this work would not have been completed. I feel a sense of apology to my children Honey and Sunny to whom I could not provide their due share of love, attention and proper care during the period of research work.

Finally I thank Almighty and great martyrs Baba Zorawar Singh ji, Baba Fateh Singh ji and Mata Gujar Kaur ji for their blessings, guidance to work and continuous moral support.

(Amritbir Singh)