Acknowledgement

In the name of Allah, the most Gracious, the most Merciful. Alhamdulillah, all praises to Allah for the strengths and His blessing in completing this thesis.

Though the following thesis is an individual work, I could never have reached the heights or explored the depths without the help, support, guidance and efforts of a lot of people.

First and foremost, my utmost gratitude to my supervisor Dr. (Mrs.) Alveera Mehdi, Associate Professor, Department of Mathematics, A. M. U., Aligarh, for her invaluable advice, guidance and for sharing her broad knowledge. She has been very generous in providing the necessary resources to carry out my research. The critical comments, she rendered during the discussion have gone a long way in my understanding and presentation. Words fail me to express my appreciation for her support, generous care and homely feeling at Aligarh. She was always beside me during the happy and hard moments to push me and motivate me. I can see the good shape of my thesis because of her help and suggestions in formatting the entire thesis. I doubt that I will ever be able to convey my appreciation fully, but I owe her my eternal gratitude.

Its my fortune to gratefully acknowledge Prof. Fazal Mehdi, Professor, Department of Mathematics, A. M. U., Aligarh, for his valuable advice in my work, spending his precious time to read this thesis and gave his valuable suggestions. His infectious enthusiasm and unlimited zeal have been major driving forces through my post graduate career at Aligarh Muslim University, Aligarh.

I am immensely grateful to the Chairman Prof. Afzal Beg, Department of Mathematics, A.M.U., Aligarh, for providing me all the necessary facilities throughout the development stages of this thesis.
My special thanks to Dr. Mohd. Akram, Associate Professor, Department of Sociology, A.M.U., Aligarh, for his sincere encouragement and inspiration throughout my research work.

This list is incomplete without acknowledging Dr. Saiful Rahman Mondal. His invaluable help and suggestions throughout the typing of this thesis have contributed to the success of this research.

It is also a pleasure to mention here my colleagues, Mrs. Firdhausi Begum, Dr. (Mrs.) Sabah A. R. K. Naji and Mr. Ayazul Hasan for their loving behavior and for carefully reading and commenting on countless revisions of this thesis.

I would like to extend huge, warm thanks to my friends Mr. Malik Rashid Jamal, Mr. Shuja Haider Rizvi, Mr. Mohd. Shuaib, Mr. Salahuddin Khan, Mr. Asif Khan, Mr. Mohd. Furqan, Dr. Noman Ahmad, Dr. Khalid Rafat Khan, Mr. Wajih Ashraf and Ms. Tanveer Fatima for being friends and for the support they have lent me during my stay in Aligarh. Thanks for the friendship and memories.

Words are short to express my deep sense of gratitude to my parents Mr. Sikander Ali and Mrs. Farhat Parveen for their unwavering faith and confidence in my abilities and in me is what has shaped me to be the person I am today. I owe everything to them. My thanks also go to my brother Mr. Munawwar Ali and my sister-in-law for their love and support. Not forgotten my appreciation to my sisters for their endless love, prayers and encouragements. They were always supporting me and encouraging me with their best wishes. Besides this several people have knowingly and unknowingly helped me in the successful completion of this work.

Finally and most importantly, I greatfully acknowledge financial support from the University Grant Commission during my research period, Aligarh Muslim University for giving me the financial assistance to visit Seoul, South Korea in an international conference to present my research work and the Department of Science and Technology for providing me the travel support to visit Muscat, Oman for my presentation in an international conference.

Fahad Sikander