ACKNOWLEDGEMENT

All praises and thanks be to ‘Allah’ the cherisher and sustainer of the world, who bestowed upon me enough guidance and benevolence to complete this research work in the present form.

It is good fortune and a matter of privilege for me to have the esteemed supervision of Dr. Syed Naseem Alam, Department of Statistics & O.R., Aligarh Muslin University, Aligarh for the sincere and active interest and constant encouragement throughout the course of the research.

I wish to express my deep sense of gratitude to Prof. Sirajur-Rehman, chairman, Department of Statistics & O.R., A.M.U. for providing me necessary facilities and constant support throughout my work.

I am highly thankful to my teachers Prof. M.Z. Khan, Prof. Q.M. Ali, Dr. M. Yaqub, Dr. S.G.A. Rizvi, Dr. Rafiqullah Khan and Dr. Haseeb Athar (Statistical Assistant) for their various help and suggestions.

I owe my sincere thanks to my friends and colleagues Mrs. Kaynat Nasser, Mrs. Nazish Malik, Ms. Naheed Parveen, Ms. Farhat Aisha, Ms. Waseefa Fatma, Ms. Sarah and all other well-wisher whose concern enthusiasm helped me most in my struggle.

I would like to express my heartiest sense of gratitude to my parents, my parents-in-law, my brother Shahanawaz, my sister Saba, and my brothers-
in-law Faisal and Kashif for their forbearance and patience during the research work.

A very special acknowledgement is due to my husband Mr. Ibadur Rehman for his constant support and encouragement, which inspired me all the time.

Finally, I am grateful to Aligarh Muslim University and the UGC for financial support by awarding me the Junior Research Fellowship.