ACKNOWLEDGEMENTS

I wish to acknowledge my profound sense of gratitude to my supervisor, Dr. Asif Ali, for his inspiring and encouraging way to guide me to a deeper understanding of knowledge work. His never failing support and excellent guidance has made this thesis possible.

My sincere thanks goes to Professor Rashid Ali, whose broad knowledge of scientific issues, unique enthusiasm, unending optimism and support have been of great value to me. I gratefully acknowledge his constructive comments and valued advice concerning this thesis. This research would have been impossible without his help and encouragement.

I also thank Dr. Mashiat U. Siddiqui, Chairman, Department of Biochemistry, J.N. Medical College, AMU for the research facilities provided at the department.

I am deeply indebted to Dr. Shahid Jameel, Head Virology Group, International Center for Genetic Engineering and Biotechnology (ICGEB), New Delhi for giving me the opportunity to work in his lab.

Thanks are also due to Dr. Khursheed Alam, Dr. Moinuddin and other members of the faculty of their continuing help and encouragement.

I would like to thank my seniors Dr. Kiran, Dr. Waris, Dr. Haseeb, Dr. Rizwan. Dr. Deepak and Dr. Saba for their amicable help and cooperation.

Many thanks to my colleagues Safia, Sarah, Fozia, Dr. Mubarak and Dr. Tariq for their help and for creating a pleasant working atmosphere in the lab.

I value and appreciate the cooperation of my friends Saba, Harshita, Sadaf, Hina especially Farah. Without her friendship and support, the long and occasionally difficult days at work would have been unbearable.

Words cannot truly express my deepest gratitude and appreciation to my parents for their unfailing love and constant support in every possible way. Without them,
achieving this goal would not have been possible. They deserve far more credit than I can ever give them. My sister, Naila and brother, Aman also deserve praise for their love and understanding.

Co-operation of Lab assistants Sabu Khan and Jumman is greatly appreciated. Thanks are also due to the non-teaching staff of the Department of Biochemistry and the technical staff of the Central Photography Section for their help.

I wish to thank Mr. Rizwan Ahmad, for all the help, cooperation and painstakingly typing this thesis for me.

(FARINA KHAN)