Acknowledgements

First and foremost I thank the Almighty ALLAH for His blessings. My first and foremost sense of profound obligation and heartful gratitude to my venerated teacher and supervisor Prof. R. S. Pandey, for ebullient encouragement, condour discussion and pellucid approach to the subject. It has indeed been a privilege and life long treasure to work with such a worthy and renowned teacher, a person of excellence, perfection and brilliance whose invaluable help can never be sufficiently acknowledged. I thank him to make me able to not only visualize my goals but more importantly to focus my efforts to achieve them.

I wish to avail this opportunity to express my deep gratefulness and indebtedness to Prof. S. D. Dixit, Head, Department of Zoology and Dean, Faculty of Science for providing me the necessary facilities during my tenure of work.

I would like to thank Prof. Pratima Gaur, Ex. Head, Department of Zoology for her willing cooperation, invaluable suggestion and constructive throughout the the course of this study.

I express my hearty gratitude to Prof. Bechan Sharma for his valuable support, constant inspiration, encouragement, useful advice, moral support and time to time help during the preparation of manuscript and whole research tenure.

I can not let this opportunity pass without expressing my thanks to Mr. Masood Kibriya who has been enormous supportive since my childhood and extended his helping hand whenever I needed.
I ardently thank my colleagues Dr. Firdaus Fatma, Dr. Amit Kumar, Dr. Prem Chand, Dr. Ratna Gaur for their skilful, invaluable help and support during my research endeavour.

The acknowledgement would be incomplete without mentioning the individuals namely Ambika Arora, Mrs. Manju Pandey, Faisal Masood, Amjad Masood, Mohd. Amir, Samreen, Afreen, Dania, Altamash and Shohab who had extended silent but constant support during my research period.

Lest I lapse, I wish to express my profound gratitude to endless encouragement, sustained support, close cooperation, unasked help, patience and buoyancy of my father and mother. They lived with me throughout my research tenure with their constant upholding and moral support. I will always remember the mantra of patience and perseverance that they taught and gave the strength and courage to enable me to withstand the hard time during the work. I also wish to express my heartfelt thanks to my brother Syed Mansoob Ahmad for being always a constant source of my inspiration at the critical moment of study and life.

(Nighat Begum)
This thesis is dedicated to my Dear Parents