ACKNOWLEDGEMENT

It has been a long enlighting and wonderful journey to plan experiment and pen down Ph.D thesis. There have been many individuals who have walked alongside with me during these years. My sincere thanks to all my well-wishers who offered self-less support during this programme.

At the very outset, it is my privilege to acknowledge deep sense of gratitude and indebtedness to my supervisor, Prof. R. K. Sharma, Professor and Chairman of the Department of Zoology, and Dean of Colleges, Kurukshetra University, Kurukshetra, for his guidance, invaluable suggestions and encouragement which helped me to accomplish this study.

It gives me immense pleasure to convey my sincere thanks to Dr. Anita Bhatnagar, Dr. Anil Tyor, Dr. Jitender Bharadwaj and Dr. Deepak Rai Babbar for their kind co-operation and encouragement during my research work.

My sincere thanks to Dr. Manju Bala Sharma for her continuous motivation, encouragement and guidance throughout my research.

I wish to extend my indebtedness and heartiest thanks to my seniors Dr. Poonam Bharadwaj and Dr. Sudha Saini for their support and encouragement. I also owe a deep sense of gratitude and express my cordial thanks from the core of my heart to my lab mates, Ms. Ambika Gandhi, Ms. Shivani, Ms. Priyanka, Mr. Shivkant Vats and Mr. Aman for their help during the study period and thesis work in the lab.

I extend my indebtedness and heartiest thanks to Dr. Mohd Ashraf (Central Institute of Fisheries Education, Mumbai) Mr. Brij Mohan Gupta and Mr. Akhil Gupta for their co-operation and help.

I express my deepest sense of thanks to my friends, Ms. Oshin, Dr. Shikha, Ms. Jyoti, Mr. Vipin Kumar, Mr. Rohan, Mr. Har Krishan, Mr. Asif Ahmad, Mr. Masroor Ahmad, Mr. Manzoor Ahmad Yatoo, Mr. Manzoor Ahmad Dar, Mr. Hafizullah Dar, Mr. Rameshwar Sharma and many more for their continuous encouragement and caring attitude.

I express thankfulness to the non-teaching staff of the Department of Zoology, for their help and cooperation.

I extend my thanks to Department of Anatomy, A.I.I.M.S (New Delhi) and CIFE (Mumbai) for providing me laboratory facilities.

I am grateful to the employees of Verinag and Kokernag hatcheries especially Mr. Younis Ahmad, Javed Ahmad and Mohammad Maqbool for their kind cooperation to get fish samples without any difficulties throughout the course of the research work.

I find no word to express my indebtedness to my beloved Father, Mother, Brother Tasaduq Hussain and to my Sisters, Shabnum Aara and Aasirun-Nisa for their most affectionate encouragement, moral support, endurance, sacrifice, blessings and love without which it would not have been possible to achieve this goal.
Last but not least, what will I write related to you my Allah, there are no words in the dictionary to express gratitude to you. If I begin to count your blessings, it would be endless. To which favors of you, Oh Allah! I will deny. You are simply the most gracious and the most merciful.

Dated: 

(Mr. Rayees Ahmad Bhat)