ACKNOWLEDGEMENTS

First and foremost I express my profound sense of honour and
gratitude to The Almighty ALLAH for His great mercy and choicest blessings
generously bestowed upon me, without which I could have never seen the
completion of my Ph.D. work.

I owe my deepest gratitude to my supervisor, Dr. Mohammad Afzal
Khan for his keen interest, skillful guidance, valuable suggestions, kindness and
timely help during the entire study programme that led to preparation of this
manuscript.

I am thankful to Prof. Irfan Ahmad, Chairman, Department of
Zoology, Aligarh Muslim University, Aligarh, for allowing me to avail the
necessary laboratory and library facilities to carry out the work successfully.

It is my pleasure to offer sincere thanks to my teachers of the
Fisheries section Prof. Iqbal Parvez, Prof. Mukhtar Ahmad Khan and Dr.
Sultanat Parveen. I am highly delighted in paying my gratitude to Prof. Kamil
Usmani, Dr. G.G.H.A. Shadab and Dr. Ayesha Qamar for their help whenever
needed.

I am greatly indebted to the University Grant Commission (UGC),
New Delhi, India, for providing financial support in the form of Maulana Azad
National Fellowship (MANT) for my research work.

I wish to express my sincere thanks to my supervisor and lab mate Mr.
Katish Miyan for his immense help during the collection of fish samples. During
this work I have collaborated with many colleagues for whom I have great
regard, and I wish to extend my warmest gratefulness to all those who have
helped me with my work. I am highly delighted in paying my gratitude to my
sipers Dr. Muheet Alam Saifi, Dr. Nagma, my lab mates Sabah, Salman Khan, Afaq Nazir Shah and my friends Uzma Ahmad, Dr. Shama Islam, Dr. Shaista Bano, Muzammil Siddiqui, Nasreen Khan, Habiba Qadri, Tabassum Rehmat, Tuba Tahir, Iram Khan, Saima Kausar, Neelu Singh, Namrita Chaudhary, Sharqua, Dr. Syed Hassan Mehdi and Hridesh for their kind support and guidance that has been of great value in this study.

My deepest gratitude and affection goes to the most precious gift of God, my loving parents Mr. Qadeer Ahmad Khan and Mrs. Shabana Khan, for being a source of unseen, but not unheard strength. They form the backbone and origin of my happiness. Their love, care and support enabled me to complete my Ph.D. thesis. I owe my most sincere gratitude to Mr. Iqbal Ali, Mrs. Humaira Begum, Tanweer Ahmad Khan, Dr. Tauseef Ahmad Khan, Naveed Iqbal, Obaid Iqbal, Safa Qadeer, Sana Iqbal and Misba Khan for their unceasingly prayers for my success.

Words fail to express my appreciation and indebtedness to my late beloved Grand father, Mr. Naseer Ahmad Khan for his prayers, blessings and affection, who were a constant source of inspiration and always with me as a great support and motivation which made me realize the dream.

[Signature]
(Shahista Khan)