Acknowledgement

It is difficult though not impossible, to acknowledge a debt as precious as that of learning. It is the only debt which is difficult to repay except only through gratitude. It gives me pleasure to put on record my heartiest gratitude to the following:-

To my supervisor Prof M.Z. Chishti & Head Department of Zoology, under whom I had the honour of studying and under whose supervision and guidance the present work was conducted. I am indebted to him not only for providing necessary literature but also for his constant and stimulating help, advice and encouragement.

To Prof. A.R. Khan, Co-supervisor for his guidance and encouragement.

To Dr. A.R. Yousuf and other teachers for their advice and suggestions.

To Dr. Mubarak for encouraging me during the course of study. I pay all thanks to Mohmad Khalil Mattoo (Economist) for his good wishes and help in this behalf.

To my friends and colleagues who kept my zest and zeal alive. Sincere appreciation also goes to my mother and brothers who were the constant source of inspiration for me.

To Dr. Azra Shah, Head of Departments of Microbiology and Pathology, Soura Medical Institute for allowing me to work in her laboratories during the course of my work.

To ICAR for the (SRF) fellowship during the tenurier of my investigations.

I feel my acknowledgement incomplete if I fail to make a mention of J & K COMPUTRONICS ISLAMABAD (ANANTNAG) for typing out the manuscript for thesis.

(DILSHAD)