Acknowledgements

I am extremely grateful and indebted to my supervisor Prof. Subrata Kumar De, Department of Zoology, Vidyasagar University for his sincere and valuable guidance and encouragement that extended to me during the tenure of my work. I take this opportunity to record our sincere regards to all the faculty members of the Department of Zoology viz., Prof. Susanta Kumar Chakraborty, Prof. Bidhan Chandra Patra, Prof. Jayanta Kumar Kundu, Dr. Priyanka Halder, Dr. Biplab Mandal and Dr. Sagar Acharya for their encouragement. I am also thankful to Prof. Tapas Chandra Nag, Department of Anatomy, All India Institute of Medical Science, New Delhi for his valuable advices and necessary support during the work at Sophisticated Analytical Instrumentation Facility (SAIF) of AIIMS. I would like to thank Dr. Swaraj Kumar Sarkar for providing me indispensable advices, information and support on different aspects of my research work. I also feel proud to acknowledge the Department of Science and Technology, Government of West Bengal, Kolkata-700091 for their financial assistance [Memo No. 436 (Sanc.)/ST/P/S&T/1G-7/2016 dated 24.08.2016]. Much of my experimental work would not have been completed without the assistance of Mr. Krishnendu Ghosh, Laboratory Attendant and Dr. Dilip Chakraborty, Technical Assistant of Department of Zoology as well as Swasti Barman, lab mate of Department of Zoology, Vidyasagar University, Paschim Medinipur, West Bengal, India. I am forever thankful to my parents, elder sister and younger brother for their continuous encouragement and tremendous support that they have extend during my Ph. D. work.