ACKNOWLEDGEMENT

I would first like to thank and express my sincere gratitude to my guide and teacher, Prof. Tusharkanti Ghosh, Department of Physiology, for his continuous inspiration, encouragement and overall guidance throughout the period of the thesis work. His advices on the experimental design and the discussions which helped me to develop ideas put forward were immensely helpful.

I am also grateful to Mr. Prasanta Mukherjee (then ADSR of Balarampur, Purulia), Mr. Abani Mohan Sandil (Secretary, Bagmundi GP) and Mr. Tarun Chakraborty (Teacher, Agarpara Mahajati Vidyalaya), who helped and assisted during the field study.

I would like to express my special gratitude to Dr. Suman Chakraborty, Research Scholar, Biological Division, Indian Statistical Institute, for his immense help and support in the statistical analyses.

I would like to put in record the friendly dealings and support that I received from Mr. Arijit Ghosh, Mr. Goutam Dutta, Mr. Ananda Raj Goswami, Ms. Satabdi Ghosh and Ms. Susmita Sil, research scholars of Neurophysiology Lab, Department of Physiology, University of Calcutta, during the course of the work.

I should express my thanks to all teachers and non-teaching staffs of the Department of Physiology of University of Calcutta and Vidyasagar University for their kind cooperation and help to carry out my thesis work.

I also extend my thanks to Dr. Bhaswar Mukherjee (Head, Department of Physiology, Surendranath College) and Dr. Bisanbindhu Bandhipadhyay (Head, Department of Physiology, Netaji Nagar College for Women) for their cooperation during the course of my field work.

Finally, I give my special thanks to my family for their constant encouragement, motivation and support during this period which added to the successful completion of the thesis work.

Date: (SUTANU DUTTA CHOWDHURY)