Acknowledgement

Beyond every success, there is undoubtedly an imperceptible power of Almighty "GOD." Firstly I would like to thank "GOD" Almighty for giving me audacity and sanctioning me with acquaintance and confidence to fulfil this arduous task.

Pursuing a Ph.D. is both way experience agonizing and enjoyable. It is just like reaching a high peak slowly and steadily, accompanied by bitterness, hardships, encouragement, and trust. Though it will not be enough to express my gratitude in words to all those who helped me throughout, I would still like to give many thanks to these people.

At this moment of accomplishment, first of all, I pay homage and heartfelt gratitude to my admirable supervisor Dr. Kauresh Vachhrajani, Head of Department, Zoology, The Maharaja Sayajirao University of Baroda. This work would have been impossible for me without his expert guidance, constructive suggestions, motivations, and inexhaustible source of energy. He has been supportive since the day I began working in the laboratory. He helped me come up with the thesis topic and guided me over almost a year of development. He gave me complete freedom of time for accomplishing any of my research tasks. His calm composure, incredible confidence, clear concepts, and cheerful personality inspired this work to be successfully completed. It is an honor to be his Ph.D. student. Thank you, Sir, for making me what I am today.

I am thankful to Dr. Padmaja madam, Head Environment Studies department, for her support.

I am grateful to the Department of Environment Studies and the department of Zoology, The Maharaja Sayajirao University of Baroda, for providing me with all the valuable materials and laboratory.

I forward my appreciation to Dr. Shilpi Jain for guiding me in applying statistical analysis and thesis writing. I also want to thank Dr. Jignesh Trivedi for his valuable suggestions and support. I thank Mrs Dipti Vachhrajani for her all time positive thoughts and supportive talks.

I forward my thanks to faculties of the Environment Studies Department: Dr. Neha Singh, Dr. Shahenaz Jadeja, Dr. Manthan Tailor, Dr. Bablu Prasad, and Dr. Tarika Upadhyay for their valuable suggestions and support.

I am extremely thankful to my colleagues for providing a motivating and cheerful environment. I wish to thank my special friends, Barkha Purohit, Dayanjali Thakkar, Monika Valand, Amita Sankhwal, and Apurva Shitole, for their fruitful discussion and moral support all along my Ph. D. period.

I am thankful to Nîlesh Bhai, Panchal Bhai, Sandip Bhai, and Vithal Kaka for their clerical and laboratory-related support and help.

Finally, I acknowledge the people who mean a lot to me, my better half, my husband, Mr Abhijeet Shukla, my both side Aai and Baba Mr Prabhakar Shukla, Mr Ketan Vaidya, Mrs Neha Shukla, and Mrs Sandhya Vaidya. I also want to extend my special thanks to brother Lt. Col Aditya Vaidya and sisters Mrs Pooja Vaidya and Miss Vaibhavi Shukla for supporting me in any possible ways. I would specially mention the efforts of my cousins Pooja tai. Prarthana tai, Tanvi,

Siddharth and Viraj for cheering me up and accomplishing any task related to my Ph.D. work.

A special mention of thanks to my luckiest charm, my sweet little son Arnav for abiding by my ignorance and the patience he showed during my Ph.D. duration.

In a nutshell, it is not possible to acknowledge everybody individually, but my sincere thanks and gratitude to everyone who helped me, directly and indirectly, to accomplish this task.

At last, I humbly pray to "GOD" from dawn to dusk for the wellbeing of all my supporters.

Gargi Vaidya