ACKNOWLEDGEMENT

This is my moment of pleasure that having this work completed my sit to acknowledge those people without whom this work would not be completed.

I hereby take this opportunity to express my deep sense of gratitude and indepthness to our esteemed university, Gulbarga University, Kalaburagi, which has provided me an opportunity to fulfill the most cherished desire to reach my goal.

I feel extremely honoured for the opportunity given to me to work under the supervision of Prof. G. R. Naik, Professor and Chairman, Department of Biotechnology, Gulbarga University, Kalaburagi. And my deep sense of gratitude is inadequate to thank Prof. G.R. Naik Sir for his professional supervision obliging suggestions and affable endorsement, the most admirable and amiable supervisor and mentor I might have wished for. His celebrity and genial thinking were always a source of incentive in all the phases of research and analysis. His spirit promoted me to work harder and find myself short of words to articulate my gratitude to him in guiding me, précising my flaws and endowing with insights in my tough times. He is the one who taught me the basics of research and constantly helped me towards success. His continuous support, encouragement and valuable suggestions throughout the period of this investigation made this thesis as one of the most important things to be cherished throughout my life. I consider him as the major strength behind this venture and thank him whole heartedly.

I am honored to be able to work with such an outstanding scientist and a person with high spirits for life. He will be remembered with great respect at all phases of my life and I shall always be indebted to him.

I would like to express my sincere thanks to Dr. Ramesh Londonkar, Professor, Department of Biotechnology, Gulbarga University, Kalaburagi for his constant support, timely help during the pursuit of my work.

I sincerely thank Dr. Chandrakanth Kelmani, Professor, Department of Biotechnology, Gulbarga University, Kalaburagi for his encouragement, care and cooperation during this research work.
I also express my heartfelt gratitude to Dr. M.B. Sulochana, Associate Professor, Department of Biotechnology, Gulbarga University, Kalaburagi for her constant encouragement and support.

I thank our young, energetic and beloved lab mates Miss. Swati Sonkwade, Mrs. Asmita, Mrs. Jayashree Uppin, Mrs. Gayatri Vaidya, Mrs. Rekha Patil, Mr. Tathagat E Waghmare, Mr. Vinod Kumar Patil, Mr. Ravi Patil, Mr. Prithviraj Bhandare and Mr. Pramod Kulkarni and the Research scholars of our Biotech Department for their kind help, support and who all have been a great strength behind me.

I express my sincere thanks to all my non-teaching staff and all my classmates for their cooperation and timely help.

I thank the support of my seniors Mr. Gireeesh Babu and Ravi Ranjan Kumar for their suggestions during this work. I thank them whole heartedly.

I also thank the people around me, who constantly challenged me in their own way and kept my will on fire, which proved vital for my success.

And I remember all teachers who molded me since my childhood and could bring this thesis out from an ordinary pupil like me and thank them with bowed crown.

A major credit of my success goes to my huby Mr. Girish. M. Gadwal without whom my research work would not have started and taken this shape. I am thankful to him for standing beside me in my difficult times and bringing back the confidence in me.

I extend my sincere thanks to my brother Dr. Sharanprakash. R. Patil and sister-in-law Dr. Bhagyashree. S. Patil for their encouragement, inspiration and blessing towards me, which brought me to this level.

At this moment, I remember the sacrifices, patience, constant support, belief and invaluable love of my son Master. Pranav Girish Gadwal, parents and in-laws, without whom nothing could have been achieved. I can never be proficient to thank them.

At last I bow down to respect to my almighty for an internal courage and strength during work.

RASHMI