ACKNOWLEDGEMENTS

I regard myself as privileged and blessed to work under the supervision of Dr. P.C. Jain, Reader of the department of Applied Microbiology and Biotechnology, Dr. Hari Singh Gour Vishwavidyalaya, Sagar (M.P.), whose valuable guidance, encouragement and constant vigil over my work, has lead this work to emerge successfully in this form. I extend my profound indebtedness and gratitude to him.

I offer sincere gratitude to my Co-supervisor, Prof. S.C. Agrawal, Head, Department of Applied Microbiology and Biotechnology, Dr. H.S. Gour Vishwavidyalaya, Sagar (M.P.), for inspiring and providing the necessary research facilities. I am also thankful to Mr. Naveen Kango, Lecturer of the department for his cooperative and encouraging attitude.

I extend my sincere thanks to Dr. Sunil K. Deshmukh, Senior Research Scientist, Nicholas Piramal India Limited, Mulund, Mumbai, for his inspiration and valuable suggestions.

I owe my gratefulness to the M.P. Government state Scholarship, Bhopal, for the award of Junior Research Fellowship during the tenure of this work.

I acknowledge with profound gratitude, the assistance and moral support rendered by Mr. Rajesh Lachoria, Mr. Praveen Jain, Miss. Avni Patel, Mr. Vijay Nema and Miss Sarika Chouksey of this department.
The work undertaken has made me experience many ups and downs, although I had been living with it days and nights but there are some people who have knowingly or unknowingly figured a major role in its completion. I acknowledge my indebtedness from the innermost recess of my heart to Late Miss. Sarita Gupta, Ms. Abhilasha Jain, Dr. Saroj Yadav, Mrs. Mahfuza Khan and Mrs. Shagufta Parveen for their affection, constant inspiration and moral support.

I sincerely acknowledge Mrs. Ayyar, Superintendent, Nivedita Girls Hostel, Mrs. Shanker, Warden, Nivedita Girls Hostel and Hostelmates Madhu, Prachi, Rama, Leena, Rashmi, Alpana, Dolly, Richa, Abhay, Harshita, Neetu, Uma, Neelu, Vidhi, Bhauna, Tasneem, Sheelu and Khudeja for their affection, care and sympathetic attitude.

The blessings of my Mummy and Dady have always been a constant source of encouragement and inspiration to me. It is really difficult to find words for my brothers, Haji Mohd. Hanif Khan and Mohd. Mushtaque Khan, and Bhabhi Mrs. Nazima and Mrs. Gulzarina, they have always been walking on my side for anything and everything.

Above all it is the Almighty Allah whose blessings made the completion of this thesis possible.

Shama Jehan Parveen Khanam