ACKNOWLEDGEMENT

It is a privilege to express my deep sense of gratitude for my supervisor Dr. S.C.Patodi, Professor in Structural Engg., without whose vision, constant guidance, motivation and adherence to detail, this work would have been a pale shadow of what it is today. His patience in bearing with the initial attempts and a clarity of direction helped me achieve the high standards befitting his expectations. Words can only give a brief, limited excerpt of the tough journey of learning that he made us embark upon. And yet he was always there when a situation seemed to bring the ultimate breakdown. Working under him, has not only made me learn engineering, but has elevated me in terms of human values that are so natural to him.

Special thanks to Dr.V.S.Purani and his family whose unending support made me reach my goal. Dr. P.V.Patel was always available for discussion, with his great insight into the technicality of the problem. Dr. H.V.Trivedi has been a great mentor at all stages and gave the philosophical outlook. Thanks are due to Mr. S.N.Thakar whose crisp and critical comments gave an edge to the work presented. Many thanks to my Parents, Parents-in-law, Dr. Kuntal, Mr. B.M.Rao, Prof. C.J.Patel, and Prof. G.B.Modha for providing the much needed support at all times.

Dr. Kaushik Gajjar, my husband, Parth my son and Kushani my daughter, are the real authors of this work. They are the people who sat through the nights, so I could work and have company. They are the ones who stood by a person who was there and yet not available to them, even in their hour of need. And yet they showered the love that provided the unwavering faith I needed on the steepest of climbs. They laughed with me in my hour of happiness and made me laugh in my hour of despair too, such was their commitment to make me achieve the goal which always seemed out of reach.

Vadodara October 2007 Rajul K Gajjar