

ACKNOWLEDGMENTS



My foremost and soulful thanks to the almighty **God** for bestowing upon me his blessings in the form of enormous strength of mind and body to accomplish the present research work.

I feel immensely pleased to reveal my deep and genuine gratitude to my respected Guide, **Dr. S. C. Patodi**, Former Professor of Structural Engineering, Applied Mechanics Department, Faculty of Technology and Engineering, M.S. University of Baroda and at present working as a Professor in Civil Engineering Department at the Parul Institute of Engineering and Technology, Vadodara, whose perpetual energy and enthusiasm in research served as a constant source of inspiration that made the research endeavour smooth and rewarding for me. He sets a world-class example of a guide with a clear meticulous attitude with profound concern, affection and care. His immeasurable care in going through the manuscript and important suggestions for improving the same has made it possible to submit the thesis in the present form.

I am grateful to Head of Applied Mechanics Department, who has been kind enough to provide me the necessary computational facilities and moral support for this research work.

I am specially indebted to **Dr. N. K. Solanki**, Assistant Professor, Applied Mechanics Department, for his invaluable suggestions and encouragement throughout this work. I am also very thankful to all other staff members of the Applied Mechanics Department who helped me directly or indirectly during the entire course of the present work.

My deepest gratitude goes to my parents and my in-laws for their unflagging love and incredible support at each and every step of this voyage.

Last but certainly not the least, I am thankful to my wife, Bhavika, for being a constant source of inspiration and encouragement, during the entire course of this work.

OCTOBER 2010

D. R. PANCHAL