ACKNOWLEDGEMEN

I express my deep sense of sincere and profound gratitude to my supervise PRAGNA.S.KANTAWALA, Department of Applied Mathematics, Faculty of Technology & Engineering, M. S. University of Baroda, India . I gratefully acknowledge the continuing debt to her for her excellent guidance, constant encouragement and keen interest in this work. Inspite of her busy schedule, she has taken enough pain to conduct stimulating discussions, in the absence of which this work would not have been possible. I owe a great deal to her for her valuable assistance, guidance, extensive knowledge and for going through the manuscripts as well as improvement.

I wish to express my sincere thanks to Babaria Institute of Technology (B.I.T.), Varnama, Gujarat State, for giving me necessary facilities during my work. I owe my special gratitude to all the staff members of Applied Mathematics Department, M. S.University of Baroda, for encouraging co-operation during the course of this work.

I am very much thankful to Dr. Dhanesh P Patel, present Head of Department and Prof. Dr. S Ramamohan, former Head of Department for their interest in my work.

Last but not least, I want to express my gratitude to my beloved parents in law, husband and son who were the great sources of strength during this time.

HEENA DIMPLEKUMAR CHALISHAJAR

Department of Applied Mathematics,

Faculty of Technology and Engineering

The M. S. University of Baroda