ACKNOWLEDGEMENT

The author takes this opportunity to express his sincere gratitude to his research supervisor Dr. P. GANESAN, Assistant Professor of Mathematics, Anna University, Chennai, for his guidance, patience, advice and encouragement throughout the course of this research work.

His sincere thanks are due to the Doctoral committee members Dr. T. SUNDARARAJAN, Department of Mechanical Engineering, Indian Institute of Technology, Chennai, and Dr. R. SRIDHAR, The Institute of Mathematical Sciences, Taramani, Chennai, for their valuable suggestions at the various stages of this research work.

The author expresses his thanks to Dr. PONNAMMAL NATARAJAN, Dean of Science and Humanities, Dr. A. VIJAYAKUMAR, Professor and Director, Members of Staff and research scholars of the School of Mathematics, Anna University.

The whole-hearted support extended by his parents Mrs. & Mr. R.Govindaswamy and the forbearance of his wife Mrs. P.Anitha and his friends during the research work are acknowledged.