ACKNOWLEDGEMENT

The author takes this opportunity to express his sincere gratitude to his research supervisor Dr. G. SETHURAMAN, Assistant Professor, Department of Mathematics, Anna University, Chennai, for his guidance, patience, advice and encouragement throughout his research career.

His sincere thanks are due to the Doctoral Committee members Dr. S. A. Choudam, Professor of Mathematics, Indian Institute of Technology, Chennai, Dr. Venkateshraman, Professor, Theoretical Computer Science, Mathematical Science, Chennai, Dr. K. P. Mohammed, Principal, Crescent Engineering College, Chennai and Dr. S. Rajasekaran, Professor of Mathematics, Crescent Engineering College, Chennai, for their valuable suggestions at every stage of this research work.

The author is thankful to Dr. P. Ganesan, Professor and Head, Department of Mathematics, Dr. V. Murugesan, Chairman, Science and Humanities, Anna University, and other authorities of the university for providing necessary facilities to carry out the research work.

The author is grateful to Professor Dr. Indira Rajasingh for meticulously going through the manuscript.

I am indebted to my parents and brothers for their motivation and constant help throughout my studies. Mere words are insufficient to express my love and affection to my wife Mrs. K. Sasirekha and my daughter E. Suchithra for creating pleasant atmosphere at home and for their invaluable help in doing research work successfully.

The author is thankful to Mr. S. Venkatesh and other friends for their support and help. Finally the author thanks Mr. P. Karthikeyan for his help in typesetting in \LaTeX format.

A. ELUMALAI