ACKNOWLEDGEMENTS

I am deeply indebted and would like to express my heartfelt gratitude to my supervisor Dr. P.N.Tandon, M.Sc.,Ph.D., F.N.A.Sc., F.I.Th.P., Professor and Head, Department of Mathematics, Harcourt Butler Technological Institute, Kanpur, for his sure and skilful guidance during the course of the work. His constructive criticism and valuable suggestions had been a great source of inspiration through out this work. I am also grateful to the Director, H.B.T.I., Kanpur for providing necessary facilities for research.

I further take this opportunity to express my deep sense of gratitude to Dr. J.N.Kapur, Ph.D., F.N.Sc., F.A.Sc., F.N.I., F.I.M.A. (U.K.), Senior Professor, Mathematics Department, I.I.T., Kanpur, for his encouragement and generous help.

I feel myself obliged to Shri M.M.Pandey, former principal, Shri B.D.Shukla, Head of the Mathematics Department and Dr. S.Chandra, Principal, D.B.S.
(P.G.) college, Kanpur, under whom I am lecturer, for encouraging me to carry the present work. I am also thankful to all my friends and colleagues for their friendly association.

I feel indebted to all my teachers, with special mention to Shri S.P. Nigam (former Head), Dr. K.N. Awasthi and Sri S.B. Mathur, Department of Mathematics, D.A.V. College, Kanpur for their constant encouragement throughout the preparation of this thesis.

Much gratitude is due to my wife, Manju, daughter, Abha and son Alck for their patience and willingness to make sacrifices during the course of the work.

Last, but not the least I tender my sincere indebtedness to my parents for their sacrifices during the building of my life.

DATED: 23-12-1983

(Akhilesh Kumar) Kulshreshtha.