

ACKNOWLEDGEMENT

I humbly thank **GOD ALMIGHTY** who has showered his abundant grace on me and bestowed me with wisdom, mental courage and good health throughout the period of my research work.

I am grateful to **Shri.Dr.P.R.KRISHNAKUMAR**, Former Chancellor, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for providing me an opportunity to pursue my research in this esteemed institution.

I wish to assure my profound gratitude to **Tmt.Dr.PREMAVATHY VIJAYAN**, M.Sc., M.Ed., Dip.Spl.Edn.(U.K), M.Phil., Ph.D., Vice Chancellor, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for her noteworthy encouragement and for providing all the needful resources.

I like to thank **Tmt. Dr.S.KOWSALYA**, M.Sc., M.Phil, Ph.D., Registrar, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for granting permission to carry out my research in this institution.

I express my deep sense of gratitude to **Tmt.Dr.G.P.JEYANTHI**, M.Sc., M.Phil., Ph.D., Director (Research and Consultancy), Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for her commendable advice and guidance in each and every proceeding involved in the course of the research work in a triumphant manner.

I acknowledge my profound thanks to **Tmt.Dr.K.UDAYA CHANDRIKA**, M.Sc., D.H.Ed., M.Phil., Ph.D., Professor, Department of Mathematics, Dean, School of Physical Sciences and Computational Sciences, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for her continual support, creditable advice and inspiring suggestions for shaping my research work.

I am greatly obliged to my supervisor **Tmt.Dr.P.JEYALAKSHMI**, M.Sc., M.Phil., Ph.D., Professor and Head, Department of Mathematics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for her laudable guidance, unstinted assistance and constant motivation during the period of my research work. She is kind

and gracious enough to share her precious time to discuss with me several crucial and cardinal points pertaining to the thesis. Her observations, comments and suggestions with parental care are all a source of great help to me to accomplish this thesis successfully.

I would like to say a special thanks to **Dr.M.CHANDRAMOULEESWARAN**, Professor and Head, PG Department of Mathematics, Sri Ramanas College of Arts and Science for Women, Aruppukottai, for his continued support and valuable suggestions throughout my research work.

I like to thank **ALL FACULTY MEMBERS OF DEPARTMENT OF MATHEMATICS**, who extended their support for my research work.

Last but foremost, I extend my deepest gratitude to my beloved parents, **Thiru.V.SUBBAIYAN**, **Tmt.S.VELUMANI** and my brother **Thiru.S.LOGENDRAN**, who are pillars of support and encouragement. Without their relentless support, selfless prayer and thoughtful understanding throughout the period of my research it would have been impossible for me to complete this thesis.

My obligation and acknowledgement would not be complete without expressing my thankfulness to my friends and well wishers for their huge investment of trust and support on me to hitch my wagon of completing my research work in a successful manner.

Sowmiya, S.