

---

## Acknowledgement

I express my heartfelt thanks to esteemed guide and supervisor, **Dr. G. BALASUBRAMANIAN**, Professor, Ramanujan Institute for Advanced Study in Mathematics, University of Madras, Chennai-5, Tamilnadu, India. His inspiring and inimitable encouragements, ingenious, zealous help, invaluable and innovative suggestions helped me a lot during the period of my research. His patience and constructive approach has motivated me to complete my thesis.

I devote my sincere and humble thanks to **Dr. E. Thandapani**, Professor and Head, Department of Mathematics, Periyar University, Salem, Tamilnadu, India, for motivating and enlightening me to a great extent.

I am greatly indebted to the Patrons of Jawahar Education Society, President / JES, Secretary / JES and Secretary / JSC for providing me the necessary facilities in all respects.

I wish to express my sincere thanks to **Dr. S. Rengarajan**, Principal, Jawahar Science College, Neyveli, for his enthusiastic words and constant encouragement to carry out this research activity.

I express my deep sense of gratitude to **Dr. G. Thangaraj**, Reader and HOD, Department of Mathematics, Jawahar Science College, Neyveli, Tamilnadu, for his valuable suggestions and continuous encouragement to carry out this research activity. I also thank the faculty members of Department of Mathematics, Jawahar Science College, Neyveli, for their sincere support and constant encouragement.

I wish to express my sincere thanks to **Dr. P. S. Raja**, Department of Mathematics, Little Flower Higher Secondary School, for his commendable technical assistance rendered during the preparation of this thesis. I am particularly grateful to **Sri. N. Rajesh**, XBASE COMPUTERS, Neyveli, for processing the manuscripts in electronic version.

I appreciate and thank the Librarians of (i) Institute of Mathematical Sciences, Taramani, Chennai, (ii) Ramanujan Institute for advanced study in Mathematics, Chennai, (iii) University of Madras, Chennai, (iv) Indian Institute of Technology, Chennai, (v) Jawahar Science College, Neyveli, who readily came forward to help me in this endeavor.

I am greatly indebted to my beloved parents, family members and my brothers for their moral support and for having rendered valuable assistance whenever and wherever it was needed during the whole period of my research.

Above all, I sincerely thank Almighty God and pray that He may shower His blessings upon all those who have helped me during the period of this research.

**V.SEENIVASAN**