ACKNOWLEDGEMENT

I wish to express my deep sense of gratitude and appreciation towards Dr. Helen. K. Saikia, Professor, Department of Mathematics, Gauhati University for her constant supervision, fruitful discussion and suggestions during the entire period of work.

I am thankful to all the faculty members of the Department of Mathematics, Gauhati Unversity for their kind advice and help.

It is my immense pleasure to convey my heartiest thanks to my parents, brother, father-in- law & mother-in-law for their encouragement and blessing.

I offer my sincere thanks to the Prof. S. P. Singh, Director, Royal Group of Institution and Prof. B. Banerjee, Principal, Royal School of Engineering & Technology, Guwahati for giving me permission to carry out the research work.

I wish to acknowledge gratefully to Dr. Anuradha Devi, HOD. and all the faculty members of Department of Mathematics, Royal School of Engineering & Technology, Guwahati, for their kind help and co-operation.

I extend my thanks to the authorities of Gauhati University for providing the facilities.

I also take this opportunity to owe my feels of indebtedness to my husband Dr. Biswajit Dutta for his constant inspiration and assistance during my entire period of study.

Date: 28/8/12

Navalakhi Hazarika

(Navalakhi Hazarika)