DECLARATION

I hereby declare that the matter embodied in this Ph. D. Thesis is the result of the research carried out by me in the Department of Mathematics, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara-390002, under the guidance of Dr. H. R. Kataria, Professor and Head, Department of Mathematics, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara-390-002.

The work presented here is, to the best of my knowledge and belief, original and is carried out by me. The books and articles, which I have referred are acknowledged at the respective places in the thesis.

This thesis is not submitted for the award of any other Degree or any other title to this University or to any other University or Institution.

(Akhil S. Mittal)

Vadodara,

July 2018

Certified by and forwarded through research guide.

Dr. H. R. Kataria (Guide) Professor and Head Department of Mathematics Faculty of Science The M. S. University of Baroda Vadodara-390002

Vadodara, July 2018