Declaration

I hereby declare that the matter embodied in this Ph. D. Thesis is the result of the researches 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, Prof. 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.

(Harshad R. Patel)

Vadodara,

September 2017

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,

September 2017

Π