



Declaration

I hereby declare that:

- (i) the thesis comprises only my original work towards the PhD except where indicated,
- (ii) due acknowledgement has been made in the text to all other materials used,
- (iii) this work has not formed the basis for the award of any degree, diploma, fellowship, associateship or similar title of any University or Institution.

A handwritten signature in black ink, appearing to read "Jignesh Dholakia".

Jignesh Dholakia

Department of Applied Mathematics
Faculty of Technology & Engineering
The M. S. University of Baroda
Vadorara - 390 001