

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.

Krupal Sujit Parikh
Department of Applied Mathematics
Faculty of Technology & Engineering
The Maharaja Sayajirao University of Baroda
Vadodara - 390 001