

CANDIDATE'S DECLARATION

I, **Chandra Shekher Singh**, certify that the work embodied in my Ph. D. thesis is my own bonafide work carried out by me under the supervision of Late **Prof. Om Prakash Singh** and co- supervision of **Prof. Rakesh Kumar Mishra** for a period of September 2011 to June 2016 at Department of Mathematical Sciences, Indian Institute of Technology (Banaras Hindu University), Varanasi. The matter embodied in this Ph. D. thesis has not been submitted for the award of any other degree/diploma.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers whenever their works have been cited in the text and the body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results, etc. reported in the journals, books, magazines, reports, dissertations, theses, etc., or available at web-sites and included them in this Ph. D. thesis and cited as my own work.

Date:

Place: Varanasi

(Chandra Shekher Singh)

CERTIFICATE FROM THE SUPERVISOR/CO-SUPERVISOR

This is to certify that the above statement made by the candidate is correct to the best of my/our knowledge.

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