CANDIDATE'S DECLARATION

I, Sarita Yadav certify that the work embodied in this Ph.D. thesis is my own

bonafide work carried out by me under the supervision of Dr. K. N. Rai, Institute

Professor, IIT(BHU) for a period from September 2011 to December 2015 at De-

partment of Mathematical Sciences, Indian Institute of Technology (Banaras Hindu

University). 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 wherever 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, thesis, etc., or available at web-sites and included them in this Ph.D.

thesis and cited as my own work.

Date.....

Place: Varanasi

(Sarita Yadav)

CERTIFICATE FROM THE SUPERVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

(Signature of the HOD)

(Signature of the Supervisor)

Dr. K. N. Rai Institute Professor,

IIT(BHU)

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