

Ph. No: +91-542-6702006,


Fax: +91-542-2368428,
E-mail: head.app@iitbhu.ac.in
ANNEXURE-E

## CANDIDATE'S DECLARATION

I, Dileep Kumar Gupta, certify that the work embodied in this Ph.D. thesis is my own bonafide work carried out by me under the supervision of Prof. Rajendra Prasad for a period of five years and 3 months from September 2011 to November 2016 at Department of Physics, Indian Institute of Technology (BHU), 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, the given credit 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, theses, etc., or available at websites and included them in this Ph. D. thesis and cited as my own work.

Date:
(Signature of the candidate)
Place: Varanasi
(Dileep Kumar Gupta)

## CERTIFICATE FROM THE SUPERVISOR/CO-SUPERVISOR/HEAD OF THE DEPARTMENT

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

Prof. Prabhakar Singh
Head
Department of Physics
Indian Institute of Technology
(Banaras Hindu University)
Varanasi-221005

Prof. Rajendra Prasad
Supervisor
Department of Physics
Indian Institute of Technology
(Banaras Hindu University)
Varanasi-221005

