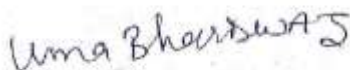
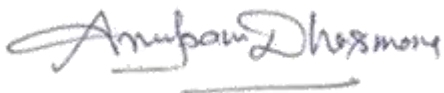


**CERTIFICATE OF VIVA-VOCE OF Ph.D. STUDENT**

**“STUDY OF ENVIRONMENTAL CARCINOGENS’  
INTERFERENCE IN BIO-MOLECULAR KINETICS  
OF CELL CYCLE REGULATORY MACHINERY  
USING SYSTEMS BIOLOGY APPROACH AND  
THEIR PROTECTION BY NANO-PARTICLES”**

Submitted by  
Kumari Anukriti

For the degree of  
Doctor of Philosophy  
in  
Biotechnology  
is evaluated and approved by



**SUPERVISOR**

Dr. Anupam Dhasmana

**CO- SUPERVISOR**

Prof. (Dr.) Uma Bhardwaj

**CO- SUPERVISOR**

Prof. (Dr.) Archana Prakash

**EXAMINER**

## **Undertaking for submission of Ph. D. thesis**

I solemnly declare that research work presented in the thesis titled “**Study of environmental carcinogens’ interference in bio-molecular kinetics of cell cycle regulatory machinery using systems biology approach and their protection by nano-particles**” is solely my research work with no significant contribution from any other person. Small contribution/help wherever taken has been duly acknowledged and that complete thesis has been written by me.

I understand the zero tolerance policy of the Swami Rama Himalayan University (SRHU) towards plagiarism. Therefore I as an Author of the above titled thesis declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred/cited.

I undertake that material of the thesis submitted in hard bound and soft copy are same and no alteration has been done. If found guilty in future University may take any action against me.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of PhD degree, the University reserves the rights to withdraw/ revoke my PhD degree.

*Anukriti*

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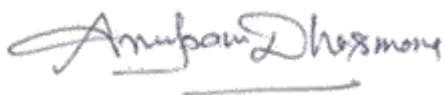
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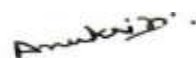
## **DECLARATION**

I hereby declare that the synopsis entitled “**Study of environmental carcinogens’ interference in bio-molecular kinetics of cell cycle regulatory machinery using systems biology approach and their protection by nano-particles**” is my own original work and it has not formed the basis for the award of any degree, diploma, associateship or fellowship of similar other titles.



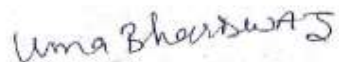
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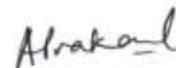
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Head, PhD Cell,  
Swami Rama Himalayan  
University

*I dedicate this thesis to my  
Parents, my Brothers and  
my Sister-in-law for their  
constant motivation and  
endless support....*

*Special dedication to my  
dear Avika who has  
brought endless joy and  
love in my life.*