

## UNDERTAKING

I, ***Manvendra Singh Chauhan***, certify that the work embodied in this Ph.D. thesis titled “***Modelling of River Ganga at Varanasi bend and its application on erosion, sedimentation and river sinuosity***” is my own bonafide work carried out by me under the supervision of ***Prof. Prabhat Kumar Singh Dikshit***, Professor, Department of Civil Engineering, Indian Institute of Technology (Banaras Hindu University), Varanasi, and co-supervision of ***Dr. Shyam Bihari Dwivedi***, Associate Professor, Department of Civil Engineering, Indian Institute of Technology (Banaras Hindu University), Varanasi. The whole responsibility of my research work is mine and I am always ready for making improvement at any time if it requires.

Date .....

Place: IIT (BHU), Varanasi

(Manvendra Singh Chauhan)

**CERTIFICATE FROM THE SUPERVISOR AND  
CO-SUPERVISOR**

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

Signature of the Co-Supervisor

Signature of the Supervisor

(Dr. Shyam Bihari Dwivedi)

(Prof. Prabhat K. S. Dikshit)

Associate Professor  
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Professor  
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Signature of the HOD with seal

(Prof. Devendra Mohan)

Professor and Head  
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*ANNEXURE-F*

## COURSE WORK / COMPREHENSIVE EXAMINATION COMPLETION CERTIFICATE

This is to certify that *Mr. Manvendra Singh Chauhan*, a bonafide research scholar of Department of Civil Engineering, Indian Institute of Technology (Banaras Hindu University), has satisfactorily completed the course work/ comprehensive examination, which is a part of his Ph. D. program.

Date:

Place: IIT (BHU), Varanasi

Signature of the Head of the Department



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*ANNEXURE-F*

## PRE-Ph.D. SEMINAR COMPLETION CERTIFICATE

This is to certify that **Mr. Manvendra Singh Chauhan**, Enrolment No. 311466 (Roll No. 11603EN006), a bonafide research scholar of the Department of Civil Engineering, IIT (BHU) presented his pre-submission seminar on the topic “*Modelling of River Ganga at Varanasi bend and its application on erosion, sedimentation and river sinuosity*” before the RPC members and DPGC members of the Department of Civil Engineering, on 09<sup>th</sup> March, 2015 at 4.00 p.m. in the Seminar Room of Civil Engineering Department. He has successfully completed the presentation, which is a part of his Ph. D. program. His presentation was satisfactory and his case is recommended for the submission of his Ph. D. thesis.

Date:

Place: IIT (BHU), Varanasi

(Signature of the Head of the Department)

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Title of the Thesis: **Modelling of River Ganga at Varanasi Bend and its Application on Erosion, Sedimentation and River Sinuosity.**

Candidate's Name: **Manvendra Singh Chauhan**

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