UNDERTAKING FROM THE CANDIDATE

I, *Madhushi Verma*, research scholar under the supervision of *Prof. K. K. Shukla*, Professor, Department of Computer Science and Engineering, Indian Institute of Technology (Banaras Hindu University), Varanasi, hereby declare that the work incorporated in the present thesis entitled "*Fuzzy Models and Heuristic Algorithms for a Class of Graph Problems*" submitted by me for the degree of *Doctor of Philosophy* is a record of first-hand research work done by me during the period of study.
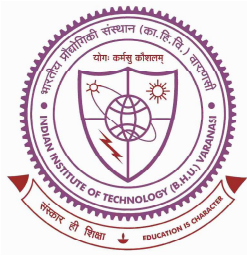
    Further, I do undertake the responsibility for the mistakes, error of facts and misinterpretations (if any) in the thesis which is entirely original and my own work.

Date: (Signature of the candidate)

Place: IIT(BHU), Varanasi   (Madhushi Verma)

Department of Computer Science & Engineering

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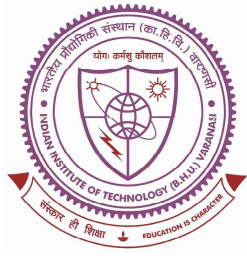**Ref.No.:** IIT(BHU)/CSE/2015-2016/   *Date:*

CERTIFICATE FROM THE SUPERVISOR

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

Signature of the Supervisor	Signature of the HOD
(Prof. K. K. Shukla)	**(Prof. K. K. Shukla)**
Professor and Head	Professor and Head
Department of Computer Science and Engineering	Department of Computer Science and Engineering
Indian Institute of Technology (B.H.U)	Indian Institute of Technology (B.H.U)
Varanasi-221005	Varanasi-221005

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ANNEXURE-F
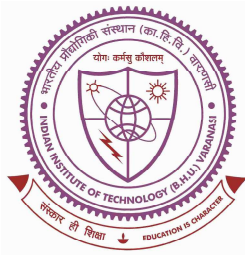(see Clause XIII.1 (c) and XIII.2 (b) (iv))

COURSE WORK / COMPREHENSIVE EXAMINATION
COMPLETION CERTIFICATE

This is to certify that **Ms. Madhushi Verma**, a bonafide research scholar of Department of Computer Science and Engineering, Indian Institute of Technology (Banaras Hindu University), has worked for 16 credits and successfully completed the Ph.D. course work examination which is a part of her Ph.D. programme.

Date:

(Signature of the Head of the Department)

Place: IIT(BHU), Varanasi

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Date:

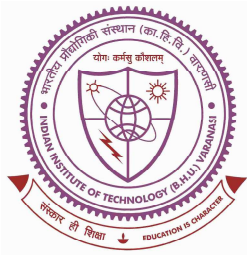**ANNEXURE-F**

(see Clause XIII.1 (c) and XIII.2 (b) (iv))

PRE-SUBMISSION COMPLETION CERTIFICATE

This is to certify that **Ms. Madhushi Verma**, a bonafide research scholar of Department of Computer Science and Engineering, Indian Institute of Technology (Banaras Hindu University), has successfully completed the pre-submission seminar on 30th July 2015 entitled "Fuzzy Models and Heuristic Algorithms for a Class of Graph Problems" which is a part of her Ph.D. programme.

Date:

(Signature of the Head of the Department)

Place: IIT(BHU), Varanasi

ANNEXURE-G

(see Clause XIII.2 (b) (v))

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