

## CERTIFICATE

This is to certify that the work contained in this thesis titled "**STUDY OF LINEAR AND NONLINEAR FRACTIONAL DIFFERENTIAL EQUATIONS,**" by **Vivek Mishra** has been carried out under my supervision and that this work has not been submitted elsewhere for a degree.

Signature of the Supervisor  
( **Dr. Subir Das** )  
Associate Professor  
Department of Mathematical Sciences  
Indian Institute of Technology (BHU)  
Varanasi-221005

July, 2015

**COURSE WORK/ COMPREHENSIVE EXAMINATION**  
**COMPLETION CERTIFICATE**

This is to certify that **Mr. Vivek Mishra**, a bonafide research scholar of this department, has successfully completed the **Ph.D.** course work and comprehensive examination requirement which is a part of his **Ph.D.** programme.

Date .....

Place: Varanasi

(Head of the Department)

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**PRE-SUBMISSION SEMINAR COMPLETION**  
**CERTIFICATE**

This is to certify that **Mr. Vivek Mishra**, a bonafide research scholar of this department, has successfully completed the pre-submission seminar held on June 01, 2015 which is a part of his Ph.D. programme.

Date .....

Place: Varanasi

(Head of the Department)