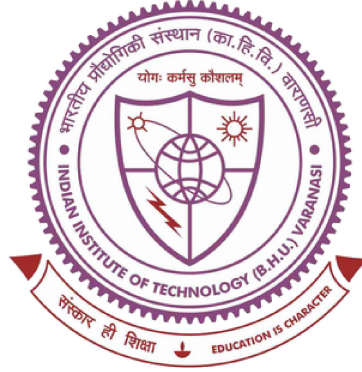


MATHEMATICAL ASPECTS OF FRACTURE PROBLEMS  
IN FUNCTIONALLY GRADED MATERIALS



*The thesis submitted in partial fulfillment*

*for the Award of Degree*

*DOCTOR OF PHILOSOPHY*

*by*

Ritika Singh

DEPARTMENT OF MATHEMATICAL SCIENCES

INDIAN INSTITUTE OF TECHNOLOGY

(BANARAS HINDU UNIVERSITY)

VARANASI-221005

Roll No: 19121008

December 2023