



**Birla Institute of Technology & Science, Pilani**  
Pilani Campus

## **CERTIFICATE**

This is to certify that the thesis entitled **Study of Structural Response and Failure Characteristics of Thin-Walled Flanged FRP Beams** and submitted by Himanshu Chawla, ID No 2010PH430412P for award of Ph.D. degree of the Institute embodies original work done by him under my supervision.

Signature (Supervisor):\_\_\_\_\_

**DR. SHAMSHER BAHADUR SINGH**

Professor, Department of Civil Engineering,

Birla Institute of Technology and Science, Pilani-333031(Raj.)

Date: