

Forwarding Certificate

This is to certify that the thesis entitled *Shape and Topology Optimization of Cantilever Beam under Different Load Distributions*, by Sandeep Kumar Vishwas (Roll Number: MEM20020), submitted in partial fulfillment of the requirements for degree of Master of Technology, specialization in Machine Design, in the Department of Mechanical Engineering at Tezpur University, Tezpur, during the academic year 2021-22, is carried out under my guidance and supervision. The work contained in this thesis has not been submitted elsewhere for a degree.



(Supervisor)

Prof. Dilip Datta
Department of Mechanical Engineering
Tezpur University
Tezpur - 784 028, Assam, India

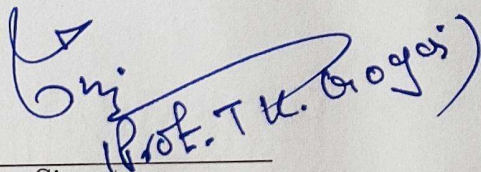
June, 2022

Professor & Head
Deptt. of Mech Engg.
Tezpur University



Certificate of Approval

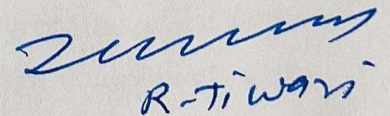
The thesis, entitled *Shape and Topology Optimization of Cantilever Beam under Different Load Distributions*, by Sandeep Kumar Vishwas (Roll Number: MEM20020), is hereby approved as a creditable study carried out and presented in a manner satisfactory to warrant its acceptance as a prerequisite to the degree for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve only for the purpose for which it is submitted.



Signature

(Head of Department)

Professor & Head
Deptt. of Mech Engg.
Tezpur University



Signature

(Examiner)



Declaration

I, Sandeep Kumar Vishwas, hereby declare that this thesis entitled “**Shape and Topology Optimization of Cantilever Beam under Different Load Distributions**” is submitted to the Department of Mechanical Engineering, Tezpur University, Tezpur, Assam, India for acceptance to award the degree of the Master of Technology in Mechanical Engineering is prepared by me and the same has not been submitted to any other institution.

Date: 27-06-22

Place: Tezpur

Sandeep Vishwas

Sandeep Kumar Vishwas

Roll Number MEM20020

Department of Mechanical Engineering