

This thesis titled, “A Numerical Investigation of Local Scour Around Different Shape of Bridge Piers and Its Reduction”, submitted by Rumana Hasan, Student ID: 181011006, has been accepted as satisfactory in partial fulfillment of the requirements for the degree M.Sc. in Mechanical Engineering on 20<sup>th</sup> June, 2022.

## BOARD OF EXAMINERS



---

Dr. Md. Hamidur Rahman  
Professor  
Mechanical and Production Engineering, IUT, Bangladesh

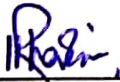
Chairman  
(Supervisor)



---

Dr. Md. Anayet Ullah Patwari  
Head and Professor  
Mechanical and Production Engineering, IUT, Bangladesh

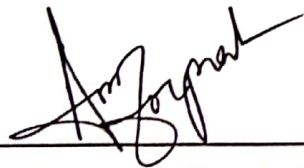
Member  
(Ex-Officio)



---

Dr. Md. Rezwanaul Karim  
Associate Professor  
Mechanical and Production Engineering, IUT, Bangladesh

Member



---

Dr. Mohammad Zoynal Abedin  
Professor  
Mechanical Engineering, DUET, Bangladesh

Member  
(External)

# CANDIDATES' DECLARATION

This is to certify that the work presented in this thesis, titled, “A Numerical Investigation of Local Scour Around Different Shape of Bridge Piers and Its Reduction”, is the outcome of the investigation and research carried out by me under the supervision of Prof. Dr. Md. Hamidur Rahman.

It is also declared that neither this thesis nor any part thereof has been submitted anywhere else for the award of any degree, diploma or other qualifications.

*Rumana*

---

Rumana Hasan

181011006