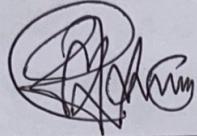


**CERTIFICATE OF RESEARCH**

*This thesis titled "NUMERICAL SIMULATION ON THERMAL ANALYSIS OF SINGLE BOREHOLE U-TUBE" submitted by AHMAD TIJJANI AHMAD(170011074) and MOHAMED ALIE KAMARA(170011075) has been acknowledged as adequate as part of the requirements for a Bachelor of Science in Mechanical Engineering degree..*

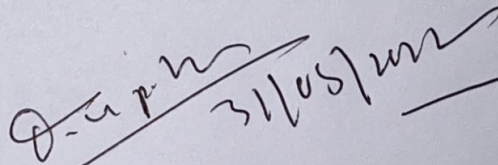
**Supervisor**

31.05.22

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31/05/22

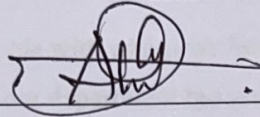
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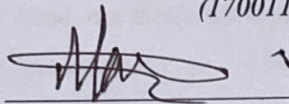
## DECLARATION

*I henceforth certify that the work, titled "Numerical Simulation on Thermal Analysis of Single Borehole U Tube," is a genuine document of our research conducted as part of the requirements for the certificate of a B.Sc. (Mechanical Engineering) degree at Islamic University of Technology, Gazipur, Dhaka, in the year 2022, under the supervision of Md. Abul Kalam Azad, Assistant Professor, Mathematics, MPE, IUT.*

*This thesis has not been submitted in part or in its entirety to any other university for the academic award.*



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