CERTIFICATE OF APPROVAL

The submitted thesis entitled, "Nano-Integrable Optical Logic Gate Implementation in Photonic Crystal Waveguide Using Beam Interference Principle" submitted by Md. Istiac Ahmed, St. No. 170021069, Mohammed Radoan, St. No. 170021132, Md. Arefin Rabbi Emon, St. No. 170021134 of Academic Year 2017-18 has been found as satisfactory and accepted as partial fulfillment of the requirement for the Degree BACHELOR OF SCIENCE in ELECTRICAL AND ELECTRONIC ENGINEERING on April 20, 2022.

Approved by:

Md Farthad Hassan

Md. Farhad Hassan (Supervisor)

Assistant Professor,

Electrical and Electronic Engineering Department,

Islamic University of Technology (IUT), Gazipur.

Declaration of Authorship

We, the authors of this thesis entitled "Nano-Integrable Optical Logic Gate Implementation in Photonic Crystal Waveguide Using Beam Interference Principle", declare that this book and all the findings presented in it are our own. We further confirm that:

- This thesis is submitted as the partial fulfillment of the Bachelor of Science in Electrical and Electronic Engineering degree at Islamic University of Technology (IUT).
- No part of this work has been submitted elsewhere for the award of any Degree or Diploma.
- We have always clearly attributed the sources when we have consulted the published work of others.

Submitted by:

Md. Istiac Ahmed

Student ID: 170021069

Mohammed Radoan

Student ID: 170021132

Md. Arefin Rabbi Emon

Student ID: 170021134