# CNC machine based complete PCB assembly line (milling)

Submitted in partial fulfilment of the requirements of the degree of

#### **Bachelors of Engineering**

by

Samir Alam Roll No. 02 Arvind Kushwaha Roll No. 53 Pronoy Mandal Roll No.56 Abin Nair Roll No. 59

Supervisor: Dr. (Mrs.) Asawari Dudwadkar



Department of Electronics V.E.S. Institute of Technology/University of Mumbai 2019 - 20

#### **CERTIFICATE**

This is to certify that the project entitled "CNC machine based complete PCB assembly line (milling)" is a bonafide work of Samir Alam (Roll No. 2), Arvind Kushwaha (Roll No. 53), Pronoy Mandal (Roll No. 56) and Abin Nair (Roll No. 59), submitted to the V.E.S. Institute of Technology in partial fulfillment of the requirement for the award of the Bachelor of Engineering in Electronics.

Supervisor/Guide
Dr. (Mrs.) Asawari Dudwadkar

Head of Department Principal

Mrs. Kavita Tiwari Dr. (Mrs.) J. M. Nair

## Project Report Approval for B. E.

This project report entitled CNC machine based complete PCB assembly line (milling) by  $Samir\ Alam$ ,  $Arvind\ Kushwaha$ ,  $Pronoy\ Mandal$  and  $Abin\ Nair$  is approved for the degree of  $Bachelor\ of\ Engineering\ in\ Electronics$ .

	Exa	Examiners	
	1		
	2		
Date:			
Place:			

### **DECLARATION**

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Samir Alam (02)	Arvind Kushwaha (53)
Pronoy Mandal (56)	Abin Nair (59)
Date:	