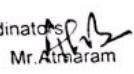
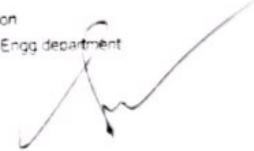


**J.C.BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD**  
**DEPARTMENT OF ELECTRICAL ENGINEERING**  
**LIST OF PROJECT MENTORS ( B.TECH III SEM)**

Group No.	Student 1	Student 2	Roll No. Student 1	Roll no: Student 2	Project name	Mentor Name
1	SAURABH SHARMA	SUDARSHAN	20001007077	20001007078	Room noise detector	
2	Nakshatra sharma	Aarzoo rose	20001007036	20001007001	Anti theft alarm	Dr Poonam Singh
3	Rahul	Ritik	20001007047	20001007051	Network Jammer	
4	Gourav	Harsheet Dahiya	20001007014	20001007019	Light intensity control using triac	
5	Jivesh Kumar	Somya Verma	20001007024	20001007055	Line following Robot	Dr P R Sharma
6	imran	vikash	20001007021	20001007063	LPG gas leakage detector	
7	Aniket Tomer	Harshit Sharma	20001007005	20001007018	Water level indicator	
8	Neeru Rani	Vaibhav Gupta	20001007038	20001007061	Electronic Dice	Dr Rajesh Kumar Ahuja
9	Anjali	Bhavya Pratap Singh	20001007006	20001007011	Electronic Eye controlled security system	
10	Tamanna	Akshita Choudhary	20001007059	20001007003	Testing life cycle of electrical loads using down counter	
11	GUNJAN	VINITA SINGH	20001007016	20001007064	RFID Doorlock Using ARDUINO	Dr Anju Gupta
12	Kunal	Rahul Sharma	20001007029	20001007048	Metal detector	
13	Aman Kumar Miglani	Himanshi Soni	20001007004	20001007071	Active solar tracking system	
14	Ishan sharma	Khushboo soni	20001007022	20001007026	Automatic water dispenser	Dr Yogendra Arya
15	Ayush Saini	Rahul Sahani	20001007010	20001007076	Clap Switch	
16	Akhil yadav	Monika	20001007002	20001007032	Wireless AC power detector	
17	Disha Sharma	Muskan verma	20001007070	20001007035	music reactive leds	Dr Sakshi Kalra
18	pragya bharati	Rohit kamma	20001007075	Leet	Remote control home appliances	
19	Chitransh khanna	Shivam	20001007069	20001007054	Smoke detector alarm	
20	Rohan	Samendra Tandon	20001007052	20001007053	Direction control of three phase induction motor using dcl	Dr. Shakuntla
21	Nikhil	Pawan kumar	20001007040	20001007042	Fire alarm	
22	Ramandeep	Leet			Bluetooth controlled devices	
23	Sudhanshu	Yatharth Verma	20001007058	20001007067	Tesla coil (wireless energy transformation)	Dr. Rashmi Agarwal
24	Nitin	Jiten Yadav	20001007074	20001007023	Animatronic hand	
25	Mayank Bansal	Mukul Bansal	20001007030	20001007033	Touch sensitve alarm circuit	
26	Niharika Kumar	Kaushiki Singh	20001007039	20001007073	Mini inverter using 555 Timer	Ms. Anubha Gautam
27	Sourav	Kartik	20001007056	20001007072	Smart Wireless Battery Charging With Mutual Induction	
28	Harshjeet Dahiya		20001007019		Light intensity control using triac	
29	Ramandeep	Gaurav	Leet	20001007015	Bluetooth module home automation	Ms. Shipra Aggarwal
30	Radha	Tushant	Leet	Leet	Ultrasonic Security System	
31	Umesh kumar	Manish Kumar	Leet	Leet	smart dustbin with ARDUINO	
32	Nikhil Mittal	Chandan kumar	Leet student	Leet student	Water level indicator	Mr. Satvinder
33	Neeru Rani	Vaibhav Gupta	20001007038	20001007061	Electronic dice	
34	Abhay Kumar Shukla	Ashish Yadav	20001007068	20001007008	Mini inverter table	
35	Umesh kumar	Manish kumar	Leet	Leet	Smart dustbin with Arduino	
36	Pragya Bhardwaj	Purna Vohra	20001007043	20001007045	Power efficient mini inverter	Ms. Rachna

37	Harshit choudhary	Pranav choudhary	20001007017	20001007044	Lamp illumination Control With Precision	
38	yashvi	utkarsh	20001007066	20001007060	RFID door lock sensor	
39	Rahul Singh	Himanshu	20001007049	20001007020	Mobile phone calls/Message detector	Mr Anuram

 Project coordinator  
Ms. Anubha Gautam  Mr. Anuram

 Chairperson  
Electrical Engg department

## CERTIFICATE

This is to certify that the project entitled "**RFID DOOR LOCK SENSOR**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Yashvi(20001007066)** and **Mr. Utkarsh Raj (20001007060)** in partial fulfillment of the requirement for the 3rd semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor

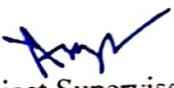
**Mr. Atma Ram**

Asst. Professor

Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**CLAP SWITCH**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. AYUSH SAINI (20001007010) and Mr. RAHUL SAHANI (20001007076)** in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by him/her under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

  
Project Supervisor  
**Supervisor Name**  
**Dr. Yogendra Arya**  
Associate Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

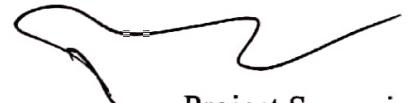
This is to certify that the project entitled "**ELECTRONIC EYE CONTROLLED SECURITY SYSTEM**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Anjali(20001007006) & Bhavya Pratap Singh(20001007011)** in partial fulfillment of the requirement for the **3rd semester** of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Dr. RAJESH KUMAR AHUJA**  
Professor & Dean(R & D)  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Electronic Dice**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Vaibhav Gupta (20001007061)** and **Ms. Neeru Rani (20001007038)** in partial fulfillment of the requirement for the third semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Dr. Rajesh Kr. Ahuja**  
Professor and Dean(R&D)  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Direction control of three phase induction motor using dol**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Rohan (20001007052)** and **Samendra Tandon (20001007053)** in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

*Shakuntla*  
6/10/22

Project Supervisor

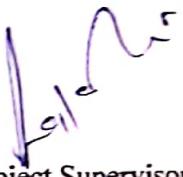
**Dr. Shakuntla**

Assistant Professor

Department of Electrical Engineering  
JC Bose UST, YMCA Faridabad

## CERTIFICATE

This is to certify that the project entitled "**SMART DRIVING GLASSES**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Dr. SAKSHI KALRA** in partial fulfillment of the requirement for the 3<sup>d</sup> semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by Rohit karma and Pragya Bharati under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Dr. Sakshi Kalra**  
Asst. Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Automatic Water Dispenser**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Ishan Sharma(20001007022)** and **Miss.KhushbooSoni(20001007026)** in partial fulfilment of the requirement for the third semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



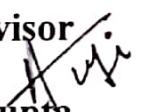
Project Supervisor

**Dr. Yogendra Arya**

Associate Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA Faridabad

## CERTIFICATE

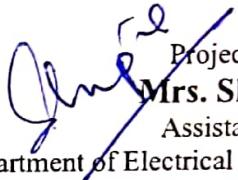
This is to certify that the project entitled "**Keypad Door System Lock Using Arduino**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Miss Vinita Singh (20001007064)** and **Miss Gunjan (20001007016)** in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

Project Supervisor  
  
**Dr. Anju Gupta**

Assistant Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Ultrasonic Security System**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Miss. Radha Pawar and Mr. Tushant Kumar** in partial fulfilment of the requirement for the 3rd semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bona fide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

  
Project Supervisor  
**Mrs. Shipra Jain**  
Assistant Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Bi-Directional Person Counter**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr.JiveshKumar (20001007024)** and **Ms.SomyaVerma (20001007055)** in partial fulfilment of the requirement for the Third semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by him/her under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of our knowledge.



Project Supervisor

**Dr. P.R. Sharma**

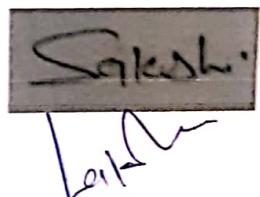
**Professor**

Department of Electrical Engineering

JCBoseUST, YMCA Faridabad

## CERTIFICATE

This is to certify that the project entitled "**4 Channel IR Remote Control Bulbs**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr.Akhil Yadav(20001007002) and Miss.Monika(20001007032)** in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor

**Dr.Sakshi Kalra**

Assistant professor

Department of Electrical Engineering

JCBoseUST, YMCA

Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Bluetooth Module Home Automation**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Ramandeep(21001007506)** and **Mr. Gaurav(20001007015)** in partial fulfilment of the requirement for the 3rd semester degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Dr. Shipra Jain**  
Asst. Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**CHAPATI MAKER BY INDUCTION MOTOR**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **GOURAV (20001007014) & HARSHJEET DAHIYA ( 20001007019)** in partial fulfillment of the requirement for the **III<sup>rd</sup>** semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Prof. P.R. SHARMA**  
Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**LPG LEAKAGE DETECTOR**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **IMRAN ALAM (20001007021) & VIKASH (20001007063)** in partial fulfillment of the requirement for the **III<sup>rd</sup>** semester of degree of **BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Prof. P.R. SHARMA**  
Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Smart Crop Protection System From Living Objects And Fire Using Arduino**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Eitesh Kumar(21001007502)** and **Mr. Manish Kumar(21001007503)** in partial fulfillment of the requirement for the 3 semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

*Satvinder Singh*  
21/02/2022

Project Supervisor  
**Mr. Satvinder Singh**  
Asst. Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Testing life cycle of electrical loads using down counter**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana to **Dr. Anju Gupta** in partial fulfillment of the requirement for the 3<sup>rd</sup> semester of degree of **BACHELOR OF TECHNOLOGY IN ELECTRICAL ENGINEERING**, is a bonafide work carried out by **Tamanna, Akshita and Kartikay Dahiya** under the supervision and guidance of **Dr. Anju Gupta**. This project work comprises of original work and has not been submitted anywhere else for any other degree. We would like to express profound gratitude to honorable, esteemed guide and mentor **Dr. Anju Gupta** who gave the opportunity for doing this project.



Project Supervisor  
**Dr. Anju Gupta**  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

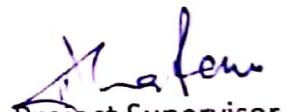
## CERTIFICATE

This is to certify that the project entitled "**WATER LEVEL INDICATOR**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Aniket Tomer(20001007005)** and **Harshit Sharma(20001007018)** in partial fulfillment of the requirement for the 3<sup>rd</sup> semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

  
Project Supervisor  
**Dr. Rajesh Kumar Ahuja**  
Department of Electrical Engineering  
J.C. Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "RFID DOOR LOCK SENSOR" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by Mr. Yashvi(20001007066) and Mr. Utkarsh Raj (20001007060) in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

  
Project Supervisor

Mr. Atma Ram  
Asst. Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**SMOKE DETECTOR ALARM FOR DETECTING SLOW-BURNING FIRE**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Shivam (20001007054)** and **Chitransh (20001007069)** in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

*Shakuntla 01/02/2022*  
Project Supervisor  
**Dr Shakuntla**  
Assistant Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

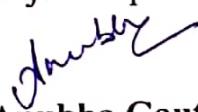
This is to certify that the project entitled "**Smart wireless battery charger using mutual induction**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Sourav (20001007056)** and **Mr. Kartik Tiwari (20001007072)** in partial fulfillment of the requirement for the 3rd semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

  
Project Supervisor  
**Ms. Anubha Gautam**  
Assistant Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA Faridabad

## CERTIFICATE

This is to certify that the project entitled "**TOUCH SENSITIVE ALARM CIRCUIT**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **MAYANK BANSAL(20001007030)** and **MUKUL BANSAL(20001007033)** partial fulfillment of the requirement for the 3<sup>rd</sup> semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

Project Supervisor

  
**Ms. Anubha Gautam**  
Assistant Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "METAL DETECTOR CIRCUIT" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by KUNAL THAKUR(20001007029) and RAHUL SHARMA (20001007048) in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

Project Supervisor



DR. ANJU GUPTA

Assistant Professor

Department of Electrical  
Engineering JC Bose UST,  
YMCA

Faridabad

## **CERTIFICATE**

This is to certify that the project entitled "**Mini inverter using 555 Timer**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Ms. Niharika Kumari (20001007039)** in partial fulfillment of the requirement for the 3rd semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by her under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

Project Supervisor



**Ms. Anubha Gautam**  
**Assistant Professor**  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## **CERTIFICATE**

This is to certify that the project entitled "**TESLA COIL**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. SUDHANSU (20001007058)** and **Mr. YATHARTH VERMA (20001007067)** in partial fulfillment of the requirement for the 3<sup>rd</sup> semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Supervisor Name**  
**Dr. RASHMI AGARWAL**  
Designation  
Department of Electrical Engineering  
J.C. BoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Active Solar Tracking System**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Ms. Himanshi Soni(20001007071)** and **Mr. Aman Kumar Miglani(20001007004)** in partial fulfillment of the requirement for the 3rd semester degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Dr. Yogendra Arya**  
Asst. Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Laser Security System**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Rahul and Mr. Ritik** in partial fulfillment of the requirement for the 3rd semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor

**Dr. Poonam Singhal**

Chairperson (Electrical Department)

Department of Electrical Engineering

JC Bose UST, YMCA

Faridabad



## CERTIFICATE

This is to certify that the project entitled "**AnimatronicHand**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Jiten yadav (20001007023)** and **Mr. Nitin (20001007074)** in partial fulfilment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

Project Supervisor  
Assistant Professor  
**Dr.RashmiAgarwal**  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## **CERTIFICATE**

This is to certify that the project entitled Music reactive LEDs to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana- 121006 by Ms. Disha Sharma (20001007070) and Ms. Muskan (20001007035) in partial fulfillment of the requirement for the 3rd semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a Bonafidework carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

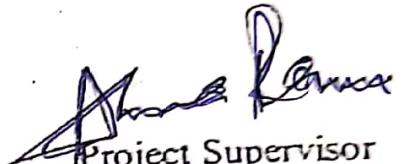


Project Supervisor  
**Dr. Sakshi Kalra**  
Assistant Professor  
Department of Electrical  
Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Lamp Illumination Control With Precision**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Harshit choudhary and Mr. Pranav choudhary** in partial fulfillment of the requirement for the **3rd** semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by him/her under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

**Mr. Atma Ram**



Project Supervisor

Asst. Professor  
Department of Electrical Engineering  
JC Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "Fire Alarm" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Mr. Nikhil Khangwal (20001007040)** and **Mr. Pawan Kumar (20001007042)** in partial fulfillment of the requirement for the third semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bona fide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.

*Shakuntala*  
Project Supervisor  
**Dr. Shakuntala**  
Assistant Professor  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**LPG LEAKAGE DETECTOR**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **IMRAN ALAM (20001007021) & VIKASH (20001007063)** in partial fulfillment of the requirement for the **III<sup>rd</sup>** semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by him/her under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor

**Prof. P.R. SHARMA**

Professor

Department of Electrical Engineering

JCBoseUST, YMCA

Faridabad

---

## CERTIFICATE

This is to certify that the project entitled "**POWER EFFICIENT MINI INVERTER**", submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Ms. Pragya Bhardwaj & Ms. Purva Vohra** in partial fulfillment of the requirement for the III semester of degree of **BACHELOR OF TECHNOLOGY** in **ELECTRICAL ENGINEERING**, is a bonafide work carried out by her under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Ms. Rachna**  
Asstt. Professor  
Department of Electrical Engineering  
J C Bose UST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Blind Stick**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana-121006 by **Ms. Aarzoo(20001007001) and Mr. Nakshatra(20001007036)** in partial fulfillment of the requirement for the **3rd** semester of degree of BACHELOR OF TECHNOLOGY in ELECTRICAL ENGINEERING, is a bonafide work carried out by them under my supervision and guidance. This project work comprises of original work and has not been submitted anywhere else for any other degree to the best of my knowledge.



Project Supervisor  
**Dr Poonam Singhal**  
Chairperson  
Department of Electrical Engineering  
JCBoseUST, YMCA  
Faridabad

## CERTIFICATE

This is to certify that the project entitled "**Gesture control robot**" submitted to Department of Electrical Engineering, Faculty of Engineering and Technology, J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana to **Dr. Poonam Singhal** in partial fulfillment of the requirement for the 3<sup>rd</sup> semester of degree of BACHELOR OF TECHNOLOGY IN ELECTRICAL ENGINEERING, is a bonafide work carried out by **Saurabh Sharma and Sudarshan** under the supervision and guidance of **Dr. Poonam Singhal**. This project work comprises of original work and has not been submitted anywhere else for any other degree. We would like to express profound gratitude to honorable, esteemed guide and mentor **Dr. Poonam Singhal** who gave me the opportunity for doing this project.



Project Supervisor  
**Dr. Poonam Singhal**

Department of Electrical Engineering

JC Bose UST, YMCA

Faridabad