Sapthagiri College of Engineering

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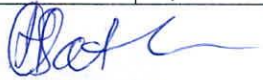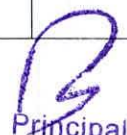
Phone:080-28372800/1/2   www.sapthagiri.edu.in   Fax: 080-28372797

Department of Electronics & Communication Engineering

Sl no	USN	Name of Student	Title of the project	Guide Name
1	1SG20EC013	ARPITHA M V	Home Automation for disabled people using Voice Tag	Prof. Vishalakshi G R
2	1SG20EC014	ASHIKA A SHOLAPUR		
3	1SG20EC045	HARSHITHA S		
4	1SG20EC007	AKSHATHA R		
5	1SG20EC006	AISHWARYA K	Advanced IOT and Machine learning Solutions to Monitor Underpass water logging	Prof. Prathiba P
6	1SG20EC024	DEEKSHA V		
7	1SG20EC036	HAFSA TABASSUM		
8	1SG20EC019	CHANDANA K		
9	1SG20EC020	CHANDANA S	Automated wildlife surveillance robot using Android	Prof. Manasa M G
10	1SG20EC029	DARMIGA C		
11	1SG20EC048	K AYESHA BANU		
12	1SG20EC053	LAKSHMISHREE		
13	1SG20EC054	Amrutha R	Surveillance Robot for military application using IOT	Prof. Rashmi H
14	1SG20EC401	Lavanya T V		
15	1SG20EC015	CHAITRA B R		
16	1SG20EC052	KEERTHANA S		
17	1SG20EC050	KAVYA N K	Parking LOT management system	Prof. Manasa M G
18	1SG20EC054	LAXMI S SAJJAN		
19	1SG20EC057	LIKHITHA S		
20	1SG21EC059	Lokesh H A		
21	1SG20EC032	GANASHREE L	IOT based non intrusive automated driver drowsiness monitoring framework for logistics	Prof. Ravishankara M N
22	1SG20EC031	Gagana YB		
23	1SG20EC010	ANUSHA C		
24	1SG20EC034	GAUTHAMI N		
25	1SG20EC002	ABHIJITHKUMAR MAJI	IOT based air quality monitoring system using LORa	Prof. Agalya P
26	1SG20EC033	GANESH A N		
27	1SG20EC039	HARSHALA B		
28	1SG20EC042	HARSHITHA K M		
29	1SG20EC001	Aashitha C G	Gas Leakage detection and automatic gas booking using IOT	Dr. Nagaraja A M
30	1SG20EC011	Anusha L		
31	1SG20EC012	Apoorva S		

Head of the Department
Electronics & Communication
Sapthagiri College of Engineering
Bangalore 560 057

Principal
Sapthagiri College of Engineering
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Bangalor

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Department of Electronics & Communication Engineering

32	1SG20EC030	Dhruvitha L		
33	1SG20EC026	Deepashree R S	Rasberry Pi based hand Gesture recognition and Voice conversion s ystem	Prof. Prathibha P
34	1SG20EC027	Deepika M		
35	1SG20EC028	Dharani K H		
36	1SG20EC051	Keerthana R		
37	1SG20EC060	M Hemanth Reddy	Design and implementation of compact 8T SRAM cell with enhanced read and write stability	Prof. shobha H
38	1SG20EC037	Hari Prasad N		
39	1SG20EC025	Deepak R M		
40	1SG20EC058	Likith R		
41	1SG20EC038	Harsha Vardhan NH	GPS Guided River cleaning Robot	Prof. Agalya P
42	1SG20EC049	Karan S		
43	1SG20EC035	Gowtham BP		
44	1SG20EC17	chandan B N		
45	1SG20EC055	Lekhan Gowda R	Smart anti-Theft system for home security using image processing	Dr. Nagaraja A M
46	1SG20EC056	Likith Kumar TS		
47	1SG20EC016	Bhoomika.K		
48	1SG20EC044	Harshitha.N		
49	1SG20EC004	ABHILASH RENU MY	Railway Management system using IOT	Prof. Chaitra H N
50	1SG20EC005	ABHINAV.A		
51	1SG20EC023	DARSHAN.R		
52	1SG20EC041	HARSHITH R		
53	1SG21EC403	Rakshitha R	Iot based school bus monitoring	prof. suma v shetty
54	1SG21EC404	Rakshitha R		
55	1SG20EC21	chethan suresh		
56	1SG21EC407	Vinay D S		
57	1SG20EC003	Abhilash G	Authenticated Access control for vehicle Ignition system by DL and Fingerprint technology	Prof.Roopashree R
58	1SG20EC018	Chandan R		
59	1SG20EC022	Chethan Sanker T		
60	1SG20EC046	Jeevan J		
61	1SG21EC406	Suman Raj B		Dr. sateesh Kumar H C
62	1SG21EC402	Manu N Raj		
63	1SG20EC043	Harshitha M	Smart speed Guardian: An Intelligent Bike speed Monitoring and control	Prof. Ravishankara M N
64	1SG20EC047	Jeevitha C		
65	1SG21EC400	Arathi B V		

Head of the Department
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Bangalore-560 057

Sapthagiri College of Engineering

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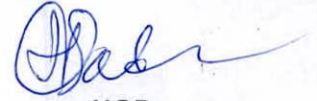Phone:080-28372800/1/2   www.sapthagiri.edu.in   Fax: 080-28372797

Department of Electronics & Communication Engineering

66	1SG21EC405	Shivakumar Y	system	

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 ...

HOD
Head of the Department
Electronics & Communication
Sapthagiri College of Engineering
Bangalor, 560 057

Slno	USN	Name of Student	Title of the Project	Guide

Sapthagiri College of Engineering,

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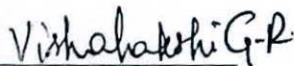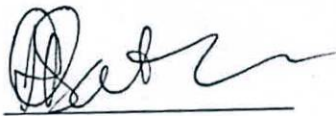## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Home Automation for disabled people using Voice-tag** is a bonafidework carried out by

Akshatha R	1SG20EC007	Arpitha M V	1SG20EC013
Ashika A Sholapur	1SG20EC014	Harshitha S	1SG20EC045

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.

Vishalakshi G R

Prof. Vishalakshi G R
Assistant Professor

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
Principal

Name of the External examiners:

S-50 BHA

Dr. Vignesh M

Signature with date:

Sapthagiri College of Engineering,

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Automated Wildlife Surveillance Robot Using Android** is a bonafidework carried out by

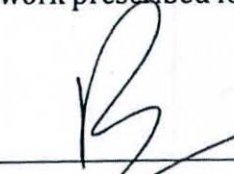|			
Chandana S	1SG20EC020	K Ayesha banu	1SG20EC048
Dharmiga C	1SG20EC029	Lakshmishree C	1SG20EC053
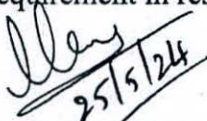
in partial fulfillment for the award of degree of Bachelor of Engineering in Electronics & Communication Engineering of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.
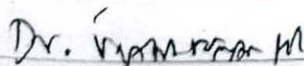
Prof. Manasa M G
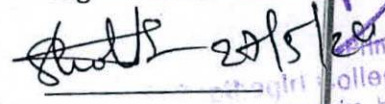Assistant Professor

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
Principal

Name of the External examiners:

S.SHOBHA

Dr. VIJAYAKUMAR

Signature with date:

AB

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"Surveillance Robot for Military application using IOT"** is a bonafide work carried out by

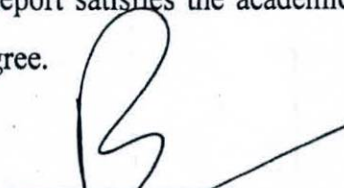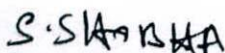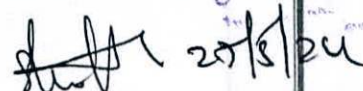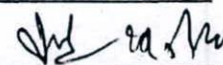|	
AMRUTHA R	1SG20EC008
B R CHAITRA	1SG20EC015
KEERTHANA S	1SG20EC052
LAVANYA T V	1SG21EC401

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

Prof. Rashmi H

Guide

Dr. H C Sateesh Kumar

Head of the Department

Dr. H Ramakrishna

Principal

Project Viva Voce

Name of Examiners

Signature with Date

2/5/24

Principal
Sapthagiri College of Engineering
4/5, Chikkasandra, Hesaraghatta Main Road,
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1. S. Shashi A

2. Dr Vijaya Laxmi M

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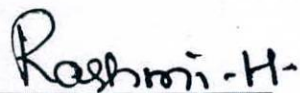
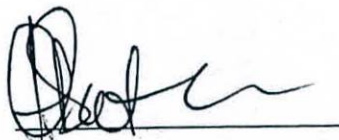## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"Parking Lot Management System"** is a bonafide work carried out by

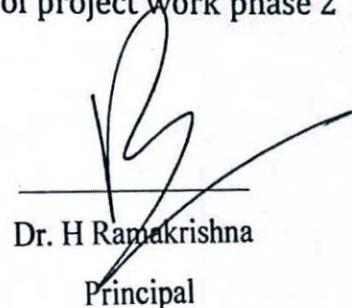|	
KAVYA N K	1SG20EC050
LAXMI S SAJJAN	1SG20EC054
LIKHITHA S	1SG20EC057
LOKESH H A	1SG20EC059

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.
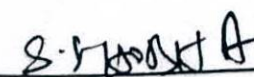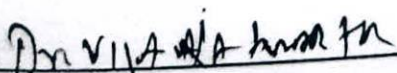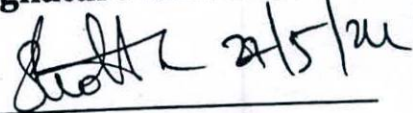
25/5/24.

_____   _____   _____

Prof. Manasa M G   Dr. H C Sateesh Kumar   Dr. H Ramakrishna
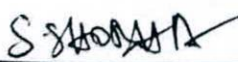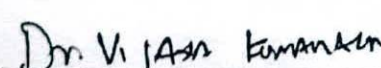
Assistant Professor   Head of the Department   Principal

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Project Viva Voce

Signature with Date

Name of Examiners

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

1. S Shobha   _____ 27/8/24

2. Dr. Vijay Kumar   _____

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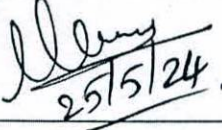## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Automatic Sanitary Pad Dispenser** is a bona-fide work carried out by

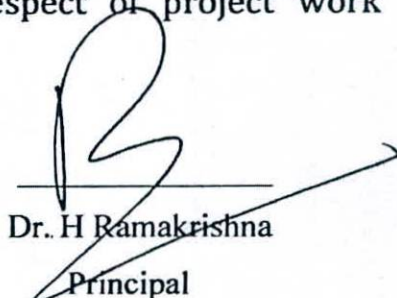|	
Anusha C	1SG20EC010
Gagana YB	1SG20EC031
Ganashree L	1SG20EC032
Gauthami N	1SG20EC034

in partial fulfillment for the award of the degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during the internal assessment have been incorporated in the report. This report satisfies the academic requirement in respect of Project Work prescribed for the degree.

....	....	....
Prof. Ravi Shankara M N	Dr. H C Sateesh Kumar	Dr. H Ramakrishna
Guide	Head of the Department	Principal

Project viva Voce

Name of Examiners

Signature with Date

1. ...S-8kfD BHA........

2. ...Dr.Y.1|Ran.tan.M

A25

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **IOT Enabled Air Quality Monitoring System Using LoRa is** a bona-fide work carried out by

AbhijithKumar Maji	1SG20EC002
Ganesh A N	1SG20EC033
Harshala B	1SG20EC039
Harshitha K M	1SG20EC042

in partial fulfillment for the award of the degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during the internal assessment have been incorporated in the report. This report satisfies the academic requirement in respect of Project Work prescribed for the degree.

Prof. Agalya P

Guide

Head of the Department
Electronics & Communication
Head of the Department
Sapthagiri College of Engineering
Bangalore -560 057
Project viva Voce

Dr. H C Sateesh Kumar

Dr. H Ramakrishna

Principal
Principal
Sapthagiri College of Engineering
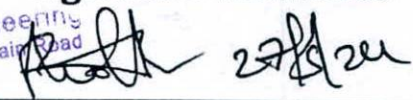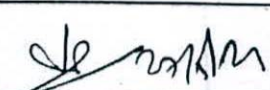Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Name of Examiners

1. S-SIADBHA

2. Dr. V. Anantram

Signature with Date

27/5/24

Sapthagiri College of Engineering,

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Gas Leakage Detection and Automatic Gas Booking Sytem using IOT** is a bonafidework carried out by

Aashitha C G	1SG20EC001	Apoorva S	1SG20EC012
Anusha L	1SG20EC011	Dhruvitha L	1SG20EC030

in partial fulfillment for the award of degree of *Bachelor of Engineering in*

Electronics & Communication Engineering of Visvesvaraya Technological

University, Belagavi during the year 2023-24. It is certified that all the suggestions

indicated during internal assessment have been incorporated in the report and this

report satisfies the academic requirement in respect of project work prescribed for

the degree.

Dr. A M Nagaraja
Professor

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
Principal

Name of the External examiners: Signature with date:

Sapthagiri College of Engineering,

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Department of Electronics & Communication Engineering
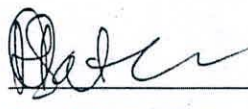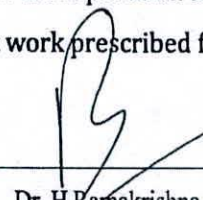

CERTIFICATE

This is to certify that the project work entitled **Raspberry pi based Hand gesture recognition and Voice conversion system** is a bonafide work carried out by

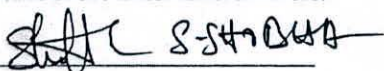|	
Deepashree R S	1SG20EC026
Deepika M	1SG20EC027
Dharani K H	1SG20EC028
Keerthana R	1SG20EC051

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.

Prof. Prathibha P
Assistant Professor

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
Principal

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Rd
Bengaluru - 560 057

Name of the External examiners:
S SINDHU

Dr. NILAN KUMAR HR

Signature with date:
2/5/24

20/5/24

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Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Design and Implementation of Compact 8T SRAM cell with Enhanced Read and Write Stability** is a bona-fide work carried out by,

Likith.R	1SG20EC058
Hari Prasad.N	1SG20EC037
M.Hemanth Reddy	1SG20EC060
Deepak.R.M	1SG20EC025

In partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.
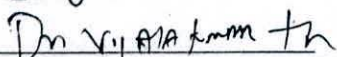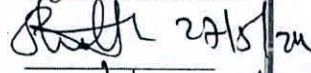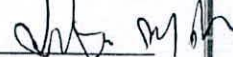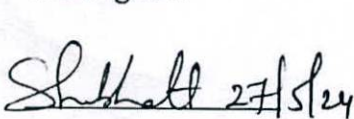
Dr. Shobha Hugar
Guide
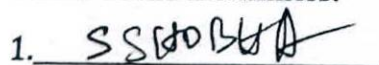
Dr. H.C Sateesh Kumar
Professor & Head
Head of the Department
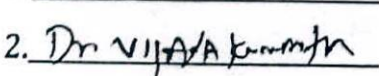Department of Chemistry
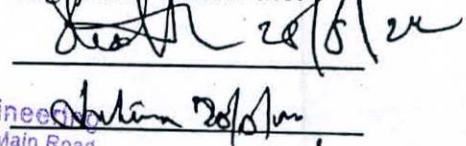Sapthagiri College of Engineering
BENGALURU - 560 057.
External Viva

Dr. H Ramakrishna
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Name of the Examiners:

1. SSHOBHA

2. Dr VIJAYAkumar

Signature with Date:

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

Sapthagiri College of Engineering,

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NAAC Accredited with 'A' Grade, Accredited by NBA

ISO 9001-2015 and 14001-2015 certified Institute

Bengaluru-560057

Department of Electronics & Communication Engineering
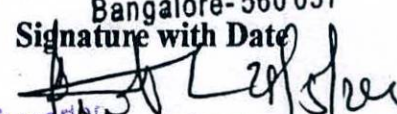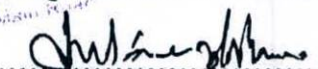
CERTIFICATE

This is to certify that the project work entitled **SMART RIVER CLEANING ROBOT** is a bona-fide work carried out by

Harshavardhan N H	1SG20EC038
Karan S	1SG20EC049
Gowtham B P	1SG20EC035
Chandan B N	1SG20EC017

in partial fulfillment for the award of the degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during the internal assessment have been incorporated in the report. This report satisfies the academic requirement in respect of Project Work prescribed for the degree.

Head of the Department

Prof. Agalya P Electronics & Satesh Kumacation   Dr. H Ramakrishna

Guide   Sapthagiri College of Engineering   Principal

Bangalore -560 057 Sapthagiri College of Engineer

Chikkasandra, Hesaraghatta Roa

Project viva Voce   Bangalore- 560 057

Name of Examiners   **Signature with Date**

1. ....

2. Dr. ....

A4 5

Sapthagiri College of Engineering,

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Bengaluru-560057

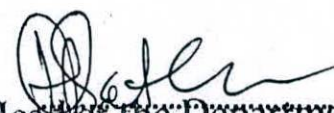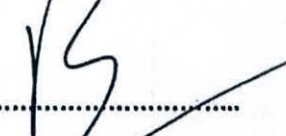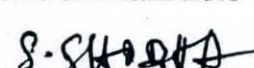### Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Smart Anti-Theft System for Home Security using Image Processing** is a bona-fide work carried out by

Bhoomika K	1SG20EC016
Harshitha N	1SG20EC044
Lekhan Gowda R	1SG20EC055
Likith Kumar T S	1SG20EC056

in partial fulfillment for the award of the degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during the internal assessment have been incorporated in the report. This report satisfies the academic requirement in respect of Project Work prescribed for the degree.

....
Dr. A M Nagaraja

Guide

....
Dr. H C Sateesh Kumar
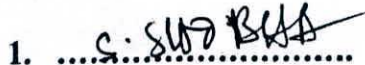
Head of the Department

....
Dr. H Ramakrishna

Principal
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road

Project viva Voce

Name of Examiners

1. ....

2. ..Dr. VIJAYA.....................

Signature with Date

Principal
Sapthagiri College of Engineering
Hesaraghatta Main Road
...dra, Hesaraghatta
560 057

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(Affiliated to Visvesvaraya Technological University and Approved by AICTE)
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Accredited by NBA
ISO 9001-2015 and 14001-2015 certified Institute

Bengaluru-560057

Department of Electronics & Communication Engineering

<u>CERTIFICATE</u>

This is to certify that the project work entitled **Railway Management system using IOT** is a bona- fide work carried out by

Abhilash Renu MY	1SG20EC004
Abhinav A	1SG20EC005
Darshan R	1SG20EC023
Harshith R	1SG20EC041

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.
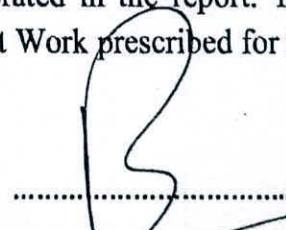
....
Prof. Chaitra H N
Guide

....
Dr. H C Sateesh Kumar
Head of the Department

....
Dr. H Ramakrishna
Principal

Project Viva Voce

Name of Examiners

1..

2..

Signature with Date

....

....

Sapthagiri College of Engineering,

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Accredited by NBA
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Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled "IOT Based School Bus Monitoring System" is a bonafide work carried out by

CHETAN SURESH YATNALLI	1SG20EC021
RAKSHITHA R	1SG21EC403
RAKSHITHA R	1SG21EC404
VINAY D S	1SG21EC407

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.

Prof. Suma V Shetty

Assistant Professor

Dr. H C Sateesh Kumar

Head of the Department

Dr. H Ramakrishna

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Project Viva Voce

Name of Examiners	Signature with Date
1. S SKr BHA	28/8/24
2. Dr V IAxr kumath	28/8/24

Sapthagiri College of Engineering,

(Affiliated to Visvesvaraya Technological University and Approved by AICTE)
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Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **IOT based Automated Hydroponics System** is a bona- fide work carried out by
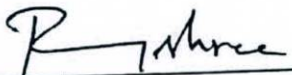
ABHILASH G [1SG20EC022]   CHETHAN SANKER T [1SG20EC022]

CHANDAN R[1SG20EC018]   JEEVAN J[1SG20EC046]

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.

Prof. RUPASHREE M
Asst. Professor

Head of the Department
Electronics & Communication
Dr. H.G Sateesh Kumar
Saphagiri College of Engineering
Bangalore-560 057.

Dr.H Ramakrishna
Principal
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Signature with date
Bangalore-560 057

Name of examiner:

1. S. Shobha

2. Dr. Vijaya kumar M

Principal
Sapthagiri College of Engineering
No, Chikkasandra, Hesaraghatta Main Road
Bangaluru - 560 057

Sapthagiri College of Engineering,

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Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"IOT Based School Bus Monitoring System"** is a bonafide work carried out by
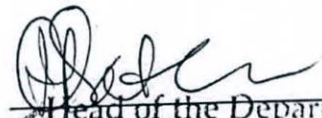
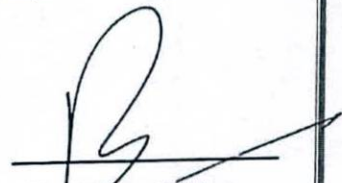|	
MANU N RAJ	1SG21EC402
SUMAN RAJ B	1SG21EC406

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.
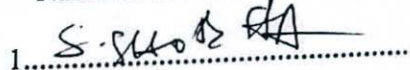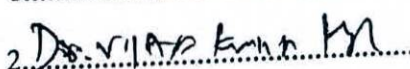
Dr. H C Sateesh Kumar

Professor and Head

Dr. H C Sateesh Kumar

Head of the Department

Dr. H Ramakrishna
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

Project Viva Voce

Name of Examiners   **Signature with Date**

1. S-SHODYA

2. Dr VYASA

Sapthagiri College of Engineering,

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Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"Smart Speed Guardian: An Intelligent Bike Speed Monitoring and Control System for Enhanced Safety"** is a bonafide work carried out by

JEEVITH C	1SG20EC047
HARSHITHA M	1SG20EC043
ARATHI B V	1SG21EC400
SHIVAKUMAR Y	1SG21EC405

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.

Prof. Ravi Shankara M N	Dr. H C Sateesh Kumar	Dr. H Ramakrishna
Associate Professor	Head of the Department	Principal

Project Viva Voce

Name of Examiners	Signature with Date
1.	28/5/24
2. Dr Vyamcuxn	

B)

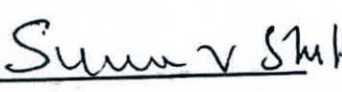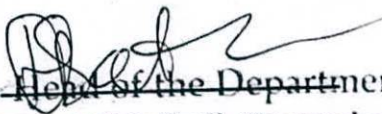**SAPTHAGIRI**
College of Engineering
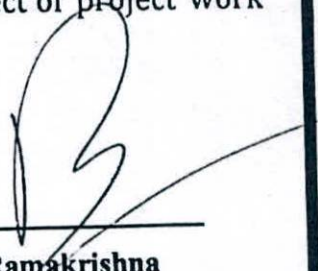Creating Tomorrow

CERTIFICATE

This is to Certify that the project work entitled "Anywhere Voting system with Facial Recognition using IoT" is a bonafide work carried out by

SAHANA C	[1SG20EC088]
SAMPATH KUMAR S	[1SG20EC091]
SANKEERNA C	[1SG20EC093]
SRIDEVI M	[1SG20EC099]

in partial fulfillment for the award of degree of 8th semester *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-2024. It is certified that all suggestions indicated during internal assessment have been incorporated in the report and the project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Prof. Suma V Shetty
Assistant professor

Head of the Department
Electronics & Communication
Dr. H C Sateesh Kumar
Head of the Department
Sapthagiri College of Engineering
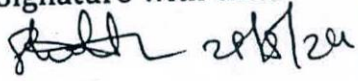Bangalore-560 057.

Dr. H Ramakrishna
Principal

External Viva

Name of the examiners:

1. S-Sato BYA

2. Dr. Minaxixan

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Main Road
Bangalore-560 057

Signature with date:

28/8/24

24/8

Sapthagiri College of Engineering,

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Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **IoT Platform to augment Solar tree as Smart Highway Street Light with Ambient Monitoring Capability** is a bonafide work carried out by

Rakshitha. A	1SG20EC084
Sahana. M	1SG20EC089
Sujana. H. A	1SG20EC102
Zaiba Khanum. G. N	1SG20EC122

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

28/5/24

Prof. Madhu. H. M.
Assistant Professor

Dr. H C Sateesh Kumar
Head of the Department
Sapthagiri College of Engineering
Bangalore -560 057

Dr. H. Ramakrishna
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

Name of the examiner

Dr. A. N. Nagaraja

Sapthagiri College of Engineering,

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Accredited by NBA
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Bengaluru-560057
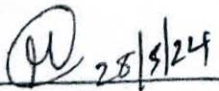
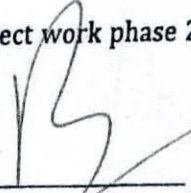## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"Automatic Sorting of Fruit Placed on Conveyor Belt"** is a bonafide work carried out by

MAMATHA S	1SG20EC062
ROHINI D K	1SG20EC086
SHIVANI R	1SG20EC096
SWAYAM SETHI	1SG20EC107

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

Prof. Padmavathi C

Guide

Dr. H C Sateesh Kumar

Head of the Department

Dr. H Ramakrishna

Principal

Project Viva Voce

Name of Examiners

Signature with Date

1. Dr. A. M. Nagaraje

2. Parimal Gandhi

B 13

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14/5, Chikkasandra, Hesaraghatta, Main Road, Bengaluru-560057, Karnataka, India.

SAPTHAGIRI
College of Engineering
Creating Tomorrow

CERTIFICATE

This is to Certify that the project work entitled "Smart Glove for Sign Language Translation using Arduino" is a bona ide work carried out by

MEGHA R B	[1SG20EC067]
MISBA MOHAMADI	[1SG20EC069]
UME HANEY S OLEKAR	[1SG20EC111]
VARSHITHA M	[1SG20EC113]

in partial fulfillment for the award of degree of 8th semester *Bachelor of Engineering*

in Electronics & Communication Engineering of Visvesvaraya Technological

University, Belagavi during the year 2023-2024. It is certified that all suggestions

indicated during internal assessment have been incorporated in the report and the

project report has been approved as it satis ies the academic requirements in respect

of project work prescribed for the said degree.

28/05/2024

Prof. Surekha B
Assistant professor

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
Principal

External Viva

Name of the examiners:

1. Dr A M Nagaraja

2. G. Nirmala Gandhi

Signature with date:

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

29/5/24

29/5/24

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ISO 9001-2015 and 14001-2015 certified Institute

Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled "**Health Monitoring System using Li-Fi**" is a bonafide work carried out by

Rashi Gupta	1SG20EC085
Varun Teja M	1SG20EC116
Veeresh H	1SG20EC117
Vishal Kumar	1SG20EC119

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

Prof. Shobha S

Guide

Dr. H C Sateesh Kumar

Head of the Department

Dr. H Ramakrishna

Principal

Principal
Sapthagiri College of Engineering
Chikkasandre, Hesaraghatta Road

Project Viva Voce

Signature with Date

Name of Examiners

1. Dr A M Nagaraj

2. C Ponmale Candh

<div align="center">

Bengaluru, Karnataka 560057

Sapthagiri College of Engineering,

(Affiliated to Visvesvaraya Technological University and Approved by AICTE)
NAAC Accredited with 'A' Grade
Accredited by NBA
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Bengaluru-560057

Department of Electronics & Communication Engineering
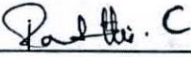
</div>

<div align="center">

CERTIFICATE

</div>

This is to certify that the project work entitled **"CNN-Based Object Recognition and Tracking System to Assist Visually Impaired People"** is a bonafide work carried out by

NANDASHREE V	1SG20EC071
PRERANA C K	1SG20EC082
SUPRITHA M	1SG20EC105
TEJASHWINI B	1SG20EC109

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

Prof. Padmavathi C

Guide

Dr. H C Sateesh Kumar
Head of the Department
Head of the Department
Electronics & Communication
Sapthagiri College of Engineering
Project Viva Voce
Bangalore -560 057

Dr. H Ramakrishna
Principal
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

Name of Examiners

Signature with Date

1. Dr. A M Nagaraj

2. G. Nirmala Gandhi

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

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14/5, Chikkasandra, Hesaraghatta, Main Road, Bengaluru-560057, Karnataka, India.

SAPTHAGIRI
College of Engineering
Creating Tomorrow

CERTIFICATE

This is to Certify that the project work entitled **"Smart Home Surveillance Based on Raspberry Pi"** is a bonafide work carried out by

MANJUNATH M H	[1SG20EC064]
MANOJ G S	[1SG20EC065]
SHASHANK B J	[1SG20EC094]
SUPRITH	[1SG20EC104]

in partial fulfillment for the award of degree of 8th semester *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-2024. It is certified that all suggestions indicated during internal assessment have been incorporated in the report and the project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.
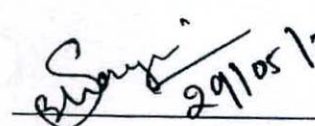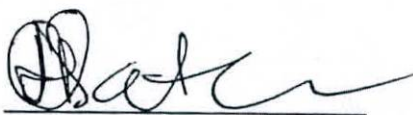
29/05/2024

Prof. Surekha B
Assistant professor

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
Principal
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

External Viva

Signature with date: 29/6/24

Name of the examiners:

1. Dr. A.M. Nojaya

2. C. Rammala Gandhi

29/5/24

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesar   Main Road
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Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **CMOS LNA for Wireless Communication in 180nm Technology** is a bona- fide work carried out by

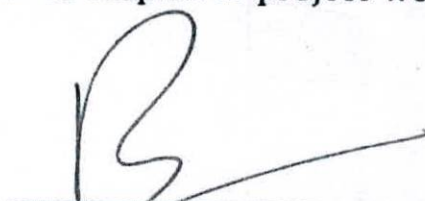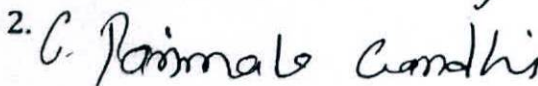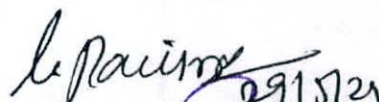|	
Vishnu Vaibhav S	1SG20EC120
Yuvaraj S	1SG20EC121
Tharun Kumar U B	1SG20EC110
Srinidhi J R	1SG20EC100

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 1 prescribed for the degree.

Dr. Shobha Hugar   Dr. H C Sateesh Kumar   Dr. H Ramakrishna
Associate Professor   Head of the Department   Principal
Guide   Sapthagiri College of Engineering
                          External Viva-Voce   Chikkasandra, Hesaraghatta Road
                                                          Bangalore-560 057
1. Dr. A.M. Nagaraja
2. L. Parimala Gandhi

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ISO 9001-2015 and 14001-2015 certified Institute

Bengaluru-560057

Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"Prediction of Epilepsy Seizures using Machine Learning"** is a bonafide work carried out by

PRAVEEN J K	1SG20EC081
S SUHAS	1SG20EC087
VARUN C	1SG20EC114
VARUN N V	1SG20EC115

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

Prof. Shobha S

Guide

Dr. H C Sateesh Kumar

Head of the Department

Dr. H Ramakrishna
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

Project Viva Voce

Name of Examiners

1. Dr Ani Nagaraja

2. C Parimala Gandhi

Signature with Date

1.

2.

Principal
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luru - 560 057

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14/5, Chikkasandra, Hesaraghatta, Main Road, Bengaluru-560057, Karnataka, India.

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CERTIFICATE

This is to Certify that the project work entitled "Radar based surveillance and weather monitoring system" is a bonafide work carried out by

MANOJ YADAV K	[1SG20EC066]
PRAJWAL G	[1SG20EC077]
SUHAS K M	[1SG20EC101]
V SUMANTH	[1SG20EC112]

in partial fulfillment for the award of degree of 8th semester *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-2024. It is certified that all suggestions indicated during internal assessment have been incorporated in the report and the project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Kalavathi.S

Prof. Kalavathi S
Assistant professor

Dr. H C Sateesh Kumar
Head of the Department

External Viva

Dr. H Ramakrishna
Principal
Principal
Sapthagiri College of Engineering
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Name of the examiners:

1. Dr. Any Nagaraja

2. G. Renmale Gandhi

Signature with date:

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru -560 057

A4/5

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CERTIFICATE

This is to Certify that the project work entitled "Development of a Remotely Operated Underwater Vehicle (ROV)" is a bonafide work carried out by

MANIKANTH M	[1SG20EC063]
NIKILESH K G	[1SG20EC073]
SUJAY B K	[1SG20EC103]
VINOD C	[1SG20EC118]

in partial fulfillment for the award of degree of 8th semester *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-2024. It is certified that all suggestions indicated during internal assessment have been incorporated in the report and the project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Kalavathi.S.

Prof. Kalavathi S
Assistant professor

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
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Principal
Sapthagiri College of Engineering
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Bangalore- 560 057

External Viva

Name of the examiners:

Signature with date:

1. ....

2. ....

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"Gesture Controlled Audio System"** is a bonafide work carried out by

MOHAN KUMAR C R	**1SG20EC070**
PRAJWAL G H	**1SG20EC078**
PRAJWAL H T	**1SG20EC079**
RAJESH H S	**1SG20EC083**

in partial fulfillment for the award of degree of **Bachelor of Engineering in Electronics & Communication Engineering** of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

Prof. Vishalakshi G R

Guide

Dr. H C Sateesh Kumar

Head of the Department

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Project Viva Voce

Name of Examiners

Signature with Date

1.

2.

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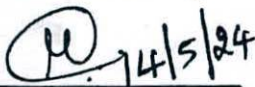## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **"Railway Track Crack Detection and Surveillance"** is a bonafide work carried out by

M S Vibha	1SG20EC061
Naveen L N	1SG20EC072
Sahana P	1SG20EC090
Vaachaspathy	1SG20EC097

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 2 prescribed for the degree.

Prof. Madhu H M   Dr. H C Sateesh Kumar   Dr. H Ramakrishna
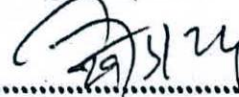
Guide   Head of the Department   Principal

Project Viva Voice

Name of Examiners	Signature with Date
1. Dr. A M Nagaraja	
2. C Ramesh Gandhi	