Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE 2

ON

# A LOW-COST THERAPEUTIC EXERCISE MACHINE FOR MECHANIZED KNEE REHABILITATION

Submitted in Partial fulfillment of the Requirements for 8th Semester

Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

MOHAMMED JUNAID M GUDDAD

1KG19EC061

ATHISH NAVEEN

1KG20EC005

KAKARLA JASWANTH CHOWDARY

1KG20EC015

**TEJASHREE M** 

1KG20EC044

Under the Guidance

of

#### Dr. K. SENTHIL BABU

Professor & Head

Department of ECE, KSSEM





#### K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### **CERTIFICATE**

This is to certify that the Project work entitled A LOW-COST THERAPEUTIC EXERCISE MACHINE FOR MECHANIZED KNEE REHABILITATION is carried out by MOHAMMED JUNAID M GUDDAD (1KG19EC061), ATHISH NAVEEN (1KG20EC005), KAKARLA JASWANTH CHOWDARY (1KG20EC015), TEJASHREE M (1KG20EC044), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide & Head of the Department

Dr. K. Senthil Babu Professor & Head Dept. of ECE

Professor & Head

Dry. of Flectronics & Communication Engineering
K.S. School of Engineering & Management
Bangalore - 560 109

Name of the Examiners

1 Raviking B.A.

2 prewa Kamar mhane.

Principal

Dr K. Rama Narasimha
Principal/Director
KSSEM

Dr. K. RAMA NARASIMHA
Principal/Director
K S School of Engineering and Management
Bengalury - 560 400 Date
Signature With Date

the faglston,

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE II

ON

# IDENTIFICATION OF RIGHT AND LEFT VENTRICULAR HYPERTROPHY FROM ECG USING MACHINE LEARNING

Submitted in Partial fulfillment of the Requirements for 8<sup>th</sup>Semester

Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

**AKSHATHA S** 

1KG20EC004

K GOWTHAM

1KG20EC014

SADHANA H D

1KG20EC038

Under the Guidance

of

Dr. Renuka V Tali

Assistant Professor,

Department of ECE, KSSEM



# K.S.SCHOOL OF ENGINEERING AND MANAGEMENT

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Identification of Right and Left Ventricular Hypertrophy from ECG using Machine Learningare carried out by Akshatha S (1KG20EC004), K Gowtham (1KG20EC014), Sadhana H D (1KG20EC038), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-IIreport and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

**Principal** 

Dr. Renuka V Tali Asst. Professor Dept. of ECE

Dr. K. Senthil Babu Professor & Head

Professor & Head

Degr., of Flectronics & Communication Engineering K.S. School of Engineering & Management Bangalore - 560 109

Name of the Examiners RAVIKIRAN B.A.

2 preva Karnat mhana

Dr K. Rama Narasimha Principal/Director

Dr. K SSEM NARASIMHA Principal/Director

K S School of Engineering and Management

Bengaluru - 560 109

Signature with Date

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT -- PHASE 2

ON

#### PROTOTYPE FOR SURFACE WASTE COLLECTION SYSTEM IN WATER BODIES

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

G BHARATH KUMAR

1KG20EC013

M B HEMANTH

1KG20EC019

P SAI KETHAN CHOWDARY

1KG20EC032

R PARTHIBAN

1KG20EC034

Under the Guidance

of

Dr. MANU D K

Associate Professor,

Department of ECE, KSSEM





# K.S.SCHOOL OF ENGINEERING AND MANAGEMENT

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Prototype for surface waste collection system in water bodies are carried out by G Bharath Kumar (1KG20EC013), M B Hemanth (1KG20EC019), P Sai Kethan Chowdary (1KG20EC032), R Parthiban (1KG20EC034), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Dr. Manu D K Assoc. Professor Dept. of ECE

Head of the Department

Dr. K. Senthil Babu Professor & Head Dept. of ECE

**Principal** 

1< Com ( Dr K. Rama Narasimha Principal/Director KSSEM

Dr. K. RAMA NARASIMHA

**Professor & Head** Principal/Director Dept. of Electronics & Communication Engineering S School of Engineering and Management Bengaluru - 560 109

K.S. School of Engineering & Management Bangalore - 560 109

Name of the Examiners

1 Ravikisan B.A. 2 poura Kamat mhaman

Signature with Date

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE II

ON

### DETECTION OF AGE RELELATED MACULAR DEGENERATION WITH AI

Submitted in Partial fulfillment of the Requirements for 8<sup>th</sup> Semester

Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

DARURU DHANYA DEEPIKA

1KG20EC008

KISHORE KUMAR M

1KG20EC016

MANNAM VANDANA

1KG20EC023

N S BANU PRASAD

1KG20EC024

Under the Guidance

Of

Dr. Kishore M

Associate Professor,

Department of ECE, KSSEM



### K.S.SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Detection Of Age Related Macular Degeneration With AI are carried out by Daruru Dhanya Deepika (1KG20EC008), Kishore Kumar M (1KG20EC016), Mannam Vandana (1KG20EC023), N S Banu prasad (1KG20EC024), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-I report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

**Head of the Department** 

**Principal** 

Dr. Kishore M Assoc. Professor Dept. of ECE

Dr. K. Senthil Babu Professor & Head Dept. of ECE

Dr K. Rama Narasin ha Principal/Director **KSSEM** 

**Professor & Head** 

Dept. of Electronics & Communication Engineering Principal/Director

K.S. School of Engineering & Management Bangalore - 560 109

Dr. K. RAMA NARASIMHA

Principal/Director Signature With Bates

Name of the Examiners Ravikuan BA

2 power Hanat mbana.

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE 2

ON

Automated Attendance Management System using Machine Learning
Submitted in Partial fulfillment of the Requirements for 8° Semester
Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

**M LOKESH** 

1KG20EC020

NISHANTH NARAYAN

1KG20EC028

POOJA R

1KG20EC031

Under the Guidance

of

Prof. DILEEP J

Assistant Professor,

Department of ECE, KSSEM





# K.S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Automated Attendance Management System using Machine Learning is carried out by M Lokesh (1KG20EC020), Nishanth Narayan (1KG20EC028), Pooja R (1KG20EC031), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

**Head of the Department** 

**Principal** 

Prof. Dileep J Asst. Professor Dept. of ECE

Name of the Examiners

Dr. K. Senthil Babu Professor & Head Dept. of ECE

Professor & Heau

Dry. of Flectronics & Communication Engineering Rengalury 550 100 K.S. School of Engineering & Management

Bangalore - 560 109

Dr. K. Rama Narasimha Principal/Director

Dr. K. RAMA NARASIMHA Principal/Director

Bengaluru - 560 109 Signature with Date

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE 2

ON

# IoT Based Gas Monitoring & Alerting System Submitted in Partial fulfillment of the Requirements for 8th Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

**KOUSHIK** 

1KG20EC017

**SACHIN R** 

1KG20EC037

INGZUECUS/

**SUPRITH R** 

1KG20EC042

Under the Guidance

of

Dr. Arun Kumar M

Associate Professor,

Department of ECE, KSSEM





#### K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled IoT Based Gas Monitoring & Alerting System is carried out by Koushik (1KG20EC017), Sachin R (1KG20EC037), Suprith R (1KG20EC042), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Dr. Arun Kumar M Associate Professor Dept. of ECE

Head of the Department

Dr. K. Senthil Babu Professor & Head Dept. of ECE

**Principal** 

Dr. K. Rama Narasimha Principal/Director

KSSEM

Dr. K. RAMA NARASIMHA

Principal/Director

K 8 School of Engineering and Management Bengaluru - 560 109

Signature with Date

Jnana Sangama, Belagavi-590014



# PROJECT REPORT – PHASE 2 ON

# HAND GESTURE RECOGNITION TO TEXT AND SPEECH CONVERSION USING IMAGE PROCESSING

Submitted in Partial fulfilment of the Requirements for 8th Semester

Bachelor of Engineering in

Electronics and Communication Engineering by

G POOJA 1KG20EC011

NEHA KUMARI S 1KG20EC027

UMA C 1KG20EC046

YASHASWINI R 1KG20EC048

Under the Guidance of

Mrs. BHARGAVI V SANGAM

Assistant Professor, Department of ECE, KSSEM



# K. S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Hand Gesture Recognition to Text and Speech Conversion Using Image Processing is carried out by G Pooja (1KG20EC011), Neha Kumari S (1KG20EC027), Uma C (1KG20EC046), Yashaswini R (1KG20EC048), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project Phase-2 report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

**Principal** 

Mrs. Bhargavi V Sangam Asst. Professor

Dept. of ECE

Dr. K. Senthil Babu

Professor & Head

Dept. of ECE

Dr. k. Rama Narasimha Principal/Director

KSSEM

**Professor & Head** 

Dr. K. RAMA NARASIMHA

Principal/Director

Dry., of Flectronics & Communication Engineering hool of Engineering and Manageme Signature with Date Bengalung Soy 109

Name of the Examiners K.S. School of Engineering & Management

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE 2

ON

#### RFID BASED SMART CAR PARKING SYSTEM

Submitted in Partial fulfillment of the Requirements for 8<sup>th</sup> Semester

Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

CHAITRA L		1KG20EC006
RAKSHITHA M	A Alexander	1KG20EC036
TANUJA N		1KG20EC043
ILIWALA H S		1KG20EC045

Under the Guidance

of

Mrs. JAYASHREE G R

Asst. Professor,

Department of ECE, KSSEM



# K. S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled RFID Based Smart Car Parking System is carried out by Chaitra L (1KG20EC006), Rakshitha M (1KG20EC036), Tanuja N (1KG20EC043), Ujwala H S (1KG20EC045), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project Phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Mrs. Jayashree G R Asst. Professor Dept. of ECE, KSSEM Head of the Department

Dr. K. Senthil Babu Professor & Head Dept. of ECE, KSSEM

Professor & Head

Dry.. of Flectronics & Communication Engineering K.S. School of Engineering & Management

Bangalore - 560 109

1 Dr. K. Seathil Rolly 2 prema Kamar mhaman

**Principal** 

Dr. K Rama Narasimha Principal/Director

KSSEM

Dr. K. RAMA NARASIMHA

Principal/Director

School of Engineering and Management

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE II

ON

# AUTOMATIC MUSIC GENERATION USING MIDI DATA AND LSTM ANN

Submitted in Partial fulfillment of the Requirements for  $8^{\text{th}}$  Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by.

NARRA BHASKAR NAIDU

1KG20EC025

**NARRA SIRI** 

1KG20EC026

SALISEEMALA UMA CHOWDARY

1KG20EC039

SALISEEMALA USHA CHOWDARY

1KG20EC040

Under the Guidance

Of

Mr. Sanjay B. Nayak

Associate Professor,

Department of ECE, KSSEM



# K.S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### **CERTIFICATE**

This is to certify that the Project work entitled Automatic Music Generation Using MIDI Data and LSTM ANN are carried out by Narra Bhaskar Naidu (1KG20EC025), Narra siri (1KG20EC026), Saliseemala uma Chowdary (1KG20EC039), Saliseemala usha chowdary (1KG20EC040), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-I report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Mr. Sanjay B. Nayak Assoc. Professor

Dept. of ECE

Head of the Department

Principal

Dr. K. Senthil Babu Professor & Head Dept. of ECE

Professor & Head

Dept. of Electronics & Communication Engineering K.S. School of Engineering & Management Bangalore - 560 109

Dr K. Rama Narasimha Principal/Director

14. Roma (

DAY STAMA NARASIMHA Principal/Director

K S School of Engineering and Managemen

Bengaluru - 560 109

Signature with Date

Name of the Examiners 1 Ravikinan BA

2 prowa Kamer mlane.

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT - PHASE 2

ON

Implementation of School Bus Tracking and Notification System using IOT

Submitted in Partial fulfillment of the Requirements for 8th Semester

Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

A YUVA SREE

1KG20EC002

CHANDANA R

1KG20EC007

**PUNITH P** 

1KG20EC033

**V SASIDHAR** 

1KG20EC047

Under the Guidance

of

Mrs. Swati Sarkar

Assistant Professor,

Department of ECE, KSSEM



# K.S.SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Implementation of School Bus Tracking and Notification System using IOT is carried out by A.YUVASREE (1KG20EC002), CHANDANA R (1KG20EC007), PUNITH P (1KG20EC033), V.SASIDHAR (1KG20EC047), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Swali Salkar

Mrs. Swati Sarkar Asst. Professor Dept. of ECE

Name of the Examiners 1 Ravikinan BA

2 fueva Karnet phone

Head of the Department

Dr. K. Senthil Babu Professor & Head Dept. of ECE

Professor & Head Dept. of Electronics & Communication Engine Mr. BgSchool of Engineering and Management K.S. School of Engineering & Management Bangalore - 560 109

Principal

Dr K. Rama Narasimher Principal/Director

KSSEM Dr. K. RAMA NARASIMHA Principal/Director

Signature with Date

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT – PHASE 2**

ON

### Implementation of Low-Cost Ventilator

Submitted in Partial fulfillment of the Requirements for 8th Semester

Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

A HARSHATH 1KG20EC001
ADUSUMALLI ROHITH 1KG20EC003
G JYOTHISWAR REDDY 1KG20EC012
K RAVITEJA 1KG20EC018

Under the Guidance

of

Prof. Ravikiran B A

Assistant Professor,

Department of ECE, KSSEM





# K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### **CERTIFICATE**

This is to certify that the Project work entitled Implementation of Low-Cost Ventilator is carried out by by A HARSHATH (1KG20EC001), ADUSUMALLI ROHITH (1KG20EC003), JYOTHISWAR REDDYG (1KG20EC012), RAVI TEJA K (1KG20EC018), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Head of the Department

Principal

BAQU

Prof. Ravikiran B A Asst. Professor Dept. of ECE

Dr. K. Senthil Babu Professor & Head Dept. of ECE Professor & Head

Dept. of Electronics & Communication Engineering K.S. School of Engineering & Management Bangalore - 560 109

Dr. K. Rama Narasimha Principal/Director **KSSEM** 

17. Romo (

Dr. K. RAMA NARASIMHA Principal/Director K S School of Engineering and Management Sign Range With 560 189

Name of the Examiners

Ravilizion BA

2 prove Karnet mhome

Jnana Sangama, Belagavi-590014



# PROJECT REPORT – PHASE II

ON

# DESIGN AND FABRICATION OF 2.4GHZ MICROSTRIP ANTENNA

Submitted in Partial fulfillment of the Requirements for 8th Semester

Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

G NEERAJ

M HEMANTH

M KAIVALYA

P HARITHA

1KG20EC010

1KG20EC021

1KG20EC022

1KG20EC030

Under the Guidance

Of

Dr. Girish V Attimarad,

Professor,

Department of ECE, KSSEM



# K.S.SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

# CERTIFICATE

This is to certify that the Project work entitled Design and Fabrication Of 2.4GHz Microstrip Antenna is carried out by G Neeraj (1KG20EC010), M Hemanth (1KG20EC021), M Kaivalya (1KG20EC022), P Haritha (1KG20EC030), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-I report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Head of the Department

**Principal** 

Dr K. Rama Narasimha

V Attimarad Dr. Girish

Professor

Dept. of ECE

Dr. K. Senthil Babu Professor &Head

Professor & Head

Principal/Director Dept. of ECE

Dept. of Electronics & Communication Engineering

K.S. School of Engineering & Management

Bangalore - 560 109

KSSEM Dr. K. RAMA NARASIMHA

Principal/Director

K S School of Engineering and Manageme

Bengaluru - 560 109 Signature with

Name of the Examiners

1 Ravikison BA
2 Preven Yanar mbana

Jnana Sangama, Belagavi-590014



#### PROJECT REPORT

ON

# Implementation of Authentication Vehicle Ignition and accident prevention System Submitted in Partial fulfillment of the Requirements for 8th Semester Bachelor of Engineering

in

#### **Electronics and Communication Engineering**

by

NITHIN G N 1KG20EC029
RAGHAVENDRA C 1KG20EC035
NISHANTH GOWDA M 1KG21EC400
SWAMY M 1KG21EC401

Under the Guidance

of

Mr. Gopalakrishna Murthy C R

Associate Professor,
Department of ECE, KSSEM



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-

560109

2023-24

# K S SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### **CERTIFICATE**

This is to certify that the Project work entitled Implementation of Authenticated vehicle Ignition and accident prevention system is carried out by Nithin G N (1KG20EC029), Raghavendra C (1KG20EC035), Nishanth Gowda M (1KG21EC400) and Swamy M (1KG21EC401), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Mr. Gopalakrishna Murthy C R Assoc. Professor

Dept. of ECE

Head of the Department

Dr. K. Senthil Babu Professor & Head Dept. of ECE

Dept. of Electronics & Communication Engineering and Management

K.S. School of Engineering & Management Bangalore - 560 109

**Principal** 

Dr K. Rama Narasimha Principal/Director

> Dr. KERSTMA NARASIMHA Principal/Director

Signature with

Name of the Examiners

Date

)

2 Prowa Kanat mhanan