

### HIRASUGAR INSTITUTE OF TECHNOLOGY NIDASOSHI-591236

Accredited at 'A' Grade by NAAC and Recognized under section 2(f) of UGC Act, 1956
Programmes Accredited by NBA: CSE & ECE



### **DEPARTMENT OF ELECTRONICS & COMMUNICATION**

#### **ENGINEERING**

### **CERTIFICATE**

Certified that the project work entitled "Crash Detection Using Sensor Data On VANETS" carried out by Mr. Rakesh Madabhavi (2HN19EC016), Mr. Hanamanta Soolibhavi (2HN20EC400), Mr. Vijayakumar Poilcepatil (2HN20EC401), bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

Dr. R. R. Maggavi

Dr. R. R. Maggavi

Dr. S. C. Kamate.

**GUIDE** 

HOD

**PRINCIPAL** 

External Viva

Name of the Examiner

Signature with date

1. S.S. Kamale

2. Mr. M.C-Sangaconby



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### DEPARTMENT OF ELECTRONICS & COMMUNICATION

#### **ENGINEERING**

## **CERTIFICATE**

Certified that the project work entitled "SMART INTEGRATED WIRE/WIRELESS CHARGING SYSTEM FOR ELECTRIC VEHICLES WITH SOLAR AND GRID ENERGY USING IOT" carried out by Mr. Akshay Salagare (2HN19EC001), Mr. Kallappa Chikodi (2HN19EC009), Mr. Maruti Magadum (2HN19EC011), Mr. Siddarth Patil (2HN19EC022), bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

Prof. D. M. Kumbhar.

**GUIDE** 

Dr. R. R. Maggavi.

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Dr. S. C. Kamate.

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### **DEPARTMENT OF ELECTRONICS & COMMUNICATION**

#### **ENGINEERING**

## **CERTIFICATE**

Certified that the project work entitled "Intelligent All terrain IoT Robotic Vehicle for Disaster Management And Rescue" carried out by Mr. Anket Chougala (211N19EC002), Mr. Ganesh Managuli (2HN19EC006), Mr. Ravi Marennavar (2HN19EC017), Mr. Ronit Patil (211N19EC018) bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

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### **DEPARTMENT OF ELECTRONICS & COMMUNICATION**

#### **ENGINEERING**

# **CERTIFICATE**

Certified that the project work entitled "An Artificial Intelligence Based User Friendly Two Way Sign Language Translator for Deaf and Dumb People of Rural India" carried out by Ms. Swati S Bhiste (2HN19EC030), Ms. Sneha S Patil (2HN19EC023), Ms. Priyanka S Dattawade (2HN19EC014), bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23.It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

Prof. P. V. Patil.

**GUIDE** 

Dr. R. R. Maggavi

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Dr. S. C. Kamate.

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1. S.S. Kamate

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### DEPARTMENT OF ELECTRONICS & COMMUNICATION

### **ENGINEERING**

### CERTIFICATE

Certified that the project work entitled "JALARAKSHAK- IOT BASED SOLAR WASTE COLLECTOR, CONTROLLED, **AQUA** REMOTE POWERED. MONITORING AND TREATMENT SYSTEM" carried out by Ms. Laxmi Raju Bedage (2HN19EC010), Ms. Shraddha Alagouda (2HN19EC021), Ms. Soujanya R Madabhavi (2HN19EC026), bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23.It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental Apra

Prof. Sallir. S. Patil.

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Dr. R. R. Maggavi

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S.S. Kounde Y. M.C. Sayloa



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### DEPARTMENT OF ELECTRONICS & COMMUNICATION

#### **ENGINEERING**

### CERTIFICATE

Certified that the project work entitled "Innovative Approach to Prevent illegal Smuggling in Forest Areas Using Machine Learning" carried out by Ms. Surabhi S Maradi (2HN19EC027), bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

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# DEPARTMENT OF ELECTRONICS & COMMUNICATION

# **ENGINEERING**

### **CERTIFICATE**

Certified that the project work entitled "LORA based framework for smart cities" carried out by Ms. Apoorva Magadum (2HN19EC003), Ms. Divya Karigar (2HN19EC005), Ms. Nikita Hattarki (2HN19EC013) are bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

Prof. D. B. Madihalli.

**GUIDE** 

Dr. R. R. Maggav

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Name of the Examiner

1. <u>S.S. Kamate</u> 2. D.S. M. C.Sarsanlen

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### DEPARTMENT OF ELECTRONICS & COMMUNICATION

#### **ENGINEERING**

### **CERTIFICATE**

Certified that the project work entitled "Advanced Military Warfield Robot with Night Vision and AI Based Automated Target Shooting" carried out by Ms. Rutuja Shetti (2HN19EC019), Ms. Sahana Mangaloorkar (2HN19EC020), Ms. Snehal Patil (2HN19EC024) bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

Prof. B. P. Khot
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Dr. R. R. Maggavi HOD Dr. S. C. Kamate PRINCIPAL

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Name of the Examiner

1. S. S. Kamate

2. Dr. M. C. Sarson by

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#### **DEPARTMENT OF ELECTRONICS & COMMUNICATION**

### **ENGINEERING**

### **CERTIFICATE**

Certified that the project work entitled "Robokisan – Autonomous Solar Powered Voice Controlled Multilingual Support Over IOT" carried out by Ms. Bhagyashree Madihalli (2HN19EC004), Ms. Harshita Goudadi (2HN19EC007), Ms. Swati Katageri (2HN19EC029), bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library.

Prof. S. S. Manj GUIDE

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Dr. S. C. Kamate.

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Dr. M. C-Sundo

2. S. Kamati

Signature with date

27/05/23