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## THE OXFORD COLLEGE OF ENGINEERING

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Bommanahalli, Hosur Road, Bengaluru – 560068. ☎: 080 -61754601/602

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### Students Project Detail Proof

2023-24

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### Students Internship Detail Proof

2023-24

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### Social Connect and Responsibility

2023-24

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### Mini Project

2023-24

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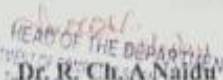
#### Department of Computer Science and Engineering




### CERTIFICATE

Certified that the project work phase-I entitled "IoT & FOG COMPUTING BASED HEALTHCARE SYSTEM TO MONITOR PATIENTS OF ICU" carried out by K M BINDU SHREE (10X20CS055), NANDINI M (10X20CS081), NEHA FARHEEN (10X20CS086) bonafide students of The Oxford College of Engineering, Bangalore in partial fulfillment for the award of the Degree of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belgaum during the year 2023-2024. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

  
Dr. R. Raghu  
Project Guide  
Dept of CSE, TOCE

  
HEAD OF THE DEPARTMENT  
Dr. R. Ch. A. Naidu  
Professor and HOD  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
THE OXFORD COLLEGE OF ENGINEERING  
BOMMANAHALLI, HOSUR ROAD, BANGALORE - 560068  
Dept. of CSE, TOCE

  
Dr. N. Kannan  
Principal, TOCE  
PRINCIPAL  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
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#### Department of Electronics and Communication Engineering

(NBA Accredited)

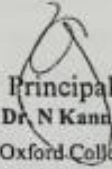


### CERTIFICATE

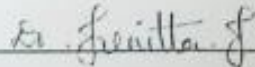
Certified that the Project Report work entitled "IOT BASED AUTOMATIC RAILWAY TRACK CRACK DETECTION SYSTEM" is carried out by Spandana Indira R (10X20EC064), Vidya P G (10X20EC073), Sindhu K Reddy (10X20EC079), Yashika G (10X20EC076) Bonafide students of THE OXFORD COLLEGE OF ENGINEERING, BANGALORE in fulfilment for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering of VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belgaum during the year 2023-2024. It is certified that all corrections/suggestions indicated for internal Assessments have been incorporated in the report deposited in the Department library. The Project Report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.


  
Guide  
Dr. Laya Tojo  
Asst. Professor  
Dept. of ECE, TOCE


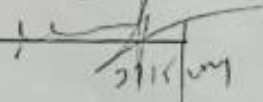
  
HOD  
Dr. Manju Devi  
Professor & HOD of E&C Engineering  
The Oxford College of Engineering  
Dept. of ECE, TOCE  
Bommanahalli, Bangalore-560 068

  
Principal  
Dr. N Kannan  
The Oxford College of  
Engineering, Bangalore  
PRINCIPAL  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Signature with Date

Name of the Examiners

1. 

2. 

  
20/5/24  


Dept. ECE TOCE

2023-24

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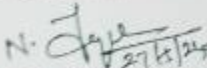
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

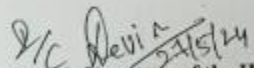


2023-2024

#### CERTIFICATE

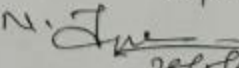
Certified that the Project work entitled "DESIGN OF BATTERY THERMAL MANGEMENT SYSTEM FOR ELECTRIC VEHICLES" has been carried out by Mr./Ms. CHANDAN M V (10X20EE003), NAZIM KHAN (10X20EE012), RAKSHITHA K (10X20EE014), RAKSHITHA S (10X20EE015) a bonafide students of THE OXFORD COLLEGE OF ENGINEERING in partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical and Electronics Engineering under the Visvesvaraya Technological University, Belgaum during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project report has been approved as it satisfies the academic requirements in respect to technical Project work prescribed for the said degree.

  
Name & Signature of the Guide  
Prof. JAYAKUMAR N  
Assistant professor  
Dept. of EEE, TOCE

  
Name & Signature of the HOD  
Professor & Head EEE  
Dr. K. P. VISHWESHWAR  
The Oxford College of Engg  
Bommanahalli, Hosur Road  
Associate professor  
Bangalore - 560068  
Dept. of EEE, TOCE

  
Signature of the Principal  
Dr. N KANNAN  
Principal, TOCE  
PRINCIPAL  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bengaluru-560 068

Name of the Examiners  
(1) Dr. KOTHAIANDAL.C  
(2) JAYAKUMAR N

Signature with date  
C. U. S. V. 28/12/24  
  
28/12/24





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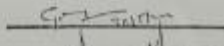

**THE OXFORD COLLEGE OF ENGINEERING**  
Bommanahalli, Hosur Road, Bengaluru-560068  
(Affiliated to VTU and approved by AICTE accredited by NAAC)  
**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled "DESIGN AND FABRICATION OF REGENERATIVE BRAKING USING DYNAMO FOR AUTOMOBILES" has been carried out by Mr. DAANISH MATHEEN (10X20ME002), IMRAN ALI WANI (10X20ME004), MOHAMMED HUSSAIN (10X20ME008), ZULFIKHAR ALI (10X20ME013) a bonafide students at THE OXFORD COLLEGE OF ENGINEERING in partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering under the Visvesvaraya Technological University, Belgaum during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect to technical Project Work prescribed for the said degree.

 Dr. Prasad H. Nayak Associate Professor	 Dr. Madhu Sudana Reddy G HOD/Principal Department of Mechanical Engineering The Oxford College of Engineering Bommanahalli, Hosur Road Bengaluru-560068 <b>External Viva</b>	 Dr. N. Kannan Principal, TOCE PRINCIPAL The Oxford College of Engineering Bommanahalli, Hosur Road Bengaluru-560068
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Name of the Examiners	Signature with Date
1. <u>Dr. Prasad H. Nayak</u>	
2. <u>Dr. Raghavendra Reddy NV</u>	



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### Regulation Of an *Escherichia coli* Auxotrophic Mutant Through an Aspirin Induced Promoter.

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(Affiliated to VTU, Belagavi, Approved by AICTE & Accredited 'A' Grade by NBA  
& NAAC, New Delhi)

DEPARTMENT OF BIOTECHNOLOGY



**CERTIFICATE**

This is to certify that the Project entitled “REGULATION OF AN *Escherichia coli* AUXOTROPHIC MUTANT THROUGH AN ASPIRIN INDUCED PROMOTER” presented by Ms. Madhushree K V (10X20BT010), Mr. Rakesh B M (10X20BT018), Ms. Supradha N (10X20BT029), Ms. Umme Ayman (10X20BT031) bonafide students of THE OXFORD COLLEGE OF ENGINEERING in partial fulfilment for the award of Bachelor of Engineering in Biotechnology of the Visvesvaraya Technological University, Belagavi, during the academic year 2023 - 2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

*D. Jothi*

Signature of the Guide  
Ms. Tamizharasi  
Assistant professor  
Dept of Biotechnology

*Dr. B K Manjunatha*

Signature of the HOD  
Dr. B K Manjunatha  
Professor & Head  
Department of Biotechnology  
The Oxford College of Engineering  
Bengaluru-560 068.

*Dr. N Kannan*

Signature of the  
Principal  
Dr. N Kannan  
Principal of TOCE

PRINCIPAL

The Oxford College of Engineering  
Bommanahalli, Hosur Road



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THE OXFORD COLLEGE OF ENGINEERING  
DEPARTMENT OF CIVIL ENGINEERING  
Hosur Road, Bommanahalli, Bangalore-560068  
(Approved by AICTE, Accredited by NAAC 'A' Grade, New Delhi & Affiliated to VTU, Belagavi)



**CERTIFICATE**

THIS is to certify that the report on PROJECT on topic entitled "GEOPOLYMER CONCRETE USING JUTE FIBRE" has been successfully carried out by RONNIE ARON R, PRAJWALA H, SUMIT OAD, UMMAY HANI bearing USN(1OX20CV010,1OX20CV008,1OX20CV012,1OX20CV014) is bonafide student of THE OXFORD COLLEGE OF ENGINEERING, of the Visvesvaraya technological university, Belagavi, during the academic year 2023-2024. It is certified that all the corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the department. The report has been approved as it satisfies the academic requirements in respect of Project prescribed for B.E Degree.

*Nayana B.S* 30/5/24  
UNDER THE GUIDANCE  
MS. NAYANA B S  
Assistant Professor & Guide  
Dept. of Civil Engineering

*[Signature]*  
HEAD OF DEPARTMENT  
DR. T.S. MALESIAH  
Head of the Department  
Department of Civil Engineering  
The Oxford College of Engineering  
Bangalore - 560 068.

*[Signature]*  
PRINCIPAL  
Dr. N KANNAN  
Principal  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bangalore 560 068.

Name of the External Viva Examiner  
1. *[Signature]*  
2. *[Signature]*

Signature with date  
*[Signature]* 20/5/24





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BOMMANAHALLI, HOSUR ROAD, BENGALURU-560068

(Affiliated to VTU and approved by AICTE)

#### Department of Mechatronics Engineering



### CERTIFICATE

Certified that the Project work entitled “TELEROBOTIC HUMANOID ARM” is a bonafide work carried out by, Mohammed Malhan Rabeet P (10X20MT002), Pragnya R Rao (10X20MT003), Rohan Kumar S (10X20MT006) and S Jayanth (10X20MT007) in partial fulfilment for the award of Bachelor of Engineering in Mechatronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all the corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The Project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

*Signature of Guide*

**Dr. Madhura S**  
Dept. of MTE

*Signature of HOD*

**Dr. Madhura S**  
Department of Mechatronics  
The Oxford College Of Engineering  
Bommanahalli, Bangalore - 560 068

*Signature of Principal*

**Dr. N Kannan**  
TOCE  
PRINCIPAL

Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bengaluru-560 068

#### Name of the Examiners:

1. Dr. Madhura S
2. Dr. Dasarajiah Rm

*Signature with Date*

*Signature*

*Signature*  
30.5.24





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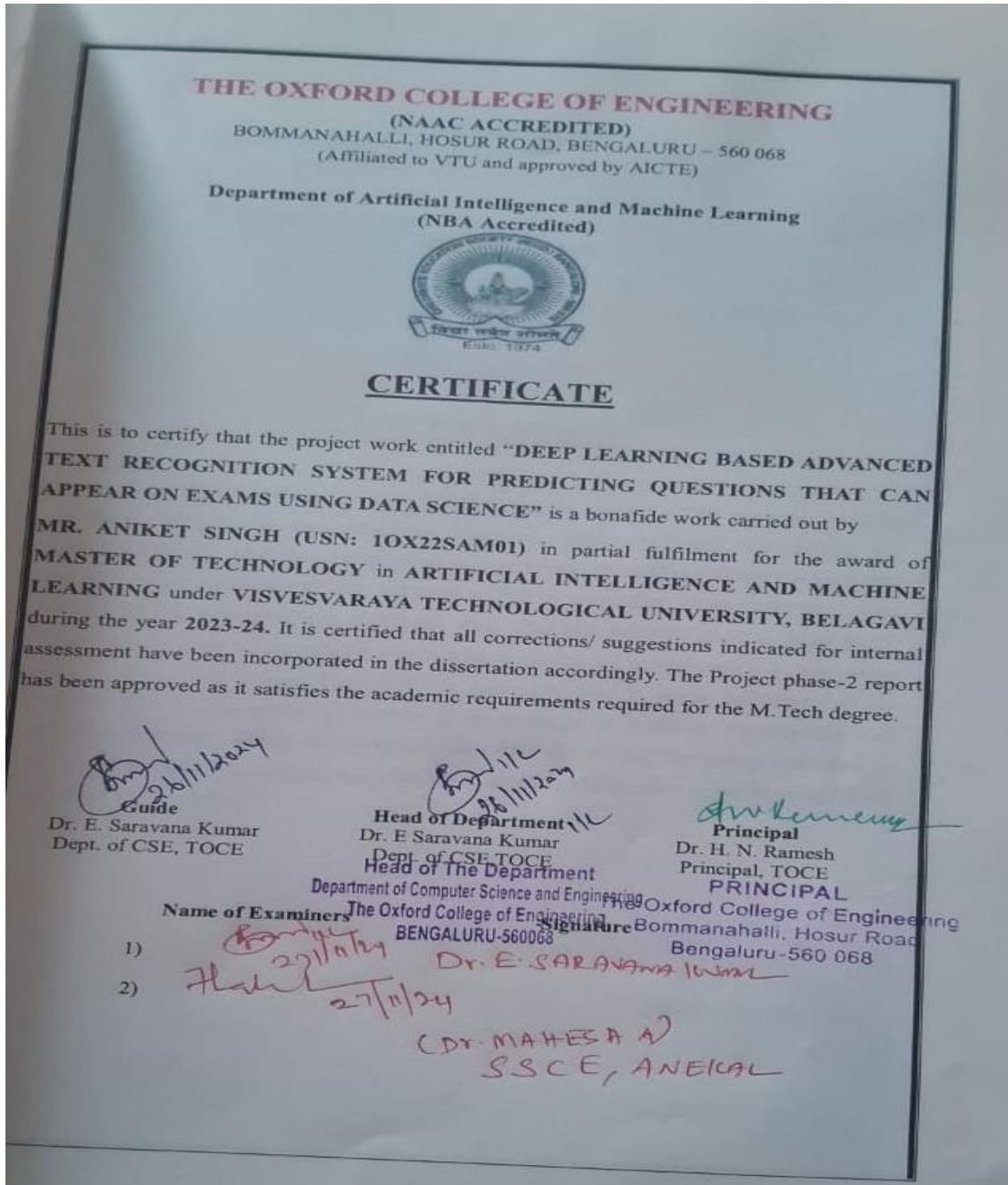
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(Affiliated to VTU and approved by AICTE)

Department of Electronics and Communication Engineering  
(NBA Accredited)



### CERTIFICATE

This is to certify that the project work entitled "DESIGN AND IMPLEMENTATION OF AN EFFICIENT FINGERPRINT AUTHENTICATION ALGORITHM USING SHA-512" is a bonafide work carried out by Ms. NIRISHA B P (USN: 10X22LVS01) in partial fulfillment for the award of MASTER OF TECHNOLOGY in VLSI DESIGN AND EMBEDDED SYSTEM under VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2023-24. It is certified that all corrections/ suggestions indicated for internal assessment have been incorporated in the dissertation accordingly. The Project phase-2 report has been approved as it satisfies the academic requirements required for the M. Tech degree.

*Manju Devi*  
Guide and HOD  
Dr. Manju Devi  
Dept. of ECE, TOCE  
Professor & HOD of E&C Engineering  
The Oxford College of Engineering  
Bommanahalli, Bangalore-560 068  
Name of Examiners

*H. N. Ramesh*  
Principal  
Dr. H. N. Ramesh  
Principal, TOCE  
PRINCIPAL  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bengaluru-560 068  
Signature

- 1) *Dr. Manju Devi*
- 2) *MR. VICEPR. JETASHEELANI.*

*Manju Devi*  
31/12/24  
*Manju Devi*  
03/12/24



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(Affiliated to VTU and approved by AICTE)

Department of Civil Engineering



### CERTIFICATE

This is to certify that the project entitled “Comparative Study of Y-Column and Rectangular Column Structures: Performance and Efficiency Analysis” is a bonafide project work carried out by LAXMIKANTH B PUJARI (USN: 10X22CSE03) in partial fulfillment for the award of MASTER OF TECHNOLOGY in STRUCTURAL ENGINEERING under VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2023-24. It is certified that all corrections/ suggestions indicated for internal assessment have been incorporated in the dissertation accordingly. The report has been approved as it satisfies the academic requirements required for the M.Tech degree.

*Nayana B.S*  
GUIDE  
Nayana B.S  
Assistant Professor  
TOCE

*[Signature]*  
HOD  
Dr. Malleshaiah T S  
Head of the Department  
Department of Civil Engineering  
The Oxford College of Engineering  
Bangalore - 560 068.

*[Signature]*  
PRINCIPAL  
Dr.H.N Ramesh  
TOCE  
PRINCIPAL  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bengaluru-560 068

Name of Examiners

1) *Ramesh B.M*

Internal

*Ramesh B.M 6/12/24*

2) *Nayana B.S*

*Nayana B.S 6/12/24*





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### CERTIFICATE

This is to certify that **Mr. Girish K V** bearing **USN: 10X22BA076** is a bonafide student of **Master of Business Administration** course of the Institute (Batch 2022 - 24) affiliated to **Visvesvaraya Technological University, Belgaum**. The Project report on "**A STUDY ON IMPACT OF CAPITAL STRUCTURE ON THE PERFORMANCE OF SHAKTHI INFRA DEVELOPERS**" is prepared by him under the guidance of **Dr. V LAKSHMI SUNEETHA**, Asst. Prof, Department of MBA in partial fulfilment of the requirement for the award of the Degree of Master of Business Administration of Visvesvaraya Technological University, Belgaum, Karnataka.

*Suneetha*  
Internal Guide

*MWH*  
HOD-MBA

HOD Dept of Business Adm  
The Oxford College of Engineering  
Bommanahalli Hosur Road  
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*R. Suneetha*  
Director -MBA & MCA  
DIRECTOR - MBA & MCA  
The Oxford College of Engineering  
Bommanahalli, Hosur Road,  
Bengaluru - 560068.

For Viva Voce

1) *Dr. Libeesh P C*

2) *Dr V Lakshmi Suneetha*





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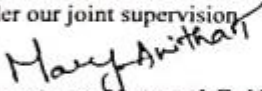


### DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS, THE OXFORD COLLEGE OF ENGINEERING


10th Milestone, Hosur Rd, Bommanahalli, Bengaluru, Karnataka 560068

#### CERTIFICATE

This is to certify that SHREYA SATYANAYAK has completed her final semester project work entitled LUNG NODULE GROUPING UTILIZING COUNTERFEIT CRAWLERS, DIRECTIONAL SURFACE AND SUPPORT VECTOR MACHINE as partial fulfillment for the award of Master of Computer Applications degree, during the academic year 2023-2024 under our joint supervision

  
Signature of Internal Guide  
Mrs. Mary Anitha T  
Asst. Professor  
TOCE

  
Signature of External guide  
Nandan E.  
Software Engineer  
Saptalabs Software solutions  
pvt ltd 017 116

  
Head of the Department  
Dr. Dharamvir  
Department of MCA  
The Oxford College of Engineering,  
Hosur Road, BANGALORE -

  
Director MBA & MCA  
Dr. Anitha Ramachander  
**DIRECTOR - MBA & MCA**  
The Oxford College of Engineering  
Bommanahalli, Hosur Road,  
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Examiner: - Name and Signature

- 1.
- 2.



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### Department of Electronics and Communication Engineering



### CERTIFICATE

Certified that the Internship Report work entitled "DROWSINESS DETECTION" is carried out by A Navya Sree (IOX20EC001) bonafide student of THE OXFORD COLLEGE OF ENGINEERING, BANGALORE in partial fulfillment for the award of the Degree of Bachelor of Engineering In Electronics and Communication Engineering of VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belgaum during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessments have been incorporated in the report deposited in the Department library. The Internship Report has been approved as it satisfies the academic requirements concerning work prescribed for the said degree.

  
Guide

Dr. Chetana Reddy  
Assistant Professor  
Dept. of ECE

  
HOD

Dr. Manju Devi  
Head of the department  
Dept. of ECE Engineering  
The Oxford College of Engineering,  
Bommanahalli, Bangalore - 560068

  
Principal

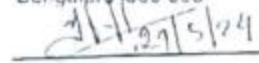
Dr. N Kannan  
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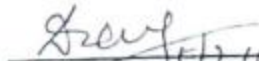
Name of the Examiners

JEET PATEL

DR. STAGADEESHA

Signature with Date:  
Bengaluru - 560 068

  
29/5/24

  
29/5/24





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2023-2024


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This is to certify that the internship entitled “UPS AND BATTERY MANAGEMENT” is a bonafide work carried out by BHARATH KUMAR A (10X20EE002), GIRISH S U (10X21EE403), JENUPRASAD V P(10X21EE404), SINCHANA R (10X20EE019) in partial fulfillment of internship in 8<sup>th</sup> semester, Bachelor of Engineering in the course of Electrical and Electronics Engineering at The Oxford College of Engineering under Visvesvaraya Technological University, Belagavi for the year 2023-2024. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report. The internship report has been approved as it satisfies the academic requirements for the award of Bachelor of Engineering degree.

  
21/5/24

Internal Guide

Prof Jayakumar N  
Assistant professor  
Dept of EEE, TOCE


  
21/5/24  
HOD & Head EEE  
The Oxford College of Engg  
Bommanahalli, Hosur Road  
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Principal  
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Name of the Examiners

1. Rajath. S.R  
2. Dr Nisha. C. Rami

Signature with date

  
30/5/24  
Nisha. C. Rami  
30/5/24



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इंस्टान एरोनाटिक्स लिमिटेड  
पु. बॉक्स 3791, मारठाहल्ली पोस्ट, बंगलूर - 560 037, भारत  
फोन : 080 - 2232 3808



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No. LCA/HR/TM/46/2423/2023

Date: 30.09.2023

### CERTIFICATE

#### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. Prajwalkumar Sadanand Mutnale, 7<sup>th</sup> Semester, BE (Mechanical Engineering), The Oxford College of Engineering, has undertaken an Internship in partial fulfillment of his academic requirement at LCA Tejas Division from 30.08.2023 to 30.09.2023.

2. His conduct during the above training period was Good.
3. Wishing him all the best for future endeavors.

*Artika*  
30/09/23  
(Artika Upadhyay)  
Senior Manager (HR) LCA

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#### DEPARTMENT OF BIOTECHNOLOGY



#### CERTIFICATE

This is to certify that the Internship entitled "NEUROMICROBIOLOGY" is presented by **Pavana B N (10X20BT015)** bonafide student of **THE OXFORD COLLEGE OF ENGINEERING** in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024.

*[Signature]*  
Signature of Internal Guide  
**Dr. B K Manjunatha**  
Professor and Head  
Dept. of Biotechnology

*[Signature]*  
Signature of HOD  
**Dr. B K Manjunatha**  
Professor and Head  
Department of Biotechnology  
The Oxford College of Engineering  
Bengaluru - 560 068.

*[Signature]*  
Signature of the Principal  
**Dr. N Kannan**  
Principal  
TOCE-Bengaluru

**PRINCIPAL**  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bengaluru - 560 068  
Signature with date

External Viva

1. *[Signature]* Dr. B K Manjunatha
2. *[Signature]* Dr. Joseph Kar D

*[Signature]* 25/5/24  
*[Signature]* 25/7/24





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### THE OXFORD COLLEGE OF ENGINEERING DEPARTMENT OF CIVIL ENGINEERING

Hosur Road, Bommanahalli, Bangalore - 560068

(Approved by A.I.C.T.E. New Delhi & Recognized by UGC Under Section 2(f) & Affiliated to VTU, Belagavi)



#### CERTIFICATE

This certificate is to state that the report on topic entitled "Internship at National Highway Authority of India" has been successfully carried out by MOHAN G V (HOX20CV006) is a bonafide student of THE OXFORD COLLEGE OF ENGINEERING in partial fulfillment toward of Bachelor of Engineering in CIVIL ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belagavi during for academic year 2023-2024. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the department. The report has been approved as it satisfies the academic requirements in respect of Internship prescribed for B.E. Degree.

*Nayana BS*  
INTERNAL GUIDE

Mrs. Nayana BS

Asst. Professor & Guide

Dept of Civil Engineering, TOCE

*[Signature]*  
HOD

Dr. MALLESHAHAH T S  
Head of the Department  
Department of Civil Engineering  
The Oxford College of Engineering  
Bangalore-560 068.

*[Signature]*  
PRINCIPAL  
Dr. N KANNAN

PRINCIPAL

Name of the External Viva Examiner

1) *[Signature]*

2) *Madhyudhan S*

Signature

*[Signature]*





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Department of Mechatronics Engineering



### CERTIFICATE

This is to certify that the Internship work entitled "Design of OPC UA Server For Temperature and Vibration Measurement of HYST Feed Drive Through DAQ Interfaced with NI LabView Max" is a Bonafede work carried out by DEEPAK N S (10N21MT405) in partial fulfilment for the award of Bachelor of Engineering in Mechatronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report and deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship prescribed for the said degree.

 20/01/24

Signature of Guide

Dr. Madhura S  
DEPT OF MTE

 20/01/24

Signature of HOD

Dr. Manjula C  
DEPT OF MTE  
HOD  
Department of Mechatronics  
The Oxford College Of Engineering  
Bommanahalli, Bangalore - 560068

 20/01/24

Signature of Principal

Dr. N Kannan

TOCE

PRINCIPAL

The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bengaluru-560068

Name of the Examiners:

1. Madhura S.

2. Sandeep K.

Signature with Date

 20/01/24

20/01/24



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Department of Electronics and Communication Engineering




**CERTIFICATE**

This is to certify that the Internship work is a bonafide work carried out by Mrs. NIRISHA B P (USN: 10X22LVS01) in partial fulfillment for the award of MASTER OF TECHNOLOGY in VLSI DESIGN AND EMBEDDED SYSTEM under VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2023-24. It is certified that all corrections/ suggestions indicated for internal assessment have been incorporated in the dissertation accordingly. The internship report has been approved as it satisfies the academic requirements required for the M.Tech degree.

  
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Head of Department  
TOCE

  
HOD  
Dr. Manjul Devi  
Dept. of ECE, TOCE  
Professor & HOD of E&C Engineering  
The Oxford College of Engineering  
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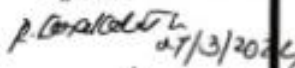

  
Principal  
Dr. N Kannan  
Principal, TOCE

Name of Examiners

- 1) Dr. Kanakguru R
- 2) Dr. Manjul Devi

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Signature

  
27/3/2024  
  
27/3/2024



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Department of Civil Engineering



**CERTIFICATE**

This is to certify that the Internship work is a bonafide work carried out by Ms. CHAITHANYA D J (USN: 10X20CSE01) in partial fulfillment for the award of MASTER OF TECHNOLOGY in CIVIL STRUCTURAL ENGINEERING under VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2023-2024. It is certified that all corrections/ suggestions indicated for internal assessment have been incorporated in the dissertation accordingly. The internship report has been approved as it satisfies the academic requirements required for the M.Tech degree.

*[Signature]*  
21/12/24

**Internal Guide**  
Mr. SHIVANAND C G  
Assistant Professor  
TOCE

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21/03/24

**External Guide**  
Mr. N SHANKARAPPA  
Managing Director  
NASHANTO

*[Signature]*

**Head of the Department**  
Dr. T. S. MALESAPPAH  
Department of Civil Engineering  
Dept. of Civil Engg., TOCE  
The Oxford College of Engineering

Name of Examiners Bangalore - External Viva

- 1) Shivanand. C.G
- 2) Dr. Sridhar. R.

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Dr. N. KANNAN  
Principal, TOCE  
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**CERTIFICATE**

This is to certify that **SHRAVANI N** bearing USN:10X22BA107, is a bonafide student of Master of Business Administration course of the Institute (Batch 2022-2024) affiliated to Visvesvaraya Technological University, Belagavi. The Internship report on "RITTAL INDIA PVT LTD" is prepared by her under the guidance of **Dr. V Lakshmi Suneetha, Assistant Professor, Department of MBA**, in partial fulfilment of the requirement for the award of The Degree of Master of Business Administration of Visvesvaraya Technological University, Belagavi, Karnataka.

*Suneetha*  
Signature of Internal Guide

*Adulthi*  
Signature of Director- MBA/MCA

**DIRECTOR - MBA & MCA**  
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1) *A. Sahana* 19/11/24  
2) *S*



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Department of Master of Computer Applications

**CERTIFICATE**



*This is to certify that the Internship work entitled*

**FULL STACK WEB DEVELOPMENT**

*Submitted in partial fulfillment of the requirement for the award of the degree*

**MASTER OF COMPUTER APPLICATIONS**

*Of*

*Visvesvaraya Technological University, Belgaum, Karnataka*

*Is a result of the bonafide work carried out*

*By*

**Divya A N**  
**10X22MC012**

*During the academic year 2023-2024*

Guide Signature  
Dr. Puja Shashi  
Assistant Professor  
Dept. of MCA

Signature of HOD  
Dr. Puja Shashi  
Prof & HOD  
Dept of MCA

**The Head**  
Department of MCA  
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**DEPARTMENT OF COMPUTER SCIENCE AND  
ENGINEERING**

**CERTIFICATE**

This is to certify that **SABA FATIMA (10X22CS142)**, **SAHANA KUSHNAPPA MALALI (10X22CS143)**, **S KAVIDARSHINI (10X22CS141)**, respectively of Computer Science and Engineering department have satisfactorily submitted the Activity phase- I report entitled "**SOCIAL CONNECT AND RESPONSIBILITIES**", Prkruthi group in partial fulfillment for the award of the Degree of Bachelor of Engineering in Computer Science and Engineering of **Visvesvaraya Technological University, Belagavi** during the year **2023-2024**. 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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Professor, Dept. Of CSE  
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**Dr.Saravana Kumar E**  
Head of Department  
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The Oxford College of Engineering  
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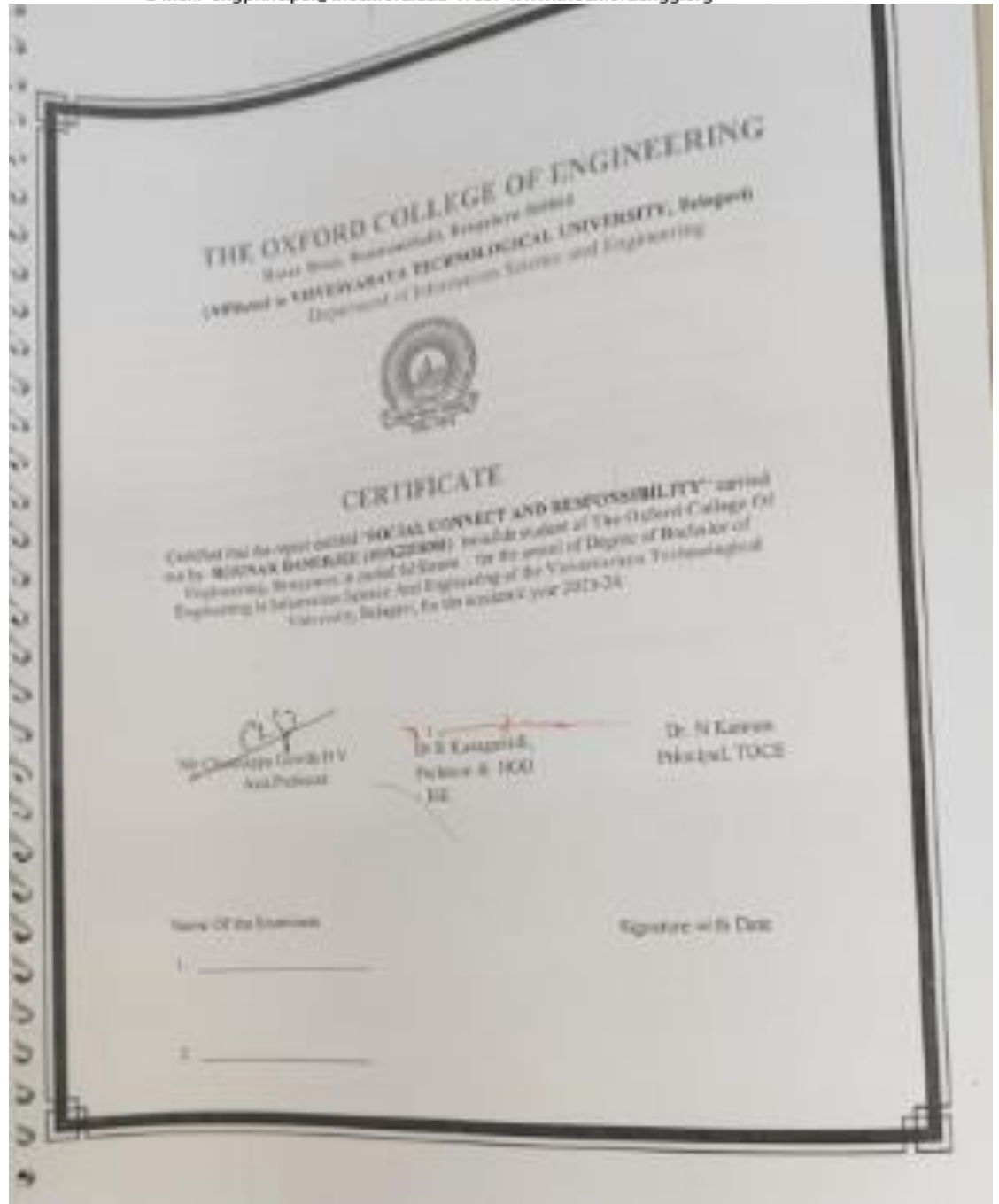
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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING**

**CERTIFICATE**

This is to certify that **Varun S (10X22EC115)**, **Varsha TN (10X22EC113)**, **Dhanush (Lateral Entry)**, **Shashank Shaker (10X22EC096)**, **Subham Mote (10X22EC105)** respectively of Electronics and Communication Engineering Department have satisfactorily submitted the activity report, in partial fulfillment for the award of the Degree of Bachelor of Engineering in Electronics and Communication Engineering of Visvesvaraya Technological University, Belagavi during the year 2023-2024.

  
Prof. Sheebakumari C.  
Assistant Professor,  
Dept. of ECE,  
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Dr. Manju Devi  
Head of the Department,  
Dept. of ECE  
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Professor & HOD of E&C Engineering  
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



2023-2024

**CERTIFICATE**

This is to certify that Name **B H A V Y A G** (USN-10X22EE005), of 3<sup>rd</sup> semester,  
Bachelor of Engineering in the course of Electrical and Electronics Engineering at The Oxford  
College of Engineering have successfully completed the course of activities in Social Connect and  
Responsibility (BSCK307) prescribed by Visvesvaraya Technological University, Belagavi in the year  
2023-24

*Nisha C Rami*  
11/03/2024  
Faculty In charge

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*N Jayakumar*  
11/3/24

NSS Coordinator  
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Assistant Professor  
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*Dr B Devi Vigneshwari*  
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Associate Professor  
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*Dr N Kannan*

Principal

Dr N Kannan  
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**CERTIFICATE**

Certified that the Report entitled "SOCIAL CONNECT AND RESPONSIBILITY" carried out by CHANDAN R (10X22ME002) Bonafide student of THE OXFORD COLLEGE OF ENGINEERING, BENGALURU in partial fulfilment for the award of Degree of Bachelor of Engineering in Mechanical Engineering of the Visvesvaraya Technological University, Belagavi, for the academic year 2023-24.

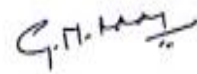
**UNDER THE GUIDANCE**

**Dr. Madhu Sudhan Reddy G**

Professor & HOD

Dept. of ME

**HEAD OF THE DEPARTMENT**

  
Dr. Madhu Sudhan Reddy G  
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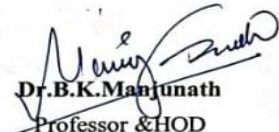
Department of Biotechnology




**CERTIFICATE**

Certified that the report entitled "SOCIAL CONNECT AND RESPONSIBILITY" carried out by Abhinay Y B with USN-10X22BT001, bonafide student of The Oxford College Of Engineering, Bengaluru in partial fulfilment for the award of Degree of Bachelor of Engineering in Biotechnology of the Visvesvaraya Technological University, Belagavi, for the academic year 2023-24.

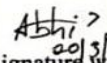
  
**Dr. K. Valarmathy**  
Asstot. Professor

  
**Dr. B. K. Manjunath**  
Professor & HOD  
**Dr. B. K. MANJUNATHA**  
Professor & Head  
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**Dr. N. Kannan**  
Principal, TOCE  
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Name Of Examiner:

1. Dr. B. K. Manjunath
2. Dr. Valarmathy . k .

  
Signature With Date  
Abhinay Y B  
(10X22BT001)





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**CERTIFICATE**

This is to certify that the report on BE Civil on topic entitled **SOCIAL CONNECT AND RESPONSIBILITIES**, has been successfully carried out by **MOHAMMED MUSAIB (10X23CV401)** is bonafide student of **THE OXFORD COLLEGE OF ENGINEERING** in partial fulfilment for award of Bachelor of Engineering, in **CIVIL ENGINEERING** the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY** Belagavi, during for the academic year 2023-24. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the department. The report has been approved as it satisfies the academic requirements in respect of prescribed for B.E Degree.

**UNDER THE GUIDANCE**  
**Mrs. HARSHITHA N**  
Assistant Professor  
Dept. of Civil Engineering

**HEAD OF DEPARTMENT**  
**Mr. T S MALLESHIAH**  
Professor & Hod  
Dept. of Civil Engineering

Name of the Examiners

Signature with Date

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_



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ENGINEERING**



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Belagavi)*

**CERTIFICATE**

Certified that the report entitled "SOCIAL CONNECT AND RESPONSIBILITY"  
carried out by **Nachu mahesh kumar (10X22MT007)** Bonafide student of **THE  
OXFORD COLLEGE OF ENGINEERING, BENGALURU** in partial fulfilment for  
the award of Degree of Bachelor of Engineering in Mechatronics Engineering of the  
**Visvesvaraya Technological University, Belagavi**, for the academic year 2023-24.

**UNDER THE GUIDANCE**

**Mr. Jaideep R**

Assistant professor

Dept. of MTE

**HEAD OF THE DEPARTMENT  
Prof. & HOD**

**Dr. Manjula C**  
Department of Mechatronics  
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Dept. of MTE



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Department of Artificial Intelligence and Machine Learning



CERTIFICATE

Certified that the report entitled "SOCIAL CONNECT AND RESPONSIBILITY" carried out by Syed Mohammed Ali with USN-10X22A1054 bonafide student of The Oxford College Of Engineering, Bengaluru in partial fulfilment for the award of Degree of Bachelor of Engineering in Artificial Intelligence and Machine Learning of the Visvesvaraya Technological University, Belagavi, for the academic year 2023-24.

*[Signature]*  
Prof. Sathya Priya K

Asst. Professor

*[Signature]*  
Dr. P. Sindhu Madhavi

Professor & HOD

*[Signature]*  
Dr. N Kannan

Principal, TOCE

HEAD OF THE DEPARTMENT  
DEPARTMENT OF AIML  
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Bengaluru-560068

The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bengaluru-560 068

Name of the Examiners

- [Signature]*
- [Signature]*

*[Signature]*  
Signature with date

SYED MOHAMMED ALI

(10X22A1049)



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Department of Computer Science and Engineering



**CERTIFICATE**

Certified that the mini project work entitled "FLORIST'S VENDOR MANAGEMENT SYSTEM" carried out by, **Janhvi Gupta (IOX21CS059)**, **Kashish Sand (IOX21CS064)**, **Kavya A G (IOX21CS065)**, **Madhumitha V (IOX21CS077)** bona-fide students of The Oxford College Of Engineering, Bengaluru in partial fulfillment for the award of Degree of Bachelor of Engineering in Computer Science And Engineering in the Visvesvaraya Technological University, Belagavi, during the year 2023-2024. It is certified that all corrections / suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of mini Project work prescribed for the said Degree.

*[Signature]*  
20/3/24  
**Ms. Vinotha**  
Mini Project guide

*[Signature]*  
20/3/24  
**Dr E Saravana Kumar**  
Professor & Head of the Dept.  
of CSE  
Head of The Department  
Department of Computer Science and Engineering  
The Oxford College of Engineering  
BENGALURU-560068

*[Signature]*  
**Dr N Kannan**  
Principal  
PRINCIPAL  
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Bengaluru-560068

1. Internal Examiner: *[Signature]*

2. External Examiner: *[Signature]*  
20/3/24





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Department of Electronics & Communication Engineering

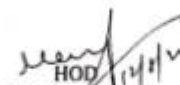



**CERTIFICATE**

Certified that the Project work entitled "Structural Analysis of Freight Wagon Wheel Failure Detection" carried out by Sagar G K (10X21EC079), Vaibhavi Gummed (10X21EC102), Yallamma (10X21EC109) a bonafide students of THE OXFORD COLLEGE OF ENGINEERING in partial fulfilment for the award of BACHELOR OF ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the academic year 2023-2024. It is certified that all the corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department library. The Mini Project report has been approved as it satisfies the academic requirements for the above said degree.

  
Guide  
**Dr. MANJU DEVI**  
Professor & H.O.D

Name of Examiner

  
HOD  
**Dr. MANJU DEVI**  
Dept. of ECE  
Professor & HOD of E&C Engineering  
The Oxford College of Engineering  
Bommanahalli, Bangalore-560 068

  
Principal  
**Dr. H N RAMESH**  
PRINCIPAL  
The Oxford College of Engineering  
Bommanahalli, Hosur Road  
Bangalore-560 068

Signature with Date



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Approved by A.I.C.T.E. New Delhi.

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Ph: 080-61754601/602, Fax: 080 - 25730551

E-mail: engprincipal@theoxford.edu Web: www.theoxfordengg.org

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(Affiliated to VTU and Approved by AICTE, Accredited by NAAC-A Grade)

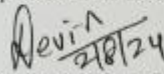
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

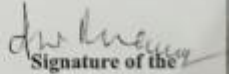


**CERTIFICATE**  
**2023-2024**

Certified that the Mini Project entitled "Design and Simulation of a SEPIC Converter for Solar Powered Electric Vehicle Battery Charging" has been carried out by SNEHA (10X21EE015), JNANIKA. B (10X22EE402), THIRUPATHI B N (10X22EE410), the bonafide students of THE OXFORD COLLEGE OF ENGINEERING in partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical and Electronics Engineering under the Visvesvaraya Technological University, Belgaum during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project report has been approved as it satisfies the academic requirements in respect to technical Project work prescribed for the said degree.

  
Name & Signature of the  
Guide  
Mrs. Sumitha T L  
Dept. of EEE, TOCE

  
Name & Signature of the HOD  
Dr. Devi Vighneshwari. B  
Dept. of EEE, TOCE  
Professor & Head EEE  
The Oxford College of Engg  
Bommanahalli, Hosur Road  
Bangalore-560 068

  
Signature of the  
Principal  
Dr. Ramesh H N  
Principal, TOCE  
PRINCIPAL  
The Oxford College of Engineering  
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Bangaluru-560 068



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E-mail: engprincipal@theoxford.edu Web: www.theoxfordengg.org  
**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

This is to certify that the project work entitled "FABRICATION OF SAND BLASTING WITH COLLECTING EQUIPMENT" carried out by DEENADHAYALAN S, FARHA FATHIMA, KESHAVAN S, NIKHIL JONATHAN C bearing USN: 1OX21ME002, 1OX21ME003, 1OX21ME005, 1OX21ME011 respectively in bonafide student of THE OXFORD COLLEGE OF ENGINEERING, in partial fulfilment to the award of Bachelor of Engineering in Mechanical of the Visveswaraya Technological University, Belagavi during the year 2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said Degree.

**Signature of the Guide**

**Dr. Prasad H Nayak**

**Signature of the HOD**

**Dr. Madhu Sudhana Reddy**

**Prof. & Head**  
**Department of Mechanical Engineering**  
**The Oxford College of Engineering**  
**Bommanahalli, Bangalore - 560 068**

**Signature of the Principal**

**Dr. H N Ramesh**

**PRINCIPAL**

**The Oxford College of Engin**  
**Bommanahalli, Hosur Rd**  
**Bangaluru-560 068**





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**BOMMANAHALLI, HOSUR ROAD BANGALORE- 560068**

(Affiliated to VTU, Belagavi, Approved by AICTE & Accredited by NAAC & NBA, New Delhi)



**DEPARTMENT OF BIOTECHNOLOGY**

**CERTIFICATE**

This is to certify that the project work entitled **SCREENING AND EVALUATION OF PHOTO-CONSTITUENTS OF LITHOSPERMUM OFFICINALE FOR THYROID DRUG TARGETS** carried out by **Gagan KC(10X21BT009), Govindaraju HN(10X21BT010), Harini R(10X21BT011), Kowshalya C(10X21BT015)**, bonafide student of **THE OXFORD COLLEGE OF ENGINEERING**, in partial fulfillment to the award of Bachelor of Engineering in Biotechnology of the Visveswaraya Technological University, Belagavi during the year 2023. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said Degree.

Signature of the Guide  
Dr. Amulya Giridasappa

Signature of the HOD  
**Dr. B.K. MANJUNATHA**  
Professor & Head  
Department of Biotechnology  
The Oxford College of Engineering  
Bangalore-560 068.

Signature of the Principal  
**Dr. H.N. Ramesh**  
**PRINCIPAL**

The Oxford College of Engineering  
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Bangalore-560 068



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**THE OXFORD COLLEGE OF ENGINEERING**  
**DEPARTMENT OF CIVIL ENGINEERING**

Hosur Road, Bommanahalli, Bangalore-560068

(Approved by AICTE, New Delhi, Accredited by NBA, NAAC Grade 'A'.

New Delhi & Affiliated to VTU, Belagavi)



**CERTIFICATE**

This is to certify that the report on Mini Project on topic entitled "PERVIOUS CONCRETE." has been successfully carried out by **VICTORY S (10X22CV403)**, **VIJAY KUMAR A (10X21CV016)**, **JAYARAM BIDAkar (10X22CV400)**, **VINOD REDDY (10X22CV404)** are bonafide students of **THE OXFORD COLLEGE OF ENGINEERING** in partial fulfilment for award of Bachelor of Engineering, in **CIVIL ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY**, Belagavi, during for the academic year 2023-24. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the department. The report has been approved as it satisfies the academic requirements in respect of Mini Project prescribed for B.E Degree.

  
**INTERNAL GUIDE**

Mr. Prashanth T S  
Asst. Professor

  
Head of Department  
Department of Civil Engineering  
The Oxford College of Engineering  
Department of Civil Engineering

**PRINCIPAL**  
Dr. H. N RAMESH  
TOCE

Name of The External Viva Examiner

- 1)  Kavya. S K.
- 2)

Signature





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BOMMANAHALLI, HOSUR ROAD, BENGALURU-560068  
(Affiliated to VTU and approved by AICTE)

**Department of Mechatronics Engineering**



**CERTIFICATE**

Certified that the Project work entitled "UNDERWATER OBJECT DETECTION THROUGH AREIAL USING IMAGE PROCESSING WITH A VTOL DRONE" is a bonafide work carried out by, Achyutha S.S (10X21MT001), Akshay Krit K (10X22MT400), Eshu H R (10X21MT004) and Madhu Chandan K Chari (10X21MT008) in partial fulfillment for the award of Bachelor of Engineering in Mechatronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-24. It is certified that all the corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The Mini-Project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Signature of Guide  
Dr. Madhura S  
Dept. Of MTE

Signature of HOD  
Dr. Madhura S  
Dept. Of MTE

Signature of Principal  
Dr. H N Ramesh  
TOCE



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**Bommanahalli, Bangalore 560068**



**CERTIFICATE**

This is to certify that the Mini-Project entitled "MULTIPLE DISEASE PREDICTION SYSTEM" carried out by **HEMANTH N B, 10X21A1010** of VIth Semester students of The Oxford College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Artificial Intelligence and Machine Learning of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. The Mini-Project report has been approved as it satisfies the academic requirements in respect of Mini-Project work prescribed for the said Degree.

Signature of the Guide and HOD

**Dr. P. Budha Madhavi**  
Professor & HOD, Dept. of AIML  
TOCE, Bangalore

**HEAD OF THE DEPARTMENT**  
DEPARTMENT OF AIML  
THE OXFORD COLLEGE OF ENGINEERING  
Bommanahalli, Bangalore

Name of the Examiners:

- 1.
- 2.

Signature of the Principal

**Dr. H N Ramesh**  
Principal  
TOCE, Bangalore

**PRINCIPAL**

**Signature with Date**  
The Oxford College of Engineering  
Bommanahalli, Hosur Road,  
Bengaluru-560 068