

DEPARTMENT OF MECHANICAL ENGINEERING

2022-23

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI- 590018



HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI-591236

Accredited at 'A' Grade by NAAC and Recognized Under Section 2(f) of UGC Act, 1956



DEPARTMENT OF MECHANICAL ENGINEERING

**CERTIFICATE**

Certified that the project work entitled **"ECO-FRIENDLY ADVANCED COMMUNITY SOLAR DRYER"** carried out by **MR.SOURABHA SHINDE USN:2HN20ME406**, **MR.ADITYA PATIL USN:2HN20ME400**, **MR.RAMESH MANJARAGI USN: 2HN20ME403** & **MR.VIRUPAXAYYA MATHAD USN: 2HN20ME408** are bonafide student of **HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI** in partial fulfillment for the award of **Bachelor Of Mechanical Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year **2022-2023**. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Dr. S.N.Topannavar

for **GUIDE**

Dr. S.N.Topannavar

**H.O.D**

Dr. S.C.Kamate

**PRINCIPAL**

External Viva

Name of the Examiners

1. Dr. B. M. Arkoli
2. N. B. Bhoji

Signature with date

Arkoli  
NB

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI- 590018



S.J.P.N. Trust's

HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI-591236

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DEPARTMENT OF MECHANICAL ENGINEERING

## CERTIFICATE

Certified that the Project work entitled "Influence of Injection Pressure and Aluminium Oxide Nano Particle Added Fish Oil Methyl Ester on Compression Ignition Engine" carried out by Miss.Archana Ramappa Gulli USN: 2HN19ME003, Mr. Mahadev R Gulli USN: 2HN19ME007, Miss.Aayesha Sayyad USN: 2HN18ME001, a bonafide students of HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI in partial fulfillment for the award of Bachelor of Engineering in Electrical and Electronics Engineering of the Visvesvaraya Technological University, Belagavi 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 departmentallibrary.

The Project report has been approved as it satisfies the academic requirements in respect of Project Work Phase-II prescribed for the said Degree.

Dr. K. M. Akkoli

Prof. G. M. Zulapi  
Guide

Dr. S. N. Topannavar

HOD

Signature with date

Dr. S.C.Kamate

Principal

Name of the examiners

1. Dr. K. M. Akkoli
2. N. B. Bhoji

DEPARTMENT OF MECHANICAL ENGINEERING

2022-23

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DEPARTMENT OF MECHANICAL ENGINEERING

**Certificate**

Certified that the project work entitled **“Effect of Algae Biodiesel Blends with Nano-fluid Additives on CRDI Engine”** carried out by **Mr.Kiran S Dhange** USN:2HN19ME005, **Mr.Abhishek Patil** USN:2HN19ME001, **Mr.Vinod Soorannavar** USN:2HN18ME046 and **Mr.Shashidhar Gurav** USN:2HN19ME010 are bonafide student of **HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI** in partial fulfillment for the award of **Bachelor of Mechanical Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year **2022-2023**. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Dr. S. C. Kamate

Dr. S. N. Topannavar

Dr. S. C. Kamate

Dr. M. M. Shivashimpi

H.O.D

PRINCIPAL

GUIDES

External Viva

Name of the Examiners

Signature with date

1. Dr. B. M. Arshad
2. N. T. Bhoji

[Signature]  
NSH



VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI,  
KARNATAKA – 590018



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DEPARTMENT OF MECHANICAL ENGINEERING  
**Certificate**

This is to certify that the project report entitled "**EXPERIMENTAL INVESTIGATION ON SHOT PEENING PROCESS**" and report being submitted by Mr. Satigouda B Patil, Mr.Prathamesh Nilaji, Mr.Suraj Maradi, Mr.Shivanand Dodagoudar, a bonafide student of **HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI** in partial fulfilment for the award of Degree of Bachelor of **Mechanical Engineering** prescribed by Visvesvaraya Technological University, Belagavi during the academic year **2022-2023** is found satisfactory. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Prof.D.N.Inamdar

Dr. S.N.Topannavar

Dr. S.C.Kamate

Prof.G.M.Zulapi

GUIDE

H.O.D

PRINCIPAL

EXTERNAL VIVA

Name of the Examiner

Signature

1. Dr. B. M. Arkoli
2. N. B. Bhoji

Signature

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI,  
KARNATAKA – 590018



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**DEPARTMENT OF MECHANICAL ENGINEERING**  
**2022-23**

## Certificate

This is to certify that the project report entitled **"MULTICROP HARVESTING MACHINE"** and report being submitted by Mr. Vinayak Badiger, Mr. Rajkumar Khot, Mr. Akshay Magadum, Mr. Sandeep Sooji, a bonafide student of **HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI** in partial fulfilment for the award of Degree of Bachelor of **Mechanical Engineering** prescribed by Visvesvaraya Technological University, Belagavi during the academic year **2022-2023** is found satisfactory. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Prof.S.A. Goudadi

**GUIDE**

Dr. S.N. Topannavar

**H.O.D**

Dr. S.C.Kamate

**PRINCIPAL**

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI,  
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DEPARTMENT OF MECHANICAL ENGINEERING  
**Certificate**

This is to certify that the project report entitled **“FIBRE EXTRACTION FROM BANANA STEM”** and report being submitted by Mr. Dhananjayakuamr Magadum, Mr.Pavankuamr Shirahatti, Mr.Ramesh Adin, Mr.Mahadev Patrot, a bonafide student of **HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI** in partial fulfilment for the award of Degree of Bachelor of **Mechanical Engineering** prescribed by Visvesvaraya Technological University, Belagavi during the academic year **2022-2023** is found satisfactory. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

  
Prof. M.S. Futane

**GUIDE**

  
Dr. S.N. Topannavar

**H.O.D**


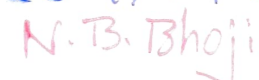
  
Dr. S.C. Kamate

**PRINCIPAL**

**EXTERNAL VIVA**

Name of the Examiner

Signature

1.   
Dr. K.M. Ashok
2.   
N.B. Bhoji




**VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI,  
KARNATAKA – 590018**



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**DEPARTMENT OF MECHANICAL ENGINEERING**

**Certificate**

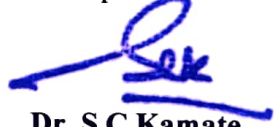
This is to certify that the project report entitled **“SOLAR OPERATED BORE-WELL MOTOR LIFTER”** and report being submitted by **Mr. Akash Bagewadi, Mr. Rahul Mudalagi, Mr. Rakesh Gudasi, Mr. Sujeeth Huddar**, a bonafide student of **HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI** in partial fulfilment for the award of Degree of Bachelor of **Mechanical Engineering** prescribed by Visvesvaraya Technological University, Belagavi during the academic year **2022-2023** is found satisfactory. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

  
**Prof. M.A. Hipparagi**

**GUIDE**

  
**Dr. S.N. Topannavar**

**H.O.D**

  
**Dr. S.C. Kamate**

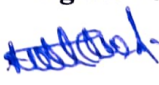
**PRINCIPAL**

**EXTERNAL VIVA**

**Name of the Examiner**

**Signature**

1. **Dr. K. M. Arkoli**
2. **N B. Bhoji**

  
**NAH**