JnanaSangama, Belagavi – 590018



A Project Report on

"FABRICATION OF SMART IRRIGATION SYSTEM USING IOT"

Carried out by

JASHWANTH S SHREYAS B SUJAY ADITHYA THEJAS V R 1KS19ME013 1KS19ME030 1KS19ME033 1KS19ME035

Submitted in partial fulfillment for the award of **BACHELOR OF ENGINEERING**

IN

MECHANICAL ENGINEERING

Under the Guidance Of **Dr. Girish T R**

Associate Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY

> Bengaluru - 560109 2022-23

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "FABRICATION OF SMART IRRIGATION SYSTEM USING IOT " is a bonafide work carried out by

Name JASHWANTH S SHREYAS B SUJAY ADITHYA THEJAS V R

USN 1KS19ME013 1KS19ME030 1KS19ME033 1KS19ME035

In partial fulfillment for the award of Bachelor of Engineering in Mechanical Engineering from Visvesvaraya Technological University. Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

Signature of Guide (Dr. Girish T R)

Signature of HOD (Dr. Umashankar M) lead of the Depr Dept. of Mechanical Engn. K.S. Institute of Technology K.S. INSTITUTE OF TECHNOLOG Bengaluru - 560 109. EXTERNAL VIVA

Signature of Principal/Director (Dr. Dilip Kumar) - PRINCIPAL

BENGALLIRU - 560 109.

Name of Examiners Dr. GIRLEHTA 1 Dr. Sounday Kunag S. M. 2

Signature with Date

JnanaSangama, Belagavi - 590018



A Project Report on

"ELECTROPLATING OF DISC ROTOR WITH COPPER"

Carried out by

NIHAL M L ABHISHEK MANIKUMAR RAMACHANDRA S ROJA G NAIK

1KS19ME019 1KS18ME001 1KS19ME028 1KS18ME057

Submitted in partial fulfillment for the award of

BACHELOR OF ENGINEERING

IN

MECHANICAL ENGINEERING

Under the Guidance Of

Mr.NAGABHUSHANA M

Associate Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY

Bengaluru - 560109 2022-23

Bengaluru – 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "ELECTROPLATING OF DISC ROTOR WITH COPPER" is a bonafide work carried out by

Name NIHAL M L ABHISHEK MANIKUMAR RAMACHANDRA S ROJA G NAIK

USN 1KS19ME019 1KS18ME001 1KS19ME028 1KS18ME057

In partial fulfillment for the award of **Bachelor of Engineering** in **Mechanical Engineering** from **Visvesvaraya Technological University**, Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

OI- waalbert Signature of Guide

(Mr.Nagabhushana M)

Name of Examiners

1. Dr. GIRISHTR

2. Dr Langary Cumag. S.M.

Signature of HOD Head of the Department Dept, of Mechanical Ling. K.S. Institute of Technology EXTERNAL VIVA

Kennag 4

Signature of Principal/Director (Dr. Dilip Kumar K)

PRIMCIPAL K.S. INSTITUTE OF TECHNOLOGY BENGALURU - 560 109.

Signature with Date

i

VISVESVARAYA TECHNOLOGICAL UNIVERSITY JNANASANGAMA, BELAGAVI - 590 018



A Project Report on

"DESIGN AND FABRICATION OF SOLAR DRYER FOR ONION"

Carried out by

HEMANTH .K JITHAN .A MADHU .V NITHESH .S.R 1KS19ME011 1KS19ME016 1KS19ME017 1KS19ME020

Submitted in partial fulfillment for the award of

BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

Under the Guidance Of Dr. Nirmala .L Associate Professor Department of Mechanical Engineering



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY 2022-23

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "DESIGN AND FABRICATION OF SOLAR DRYER FOR ONION" is a bonafide work carried out by

Name:	USN:
HEMANTH .K	1KS19ME011
JITHAN .A	1KS19ME016
MADHU .V	1KS19ME017
NITHESH .S.R	1KS19ME020

In partial fulfillment for the award of **Bachelor of Engineering** in **Mechanical Engineering** from **Visvesvaraya Technological University**, Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

er 18/5/23

Signature of Guide Dr. Nirmala .L

Signature of HOD Ditial Onlashankari ()9-Dept. of Mechanikari ()9-K.S. Inscitute of Technology Science () 109 Science ()

Signature of Principal & Director Dr. Dilip Kumar K

Signature with Date

Name of Examiners 1. Dr. GIRISH PL

2. Dr. Sernjay Cumar.S.M.

JnanaSangama, Belagavi 590018



A Project Report on

"FABRICATION OF AN AUTOMATED PESTICIDE SPRAYER USING BLUETOOTH"

Carried out by

ACHINTYA S SAROVAR AJITH KUMAR R MANU KUMAR D K ROHITH S 1KS19ME001 1KS19ME003 1KS19ME018 1KS18ME056

Submitted in partial fulfilment for the award of

BACHELOR OF ENGINEERING IN

MECHANICAL ENGINEERING

Under the Guidance Of **Mr. Prasad K** Associate Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING

K S INSTITUTE OF TECHNOLOGY

Bengaluru - 560109

2022-23

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "FABRICATION OF AN AUTOMATED PESTICIDE SPRAYER USING BLUETOOTH" is a bonafide work carried out by

Name

ACHINTYA S SAROVAR AJITH KUMAR R MANU KUMAR D K **ROHITH S**

USN

1KS19ME001 1KS19ME003 1KS19ME018 1KS18ME056

In partial fulfilment for the award of Bachelor of Engineering in Mechanical Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

Signature of Guide

(Mr. Prasad K)

EXTERNAD IVIVA

Signature of HOD Signature of Principal/Director

(Dr. Umashankar M) Head of the Department Dept. of Mechanical Engg. K.S. Institute of Technology

(Dr. Dilip Kumar K) PRINCIPAL K.S. INSTITUTE OF TECHNOLOGY BENGALURU - 560 109.

Signature with Date

Name of Examiners

1. Dr. Sanfay Kumerg. S. M.

2. Dr. GIRKH TR

ii

VISVESVARAYA TECHNOLOGICAL UNIVERSITY Jnana Sangama, Belagavi – 590018



A Project Report on

"PNEUMATIC FOUR AXIS MATERIAL HANDLING ROBOT"

Carried out by

PRASANNA KUMAR S G PRATHAP REDDY T M R DEEPAK A RAO RAKSHITH NAGESH 1KS19ME022 1KS19ME023 1KS19ME024 1KS19ME027

Submitted in partial fulfillment for the award of BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

> Under the Guidance Of **Dr. SALEEM KHAN** Assistant Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY Bengaluru – 560109 2022-23

Bengaluru – 560109 DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "PNEUMATIC FOUR AXIS MATERIAL HANDLING ROBOT" is a bonafide work carried out by

<u>Name</u> PRASANNA KUMAR S G PRATHAP REDDY T M R DEEPAK A RAO RAKSHITH NAGESH USN 1KS19ME022 1KS19ME023 1KS19ME024 1KS19ME027

In partial fulfillment for the award of **Bachelor of Engineering** in **Mechanical Engineering** from **Visvesvaraya Technological University**. Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.



Ilantas las Signature of HOD (Dr. Umashankar M)

EXTERNAL VIVA

uno?

Signature of Principal/Director [Dr. Dilip Kumar K]

Signature with Date m. 19/5/22

144

Name of Examiners

1. Dr. Scingen Cumon S.M. 2 Dr. GIRUSH TK

Jnana Sangama, Belagavi - 590018



A Project Report on

EXPERIMENTAL STUDIES ON OSCILLATING HEAT PIPES USING CONVENTIONAL AND NANO-FLUIDS Carried out by

R MANOJ REDDY RAHUL R SRI KRISHNA SANTOSH K SYED ASMA ASHEER

1KS19ME025 1KS19ME026 1KS19ME032 1KS19ME034

Submitted in partial fulfillment for the award of BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

Under the Guidance Of

Mr. Parashuram A K

Assistant Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY

Bengaluru - 560109

2022-23

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "EXPERIMENTAL STUDIES ON OSCILLATING HEAT PIPES USING CONVENTIONAL AND NANO-FLUIDS" is a bonafide work carried out by

Name	USN
R MANOJ REDDY	1KS19ME025
RAHUL R	1KS19ME026
SRI KRISHNA SANTOSH K	1KS19ME032
SYED ASMA ASHEER	1KS19ME034

In partial fulfillment for the award of Bachelor of Engineering in Mechanical Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

PAKento-konolasi Signature of Guide

(Mr. Parashuram A K)

EXTERNAL VIVA

Name of Examiners

1. Dr. Sampay Kunnag. S. M. 2. Dr. GURISH TR

Signature of HOL

Her Umasbankan M) Dept. of Mechanical Engg. K.S. Inscitute of Technology Bengaluru - 560 109.

Funal.

Signature of Principal/Director

(Dr. Dilip Kumar K) PRINCIPAL K.S. INSTITUTE OF TECHNOLOGY EENCALURU - 560 109.

Signature with Date 19/5/23 Juy

VISVESVARAYA TECHNOLOGICAL UNIVERSITY JnanaSangama, Belagavi – 590018



A Project Report on

"IDENTIFICATION AND SEGREGATION OF OBJECTS USING IMAGE PROCESSING"

Carried out by

ANUSH S ATIF M SHAIK KARTHIK G S PRAJWAL NIKAM

1KS18ME008 1KS18ME010 1KS18ME024 1KS18ME048

Submitted in partial fulfillment for the award of BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

> Under the Guidance Of Mr. Manjunath B R

Associate Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY

Bengaluru - 560109

2022-23

I

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "IDENTIFICATION AND SEGREGATION OF OBJECTS USING IMAGE PROCESSING" is a bonafide work carried out by

Name ANUSH S ATIF M SHAIK KARTHIK G S PRAJWAL NIKAM

USN
1KS18ME008
1KS18ME010
1KS18ME024
1KS18ME048

In partial fulfillment for the award of Bachelor of Engineering in Mechanical Engineering from Visvesvaraya Technological University. Belagavi during the academic year 2022-2023. It is certified that all the corrections suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

Signature of Guide (Mr. Manjunath B R) (Dr. Emashankar M)

22/3/23 Signature of HOD

Signature of Principal/Director (Dr. Dilip Kumar)

EXTERNAL VIVA

Name of Examiners

Dr. GIASIM = DR. DHLIHMUENDRN (C

Signature with Date 22/05/

JnanaSangama, Belagavi – 590018



A Project Report on

"DESIGN AND CONSTRUCTION OF AN INTEGRATED DOMESTIC ORGANIC WASTE COMPOSTING DEVICE"

Carried out by

ARUN KUMAR M CHARITHA S SANJAY V VENKATARAMANA G BHAT 1KS19ME004 1KS19ME008 1KS19ME029 1KS19ME039

Submitted in partial fulfillment for the award of BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

Under the Guidance Of Mr . Ranganath N Assistant Professor

Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K.S INSTITUTE OF TECHNOLOGY

Bengaluru – 560109 2022-23

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "DESIGN AND CONSTRUCTION OF AN INTEGRATED DOMESTIC ORGANIC WASTE COMPOSTING DEVICE " is a bonafide work carried out by

<u>Name</u> ARUN KUMAR M CHARITHA .S SANJAY V VENKATARAMANA G BHAT USN 1KS19ME004 1KS19ME008 1KS19ME029 1KS19ME039

In partial fulfillment for the award of **Bachelor of Engineering** in **Mechanical Engineering** from **Visvesvaraya Technological University**, Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

Rangemeth.W Signature of Guide 12023

(Mr.Ranganath N)

Name of Examiners

1. Dr. GIRKH M

2. DR. ZALAHUUENDRAK.

Signature of HOD (Dr. Of Mashankar M) Dept. of Mechanical Engg K.S. Institute of Technology EXTERNAL WIVA

Kunal . 4

Signature of Principal/Director (Dr. Dilip Kumar K)

K.S. INSTITU Signature with Date

JnanaSangama, Belagavi - 590018



A Project Report on

"GENERATION OF ELECTRICAL ENERGY USING NEODYMIUM MAGNETS IN DOUBLE CYLINDER ACTUATION."

Carried out by

ADVAIT SIDDANTH K V BHAVAN KASHYAP K TILAK P VAISHNAV H 1KS19ME002 1KS19ME005 1KS19ME036 1KS19ME037

Submitted in partial fulfillment for the award of

BACHELOR OF ENGINEERING

IN

MECHANICAL ENGINEERING

Under the Guidance Of

Mr . Anil Kumar A

Assistant Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY

Bengaluru – 560109 2022-23

I

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "GENERATION OF ELECTRICAL ENERGY USING NEODYMIUM MAGNETS IN DOUBLE CYLINDER ACTUATION" is a bonafide work carried out by

Name

ADVAIT SIDDANTH K V BHAVAN KASHYAP K TILAK P VAISHNAV H

USN

1KS19ME002 1KS19ME005 1KS19ME036 1KS19ME037

In partial fulfillment for the award of Bachelor of Engineering in Mechanical Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

Whamel

Signature of Guide (Mr.Anil Kumar A)

19523

Signature of HOD (Dr.Umashankar M)

jumo?

Signature of Principal/Director (Dr. Dilip Kumar K)

EXTERNAL VIVA

Name of Examiners

1. Dr. GIEVEN M. 2. DR. ZACHAVENDRALL,

Signature with Date 4:275 P.Ce. 22/05/23

Jnana Sangama, Belagavi - 590018



A Project Report on

"CHARACTERIZATION OF BRIQUETTE FUEL PREPARED FROM CORN COB"

Carried out by

DHANUSH GOWDA M JAYANTH T K PRAJWAL KUMAR R JEEVAN B S

1KS19ME010 1KS19ME014 1KS19ME021 1KS19ME015

Submitted in partial fulfillment for the award of BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

> Under the Guidance Of Dr. NAGAPRASAD K S

Associate Professor Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY

> Bengaluru - 560109 2022-23

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "CHARACTERIZATION OF BRIQUETTE FUEL PREPARED FROM CORN COB "is a bonafide work carried out by

Name DHANUSH GOWDA M JAYANTH T K PRAJWAL KUMAR R JEEVAN B S

USN 1KS19ME010 1KS19ME014 1KS19ME021 1KS19ME015

In partial fulfillment for the award of Bachelor of Engineering in Mechanical Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2022-2023. It is certified that all the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

Signature of Guide

(Dr. NAGAPRASAD K S) Associate professor Dept. of Mechanical Engg. KSIT, Bengaluru-109

Signature of HC

(Dr. Uma Shankar M) Dept of sage and theath gg. K. Deptiof Mechanical Engg KShtaBengaluru-P09

EXTERNAL VIVA

Land

Signature of Principal/Director (Dr. DILIP KUMAR K) Principal/Director KSIT, Bengaluru-109 K.S. INSTITUTE OF TECHNOLOGY BENGALURU - 560 109.

Signature with Date

22/05,

Name of Examiners

1. Dr. GIRISH M 2. Dr. RHUMMVENDRM-U.

JnanaSangama, Belagavi - 590018



A Project Report on

"FABRICATION OF SMART DUSTBIN WITH CRUSHER MACHINE"

Carried out by

DARSHAN. N ZAFFAR ABDULLAH SHEIKH 1KS19ME009 1KS19ME040

Submitted in partial fulfilment for the award of **BACHELOR OF ENGINEERING**

IN

MECHANICAL ENGINEERING

Under the Guidance Of **Mr. Harish U** Asst. Professor

Department of Mechanical Engineering.



DEPARTMENT OF MECHANICAL ENGINEERING K S INSTITUTE OF TECHNOLOGY

Bengaluru - 560109

2022-23

Bengaluru - 560109

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "FABRICATION OF SMART DUSTBIN WITH CRUSHER MACHINE" is a bonafide work carried out by

Name

DARSHAN. N ZAFFAR ABDULLAH SHEIKH

In partial fulfilment for the award of **Bachelor of Engineering** in **Mechanical** Engineering from Visvesvaraya Technological University, Belagavi during that academic year 2022-2023. It is certified all the the corrections/suggestions indicated for the internal assessment have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements.

Th a 205/23 Signature of Guide

Signature of Principal/Director

(Dr. Dilip Kumar K)

Mr. Harish U

EXTERNAL VIVA

(Dr. M Umashankar)

Name of Examiners

- 1. Dr-GIRIEU M. 2. DR. ZALIHH VEWDRA Fl.

Signature with Date

22/05/2

USN

1KS19ME009 1KS19ME040