

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY CERTIFICATE

This is to certify that the project report titled "ROCKER BOGIE SUSPENSION SYSTEM" is being submitted as a record bonafide work carried out by A. HITESH KUMAR (16911A0361), G. BHANU PRASAD (16915A0374), L. NAVEEN KUMAR (16915A0389), R. SURYA TEJA (16911A03A7) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Ms. G. SRAVYA

Head of The Department

Dr. G. SreeramReddy

Professor

295000000

Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Huderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER



## VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "DESIGN AND CFD ANALYSIS OF A CAR REAR AEROFOIL" is being submitted as a record bonafide work carried out by AJAY BIRADAR (16911A0362), P.BHASKAR (16915A03A0), P.RAHUL KUMAR (16915A03A3), P.V.S MANOJ CHANDRA (16911A03A5) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Mr. M.Mallesh

**Associate Professor** 

Head of The Department

Dr. G. Sreeram Reddy

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER



#### CERTIFICATE

This is to certify that the project report titled "FRICTION STIR WELDING OF DISSIMILAR ALUMINIUM ALLOYS BY ADDING BORAN CARBIDE POWDER" has been submitted by

A.NARENDAR REDDY	(16911A03B8)	
C.SAI SUMANTH CHARY	(16911A03C8)	
R.VINOD KUMAR	(16911A03G0)	
S.SAI SANDEEP YADAV	(16911A03G7)	

In the partial fulfillment of the requirements for the award of the B.tech Degree in MECHANICAL ENGINEERING from the Vidya Jyothi Institute Of Technology, Hyderabad is a bonafied work carried out by them during the academic year 2019- 2020.

INTERNAL GUIDE,

Mr. P.SAMPATH KUMAR,

Associate Professor (CAD/CAM).

HEAD OF THE DEPARTMENT,

Dr. G.SREERAM REDDY,

Professor (Dept of Mechanical)

PRINCIPAL

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Hyderabad-75.

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## DEPARTMENT OF MECHANICAL ENGINEERING



## **CERTIFICATE**

This is to certify that the Project report entitled "ERGONOMIC BUDGET MINI CHOPPER" has been submitted by the following students in partial fulfilment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this Project report have not been submitted to any other university or institute for the award of any degree.

MOHAMMED ISHAQ(16911A0339)

APNAGARI NAVEEN KUMAR(16911A0303)

ALLI VINAY KUMAR(17915A0303)

**Project Guide** 

Mrs.J.EMEEMA
(Associate Professor)

Head of the Department

Dr.G.SREERAM REDDY

(Professor)

External Examiner

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

## DEPARTMENT OF MECHANICAL ENGINEERING



## **CERTIFICATE**

This is to certify that the Project report entitled "ERGONOMIC BUDGET MINI CHOPPER" has been submitted by the following students in partial fulfilment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this Project report have not been submitted to any other university or institute for the award of any degree.

MOHAMMED ISHAQ(16911A0339)

APNAGARI NAVEEN KUMAR(16911A0303)

ALLI VINAY KUMAR(17915A0303)

**Project Guide** 

Mrs.J.EMEEMA (Associate Professor) Head of the Department

Dr.G.SREERAM REDDY

(Professor)

External Examiner

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "Evaluation of Mechanical Properties of a Novel Composite Material" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2016 - 2017. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

A BALAKRISHNA	16911A0305
K A MALLESH YADAV	16911A0326
V VISHNU	16911A0357
B SHASHI REDDY	17915A0308

Project Guide,

S RAMAKRISHNA

(Assistant Professor)

Head of the Department

DR G. SREERAM REDDY

(Professor)

External Examiner

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## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

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S RAMANUJAM

16911A0349

**B JAYACHANDRA** 

17915A0307

**B SAI HARIHARAN** 

17915A0311

**B DIKSHITH** 

17915A0312

Project Guide

T. Pavan Kumar

(Assistant Professor)

Head of the Department

Dr G. Sreeram Reddy

(Professor)

External Examiner

PRINCIPAL

tya Jyothi Institute of Technolog

Hyderabad-75.



## **Department of Mechanical Engineering**

#### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "INVESTIGATION ON THE IMPACT OF NOTCH GEOMETRY ON THE FATIGUE LIFE OF SUPER DUPLEX SS UNS S31254"

## is bonafide project work

submitted by

1. B. SRINATH (16911A03CO)

2. P. CHINNASWAMY (16911A03F7)

3. N. RAJESH (16911A03F2)

4. B. SUNIL (16911A03G8)

In partial fulfilment of requirements for the award of the degree of Bachelor of Technology in Mechanical Engineering by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision. The result embodied in the report has not been submitted the same to any university/institution for the award of any Degree.

Mr. J.JAGADESH KUMAR

Internal Examiner

Dept of Mechanical engineering engineering

Dr. G.SREERAM REDDY

Head of the Department

Dept of Mechanical

Examiner

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Jyothi Institute of Technology

nayatnagar (Vill), C.B. Post.,

https://doi.org/10.1007/j.j.

(Affiliated to JNTUH)
Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project work entitled "Experimental investigation of Mechanical properties of Mild steel AISI 1040 using MIG welding process" is a bonafide work carried out by M.PREM(16911A0334), M.ARAVIND REDDY (16911A0342), B.SURYA KANTH(16911A0306), S.VAMSHI(16911A0351) in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma.

Project Guide,

Mr.K. RAJESH KUMAR

Head of the Department

DR G. SREERAM REDDY

(Professor)

External Examiner

PRINCIPAL tya Jyothi Institute of Technol

Hyderabad-75.

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Experimental Investigation of Mechanical Properties of Stainless Steel 304 Using TIG Welding Process"

isbonafide project worksubmitted by BANDA VIKAS YADAV(16911A0307) CHINTHA ARUN(16911A0313) DEVUNURI MANIRATNAM(16911A0315) MALGARI KRANTHI SWAROOP REDDY(16911A0333). In the department of MECHANICAL ENGINEERING in partial fulfilment of requirements for the award of degree of Bachelor of Technology in "Mechanical Engineering" for the academic year 2016-20. This work has been carried under theguidance of K.RAJESH KUMAR, Associate Professor and has not been submitted the same for any university/institution for award of anydegree/diploma.

PROJECT GUIDE

Mr.K RAJESH KUMAR

HEAD OFDEPARTMENT

Dr. G.SREERAMREDDY

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Idya Jyothi Institute of Technology

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## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "DEVELOPMENT OF COMPOSITE MATERIALS USING VARIOUS FIBERS AND EPOXY RESIN" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in MECHANICAL Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

**B.SHIVANI** 

16911A0308

**J.SWAPNA** 

16911A0325

M.VEENILA

16911A0336

**UVS.CHANDAN** 

16911A0355

Project Guide,

MR.C.NAVEEN RAJ (Assistant Professor)

Dr. SREERAM REDDY

(Professor)

Head of the Department

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## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "Evaluation of Mechanical Properties of a Novel Composite Material" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2016 - 2017. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

A BALAKRISHNA 16911A0305

K A MALLESH YADAV 16911A0326

V VISHNU 16911A0357

B SHASHI REDDY 17915A0308

Project Guide,

S RAMAKRISHNA (Assistant Professor) Head of the Department

DR G. SREERAM REDDY

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## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "Evaluation of Mechanical Properties of a Novel Composite Material" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

S RAMANUJAM

16911A0349

B JAYACHANDRA

17915A0307

**B SAI HARIHARAN** 

17915A0311

**B DIKSHITH** 

17915A0312

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T. Pavan Kumar

(Assistant Professor)

Head of the Department

Dr G. Sreeram Reddy

(Professor)

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## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "COMPARATIVE EVALUATION OF MILDSTEEL WELDED JOINTS EMPLOYED BY DEFFERENT PROCESSES" has been submitted by the following students in partial fulfilment for the award of the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technology University, Hyderabad, during the academic year 2016-2020

The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

S.SUNIL

16911A0352

T.SANDEEP

16911A0354

M.RAJKUMAR

16911A0341

**B.NAGA** 

16911A0310

ProjectGuide/

DR.V.V.SATYANARAYANA

(Professor) (Professor)

Head of the Department

DR.G.Sree RamReddy

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(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "Evaluation of Mechanical Properties of a Novel Composite Material" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

S RAMANUJAM

16911A0349

B JAYACHANDRA

17915A0307

B SAI HARIHARAN

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**B DIKSHITH** 

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Project Guide

T. Pavan Kumar

(Assistant Professor)

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Dr G. Sreeram Reddy

(Professor)

External Examiner

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(Affiliated to Jawaharlal Nehru Technological University, Hyderabad)

Aziznagar Gate, ChilkurBalaji Road, Hyderabad, TS-500075 DEPARTMENT OF MECHANICAL ENGINEERING

#### CERTIFICATE

This is to certify that the project report titled "AUTOMATION OF CONVENTIONAL LATHE" is being submitted as a record bonafide work carried out by SAI KRISHN (17915A0314), PAVANKUMAR.CH. (17915A0318), VAMSHIKRISHNA.D (17915A0320), GAN GARAJU.G. (17915A0324) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, VidyaJyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of

P. RAGHURAM REDDY

Associate Professor Professor

Head of The Department

Dr.G.SREERAM REDDY

INTERNAL EXAMINER

EXTERNAL EXAMINER

PRINCIPAL

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(Autonomous)

Aziz Nagar gate, CB Post, Hyderabad-500075



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "Validation of Empirical Method & Finite Element Method for Evaluation of Fatigue Parameter of Steels." is bonafide project work submitted by HARSH LAHOTI (16911A03D4), CH. SANATH CHANDRA (16911A03C7), GAYATRI VELAMURI (16911A03G2) and S. ANISHA REDDY (16911A03G6). In partial fulfillment of requirements for the award of the degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad

The content in this report has not been submitted to other universities/institutions for the award of any Degree.

PROJECT GUIDE Mr. J. JAGADESH KUMAR

Associate Professor

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

Professor

Internal Supervisor

External Supervisor

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Aziznagar Gate, Chilkur Balaji Road, Hyderabad, TS-500075

## **DEPARTMENT OF MECHANICAL ENGINEERING**

## **CERTIFICATE**

This is to certify that the project report titled "THE EFFECT OF VARIOUS MATERIALS ON PERFORMANCE OF THERMAL ENERGY STORAGE TANK" is being submitted as a record bonafide work carried out by N.BHAVANI (16911A0399), T.VANDANA (16911A0B5), CH.SHASHANK (17915A0316), E.SRIKANTH REDDY (17915A0321) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of volume

Dr.L.MADAN ANANDA KUMAR

Associate Professor

Head of The Department

Dr.G.SREERAM REDDY

**Professor** 

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

EXTERNAL EXAMINER

INTERNAL EXAMINER

# DEPARTMENT OF MECHANICAL ENGINEERING VIDYA JYOTHI INSTITUTE OF TECHNOLOGY



#### CERTIFICATE

This is to certify that the project report titled "CONCENTRATING SOLAR POWER" is being submitted as a record bonafide work carried out by C.M.CHENNA KESHAV (16911A0367), G.GAYATHRI (16911A0375), G.BHAVYA SRI (16911A0377), CH.SAI KUMAR (17915A0317), J.DEEKSHITH (17915A0325) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Dr.L.Madan Ananda Kumar

**Associate Professor** 

Head of the Department

Dr.G. Sreeram Reddy

Professor

INTERNAL EXAMINED

PRINCIPAL

Vidya Jyothi Institute of Technology

Himayatnagar (Vill), C.B, Post.,

EXTERNAL EXAMINER



## CERTIFICATE

This is to certify that the project report titled "FRICTION STIR WELDING OF DISSIMILAR ALUMINIUM ALLOYS BY ADDING BORAN CARBIDE POWDER" has been submitted by

A.NARENDAR REDDY	(16911A03B8)	
C.SAI SUMANTH CHARY	(16911A03C8)	
R.VINOD KUMAR	(16911A03G0)	
S.SAI SANDEEP YADAV	(16911A03G7)	

In the partial fulfillment of the requirements for the award of the B.tech Degree in MECHANICAL ENGINEERING from the Vidya Jyothi Institute Of Technology, Hyderabad is a bonafied work carried out by them during the academic year 2019- 2020.

INTERNAL GUIDE,

Mr. P.SAMPATH KUMAR,

Associate Professor (CAD/CAM).

HEAD OF THE DEPARTMENT,

Dr. G.SREERAM REDDY,

Professor (Dept of Mechanical)

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.



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Aziznagar Gate, ChilkurBalaji Road, Hyderabad, TS-500075 DEPARTMENT OF MECHANICAL ENGINEERING

#### CERTIFICATE

This is to certify that the project report titled "AUTOMATION OF CONVENTIONAL LATHE" is being submitted as a record bonafide work carried out by SAI KRISHN (17915A0314), PAVANKUMAR.CH. (17915A0318), VAMSHIKRISHNA.D (17915A0320), GAN GARAJU.G. (17915A0324) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, VidyaJyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of

P. RAGHURAM REDDY

Associate Professor Professor

Head of The Department

Dr.G.SREERAM REDDY

INTERNAL EXAMINER

EXTERNAL EXAMINER

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(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road - 500075

## DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "INVESTICATION OF MECHANICAL PROPERTIES OF POLYURETHANE COMPOSITES WITH QUARTZ" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

> CH.SAI CHANDANA 16911A0366 M.VINAY KUMAR 16911A0391 S.SAI KRISHNA 16911A03A8 T.NAVEEN 16911A03B3

DR. B V REDDI

Professor

Professor

Head of the Department

Dr G. Sreeram Reddy

# DEPARTMENT OF MECHANICAL ENGINEERING VIDYA JYOTHI INSTITUTE OF TECHNOLOGY



#### CERTIFICATE

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Under the guidance of,

Dr.L.Madan Ananda Kumar

**Associate Professor** 

Head of the Department

Dr.G. Sreeram Reddy

Professor

INTERNAL EXAMINER

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

EXTERNAL EXAMINER

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Experimental Investigation of Mechanical Properties of Stainless Steel 304 Using TIG Welding Process"

isbonafide project worksubmitted by BANDA VIKAS YADAV(16911A0307) CHINTHA ARUN(16911A0313) DEVUNURI MANIRATNAM(16911A0315) MALGARI KRANTHI SWAROOP REDDY(16911A0333). In the department of MECHANICAL ENGINEERING in partial fulfilment of requirements for the award of degree of Bachelor of Technology in "Mechanical Engineering" for the academic year 2016-20. This work has been carried under theguidance of K.RAJESH KUMAR, Associate Professor and has not been submitted the same for any university/institution for award of anydegree/diploma.

PROJECT GUIDE

Mr.K RAJESH KUMAR

HEAD OFDEPARTMENT

Dr. G.SREERAMREDDY

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PRINCIPAL
Vidya Jyothi Institute of Technology
Vidya Jyothi Institute of Technology
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Experimental Investigation of Mechanical Properties of Stainless Steel 304 Using TIG Welding Process"

isbonafide project worksubmitted by BANDA VIKAS YADAV(16911A0307) CHINTHA ARUN(16911A0313) DEVUNURI MANIRATNAM(16911A0315) MALGARI KRANTHI SWAROOP REDDY(16911A0333).In the department of MECHANICAL ENGINEERING in partial fulfilment of requirements for the award of degree of Bachelor of Technology in "Mechanical Engineering" for the academic year 2016-20. This work has been carried under theguidance of K.RAJESH KUMAR, Associate Professor and has not been submitted the same for any university/institution for award of anydegree/diploma.

PROJECT GUIDE

Mr.K RAJESH KUMAR

HEAD OFDEPARTMENT

Dr. G.SREERAMREDDY

PRINCIPAL
PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

## **Department of Mechanical Engineering**



BONAFIDE CERTIFICATE This is to certify that the project work entitled "An experimental investigation of the performance and emissions of a hydrogen-diesel dual fuel compression ignition internal combustion engine" is bonafide project work submitted by

JAVA SHIVA	KIIMAR	DACHAPALLY	7 16911A03J0

PUSKURI VENKAT 17915A0348

NAGRAJ SWARNAKAR 16911A03N0

SYED AFZAL AFNAAN 16911A03N1

In partial fulfilment of requirements for the award of degree of **Bachelor of Technology in Mechanical Engineering** to be awarded by the **JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY**, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE K.ASHØK CHARY

(Associate Professor)

Internal Examiner

Dr. G. SREERAM REDD

(D. C

External Examiner

PRINCIPAL

Vidya Jyothi Institute of Technologi Himayatnagar (Vill), C.B. Poet., Hyderabad-75.





Approved by AICTE, New Delhi & Affiliated to

Jawaharlal Nehru Technological University, Hyderabad

#### CERTIFICATE

This is to certify that the dissertation entitled - MODELING AND ANALYSIS OF HUMAN FEMUR BONE USING FEM is a bonafide work carried out by S. DEEPIKA (16911A03J3), D.D.N.SAI SUPRIYA (16911A03J4), IBRAHIM BIN ABDHULLAH (16911A03K1), J.HEAMANTH REDDY (16911A03K2), RAHUL PATIL (16911A03M4) in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad, Under our Guidance and Supervision

The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

Internal Guide

PRADEEP KUMAR

Assistant Professor

Head of the Department

Dr. G. SREERAM REDDY,

Vidya Jyothi Instil de of Technology Himayatnagar (VIII), C.B. Post.,



(Affiliated to Jawaharlal Nehru Technological University, Hyderabad)

Aziznagar Gate, ChilkurBalaji Road, Hyderabad, TS-500075 DEPARTMENT OF MECHANICAL ENGINEERING

#### CERTIFICATE

This is to certify that the project report titled "AUTOMATION OF CONVENTIONAL LATHE" is being submitted as a record bonafide work carried out by SAI KRISHN (17915A0314),PAVANKUMAR.CH.(17915A0318),VAMSHIKRISHNA.D(17915A0320),GAN GARAJU.G.(17915A0324) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, VidyaJyothi Institute of Technology, Hyderabad during the period 2019-2020.

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#### CERTIFICATE

This is to certify that the dissertation entitled - MODELING AND ANALYSIS OF HUMAN FEMUR BONE USING FEM is a bonafide work carried out by S. DEEPIKA (16911A03J3), D.D.N.SAI SUPRIYA (16911A03J4), IBRAHIM BIN ABDHULLAH (16911A03K1), J.HEAMANTH REDDY (16911A03K2), RAHUL PATIL (16911A03M4) in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad, Under our Guidance and Supervision

The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

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## **CERTIFICATE**

This is to certify that the project report titled "THE EFFECT OF VARIOUS MATERIALS ON PERFORMANCE OF THERMAL ENERGY STORAGE TANK" is being submitted as a record bonafide work carried out by N.BHAVANI (16911A0399), T.VANDANA (16911A0B5), CH.SHASHANK (17915A0316), E.SRIKANTH REDDY (17915A0321) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

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## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "The Effect of Al2O3 on the performance of Single stage Solar still" is bonafide project work submitted by

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- 2. V.KOMAL TEERTHA (16911A03HO)
- 3. G.NITHIN VARMA (16911A03D0)
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This is to certify that the project report titled "ROCKER BOGIE SUSPENSION SYSTEM" is being submitted as a record bonafide work carried out by A. HITESH KUMAR (16911A0361), G. BHANU PRASAD (16915A0374), L. NAVEEN KUMAR (16915A0389), R. SURYA TEJA (16911A03A7) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

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#### CERTIFICATE

This is to certify that the project report titled "CONCENTRATING SOLAR POWER" is being submitted as a record bonafide work carried out by C.M.CHENNA KESHAV (16911A0367), G.GAYATHRI (16911A0375), G.BHAVYA SRI (16911A0377), CH.SAI KUMAR (17915A0317), J.DEEKSHITH (17915A0325) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

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#### **CERTIFICATE**

This to certify that the project work entitled "Effect of coating on AISI 316L

Austenitic stainless steel for Tribological property evaluation" is a bonafide work carried out by

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MS. G. MOUNIKA (16911A03D1)

MS. G. TEJASHWINI (16911A03D3)

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The content in the report has not been submitted to any other university or institute for the award of any degree or diploma.

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#### CERTIFICATE

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# DEPARTMENT OF MECHANICAL ENGINEERING



#### CERTIFICATE

This is to certify that the work reported in the present project entitled "DESIGN AND MANUFACTURING OF CUSTOM SLIPPER SOLE USING LATTICE

STRUCTURES" is a record of work done by us in the department of MECHANICAL Engineering, Vidya Jyothi Institute of Technology (Autonomous), Jawaharlal Nehru technological university, Hyderabad. The reports based on the project work done entirely by us and not copied from any other source.

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This to certify that the project work entitled "Effect of coating on AISI 316L

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MS. G. MOUNIKA (16911A03D1)

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#### CERTIFICATE

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#### CERTIFICATE

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# BONAFIDE CERTIFICATE

This is to certify that the project work entitled "Validation of Empirical Method & Finite Element Method for Evaluation of Fatigue Parameter of Steels." is bonafide project work submitted by HARSH LAHOTI (16911A03D4), CH. SANATH CHANDRA (16911A03C7), GAYATRI VELAMURI (16911A03G2) and S. ANISHA REDDY (16911A03G6). In partial fulfillment of requirements for the award of the degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad

The content in this report has not been submitted to other universities/institutions for the award of any Degree.

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Approved by AICTE, New Delhi & Affiliated to

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#### CERTIFICATE

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### CERTIFICATE

This is to certify that the project report entitled "DEVELOPMENT OF COMPOSITE MATERIALS USING VARIOUS FIBERS AND EPOXY RESIN" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in MECHANICAL Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

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#### CERTIFICATE

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#### CERTIFICATE

This is to certify that the project report titled "INVESTIGATION OF MORPHOLOGY OF SILVER-IRON NANO POWDER" is being submitted as a record bonafide work carried out by J.SHASHANK (16911A0381), MOHD SANWAL AHMED (16911A0396), P.SAI NATH (16915A03A1), Y. SUDHEER YADAV (16911A03B6) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

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#### CERTIFICATE

This is to certify that the project report entitled "Evaluation of Mechanical Properties of a Novel Composite Material" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2016 - 2017. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

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## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION ON MODELLING OF DISC BRAKE WITH COMPOSITE MATERIAL" is bonafide project work

## submitted by

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- 2. K. SAI KUMAR (17915A0328)
- 3. K. MAHESH (17915A0329)
- 4. M. GOPI KRISHNA (17915A0338)
- 5. P. PRIYANKA (16911A03F6

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#### CERTIFICATE

This is to certify that the project report entitled "SYNTHESIS OF TITANIA(TiO<sub>2</sub>) NANO STRUCTURES WITH DIFFERNT MORPHOLOGIES" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

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K. RUCHITHA	(16911A0331)
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ProjectGuide,

Dr.B.V.REDDI Professor Head of the Department

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#### Department of Mechanical Engineering



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This is to certify that the project work entitled "DESIGN AND DEVELOPMENT OF UNMANNED AERIAL VEHICLE" is bona fide project work submitted by

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The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

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**DEPARTMENT OF MECHANICAL ENGINEERING** 



#### CERTIFICATE

This is to certify that the project report entitled "SYNTHESIS OF TITANIA(TiO<sub>2</sub>) NANO STRUCTURES WITH DIFFERNT MORPHOLOGIES" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

G. AJAY REDDY	(16911A0323)
K. DURGA PRASAD	(16911A0330)
K. RUCHITHA	(16911A0331)
P. DIVIJ REDDY	(16911A0346)

ProjectGuide,

Dr.B.V.REDDI Professor Head of the Department

Dr. SREE RAMREDDY

Professor

External Evaminer

PRINCIPAL

dya Jyothi Institute of Technology

Himayatnagar (Vill), C.B. Post.,

Himayatnagar (All Parabad 1975).

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY (Autonomous)

Himayath Nagar (VI), C.B. Post, R.R Dist. 500075



#### CERTIFICATE

This to certify that the project work entitled "IMPACT OF CORROSION ON THE FATIGUE LIFE OF AISI316L AUSTENITIC STAINLESS STEEL"

is a bonafide work carried out by

MR. K. RAGHU (17915A0330)

MR. P.MANOHAR (16911A03F3)

MS. P. ROHITH (16911A03F5)

MS. K. SAI KIRAN (16911A03E2)

in partial fulfilment of the requirements for award of degree of BACHELOR OF TECHNOLOGYINMECHANICALENGINEERINGtobeawardedbytheJAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY. Hyderabad

The content in the report has not been submitted to any other university or institute for theaward of any degree ordiploma.

PROJECTGUIDE

MS P. PAVANI

Professor

Intervaletaminer

H<del>EAD OF THEDEP</del>ARTMENT

DR.G. SREER M REDDY

Professor

External examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayathagar (Val.), C.B. Post.,

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY (Autonomous)

Himayath Nagar (VI), C.B. Post, R.R Dist. 500075



#### CERTIFICATE

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is a bonafide work carried out by

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MR. P.MANOHAR (16911A03F3)

MS. P. ROHITH (16911A03F5)

MS. K. SAI KIRAN (16911A03E2)

in partial fulfilment of the requirements for award of degree of BACHELOR OF TECHNOLOGYINMECHANICALENGINEERINGtobeawardedbytheJAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY. Hyderabad

The content in the report has not been submitted to any other university or institute for theaward of any degree ordiploma.

PROJECTGUIDE

MS P. PAVANI

Professor

Intervaletaminer

HEAD OF THEDEPARTMENT

DR.G. SREER M REDDY

Professor

External examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayathagor (vid), C.B. Post.,

ij



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY CERTIFICATE

This is to certify that the project report titled "ROCKER BOGIE SUSPENSION SYSTEM" is being submitted as a record bonafide work carried out by A. HITESH KUMAR (16911A0361), G. BHANU PRASAD (16915A0374), L. NAVEEN KUMAR (16915A0389), R. SURYA TEJA (16911A03A7) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Ms. G. SRAVYA

Head of The Department

Dr. G. SreeramReddy

Professor

PRINCIP

Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,

Himayatnagar (VIII), C.B. Hyderadad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER

(Autonomous) Himayathnagar (vi), C.B. Post, R.R Dist. 500075



#### CERTIFICATE

This is to certify that the project work entitled FABRICATION OF HELIX WIND TURBINE WITH NYLON BLADES is a bonafide work carried out by

M.MAHESH (17915A0331) M.PAVAN KALYAN REDDY (17915A0334) M.BHARATHWAZ (17915A0335) M.SAI DATHA (17915A0336)

in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma

Mr. R.N.S.V. RAMAKANTH

Internal Supervisor

Department of Mechanical Engineering

Mr. G.SRIRAM REDDY

Head of the Department

Department of Mechanical Engineering

Vidya Jyothi Institute of Ye

ii

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Experimental Investigation of Mechanical Properties of Stainless Steel 304 Using TIG Welding Process"

isbonafide project worksubmitted by BANDA VIKAS YADAV(16911A0307) CHINTHA ARUN(16911A0313) DEVUNURI MANIRATNAM(16911A0315) MALGARI KRANTHI SWAROOP REDDY(16911A0333). In the department of MECHANICAL ENGINEERING in partial fulfilment of requirements for the award of degree of Bachelor of Technology in "Mechanical Engineering" for the academic year 2016-20. This work has been carried under theguidance of K.RAJESH KUMAR, Associate Professor and has not been submitted the same for any university/institution for award of anydegree/diploma.

PROJECT GUIDE

Mr.K RAJESH KUMAR

HEAD OFDEPARTMENT

Dr. G.SREERAMREDDY

PRINCIPAL
PRINCIPAL
Vidya Jyothi Institute of Technology
Vidya Jyothi Institute of Technology
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.



(Affiliated to Jawaharlal Nehru Technological University, Hyderabad)

Aziznagar Gate, Chilkur Balaji Road, Hyderabad, TS-500075 DEPARTMENT OF MECHANICAL ENGINEERING

#### CERTIFICATE

This is to certify that the project report titled "AUTOMATION OF CONVENTIONAL LATHE" is being submitted as a record bonafide work carried out by M. SHYAM PRASAD (17915A0333), M. SHIVA KUMAR (17915A0339), RANGA RITVIK(16911A03F9), SHAIK NADEEM AHMED(16911A03G5) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of

SSINBENKINAD

Associate Professor

Head of The Department

Dr.G.SREERAM REDDY

Professor

INTERNAL EXAMINER

EXTERNAL EXAMINER

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

ii

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road - 500075

#### DEPARTMENT OF MECHANICAL ENGINEERING



#### CERTIFICATE

This is to certify that the project report entitled "INVESTICATION OF MECHANICAL PROPERTIES OF POLYURETHANE COMPOSITES WITH QUARTZ" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

> CH.SAI CHANDANA 16911A0366 M.VINAY KUMAR 16911A0391 S.SAI KRISHNA 16911A03A8 T.NAVEEN 16911A03B3

DR. B V REDDI

Professor

Professor

Head of the Department

Dr G. Sreeram Reddy

(Autonomous) Himayathnagar (vi), C.B. Post, R.R Dist. 500075



#### CERTIFICATE

This is to certify that the project work entitled FABRICATION OF HELIX WIND TURBINE WITH NYLON BLADES is a bonafide work carried out by

M.MAHESH

(17915A0331)

M.PAVAN KALYAN REDDY (17915A0334)

M.BHARATHWAZ

(17915A0335)

M.SAI DATHA

(17915A0336)

in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma

Mr. R.N.S.V. RAMAKANTH

Internal Supervisor

Department of Mechanical Engineering

Mr. G.SRIRAM REDDY

Head of the Department

Department of Mechanical Engineering

PRINCIPAL

Vidya Jyothi Institute of Yeshnology

Livery at 12 h

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

# DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project work entitled "Experimental investigation of Mechanical properties of Mild steel AISI 1040 using MIG welding process" is a bonafide work carried out by M.PREM(16911A0334), M.ARAVIND REDDY (16911A0342), B.SURYA KANTH(16911A0306), S.VAMSHI(16911A0351) in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma.

Project Guide,

Mr.K. RAJESH KUMAR

Head of the Department

DR G. SREERAM REDDY

(Professor)

External Examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

(Autonomous) Himayathnagar (vi), C.B. Post, R.R Dist. 500075



#### CERTIFICATE

This is to certify that the project work entitled FABRICATION OF HELIX WIND TURBINE WITH NYLON BLADES is a bonafide work carried out by

M.MAHESH

(17915A0331)

M.PAVAN KALYAN REDDY (17915A0334)

M.BHARATHWAZ

(17915A0335)

M.SAI DATHA

(17915A0336)

in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma

Mr. R.N.S.V. RAMAKANTH

Internal Supervisor

Department of Mechanical Engineering

Mr. G.SRIRAM REDDY

Head of the Department

Department of Mechanical Engineering

PRINCIPAL

Vidya Jyothi Institute of Yeshnology

Light State of the light

(Autonomous) Himayathnagar (vi), C.B. Post, R.R Dist. 500075



#### CERTIFICATE

This is to certify that the project work entitled FABRICATION OF HELIX WIND TURBINE WITH NYLON BLADES is a bonafide work carried out by

M.MAHESH

(17915A0331)

M.PAVAN KALYAN REDDY (17915A0334)

M.BHARATHWAZ

(17915A0335)

M.SAI DATHA

(17915A0336)

in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma

Mr. R.N.S.V. RAMAKANTH

Internal Supervisor

Department of Mechanical Engineering

Mr. G.SRIRAM REDDY

Head of the Department

Department of Mechanical Engineering

PRINCIPAL

Vidya Jyothi Institute of Yechnology

Liuria Pipila

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

#### DEPARTMENT OF MECHANICAL ENGINEERING



#### CERTIFICATE

This is to certify that the project report entitled "DEVELOPMENT OF COMPOSITE MATERIALS USING VARIOUS FIBERS AND EPOXY RESIN" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in MECHANICAL Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

<b>B.SHIVANI</b>	16911A0308
J.SWAPNA	16911A0325
M.VEENILA	16911A0336
UVS.CHANDAN	16911A0355

Project Guide,

MR.C.NAVEEN RAJ (Assistant Professor) Head of the Department

Dr. SREERAM REDDY

(Professor)

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.



# **BONAFIDE CERTIFICATE** This is to certify that the project work entitled "FABRICATION AND TESTING OF TRACK LAYING AND AGGREGATE

**POURING MACHINE"** is bonafide project work submitted by

M.BHANU CHANDER

16911A03L2

**M.SANDEEP** 

16911A03L3

M.VAMAN SAI

16911A03L4

M.TARIQ ALI KHAN

16911A03L5

In partial fulfilment of requirements for the award of degree of **Bachelor of Technology in Mechanical Engineering** to be awarded by the **JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY,** Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECTGUIDE

MS P. PAVANI

Professor

HEAD OF THEDEPARTMENT

DR.G. SREERAM REDDY

Professor

nternalexaminer

External examiner

PRINCIPAL

Vidya Jyothi Institute of Technology

Himavatna

ii



#### CERTIFICATE

This to certify that the project report titled "IMPACT OF NOTCH TOPOLOGY ON THE FATIGUE LIFE OF UNS S32760 SUPER DUPLEX STAINLESS STEEL" is being submitted by

**Mohammed Adil** 

(16911A0337)

Mohammed Imaz Uddin (16911A0338)

P.Sourab

(16911A0345)

**Zubair Ahmed** 

(16911A0360)

in the department of MECHANICAL ENGINEERING for the partial fulfillment of requirements for the award of degree of Bachelor of Technology in the academic year 2019-2020. This work has been carried out under our guidance and has not been submitted for any university/institution for the award of any Degree/Diploma.

INTERNAL GUIDES

Dr. V. PHANINDRA BOGU

Associate Professor, Dept. of Mechanical Engg.

Mr. J. JAGADESH KUMAR

HEAD OF THE DEPARTMENT

Dr. SREERAM REDDY

Professor, Dept of Mechanical Engg.

External Examinar

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

#### CERTIFICATE

This is to certify that the project report titled "EXPERIMENTAL INVESTIGATION ON DUAL FUEL DIESEL ENGINE" is being submitted as a record bonafide work carried out by SHAMINE BASHEER K(16911A03B0), MOHAMMED ZOHEB UDDIN KHAN (16915A0395), MOHAMMED ARBAZ HUSSAIN (16915A0394), P.SRIKANTH (16911A03A2) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, VidyaJyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under theguidanceof,

Mr. K.Ravikumar

Assistant Professor

Head of The Department

Dr. G. SreeramReddy

PRINCIPAL

Vidya Jyothi Institute of Technology

Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER



#### CERTIFICATE

This to certify that the project report titled "IMPACT OF NOTCH TOPOLOGY ON THE FATIGUE LIFE OF UNS S32760 SUPER DUPLEX STAINLESS STEEL" is being submitted by

**Mohammed Adil** 

(16911A0337)

Mohammed Imaz Uddin (16911A0338)

P.Sourab

(16911A0345)

**Zubair Ahmed** 

(16911A0360)

in the department of MECHANICAL ENGINEERING for the partial fulfillment of requirements for the award of degree of Bachelor of Technology in the academic year 2019-2020. This work has been carried out under our guidance and has not been submitted for any university/institution for the award of any Degree/Diploma.

INTERNAL GUIDES

Dr. V. PHANINDRA BOGU

Associate Professor, Dept. of Mechanical Engg.

Mr. J. JAGADESH KUMAR

HEAD OF THE DEPARTMENT

Dr. SREERAM\REDDY

Professor, Dept, of Mechanical Engg.

External Examinar

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

#### DEPARTMENT OF MECHANICAL ENGINEERING



# **CERTIFICATE**

This is to certify that the Project report entitled "ERGONOMIC BUDGET MINI CHOPPER" has been submitted by the following students in partial fulfilment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this Project report have not been submitted to any other university or institute for the award of any degree.

MOHAMMED ISHAQ(16911A0339)

APNAGARI NAVEEN KUMAR(16911A0303)

ALLI VINAY KUMAR(17915A0303)

Project Guide

Mrs.J.EMEEMA
(Associate Professor)

Head of the Department

Dr.G.SREERAM REDDY

(Professor)

External Examiner



# **BONAFIDE CERTIFICATE** This is to certify that the project work entitled "FABRICATION AND TESTING OF TRACK LAYING AND AGGREGATE

**POURING MACHINE"** is bonafide project work submitted by

M.BHANU CHANDER 16911A03L2

M.SANDEEP 16911A03L3

M.VAMAN SAI 16911A03L4

M.TARIQ ALI KHAN 16911A03L5

In partial fulfilment of requirements for the award of degree of **Bachelor of Technology in Mechanical Engineering** to be awarded by the **JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY,** Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECTGUIDE

MS P. PAVANI

Professor

HEAD OF THEDEPARTMENT

DR.G. SREERAM REDDY

Professor

ternalexaminer

External examiner

PRINCIPAL

Vidya Jyothi Institute of Technology

Himavatua

ii



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "EXPERIMENTAL INVESTIGATION ON DUAL FUEL DIESEL ENGINE" is being submitted as a record bonafide work carried out by SHAMINE BASHEER K(16911A03B0), MOHAMMED ZOHEB UDDIN KHAN (16915A0395), MOHAMMED ARBAZ HUSSAIN (16915A0394), P.SRIKANTH (16911A03A2) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, VidyaJyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under theguidanceof,

Mr. K.Ravikumar

Assistant Professor

Head of The Department

Dr. G. SreeramReddy

PRINCIPAL

Vidya Jyothi Institute of Technology

Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "INVESTIGATION OF MORPHOLOGY OF SILVER-IRON NANO POWDER" is being submitted as a record bonafide work carried out by J.SHASHANK (16911A0381), MOHD SANWAL AHMED (16911A0396), P.SAI NATH (16915A03A1), Y. SUDHEER YADAV (16911A03B6) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the pridance of,

Mr. NPRAVEEN

Asst. Professor

Head of The Department

Dr. G.SREE RAM REDDY

PRINCIPAL

Idya Jyothi Institute of Technology

Obergran (VIII), C.B. Post.,

Hiprawatpagar (Vill), C.B. Hiprawatpagar (Vill), C.B. Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER

(Autonomous)

Himayath Nagar (VI), C.B. Post, R.R Dist. 500075



#### **CERTIFICATE**

This to certify that the project work entitled "Effect of coating on AISI 316L

Austenitic stainless steel for Tribological property evaluation" is a bonafide work carried out by

MR. SANDEEP (16911A03H2)

MR. M. AKHIL (16911A03F0)

MS. G. MOUNIKA (16911A03D1)

MS. G. TEJASHWINI (16911A03D3)

in partial fulfilment of the requirements for award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY. Hyderabad

The content in the report has not been submitted to any other university or institute for the award of any degree or diploma.

PROJECT GUIDE

DR.V.V. SATYANARAYANA

**Professor** 

Internal examiner

HEAD OF THE DEPARTMENT

DR.G. SREERAM REDDY

Professor

External examiner

PRINCIPAL yothi Institute of Technolog yatnagar (Vill), C.B. Post.,

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

# DEPARTMENT OF MECHANICAL ENGINEERING



# CERTIFICATE

This is to certify that the project report entitled "COMPARATIVE EVALUATION OF MILDSTEEL WELDED JOINTS EMPLOYED BY DEFFERENT PROCESSES" has been submitted by the following students in partial fulfilment for the award of the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technology University, Hyderabad, during the academic year 2016-2020

The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

S.SUNIL

16911A0352

T.SANDEEP

16911A0354

M.RAJKUMAR

16911A0341

**B.NAGA** 

16911A0310

ProjectGuide/

DR V V SATVANARAVANA

(Professor) (Professor)

Head of the Department

DR.G.Sree RamReddy

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

# **Department of Mechanical Engineering**



# **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION ON MODELLING OF DISC BRAKE WITH COMPOSITE MATERIAL" is bonafide project work

# submitted by

- 1. K. SRIRAM (17915A0327)
- 2. K. SAI KUMAR (17915A0328)
- 3. K. MAHESH (17915A0329)
- 4. M. GOPI KRISHNA (17915A0338)
- 5. P. PRIYANKA (16911A03F6

In partial fulfilment of requirements for the award of the degree of Bachelor of Technology in Engineering the JAWAHARLAL by **NEHRU** UNIVERSITY, Hyderabad under our guidance and supervision. The result embodied in the report **TECHNOLOGICAL** has not been submitted the same to any university/institution for the award of any Degree.

PROJECT GUIDE

Asst.professor

HEAD OF DEPARTMENT

Dr. G.SREERAM REDDY

professor

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.



(Affiliated to Jawaharlal Nehru Technological University, Hyderabad)

Aziznagar Gate, Chilkur Balaji Road, Hyderabad, TS-500075 DEPARTMENT OF MECHANICAL ENGINEERING

#### CERTIFICATE

This is to certify that the project report titled "AUTOMATION OF CONVENTIONAL LATHE" is being submitted as a record bonafide work carried out by M. SHYAM PRASAD (17915A0333), M. SHIVA KUMAR (17915A0339), RANGA RITVIK(16911A03F9), SHAIK NADEEM AHMED(16911A03G5) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of

S. SUNBELXKUMAR

Associate Professor

Head of The Department

Dr.G.SREERAM REDDY

Professor

INTERNAL EXAMINER

EXTERNAL EXAMINER

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

ii

# Department of Mechanical Engineering



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "DESIGN AND DEVELOPMENT OF UNMANNED AERIAL VEHICLE" is bona fide project work submitted by

V. ASHISH KUMAR

16911A03N3

K. SUMALATHA

16911A03K8

P. RITU VENNELA

16911A03M5

M.VIDYA RANI

17915A0340

In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE

Mr. SHAIK ISMAIL

Associate Professor

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

Professor

ExternalE

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

(Affiliated to JNTUH)
Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

# DEPARTMENT OF MECHANICAL ENGINEERING



# CERTIFICATE

This is to certify that the project work entitled "Experimental investigation of Mechanical properties of Mild steel AISI 1040 using MIG welding process" is a bonafide work carried out by M.PREM(16911A0334), M.ARAVIND REDDY (16911A0342), B.SURYA KANTH(16911A0306), S.VAMSHI(16911A0351) in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma.

Project Guide,

Mr.K. RAJESH KUMAR

Head of the Department

DR G. SREERAM REDDY

(Professor)

External Examiner

PRINCIPAL
a Jyothi Institute of Technolog
mayatnagar (Vill), C.B. Post.,

Hyderabad-75.

(Autonomous)

Aziz Nagar, Hyderabad -500075

AProject Report On

# FABRICATION & TESTING OF MULTIPURPOSE AGRICULTRAL MACHINE

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

# BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

Veld

Under the guidance of: S.Venkatesh Asst. Professor Submitted by:

M.Arunkumar(17915A0341)

P.Madhu Sudan(17915A0347)

R.Ramakrishna (17915A0349)

S.Maheswar Reddy 17915A0350)



DEPT OF MECHANICAL ENGINEERING VJIT ENGINEERING COLLEGE Aziz Nagar, C B Post, Hyderabad -500075

A Karas

PRINCIPAL
Vidya Jyothi Institute of Technolog
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION OF ACETYLENE ASPIRATED DUAL FUEL DIESEL ENGINE WITH PALM STEARIN BIO-DIESEL BY VARYING COMPRESSION RATIO" is bonafide project work submitted by

N. BALA KRISHNA	16911A0397
ROHIT AGARWAL	16911A03A6
P. SYAM KISHORE	16911A03B2
V. VENKATA LOHITH	16915A03B4

In the department of MECHANICAL ENGINEERING in partial fulfillment of requirements for the award of degree of bachelor of technology in "Mechanical Engineering" for the academic year 2017-18. This work has been carried under my guidance and has not been submitted the same for any university/institution for award of any degree/diploma.

PROJECT GUIDE

Mr. S. PRASAD KUMAR

Internal Examiner:

HEAD OF DEPARTMENT

Mr. G.SREERAM REDDY

External Examiner:

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.



# **Department of Mechanical Engineering**

#### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "INVESTIGATION ON THE IMPACT OF NOTCH GEOMETRY ON THE FATIGUE LIFE OF SUPER DUPLEX SS UNS S31254"

### is bonafide project work

submitted by

1. B. SRINATH (16911A03CO)

2. P. CHINNASWAMY (16911A03F7)

3. N. RAJESH (16911A03F2)

4. B. SUNIL (16911A03G8)

In partial fulfilment of requirements for the award of the degree of Bachelor of Technology in Mechanical Engineering by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision. The result embodied in the report has not been submitted the same to any university/institution for the award of any Degree.

Mr. J.JAGADESH KUMAR

Internal Examiner

Dept of Mechanical engineering engineering

Dr. G.SREERAM REDDY

Head of the Department

Dept of Mechanical

Examiner

PRINCIPAL
Idya Jyothi Institute of Technology
Himayatnagar (VIII), C.B. Post.,

Himayatnagar (VIII), C.B. Post.,

# **Department of Mechanical Engineering**



### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Analysis of XRD&SEM of Hematite and Magnite Nano crystallites using Novel arc discharge Method" is bona fide project work submitted by

N.DEVENDHAR (16911A03L9)

PRANADHEER (16911A03M6)

PSYAM KUMAR (16911A03M7)

U.RAJKUMAR (16911A03N2)

In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE

Associate Professor

Internal Examiner

HEAD OF DEPARTMEN

Dr. G. SREERAM REDDY

Professor

External Examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post., Hyderabad-75.

# **Department of Mechanical Engineering**



### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION OF MECHANICAL PROPERTIES OF SUBMERGED FRICTION STIR WELDING OF DISSIMILAR ALUMINIUM ALLOYS OF 5083 &6061 AND COMPARE WITH FRICTION STIR WELDING" is bona fide project work submitted by

> G. ANUDEEP 16915A03J9

> N. SWAMY 17915A0343

> **B. DINESH REDDY** 16915A03H7

> D. ANAND VARDHAN 16915A03J2

In partial fulfilment of requirements for the award of degree of **Bachelor of Technology** Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU **TECHNOLOGICAL UNIVERSITY,** Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

ECTGUIDE

MS P. PAVANI

Professor

HEAD OF THEDEPARTMENT

DR.G. SREERAM REDDY

**Professor** 



### VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "DESIGN AND CFD ANALYSIS OF A CAR REAR AEROFOIL" is being submitted as a record bonafide work carried out by AJAY BIRADAR (16911A0362), P.BHASKAR (16915A03A0), P.RAHUL (16915A03A3), P.V.S MANOJ CHANDRA (16911A03A5) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Mr. M.Mallesh

**Associate Professor** 

Head of The Department

Dr. G. Sreeram Reddy

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.

derabad-75.

EXTERNALEX

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY (Autonomous)

Himayath Nagar (VI), C.B. Post, R.R Dist. 500075



### CERTIFICATE

This to certify that the project work entitled "IMPACT OF CORROSION ON THE FATIGUE LIFE OF AISI316L AUSTENITIC STAINLESS STEEL"

is a bonafide work carried out by

MR. K. RAGHU (17915A0330)

MR. P.MANOHAR (16911A03F3)

MS. P. ROHITH (16911A03F5)

MS. K. SAI KIRAN (16911A03E2)

in partial fulfilment of the requirements for award of degree of BACHELOR OF TECHNOLOGYINMECHANICALENGINEERINGtobeawardedbytheJAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY. Hyderabad

The content in the report has not been submitted to any other university or institute for theaward of any degree ordiploma.

PROJECTGUIDE

MS P. PAVANI

Professor

Intervaletaminer

H<del>EAD OF THEDEP</del>ARTMENT

DR.G. SREER M REDDY

Professor

External examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayathagar (Vall), C.B. Post.,



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "INVESTIGATION OF MORPHOLOGY OF SILVER-IRON NANO POWDER" is being submitted as a record bonafide work carried out by J.SHASHANK (16911A0381), MOHD SANWAL AHMED (16911A0396), P.SAI NATH (16915A03A1), Y. SUDHEER YADAV (16911A03B6) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the pridance of,

Mr. NPRAVEEN

Asst. Professor

Head of The Department

Dr. G.SREE RAM REDDY

PRINCIPAL

Jyothi Institute of Technology

Obragar (Vill), C.B. Post.,

Hiprawatpagar (Vill), C.B. Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "EXPERIMENTAL INVESTIGATION ON DUAL FUEL DIESEL ENGINE" is being submitted as a record bonafide work carried out by SHAMINE BASHEER K(16911A03B0), MOHAMMED ZOHEB UDDIN KHAN (16915A0395), MOHAMMED ARBAZ HUSSAIN (16915A0394), P.SRIKANTH (16911A03A2) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, VidyaJyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under theguidanceof,

Mr. K.Ravikumar

Assistant Professor

Head of The Department

Dr. G. SreeramReddy

PRINCIPAL

Vidya Jyothi Institute of Technology

Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY (AUTONOMOUS)

HIMAYATHNAGAR (VI) C.B. POST, RR DIST.500075



### **CERTIFICATE**

This is to certify that the project work entitled "DESIGN AND FABRICATION OF INTELLIGENT BRAKING SYSTEM "is a Bonafide work carried out by Mr.K. SHASHANK (16911A03K3), Mr.P.MURALI (17915A0345), Mr.P.SATISH REDDY (17915A0346), Mr.S.NAVEEN, (17915A0353), Mr.T.SANTHOSH (15911A03M7) in partial fullfilment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad, under our guidance and supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma

INTERNAL GUIDE,

Mr. P.SAMPATH KUMAR,

Associate Professor (CAD/CAM).

HEAD OF THE DEPARTMENT.

Dr. G.SREERAM REDDY,

Professor (Dept of Mechanical)

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

(Autonomous)

Aziz Nagar, Hyderabad -500075

AProject Report On

# FABRICATION & TESTING OF MULTIPURPOSE AGRICULTRAL MACHINE

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

# BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

lelet

Under the guidance of: S.Venkatesh Asst. Professor Submitted by:
M.Arunkumar(17915A0341)
P.Madhu Sudan(17915A0347)
R.Ramakrishna (17915A0349)
S.Maheswar Reddy 17915A0350)



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PRINCIPAL
Vidya Jyothi Institute of Technolog
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.



### CERTIFICATE

This to certify that the project report titled "IMPACT OF NOTCH TOPOLOGY ON THE FATIGUE LIFE OF UNS S32760 SUPER DUPLEX STAINLESS STEEL" is being submitted by

**Mohammed Adil** 

(16911A0337)

Mohammed Imaz Uddin (16911A0338)

P.Sourab

(16911A0345)

**Zubair Ahmed** 

(16911A0360)

in the department of MECHANICAL ENGINEERING for the partial fulfillment of requirements for the award of degree of Bachelor of Technology in the academic year 2019-2020. This work has been carried out under our guidance and has not been submitted for any university/institution for the award of any Degree/Diploma.

INTERNAL GUIDES

Dr. V. PHANINDRA BOGU

Associate Professor, Dept. of Mechanical Engg.

Mr. J. JAGADESH KUMAR

HEAD OF THE DEPARTMENT

Dr. SREERAM\REDDY

Professor, Dept of Mechanical Engg.

External Examinar

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,



### VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "DESIGN AND CFD ANALYSIS OF A CAR REAR AEROFOIL" is being submitted as a record bonafide work carried out by AJAY BIRADAR (16911A0362), P.BHASKAR (16915A03A0), P.RAHUL KUMAR (16915A03A3), P.V.S MANOJ CHANDRA (16911A03A5) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Mr. M.Mallesh

**Associate Professor** 

Head of The Department

Dr. G. Sreeram Reddy

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Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER





Approved by AICTE, New Delhi & Affiliated to

Jawaharlal Nehru Technological University, Hyderabad

### CERTIFICATE

This is to certify that the dissertation entitled - MODELING AND ANALYSIS OF HUMAN FEMUR BONE USING FEM is a bonafide work carried out by S. DEEPIKA (16911A03J3), D.D.N.SAI SUPRIYA (16911A03J4), IBRAHIM BIN ABDHULLAH (16911A03K1), J.HEAMANTH REDDY (16911A03K2), RAHUL PATIL (16911A03M4) in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad, Under our Guidance and Supervision

The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

Internal Guide

PRADEEP KUMAR

Assistant Professor

Head of the Department

Dr. G. SREERAM REDDY,

Vidya Jyothi Instil de of Technology Himayatnagar (VIII), C.B. Post.,

(Affiliated to JNTUH)
Aziz Nagar Gate, C.B Post, ChilkurRoad, Hyderabad – 500075

DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "SYNTHESIS OF TITANIA(TiO<sub>2</sub>) NANO STRUCTURES WITH DIFFERNT MORPHOLOGIES" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

G. AJAY REDDY (16911A0323)

K. DURGA PRASAD (16911A0330)

K. RUCHITHA (16911A0331)

P. DIVIJ REDDY (16911A0346)

ProjectGuide,

Dr.B.V.REDDI

Professor

Head of the Department

Dr. SREE RAMREDDY

Professor

External Evaminer

PRINCIPAL
ya Jyothi Institute of Technology
imayatnagar (VIII), C.B. Post.,

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY (Autonomous)

Himayath Nagar (VI), C.B. Post, R.R Dist. 500075



### **CERTIFICATE**

This to certify that the project work entitled "IMPACT OF CORROSION ON THE FATIGUE LIFE OF AISI316L AUSTENITIC STAINLESS STEEL"

is a bonafide work carried out by

MR. K. RAGHU (17915A0330)

MR. P.MANOHAR (16911A03F3)

MS. P. ROHITH (16911A03F5)

MS. K. SAI KIRAN (16911A03E2)

in partial fulfilment of the requirements for award of degree of BACHELOR OF TECHNOLOGYINMECHANICALENGINEERINGtobeawardedbytheJAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY. Hyderabad

The content in the report has not been submitted to any other university or institute for theaward of any degree ordiploma.

PROJECTGUIDE

MS P. PAVANI

**Professor** 

H<del>EAD OF THEDEP</del>ARTMENT

DR.G. SREER M REDDY

Professor

Vidya Jyothi Institute of Technology Himayatnagor (Vel), C.B. Post.,

# Department of Mechanical Engineering



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "DESIGN AND DEVELOPMENT OF UNMANNED AERIAL VEHICLE" is bona fide project work submitted by

V. ASHISH KUMAR

16911A03N3

K. SUMALATHA

16911A03K8

P. RITU VENNELA

16911A03M5

M.VIDYA RANI

17915A0340

In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE

Mr. SHAIK ISMAIL

Associate Professor

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

Professor

ExternalE

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

# **Department of Mechanical Engineering**



# **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION ON MODELLING OF DISC BRAKE WITH COMPOSITE MATERIAL" is bonafide project work

# submitted by

- 1. K. SRIRAM (17915A0327)
- 2. K. SAI KUMAR (17915A0328)
- 3. K. MAHESH (17915A0329)
- 4. M. GOPI KRISHNA (17915A0338)
- 5. P. PRIYANKA (16911A03F6

In partial fulfilment of requirements for the award of the degree of Bachelor of Technology in Mechanical Engineering by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision. The result embodied in the report has not been submitted the same to any university/institution for the award of any Degree.

PROJECT GUIDE

G.RAJESH BARII

Asst.professor

HEAD OF DEPARTMENT

Dr. G.SREERAM REDDY

professor

INTERNAL EXAMINER

1-1 War

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

# **Department of Mechanical Engineering**



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Analysis of XRD&SEM of Hematite and Magnite Nano crystallites using Novel arc discharge Method" is bona fide project work submitted by

N.DEVENDHAR (16911A03L9)

PRANADHEER (16911A03M6)

PSYAM KUMAR (16911A03M7)

U.RAJKUMAR (16911A03N2)

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PROJECT GUIDE

Associate Professor

Internal Examiner

HEAD OF DEPARTMEN

Dr. G. SREERAM REDDY

Professor

External Examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post., Hyderabad-75.



# **Department of Mechanical Engineering**

#### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "INVESTIGATION ON THE IMPACT OF NOTCH GEOMETRY ON THE FATIGUE LIFE OF SUPER DUPLEX SS UNS S31254"

### is bonafide project work

submitted by

1. B. SRINATH (16911A03CO)

2. P. CHINNASWAMY (16911A03F7)

3. N. RAJESH (16911A03F2)

4. B. SUNIL (16911A03G8)

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Mr. J.JAGADESH KUMAR

Internal Examiner

Dept of Mechanical engineering engineering

Dr. G.SREERAM REDDY

Head of the Department

Dept of Mechanical

Examiner

PRINCIPAL
ya Jyothi Institute of Technology
limayatnagar (Vill), C.B. Post.,
limayatnagar (Vill), C.B. Post.,

# **Department of Mechanical Engineering**



BONAFIDE CERTIFICATE This is to certify that the project work entitled "An experimental investigation of the performance and emissions of a hydrogen-diesel dual fuel compression ignition internal combustion engine" is bonafide project work submitted by

JAYA SHIVA KUMAR DACHAPALLY 16911A03J0

PUSKURI VENKAT 17915A0348

NAGRAJ SWARNAKAR 16911A03N0

SYED AFZAL AFNAAN 16911A03N1

In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE K.ASHØK CHARY

(Associate Professor)

Internal Examiner

HEAD OF DEPARTMENT

Dr. G. SREERAM F

External Examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post., Hyderabad-75

# **Department of Mechanical Engineering**



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Analysis of XRD&SEM of Hematite and Magnite Nano crystallites using Novel arc discharge Method" is bona fide project work submitted by

N.DEVENDHAR (16911A03L9)

PRANADHEER (16911A03M6)

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In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE

Associate Professor

Internal Examiner

HEAD OF DEPARTMEN

Dr. G. SREERAM REDDY

Professor

External Examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post., Hyderabad-75.



### VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "DESIGN AND CFD ANALYSIS OF A CAR REAR AEROFOIL" is being submitted as a record bonafide work carried out by AJAY BIRADAR (16911A0362), P.BHASKAR (16915A03A0), P.RAHUL (16915A03A3), P.V.S MANOJ CHANDRA (16911A03A5) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Mr. M.Mallesh

**Associate Professor** 

Head of The Department

Dr. G. Sreeram Reddy

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.

derabad-75.

EXTERNALEX

(Autonomous)

Aziz Nagar, Hyderabad -500075

AProject Report On

# FABRICATION & TESTING OF MULTIPURPOSE AGRICULTRAL MACHINE

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

# BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

leld

Under the guidance of: S.Venkatesh Asst. Professor Submitted by:
M.Arunkumar(17915A0341)
P.Madhu Sudan(17915A0347)
R.Ramakrishna (17915A0349)
S.Maheswar Reddy 17915A0350)



DEPT OF MECHANICAL ENGINEERING VJIT ENGINEERING COLLEGE Aziz Nagar, C B Post, Hyderabad -500075

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PRINCIPAL
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Himayatnagar (Vill), C.B. Post.,
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(Affiliated to Jawaharlal Nehru Technological University, Hyderabad)

Aziznagar Gate, Chilkur Balaji Road, Hyderabad, TS-500075 DEPARTMENT OF MECHANICAL ENGINEERING

#### CERTIFICATE

This is to certify that the project report titled "AUTOMATION OF CONVENTIONAL LATHE" is being submitted as a record bonafide work carried out by M. SHYAM PRASAD (17915A0333), M. SHIVA KUMAR (17915A0339), RANGA RITVIK(16911A03F9), SHAIK NADEEM AHMED(16911A03G5) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of

S STINIBLE VETTMAD

Associate Professor

Head of The Department

Dr.G.SREERAM REDDY

Professor

INTERNAL EXAMINER

EXTERNAL EXAMINER

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

ii



### CERTIFICATE

This is to certify that the project report titled "FRICTION STIR WELDING OF DISSIMILAR ALUMINIUM ALLOYS BY ADDING BORAN CARBIDE POWDER" has been submitted by

A.NARENDAR REDDY	(16911A03B8)
C.SAI SUMANTH CHARY	(16911A03C8)
R.VINOD KUMAR	(16911A03G0)
S.SAI SANDEEP YADAV	(16911A03G7)

In the partial fulfillment of the requirements for the award of the B.tech Degree in MECHANICAL ENGINEERING from the Vidya Jyothi Institute Of Technology, Hyderabad is a bonafied work carried out by them during the academic year 2019- 2020.

INTERNAL GUIDE,

Mr. P.SAMPATH KUMAR,

Associate Professor (CAD/CAM).

HEAD OF THE DEPARTMENT,

Dr. G.SREERAM REDDY,

Professor (Dept of Mechanical)

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

(Autonomous)

Department of Mechanical Engineering



### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "The Effect of Al2O3 on the performance of Single stage Solar still" is bonafide project work submitted by

- 1. R.R.RAGHAVENDRA REDDY (16911A03G1)
- 2. V.KOMAL TEERTHA (16911A03HO)
- 3. G.NITHIN VARMA (16911A03D0)
- 4. E.VARUN (16911A03C9)

In partial fulfilment of requirements for the award of the degree of Bachelor of Technology in Mechanical Engineering by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for the award of any Degree.

PROJECT GUIDE

Dr. L. MADAN ANANDA KUMAR

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

AssociateProfessor

Professor

Internal Caminer

PRINCIPAL

Vidya Jyothi Institute of Technology

Himayatnagar (Vill), C.B. Post.,

External Examiner

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



## **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION OF ACETYLENE ASPIRATED DUAL FUEL DIESEL ENGINE WITH PALM STEARIN BIO-DIESEL BY VARYING COMPRESSION RATIO" is bonafide project work submitted by

N. BALA KRISHNA	16911A0397
ROHIT AGARWAL	16911A03A6
P. SYAM KISHORE	16911A03B2
V. VENKATA LOHITH	16915A03B4

In the department of MECHANICAL ENGINEERING in partial fulfillment of requirements for the award of degree of bachelor of technology in "Mechanical Engineering" for the academic year 2017-18. This work has been carried under my guidance and has not been submitted the same for any university/institution for award of any degree/diploma.

PROJECT GUIDE

Mr. S. PRASAD KUMAR

Internal Examiner:

HEAD OF DEPARTMENT

Mr. G.SREERAM REDDY

External Examiner:

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the work reported in the present project entitled "DESIGN AND MANUFACTURING OF CUSTOM SLIPPER SOLE USING LATTICE

STRUCTURES" is a record of work done by us in the department of MECHANICAL Engineering, Vidya Jyothi Institute of Technology (Autonomous), Jawaharlal Nehru technological university, Hyderabad. The reports based on the project work done entirely by us and not copied from any other source.

Mr. G. SESHANTH (16911A0322),

Mr. R. NAVEEN (16911A0348),

Mr. V. PAVAN SUDHAKAR (16911A0358),

Miss. Y. LAXMI PRASANNA (16911A0359)

Project Guide,

Dr. V. Phanindra Bogu

(Associate Professor)

Head of the Department

DR G. SREERAM REDDY

(Professor)

External Examiner

PRINCIPAL

Himayatnagar (Vill), C.B. Post.,

3

### DEPARTMENT OF MECHANICAL ENGINEERING



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY CERTIFICATE

This is to certify that the project report titled "ROCKER BOGIE SUSPENSION SYSTEM" is being submitted as a record bonafide work carried out by A. HITESH KUMAR (16911A0361), G. BHANU PRASAD (16915A0374), L. NAVEEN KUMAR (16915A0389), R. SURYA TEJA (16911A03A7) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of,

Ms. G. SRAVYA

Head of The Department

Dr. G. SreeramReddy

Professor

PRINCIPAL

Vidya Jyothi Institute of Technology

Vidya Jyothi Institute of Technology

Vidya Jyothi Institute of Technology

Himayatnagar (VIII), 0.5

EXTERNAL EXAMINER

INTERNALEXAMINER

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

# DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "Evaluation of Mechanical Properties of a Novel Composite Material" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

S RAMANUJAM 16911A0349

B JAYACHANDRA 17915A0307

B SAI HARIHARAN 17915A0311

B DIKSHITH 17915A0312

Project Guide

T. Pavan Kumar

(Assistant Professor)

Head of the Department

Dr G. Sreeram Reddy

(Professor)

External Examiner

A radina

Vidya Jyothi Institute of Technology
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Hyderabad-75.

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

### DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report entitled "INVESTICATION OF MECHANICAL PROPERTIES OF POLYURETHANE COMPOSITES WITH QUARTZ" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

CH.SAI CHANDANA 16911A0366 M.VINAY KUMAR 16911A0391 S.SAI KRISHNA 16911A03A8 T.NAVEEN 16911A03B3

Project Guide, DR. B V REDDI

Professor

Professor

Head of the Department

Dr G. Sreeram Reddy

External Examiner

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//dya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,

(Autonomous)

Aziz Nagar gate, CB Post, Hyderabad-500075



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "Validation of Empirical Method & Finite Element Method for Evaluation of Fatigue Parameter of Steels." is bonafide project work submitted by HARSH LAHOTI (16911A03D4), CH. SANATH CHANDRA (16911A03C7), GAYATRI VELAMURI (16911A03G2) and S. ANISHA REDDY (16911A03G6). In partial fulfillment of requirements for the award of the degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad

The content in this report has not been submitted to other universities/institutions for the award of any Degree.

PROJECT GUIDE Mr. J. JAGADESH KUMAR

Associate Professor

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

Professor

Internal Supervisor

External Supervisor

PRINCIPAL
a Jyothi Institute of Technologi
mayatnagar (Vill), C.B. Post.,

(Affiliated to JNTUH)
Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

# DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project work entitled "Experimental investigation of Mechanical properties of Mild steel AISI 1040 using MIG welding process" is a bonafide work carried out by M.PREM(16911A0334), M.ARAVIND REDDY (16911A0342), B.SURYA KANTH(16911A0306), S.VAMSHI(16911A0351) in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad.

The content in this report has not been submitted to any other university or institute for the award of any degree or diploma.

Project Guide,

Mr.K. RAJESH KUMAR

Head of the Department

DR G. SREERAM REDDY

(Professor)

External Examiner

PRINCIPAL

Jvothi Institute of Tech

Mayatnagar (VIII), C.B. P. Hyderabad-75.

(Autonomous)

Aziz Nagar, Hyderabad -500075

AProject Report On

## FABRICATION & TESTING OF MULTIPURPOSE AGRICULTRAL MACHINE

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

# BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

lele

Under the guidance of: S.Venkatesh Asst. Professor Submitted by:
M.Arunkumar(17915A0341)
P.Madhu Sudan(17915A0347)
R.Ramakrishna (17915A0349)
S.Maheswar Reddy 17915A0350)



DEPT OF MECHANICAL ENGINEERING VJIT ENGINEERING COLLEGE Aziz Nagar, C B Post, Hyderabad -500075

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PRINCIPAL
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Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY (AUTONOMOUS)

HIMAYATHNAGAR (VI) C.B. POST, RR DIST.500075



### **CERTIFICATE**

This is to certify that the project work entitled "DESIGN AND FABRICATION OF INTELLIGENT BRAKING SYSTEM "is a Bonafide work carried out by Mr.K. SHASHANK (16911A03K3), Mr.P.MURALI (17915A0345), Mr.P.SATISH REDDY (17915A0346),Mr.S.NAVEEN, (17915A0353), Mr.T.SANTHOSH (15911A03M7) in partial fullfilment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad, under our guidance and supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma

INTERNAL GUIDE,

Mr. P.SAMPATH KUMAR,

Associate Professor (CAD/CAM).

HEAD OF THE DEPARTMENT.

Dr. G.SREERAM REDDY,

Professor (Dept of Mechanical)

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

# DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report entitled "COMPARATIVE EVALUATION OF MILDSTEEL WELDED JOINTS EMPLOYED BY DEFFERENT PROCESSES" has been submitted by the following students in partial fulfilment for the award of the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technology University, Hyderabad, during the academic year 2016-2020

The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

S.SUNIL 16911A0352

T.SANDEEP 16911A0354

M.RAJKUMAR 16911A0341

B.NAGA 16911A0310

ProjectGuide,

DR.V.V.SATYANARAYANA

(Professor) (Professor)

Head of the Department

DR.G.Sree RamReddy

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hvderabad-75.

# Department of Mechanical Engineering



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "MODELLING AND FABRICATIO OF ABRASIVE JET MACHINING" is a bonafide project work submitted by

K.VINAY KUMAR GOUD

16911A03K4

S.PRITHVI

16911A03M9

S.RAJSHEKAR

17915A0351

SHAIK YAKOOB BABA

17915A0352

In partial fulfillment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

Project guide

Mr.S.VENKATESH

(Assistant Professor) (Professor)

Head Of the Department Dr.G.SREERAM REDDY

E STE

Internal Examiner

PRINCIPAL dya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.



(Affiliated to Jawaharlal Nehru Technological University, Hyderabad)

Aziznagar Gate, Chilkur Balaji Road, Hyderabad, TS-500075 DEPARTMENT OF MECHANICAL ENGINEERING

#### CERTIFICATE

This is to certify that the project report titled "AUTOMATION OF CONVENTIONAL LATHE" is being submitted as a record bonafide work carried out by M. SHYAM PRASAD (17915A0333), M. SHIVA KUMAR (17915A0339), RANGA RITVIK(16911A03F9), SHAIK NADEEM AHMED(16911A03G5) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of

S. SUNBELXKUMAR

Associate Professor

Head of The Department

Dr.G.SREERAM REDDY

Professor

INTERNAL EXAMINER

EXTERNAL EXAMINER

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

ii

# Department of Mechanical Engineering



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "MODELLING AND FABRICATIO OF ABRASIVE JET MACHINING" is a bonafide project work submitted by

K.VINAY KUMAR GOUD

16911A03K4

S.PRITHVI

16911A03M9

S.RAJSHEKAR

17915A0351

SHAIK YAKOOB BABA

17915A0352

In partial fulfillment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

Project guide

Mr.S.VENKATESH

(Assistant Professor) (Professor)

Head Of the Department Dr.G.SREERAM REDDY

External Examiner

Internal Examiner

PRINCIPAL dya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

### DEPARTMENT OF MECHANICAL ENGINEERING



## VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "EXPERIMENTAL INVESTIGATION ON DUAL FUEL DIESEL ENGINE" is being submitted as a record bonafide work carried out by SHAMINE BASHEER K(16911A03B0), MOHAMMED ZOHEB UDDIN KHAN (16915A0395), MOHAMMED ARBAZ HUSSAIN (16915A0394), P.SRIKANTH (16911A03A2) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, VidyaJyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under theguidanceof,

Mr. K.Ravikumar

Assistant Professor

Head of The Department

Dr. G. SreeramReddy

PRINCIPAL

Vidya Jyothi Institute of Technology

Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER

# Department of Mechanical Engineering



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "MODELLING AND FABRICATIO OF ABRASIVE JET MACHINING" is a bonafide project work submitted by

K.VINAY KUMAR GOUD	16911A03K4
S.PRITHVI	16911A03M9
S.RAJSHEKAR	17915A0351
SHAIK YAKOOB BABA	17915A0352

In partial fulfillment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

Project guide

Mr.S.VENKATESH

(Assistant Professor) (Professor)

Head Of the Department Dr.G.SREERAM REDDY

External Examine

PRINCIPAL

Vidya Jyothi Institute of Technology

Himayatnagar (Vill), C.B. Post., Hyderabad-75.

(Autonomous)

Aziz Nagar gate, CB Post, Hyderabad-500075



## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "Validation of Empirical Method & Finite Element Method for Evaluation of Fatigue Parameter of Steels." is bonafide project work submitted by HARSH LAHOTI (16911A03D4), CH. SANATH CHANDRA (16911A03C7), GAYATRI VELAMURI (16911A03G2) and S. ANISHA REDDY (16911A03G6). In partial fulfillment of requirements for the award of the degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad

The content in this report has not been submitted to other universities/institutions for the award of any Degree.

PROJECT GUIDE Mr. J. JAGADESH KUMAR

Associate Professor

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

Professor

Internal Supervisor

External Supervisor

PRINCIPAL

Jyothi Institute of Technology
nayatnagar (Vill), C.B. Post.,

#### DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report titled "FRICTION STIR WELDING OF DISSIMILAR ALUMINIUM ALLOYS BY ADDING BORAN CARBIDE POWDER" has been submitted by

A.NARENDAR REDDY	(16911A03B8)
C.SAI SUMANTH CHARY	(16911A03C8)
R.VINOD KUMAR	(16911A03G0)
S.SAI SANDEEP YADAV	(16911A03G7)

In the partial fulfillment of the requirements for the award of the B.tech Degree in MECHANICAL ENGINEERING from the Vidya Jyothi Institute Of Technology, Hyderabad is a bonafied work carried out by them during the academic year 2019- 2020.

INTERNAL GUIDE,

Mr. P.SAMPATH KUMAR,

Associate Professor (CAD/CAM).

HEAD OF THE DEPARTMENT,

Dr. G.SREERAM REDDY,

Professor (Dept of Mechanical)

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY (AUTONOMOUS)

HIMAYATHNAGAR (VI) C.B. POST, RR DIST.500075



### **CERTIFICATE**

This is to certify that the project work entitled "DESIGN AND FABRICATION OF INTELLIGENT BRAKING SYSTEM "is a Bonafide work carried out by Mr.K. SHASHANK (16911A03K3), Mr.P.MURALI (17915A0345), Mr.P.SATISH REDDY (17915A0346),Mr.S.NAVEEN, (17915A0353), Mr.T.SANTHOSH (15911A03M7) in partial fullfilment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad, under our guidance and supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma

INTERNAL GUIDE,

Mr. P.SAMPATH KUMAR,

Associate Professor (CAD/CAM).

HEAD OF THE DEPARTMENT.

Dr. G.SREERAM REDDY,

Professor (Dept of Mechanical)

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

Hyderabad-75.



### **Department of Mechanical Engineering**

#### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "INVESTIGATION ON THE IMPACT OF NOTCH GEOMETRY ON THE FATIGUE LIFE OF SUPER DUPLEX SS UNS S31254"

### is bonafide project work

submitted by

1. B. SRINATH (16911A03CO)

2. P. CHINNASWAMY (16911A03F7)

3. N. RAJESH (16911A03F2)

4. B. SUNIL (16911A03G8)

In partial fulfilment of requirements for the award of the degree of Bachelor of Technology in Mechanical Engineering by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision. The result embodied in the report has not been submitted the same to any university/institution for the award of any Degree.

Mr. J.JAGADESH KUMAR

Internal Examiner

Dept of Mechanical engineering engineering

Dr. G.SREERAM REDDY

Head of the Department

Dept of Mechanical

Examiner

PRINCIPAL

Jyothi Institute of Technology

nayatnagar (Vill), C.B. Post.,

hayatnagar (Vill), C.B. Post.,

### **Department of Mechanical Engineering**



BONAFIDE CERTIFICATE This is to certify that the project work entitled "An experimental investigation of the performance and emissions of a hydrogen-diesel dual fuel compression ignition internal combustion engine" is bonafide project work submitted by

JAYA SHIVA KUMAR DACI	IAPALLY	16911A03J0
-----------------------	---------	------------

PUSKURI VENKAT 17915A0348

NAGRAJ SWARNAKAR 16911A03N0

SYED AFZAL AFNAAN 16911A03N1

In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE K.ASHØK CHARY

(Associate Professor)

HEAD OF DEPARTMENT Dr. G. SREERAM REDD

(Professor

External Examiner

PRINCIPAL
Vidya Jyothi Institute of Technol
Himayatnagar (Vill), C.B. Pos

2

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION OF ACETYLENE ASPIRATED DUAL FUEL DIESEL ENGINE WITH PALM STEARIN BIO-DIESEL BY VARYING COMPRESSION RATIO" is bonafide project work submitted by

N. BALA KRISHNA	16911A0397
ROHIT AGARWAL	16911A03A6
P. SYAM KISHORE	16911A03B2
V. VENKATA LOHITH	16915A03B4

In the department of MECHANICAL ENGINEERING in partial fulfillment of requirements for the award of degree of bachelor of technology in "Mechanical Engineering" for the academic year 2017-18. This work has been carried under my guidance and has not been submitted the same for any university/institution for award of any degree/diploma.

PROJECT GUIDE

Mr. S. PRASAD KUMAR

Internal Examiner:

HEAD OF DEPARTMENT

Mr. G.SREERAM REDDY

External Examiner:

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

### **Department of Mechanical Engineering**



BONAFIDE CERTIFICATE This is to certify that the project work entitled "An experimental investigation of the performance and emissions of a hydrogen-diesel dual fuel compression ignition internal combustion engine" is bonafide project work submitted by

JAYA SHIVA KUMAR DACHAPALLY 16911A03J0

PUSKURI VENKAT 17915A0348

NAGRAJ SWARNAKAR 16911A03N0

SYED AFZAL AFNAAN 16911A03N1

In partial fulfilment of requirements for the award of degree of **Bachelor of Technology in Mechanical Engineering** to be awarded by the **JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY**, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE K.ASHØK CHARY

(Associate Professor)

Internal Examiner

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

External Examiner

PRINCIPAL
Vidya Jyothi Institute of Technolog
Himayatnagar (Vill), C.B. Post.,

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

# DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled "COMPARATIVE EVALUATION OF MILDSTEEL WELDED JOINTS EMPLOYED BY DEFFERENT PROCESSES" has been submitted by the following students in partial fulfilment for the award of the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technology University, Hyderabad, during the academic year 2016-2020

The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

S.SUNIL

16911A0352

T.SANDEEP

16911A0354

M.RAJKUMAR

16911A0341

**B.NAGA** 

16911A0310

ProjectGuide

DRIVICATIONADAVANIA

(Professor) (Professor)

Head of the pepartment

DR.G.Sree RamReddy

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

### DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report entitled "INVESTICATION OF MECHANICAL PROPERTIES OF POLYURETHANE COMPOSITES WITH QUARTZ" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

CH.SAI CHANDANA 16911A0366
M.VINAY KUMAR 16911A0391
S.SAI KRISHNA 16911A03A8
T.NAVEEN 16911A03B3

Project Guide, DR. B V REDDI

Professor

Head of the Department

Dr G. Sreeram Reddy

Professor

External Examiner

PRINCIPAL

/idya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

## **Department of Mechanical Engineering**



### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "Analysis of XRD&SEM of Hematite and Magnite Nano crystallites using Novel arc discharge Method" is bona fide project work submitted by

N.DEVENDHAR (16911A03L9)

PRANADHEER (16911A03M6)

PSYAM KUMAR (16911A03M7)

U.RAJKUMAR (16911A03N2)

In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE

Associate Professor

100001416 1 10163301

Internal Examiner

HEAD OF DEPARTMEN

Dr. G. SREERAM REDDY

Professor

External Examiner

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post., Hyderabad-75.

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

### DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report entitled "DEVELOPMENT OF COMPOSITE MATERIALS USING VARIOUS FIBERS AND EPOXY RESIN" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in MECHANICAL Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2019 - 2020. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

B.SHIVANI 16911A0308

J.SWAPNA 16911A0325

M.VEENILA 16911A0336

UVS.CHANDAN 16911A0355

Project Guide,

MR.C.NAVEEN RAJ (Assistant Professor) Head of the Department

Dr. SREERAM REDDY

(Professor)

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hydarabad-75.

### Department of Mechanical Engineering



### BONAFIDE CERTIFICATE

This is to certify that the project work entitled "DESIGN AND DEVELOPMENT OF UNMANNED AERIAL VEHICLE" is bona fide project work submitted by

V.	ASHISH KUMAR	16911A03N3
K	. SUMALATHA	16911A03K8
P	P. RITU VENNELA	16911A03M5
M	I.VIDYA RANI	17915A0340

In partial fulfilment of requirements for the award of degree of Bachelor of Technology in Mechanical Engineering to be awarded by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for award of any Degree.

PROJECT GUIDE Mr. SHAIK ISMAIL

Associate Professor

HEAD OF DEPARTMENT Dr. G. SREERAM REDDY

Professor

External Ex

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post., Hyderabad-75.

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "EXPERIMENTAL INVESTIGATION OF ACETYLENE ASPIRATED DUAL FUEL DIESEL ENGINE WITH PALM STEARIN BIO-DIESEL BY VARYING COMPRESSION RATIO" is bonafide project work submitted by

N. BALA KRISHNA 16911A0397

ROHIT AGARWAL 16911A03A6

P. SYAM KISHORE 16911A03B2

V. VENKATA LOHITH 16915A03B4

In the department of MECHANICAL ENGINEERING in partial fulfillment of requirements for the award of degree of bachelor of technology in "Mechanical Engineering" for the academic year 2017-18. This work has been carried under my guidance and has not been submitted the same for any university/institution for award of any degree/diploma.

PROJECT GUIDE

Mr. S. PRASAD KUMAR

Internal Examiner:

HEAD OF DEPARTMENT

Mr. G.SREERAM REDDY

External Examiner:

PRINCIPAL
Vidya Jyothi Institute of Technology
Himayatnagar (Vill), C.B. Post.,
Hyderabad-75.

(Autonomous)

**Department of Mechanical Engineering** 



### **BONAFIDE CERTIFICATE**

This is to certify that the project work entitled "The Effect of Al2O3 on the performance of Single stage Solar still" is bonafide project work submitted by

- 1. R.R.RAGHAVENDRA REDDY (16911A03G1)
- 2. V.KOMAL TEERTHA (16911A03HO)
- 3. G.NITHIN VARMA (16911A03D0)
- 4. E.VARUN (16911A03C9)

In partial fulfilment of requirements for the award of the degree of Bachelor of Technology in Mechanical Engineering by the JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, Hyderabad under our guidance and supervision.

The result embodied in the report has not been submitted the same to any university/institution for the award of any Degree.

PROJECT GUIDE

Dr. L. MADAN ANANDA KUMAR

HEAD OF DEPARTMENT

Dr. G. SREERAM REDDY

AssociateProfessor

Professor

Internal Caminer

PRINCIPAL

Vidya Jyothi Institute of Technology

Himayatnagar (Viii), Hyderabad-75.

External Examiner



(Affiliated to Jawaharlal Nehru Technological University, Hyderabad)

Aziznagar Gate, Chilkur Balaji Road, Hyderabad, TS-500075

# **DEPARTMENT OF MECHANICAL ENGINEERING**

### **CERTIFICATE**

This is to certify that the project report titled "THE EFFECT OF VARIOUS MATERIALS ON PERFORMANCE OF THERMAL ENERGY STORAGE TANK" is being submitted as a record bonafide work carried out by N.BHAVANI (16911A0399), T.VANDANA (16911A0B5), CH.SHASHANK (17915A0316), E.SRIKANTH REDDY (17915A0321) in partial fulfillment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the guidance of volume

Dr.L.MADAN ANANDA KUMAR

**Associate Professor** 

Head of The Department

Dr.G.SREERAM REDDY

**Professor** 

PRINCIPAL

Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post.,

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EXTERNAL EXAMINER

INTERNAL EXAMINER

(Affiliated to JNTUH) Aziz Nagar Gate, C.B Post, Chilkur Road – 500075

### DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report entitled "Evaluation of Mechanical Properties of a Novel Composite Material" has been submitted by the following students in partial fulfillment for the award of the degree of "Bachelor of Technology" in Mechanical Engineering to Jawaharlal Nehru Technological University, Hyderabad, during the academic year 2016 - 2017. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

A BALAKRISHNA 16911A0305

K A MALLESH YADAV 16911A0326

V VISHNU 16911A0357

B SHASHI REDDY 17915A0308

Project Guide,

S RAMAKRISHNA (Assistant Professor) Head of the Department

DR G. SREERAM REDDY

(Professor)

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## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the work reported in the present project entitled "DESIGN AND MANUFACTURING OF CUSTOM SLIPPER SOLE USING LATTICE

STRUCTURES" is a record of work done by us in the department of MECHANICAL Engineering, Vidya Jyothi Institute of Technology (Autonomous), Jawaharlal Nehru technological university, Hyderabad. The reports based on the project work done entirely by us and not copied from any other source.

Mr. G. SESHANTH (16911A0322),

Mr. R. NAVEEN (16911A0348),

Mr. V. PAVAN SUDHAKAR (16911A0358),

Miss. Y. LAXMI PRASANNA (16911A0359)

Project Guide,

Dr. V. Phanindra Bogu

(Associate Professor)

Head of the Department

DR G. SREERAM REDDY

(Professor)

External Examiner

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Vidya Jyothi Institute of Technology Himayatnagar (Vill), C.B. Post., Hyderabad-75

## DEPARTMENT OF MECHANICAL ENGINEERING



# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

### CERTIFICATE

This is to certify that the project report titled "INVESTIGATION OF MORPHOLOGY OF SILVER-IRON NANO POWDER" is being submitted as a record bonafide work carried out by J.SHASHANK (16911A0381), MOHD SANWAL AHMED (16911A0396), P.SAI NATH (16915A03A1), Y. SUDHEER YADAV (16911A03B6) in partial fulfilment of the academic requirements for the award of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING, Submitted to the Department of Mechanical Engineering, Vidya Jyothi Institute of Technology, Hyderabad during the period 2019-2020.

Under the pridance of,

Mr. NPRAVEEN

Asst. Professor

Head of The Department

Dr. G.SREE RAM REDDY

PRINCIPAL PRINCIPAL

Vidya Jyothi Institute C.B. Post Higher Hangar (Vill), C.B. Post

High Hyderabad-75.

EXTERNAL EXAMINER

INTERNALEXAMINER

(Autonomous)

Himayath Nagar (VI), C.B. Post, R.R Dist. 500075



### CERTIFICATE

This to certify that the project work entitled "Effect of coating on AISI 316L

Austenitic stainless steel for Tribological property evaluation" is a bonafide work carried out by

MR. SANDEEP (16911A03H2)

MR. M. AKHIL (16911A03F0)

MS. G. MOUNIKA (16911A03D1)

MS. G. TEJASHWINI (16911A03D3)

in partial fulfilment of the requirements for award of degree of BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING to be awarded by the JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY. Hyderabad

The content in the report has not been submitted to any other university or institute for the award of any degree or diploma.

PROJECT GUIDE

DR.V.V. SATYANARAYANA

Professor

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## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the work reported in the present project entitled "DESIGN AND MANUFACTURING OF CUSTOM SLIPPER SOLE USING LATTICE

STRUCTURES" is a record of work done by us in the department of MECHANICAL Engineering, Vidya Jyothi Institute of Technology (Autonomous), Jawaharlal Nehru technological university, Hyderabad. The reports based on the project work done entirely by us and not copied from any other source.

Mr. G. SESHANTH (16911A0322),

Mr. R. NAVEEN (16911A0348),

Mr. V. PAVAN SUDHAKAR (16911A0358),

Miss. Y. LAXMI PRASANNA (16911A0359)

Project Guide,

Dr. V. Phanindra Bogu

(Associate Professor)

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DR G. SREERAM REDDY

(Professor)

External Examiner

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Himayatnagar (Vill), C.B. Post.,

## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This to certify that the project report titled "IMPACT OF NOTCH TOPOLOGY ON THE FATIGUE LIFE OF UNS S32760 SUPER DUPLEX STAINLESS STEEL" is being submitted by

**Mohammed Adil** 

(16911A0337)

Mohammed Imaz Uddin (16911A0338)

P.Sourab

(16911A0345)

**Zubair Ahmed** 

(16911A0360)

in the department of MECHANICAL ENGINEERING for the partial fulfillment of requirements for the award of degree of Bachelor of Technology in the academic year 2019-2020. This work has been carried out under our guidance and has not been submitted for any university/institution for the award of any Degree/Diploma.

INTERNAL GUIDES

Dr. V. PHANINDRA BOGU

Associate Professor, Dept. of Mechanical Engg.

Mr. J. JAGADESH KUMAR

HEAD OF THE DEPARTMENT

Dr. SREERAM\REDDY

Professor, Dept of Mechanical Engg.

External Examinar

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