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Department of Civil Engineering
"Building Better Development"
Session 2021-22

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HOD, (CE)

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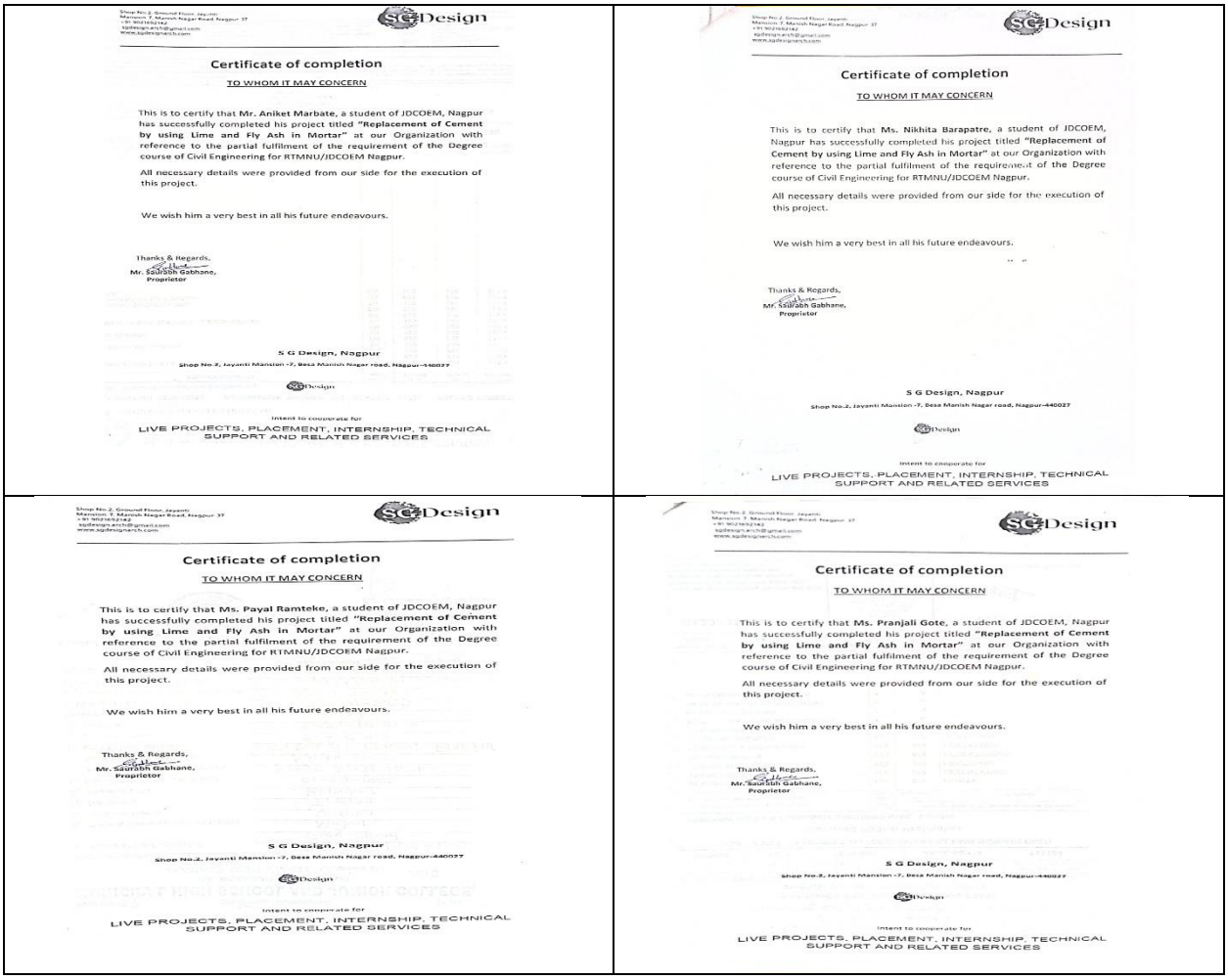

Certificate of completion

TO WHOM IT MAY CONCERN

This is to certify that Mr. Aniket Marbate, a student of JDCOEM, Nagpur has successfully completed his project titled "Replacement of Cement by using Lime and Fly Ash in Mortar" at our Organization with reference to the partial fulfilment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.

All necessary details were provided from our side for the execution of this project.

We wish him a very best in all his future endeavours.

Thanks & Regards,
Mr. Saurabh Gabhane,
Proprietor

S G Design, Nagpur

Intent to cooperate for
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Certificate of completion

TO WHOM IT MAY CONCERN

This is to certify that Ms. Nikhita Barapatre, a student of JDCOEM, Nagpur has successfully completed his project titled "Replacement of Cement by using Lime and Fly Ash in Mortar" at our Organization with reference to the partial fulfilment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.

All necessary details were provided from our side for the execution of this project.

We wish him a very best in all his future endeavours.

Thanks & Regards,
Mr. Saurabh Gabhane,
Proprietor

S G Design, Nagpur

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Certificate of completion

TO WHOM IT MAY CONCERN

This is to certify that Ms. Payal Ramteke, a student of JDCOEM, Nagpur has successfully completed his project titled "Replacement of Cement by using Lime and Fly Ash in Mortar" at our Organization with reference to the partial fulfilment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.

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Proprietor

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TO WHOM IT MAY CONCERN

This is to certify that Ms. Pranjali Gote, a student of JDCOEM, Nagpur has successfully completed his project titled "Replacement of Cement by using Lime and Fly Ash in Mortar" at our Organization with reference to the partial fulfilment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.

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Mr. Saurabh Gabhane,
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Performing Abrasion Test

Performing Sieve Analysis Fine and Coarse Aggregate

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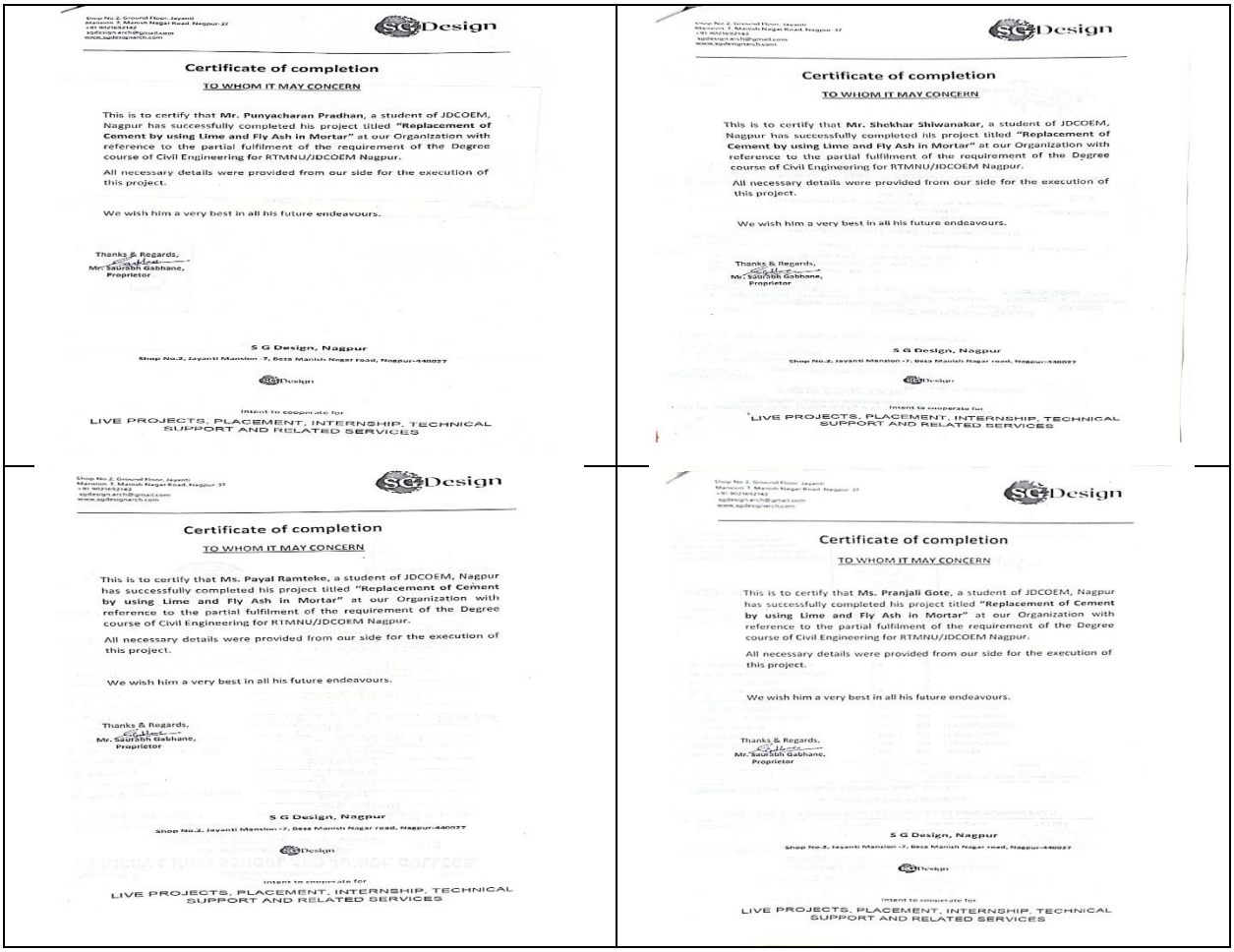

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TO WHOM IT MAY CONCERN

This is to certify that **Mr. Punyacharan Pradhan**, a student of JDCOEM, Nagpur has successfully completed his project titled **"Replacement of Cement by using Lime and Fly Ash in Mortar"** at our Organization with reference to the partial fulfilment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.

All necessary details were provided from our side for the execution of this project.

We wish him a very best in all his future endeavours.

Thanks & Regards,
Mr. Saurabh Gabhane,
Proprietor

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TO WHOM IT MAY CONCERN

This is to certify that **Mr. Shekhar Shiwanakar**, a student of JDCOEM, Nagpur has successfully completed his project titled **"Replacement of Cement by using Lime and Fly Ash in Mortar"** at our Organization with reference to the partial fulfilment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.

All necessary details were provided from our side for the execution of this project.

We wish him a very best in all his future endeavours.

Thanks & Regards,
Mr. Saurabh Gabhane,
Proprietor

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Shop No.2, Jayanti Mansion -7, Beza Manish Nagar road, Nagpur-440027

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TO WHOM IT MAY CONCERN

This is to certify that **Ms. Payal Ramteke**, a student of JDCOEM, Nagpur has successfully completed his project titled **"Replacement of Cement by using Lime and Fly Ash in Mortar"** at our Organization with reference to the partial fulfilment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.

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Thanks & Regards,
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Proprietor

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We wish him a very best in all his future endeavours.

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Proprietor

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CSE Student Live Project Details

Date:17/07/2021

Title: "Smart Health Care Using Medical ChatBoats"

Abstract

In the current situation peoples are getting more concerned about wellbeing and good health of themselves and their families. During this pandemic situation of COVID-19 the peoples are scared of visiting hospitals and lack proper medication. In recent years many technologies have been evolved in the medical field one of which is Medical Chatbot. An automatized medical chatbot is a system with human interaction using natural language diagnosis to provide medical aid. Use of NLP, NLU, AI, ML concepts are being done in development of chatbots. A person can keep an eye on his health using these chatbots. The following paper is a review over the technologies and applications of various proposed chatbots in recent years.

Summary

One of the major dares that India as a country faces is to cater to great quality and affordable healthcare to its growing population. The World Health Report issued by WHO has ranked India's healthcare system at 112 out of 190 countries. This inaccessibility of healthcare amenities particularly in rural India and the complexity in accessing means of transport further causes patients to postpone their treatment, or opt for medical amenities that may be closer but at the same time are not cost-efficient and well-matched to their medical needs. To seek more efficient ways to supply timely medical care, access and quality treatment to the patient, the role of chatbot Or we can call medbot comes into play which connects patients with healthcare providers and healthcare cognition. Due to the recent COVID-19 pandemic, social distancing will stay in India for a long time, particularly for patients with chronic diseases, thereby massive a blockage for the population to access healthcare facilities. The data released by the National Health Mission, amid COVID-19 shows that there has been a collapse in distinct acrid illnesses being reported during the lockdown in India. This data indicates that a reduced hospitalization case indicates a shortage of access to healthcare, rather than a shortage of illness.

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By using Interlocutory artificial intelligence, healthcare providers can diagnose and deal with patients without the need for a individual visit, whilst promoting social distancing and reducing the risk of COVID-19 transmission. Interlocutory bot with a voice and/or chat interface can play a main role by overcoming the current hurdles towards making primary healthcare affordable, accessible, and potentially sustainable in the new digital economy. With the advent of AI, virtual assistants can be seen penetrating to the nook and corner of the world. Voice assistants construct use of a natural language interface to interact via speech. Voice technology must be tailored to be useful in the field of healthcare. It makes use of voice objections to get answers, perform actions and instructions according to user commitments. They are flexible to the user's separate language usages, searches, and preferences with continuing use. The vast amount of information that is available on the internet allows chatbots to provide accurate and systematic statistics based on the users demand and requisite. The idea behind this is to focus on the preliminary symptoms and the problems that the user may be experiencing. After the automated medical chatbot has collected enough data from the initial conversation, it now forwards the conversation by asking questions to the user and trying to review diseases by converting the input data into queries and execute it to gather the solution of illness that the user might be suffering from. After the bot has shortlisted the possible diseases that the user may have according to rank to the possible diseases that the user may be suffering from. The Chatbot starts questioning the user about how the user is feeling. Once it gets a desired amount of data it finds the most likely disease that the user may be suffering through according to the input data.

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Photograph:

CSE- Smart Health Care Using Medical ChatBoats-2021-22

Group Members

Abhishek Bansod,

Ameer Meshram,

Nikhil Mishra,

Komal Bagde,

Mohini Lad

Prof. Mirza Moiz Baig,
Guide

Prof. Rohan Kokate
Project Co-ordinator

Prof. Supriya Sawwashere
HOD, CSE

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JDCOEM, Nagpur

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www.pskitservices.com

PSK/2021-22/82

04/04/2022

CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that following student of J D College of Engineering and Management, Nagpur has successfully completed Live Project titled **"SMART HEALTHCARE USING MEDICAL CHATBOTS"** during Academic Session 2021-22. They worked for mentioned Period i.e. from 1st August 2021 to 4th March 2022.

Sr.No.	Name of Student	Branch
1	**Ameer Meshram,**	Computer Science & Engineering
2	**Abhishek Bansod,**	Computer Science & Engineering
3	**Nikhil Mishra,**	Computer Science & Engineering
4	**Komal Bagde,**	Computer Science & Engineering
5	**Mohini Lad**	Computer Science & Engineering

We wish them a very best in all their future endeavors.

Thanking you,

Mr.Prashant S.Khadau
Director, PSK Technologies Pvt.Ltd Nagpur
Email:hr@pskitservices.com
www.pskitservices.com

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

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Date:21/07/2021

Title: "Plant Diseases Detection and Applies Smart Irrigation System"

Abstract

In today's era farmers have been facing many problems related to climate change, more production of crops. some times plants can become weak by some diseases, and farmers can not be aware of their plant's growth. To check on the internet of things, the concept helps us to interconnect physical objects equipped with sensing, actuating, computing power and thus lends them the capability to collaborate on a task in unison remaining connected to the internet termed as the IoT. It is placed on the farm field and detects the disease and gives notification to farmers related to the disease on plant leaves and also suggests how to overcome that problem. Farmer also can know about climate conditions before a weak or 2 or 3 days. Wireless sensor network (WSNs) acquisition device, environment user-interfaces, and low-cost monitoring system for detecting the various disease in agriculture and farming domain use innovative of automatic learning decision support are proposed to manage the disease detection system. In this, future the need to use technology in the agriculture field is easy toknow about the climate condition before one month and the growth or health of the plant.

Summary

THIS quick development of the web of things (IoT) technologies supposed researchers and developers to suppose new types of smart services that extract knowledge from IoT-generateddata. Agriculture is that the backbone of the Indian economy. The EPC international Network might be a network acquainted with sharing product data between commerce partners. It absolutely was created by EPC international. The premise for the info flow inside the network is that the Electronic Product Code (EPC), EPC is additionally encodedterribly} very Frequency Identification (RFID) tag, however, is not designed fully to be used with RFID data carriers. In today's Era the foremost issue inside the agriculture field whether or not or not & climate risk. The management of weather and climate risk in agriculture has become an important issue because of international temperature change. sheep prediction to all or any or any blocks across & districts inside the country by 2020 and helps as many as 9.5 core farmers cope with the vagaries of weather this paper could be a trial to ascertain the numerous cubic centimetre moreover as IoT techniques applied to the agriculture sector to predict soil condition, weather and various factors moving agriculture.

We use the IoT is to sense the gathered data from shut moreover as perform a self-activating perform for the user. IoT in environmental looking helps to know relating to the air and water quality temperature and conditions of the soil and put together monitor the intrusion of animals into the fields.

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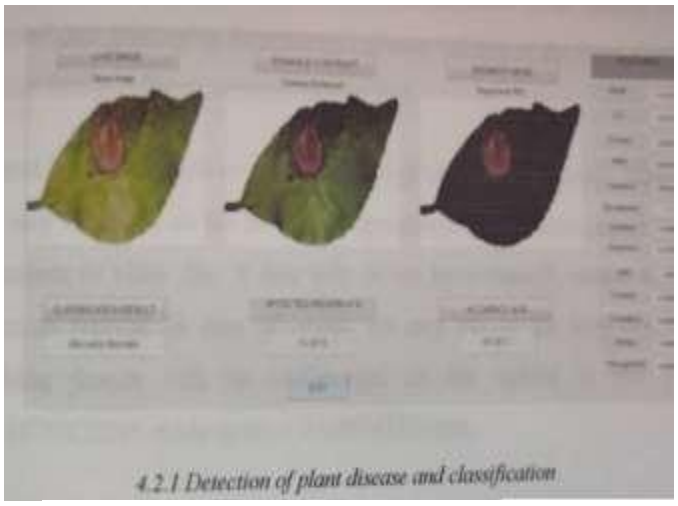
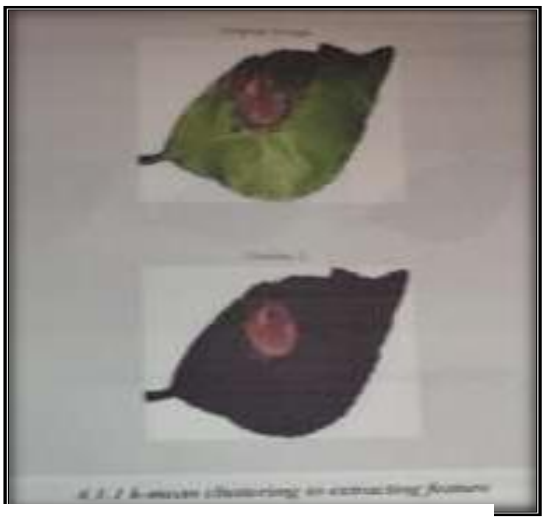
Thesystem uses two footage information one for the work of already keep infected house and completely different for the execution of question image. The project presents disease victimization Associate in Nursing open CV camera system used within the agriculture field. OpenCV (Open offer portable computer Vision) might be a library of programming functions within the main aimed toward amount portable computervision. This project aims to observe diseases on plant and suggest an improved resolution for healthy yield and productivity of the plant.

Photograph:





CSE- Plant Diseases Detection and Applies Smart Irrigation System -2021-22

Group Members

Chitra Bhujade,
Dikshita Tambe,
Harshada Mohinkar,
Pratiksha Tandekar,
Vanashri mohurle

Prof. Mirza MoizBaig,
Guide

Prof. Bhagyashree Madan
Project Co-ordinator

Prof. SupriyaSawwashere
HoD CSE

Principal
J. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HOD
Computer Science & Engineering
JDCOEM, Nagpur

Adwaijra Technologies Private Limited

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Ref No.: ATPL/2022/3832

21/04/2022

CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that following student of J D College of Engineering and Management; Nagpur has successfully completed Live Project titled **"Plant disease detection and applied smart irrigation system"** during Academic Session 2021-22. They worked for mentioned Period i.e. from 1st August 2021 to 30th March 2022.

Sr.No.	Name of Student	Branch
1	Chitra Bhujade	Computer Science & Engineering
2	Dikshita Tambe	Computer Science & Engineering
3	Harshada Mohinkar	Computer Science & Engineering
4	Pratiksha Tandekar	Computer Science & Engineering
5	Vanashri Mohurle	Computer Science & Engineering

We wish them a very best in all their future endeavors.

Thanking you,

For Adwaijra Technologies Private Limited

Director

Mrs. Vaishnavi Tiwari,
Director/ Program Manager,
Adwaijra Technology Pvt. Ltd, India.

Principal
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Khandala, Katol Road
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Live Project Summary: Street Light Controller with Energy Saving System

Topic: Street Light Controller with Energy Saving System

The live project conducted by students at Shakti Electricals Industries, Hinganghat focused on the development of a Street Light Controller with an integrated energy-saving system.

Name of Industry: Shakti Electricals Industries, Hinganghat

Name of Students: Payal Rewatkar, Sarang Gate, Sonam Kamble, Sankesh Deshmukh, and Suraj Bhuyar,

Objective:

The primary objective of the project was to design and implement a smart street light control system that not only efficiently manages the illumination of street lights but also incorporates energy-saving features. The aim was to contribute to sustainable and eco-friendly urban lighting solutions.

Working Model Explanation:

The working model of the street light controller with an energy-saving system involves a combination of advanced technologies and control mechanisms. Key features include:

1. Automated Illumination Control:

- The system is equipped with sensors to detect ambient light conditions. It automatically adjusts the brightness of street lights based on the natural light available, ensuring optimal visibility during the night while conserving energy during well-lit periods.

2. Motion Detection and Dimming:

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- Motion sensors are integrated to detect human or vehicular movement in the vicinity. When no motion is detected, the system dims the street lights to a predefined low intensity, saving energy when full illumination is not required.

3. Remote Monitoring and Control:

- The system incorporates remote monitoring capabilities, allowing authorities to track the operational status of each street light in real-time. This feature aids in proactive maintenance and enhances overall system reliability.

4. Energy Consumption Analytics:

- An analytics module is included to collect and analyze energy consumption data. This information can be utilized for future optimizations and to make informed decisions regarding energy-efficient practices.

This live project not only provided valuable hands-on experience to the students but also contributed to the development of a sustainable and intelligent street lighting system for urban environments.

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Figure 1Street Light Controller with Energy Saving System

PROJECT GUIDE H.O.D PRINCIPAL

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PERMISSION LETTER

To,
The principal
J D College of Engineering and Management,
Nagpur.

Respected Sir,

With Reference to your application received for **Live Project** of Final Year Electrical Engg. students of your college for the permission to undertake Live Project at our organization. We pleased to inform you that, we are permitting these 5 students to start their Live Project from 11th July 2021 till completion of their project work.

Our staff to be available to assist the students to make help them to get familiarize with Industry.

Please contact us if there is anything that we can do more for you

Student list

1. Payal Rewatkar
2. Sarang Gate
3. Sonam Kamble
4. Sankesh Deshmukh
5. Suraj Bhuyar

Thanks & Regards

For Shakti Electrical Industries

Shakti Electricals Industries Hinganghat

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Contact us: - Email id: swapnil@cflrawmaterial.org, web site: -www. cflrawmaterial.org

JAIDEV EDUCATION SOCIETY'S

J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

(An Autonomous Institute, with NAAC "A" Grade)

Affiliated to DBATU, RTMNU & MSBTE Mumbai

Department Of Electrical Engineering

"Igniting minds to illuminate the world"

2021-22

VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

SHAKTI ELECTRICAL INDUSTRIES

Near Mohata Garden, NH-44, Hinganghat, Maharashtra- 442301

Certificate of completion

TO WHOM IT MAY CONCERN

This is to certify Payal Rewatkar, Sarang Gate, Sonam Kamble, Sankesh Deshmukh, and Suraj Bhuyar, students of J D College of Engineering and Management, has successfully completed their project titled "Street light controller by with Energy saving system" at our organization with reference to the partial fulfillment of the requirement of the Bachelor course of Technology in Electrical Engineering for DBATU University.

All necessary details were provided from our side for the execution of this project.

We wish them a very best in all his future endeavors.

Thanking you,

With regards,

For Shakti Electricals Industries, Hinganghat.

Shakti Electricals Industries Hinganghat

Contact us: - Email id: swapnil@cflrawmaterial.org, web site: -www. cflrawmaterial.org

PROJECT GUIDE H.O.D PRINCIPAL

J D COLLEGE OF ENGINEERING & MANAGEMENT NAGPUR

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
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Department Of Electrical Engineering
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VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

Title: IoT-Based Motor Monitoring and Control System at Shakti Electricals Industries

Name of Industry: Shakti Electricals Industries

Project Team:

- Sanjay Jadhao
- Ruchi Shiurkar
- Pallavi Chaubey
- Kajal Meshram
- Srushti Dhone

Objective:

The primary objective of the live project conducted by the students at Shakti Electricals Industries in Hinganghat was to design and implement a lot-based Motor Controlling and Monitoring System. The focus was on leveraging Internet of Things (IoT) technology to monitor and control industrial processes, ensuring the safety, reliability, and efficiency of the motors used.

Key Objectives:

1. Design and develop a Motor Controlling and Monitoring System for industrial applications.
2. Implement early fault detection to reduce motor process interruptions and minimize damages, enhancing overall reliability.
3. Protect motors from overloading, over-current, and high temperatures to ensure their longevity and prevent system failures.
4. Incorporate automatic or manual control methods for start and stop operations of Induction Motors to avoid unexpected issues.
5. Utilize graphical analysis of current and voltage waveforms as a widely adopted method for fault detection in motors.

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Working Model Explanation:

The developed IoT-based Motor Monitoring and Control System consists of sensors and actuators integrated into the industrial processes. These sensors collect real-time data on parameters such as temperature, current, power, and speed of the motors. The data is then transmitted through the Internet of Things for remote monitoring and control.

1. Early Fault Detection:
   - The system employs advanced algorithms to analyze the collected data in real-time.
   - Early fault detection mechanisms are implemented to identify irregularities or abnormalities in motor behavior.
   - Notifications or alerts are sent to operators or supervisors for prompt intervention.
2. Motor Protection:
   - The system incorporates safeguards against overloading, over-current, and high temperatures.
   - Automatic shutdown mechanisms are activated when predefined thresholds are exceeded.
   - Manual control options are available for operators to intervene and take corrective actions.

3. Start and Stop Operation:
   - Automatic control methods are implemented to regulate the start and stop operations of Induction Motors based on predefined parameters.
   - Manual control options provide flexibility for operators to initiate or halt motor operations as needed.

4. Graphical Analysis:
   - The system offers graphical representation of current and voltage waveforms.
   - Graphical analysis aids in the visual detection of irregularities, allowing for quick identification and resolution of motor faults.

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

In summary, the IoT-based Motor Monitoring and Control System developed by the students at Shakti Electricals Industries enhances the efficiency, safety, and reliability of industrial motors. By addressing the specified objectives, the system contributes to reduced downtime, increased motor lifespan, and improved overall industrial process control.

Figure 1IoT-Based Motor Monitoring and Control System

PROJECT GUIDE H.O.D PRINCIPAL

J D COLLEGE OF ENGINEERING & MANAGEMENT * NAGPUR *

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S

J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

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Department Of Electrical Engineering

"Igniting minds to illuminate the world"

2021-22

VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

SHAKTI ELECTRICAL INDUSTRIES

Near Mohata Garden, NH-44, Hinganghat, Maharashtra- 442301

PERMISSION LETTER

To,
The principal
J D College of Engineering and Management,
Nagpur.

Respected Sir,

With Reference to your application received for **Live Project** of Final Year Electrical Engg. students of your college for the permission to undertake Live Project at our organization. We pleased to inform you that, we are permitting these 5 students to start their Live Project from 11th July 2021 till completion of their project work.

Our staff to be available to assist the students to make help them to get familiarize with Industry.

Please contact us if there is anything that we can do more for you

Student list

1. Sanjay Jadhao
2. Ruchi Shiurkar
3. Pallavi Chaubey
4. Kajal Meshram
5. Srushti Dhone

Thanks & Regards

For Shakti Electrical Industries

Shakti Electricals Industries Hinganghat

Principal
J. D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Contact us: - Email id: swapnil@cflrawmaterial.org, web site: -www. cflrawmaterial.org

JAIDEV EDUCATION SOCIETY'S

J D COLLEGE OF ENGINEERING AND MANAGEMENT

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SHAKTI ELECTRICAL INDUSTRIES

Near Mohata Garden, NH-44, Hinganghat, Maharashtra- 442301

Certificate of completion

TO WHOM IT MAY CONCERN

This is to certify that Sanjay Jadhao, Ruchi Shiurkar, Pallavi Chaubey, Kajal Meshram, Srushti Dhone students of J D College of Engineering and Management, has successfully completed their project titled "IoT-based Motor Monitoring and Control System" at our organization with reference to the partial fulfillment of the requirement of the Bachelor course of Technology in Electrical Engineering for DBATU University.

All necessary details were provided from our side for the execution of this project.

We wish them a very best in all his future endeavors.

Thanking you,

With regards,

For Shakti Electricals Industries, Hinganghat.

Shakti Electricals Industries Hinganghat

Contact us: - Email id: swapnil@cflrawmaterial.org, web site: -www. cflrawmaterial.org

PROJECT GUIDE H.O.D PRINCIPAL

J D COLLEGE OF ENGINEERING & MANAGEMENT NAGPUR

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

VISION	MISSION
To be a Department providing high quality & globally competent knowledge of concurrent technologies in the field of Electronics and Telecommunication."	**1. To provide quality teaching learning process through well-developed educational environment and dedicated faculties.** **2. To produce competent technocrats of high standards satisfying the needs of all stakeholders.**

REVAT NETWORK

REVAT NETWORK

3 Sai Nagar, Jaitala Nagpur – 440036, www.revatnetwork .com, revatnetwork@gmail.com , Ph. 77774009378

Date: 04/5/2021

PROJECT COMPLETION CERTIFICATE

This is to Certify that Mr.Kunal Muddamwar, Mr. Someshwar Muddamwar, Ms. Damini Choudhari Mr. Hemant Shende , Mr. Mahesh Runnaware of Electronics & Telecommunication Department of JD College of Engineering and Management, Nagpur had successfully completed Live Project Title "ROBOTIC ARM VEHICLE WITH OBJECT AND FACE RECOGNITION" under the supervision of Project Engineer REVAT NETWORK NAGPUR and Prof. Mohammad Hassan, Assistant Professor JDCOEM, Nagpur for Session 2021-22 .

REVAT NETWORK NAGPUR

NAGPUR REVAT NETWORK

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

TECHNOVISION
Holding The Key of Technology

TECHNOVISION TECHNOLOGIES PVT. LTD.

6/1/B/2, Mhasala-Nagpur Bypass Road, Mhasala, Wardha,
Maharashtra-442001
Email ID: ttplwardha@gmail.com
+91 9850888320, +91 9850888325

Ref. TTPL/20-21/22 Date: 01/02/2021

PROJECT COMPLETION CERTIFICATE

This is to Certify that Mr. Harish Goupale, Ms. Twinkal Baisare, Mr. Pranay Chavan, Ms. Sneha Kumbhare of Electronics & Telecommunication Department of JD College of Engineering and Management, Nagpur had successfully completed Live Project Title **"Inspection System for Assembled PCB using Machine vision"** under the supervision of Project Engineer of TECHNOVISION TECHNOLOGIES Pvt. Ltd., Nagpur and Prof. Gayatri Padole, Assistant Professor JDCOEM, Nagpur for Session 2020-21. .

Mr.Swapnil Katole
Director,
Technovision Technologies Private Limited,
Wardha

2021-22 ETC LIVE PROJECT CERTIICATE

HOD, Dept. of EN/ETC
JD College of Engineering
& Management, Nagpur

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S
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Affiliated to DBATU, RTMNU & MSBTE Mumbai
Progress Beyond Excellence
2021-22 (Odd Sem)

Education to Eternity

VISION	MISSION
1.To be recognised for excellent innovative engineering, developing global leaders both in educational and research the domain of computer science and wireless engineering.	1. Create self learning environment by facilitating leadership quality, team-spirit and ethical responsibility. 2. Promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

Ref. No. **JDCOEM/101/IT/ LIVE PROJECT/2021-22/14** **Date: 01/05/2021**

To,
MaSyCoDa Solutions, Nagpur
The Director
Nagpur

SUBJECT: Permission to undertake Live Project.

Respected Sir/ Mam,

It is my proud privilege to interact with you as Principal of J D College of Engineering and Management Nagpur. Our institute is presently offering Engineering courses in Information Technology, Mechanical, Civil, Electrical, Electronics and Computer Science.

Few Student of IT Department are Keen interested to Undergo Live Project as a part of curriculum of DBATU. Which Will Provide them Industrial Knowledge and fulfillment of Final year Project in Engineering Course.

I request you to kindly permit the students to undertake the Live Project in your esteemed organization and provide them necessary information age guidance. The Live project will greatly enhance their understanding of the subjects and give them the desired Industrial exposure.

The name of the student is enclosed herewith.

Thanking you.

Group No	Roll No	Name of student
01	7	Anjali Jaiswal
	29	Ashwin Chimankar
	14	Minakshi Gahalyan
	12	Rutuja Thakre
	55	Rajat Khawaskar
	18	Shron Jadhao
02	15	Bhushan Meshram
	19	Harsh Shambhuwani
	25	Mahima Tiwari
	40	Pranjali Gore
	52	Ritik Dhabekar

J D COLLEGE OF ENGINEERING & MANAGEMENT * NAGPUR *

Principal

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

मॅसीकोडा सोल्युशन्स

MaSyCoDa Solutions

Ref. No. MSPL/2122/01 **Date: 10/05/2021**

To,
HOD, Information Technology
JD College of Engineering and Management
Nagpur

SUBJECT: Acceptance to undertake Live Project.

Respected Sir,

We are delighted to inform you that at our place we intend to take the project as a external supervisor for 02 group and involve itself in the students' academic advancement.

Group No	Roll No	Name of student
01	7	Anjali Jaiswal
	29	Ashwin Chimankar
	14	Minakshi Gahalyan
	12	Rutuja Thakre
	55	Rajat Khawaskar
	18	Shron Jadhao
02	15	Bhushan Meshram
	19	Harsh Shambhuwani
	25	Mahima Tiwari
	40	Pranjali Gore
	52	Ritik Dhabekar

Principal
J. D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Signature &
Company Seal

MaSyCoDa Solutions Pvt. Ltd.

Education to Eternity

JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
(An Autonomous Institute with NAAC "A" Grade)
Affiliated to DBATU, RTMNU

VISION

"To be a center of excellence imparting professional education satisfying societal and global needs.

MISSION

1.Transforming students into lifelong learners through quality teaching, training and exposure to concurrent technologies.
2.Fostering conductive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

Ref. No. **JDCOEM/1202/ LIVE PROJECT/2021-22/326** **Date: 22/09/2021**

To,
The Manager,
Budhwanti Foundation,
Hingna MIDC, Nagpur-(MS)

SUBJECT: Permission to undertake Live Project.

Respected Sir/ Mam,

It is my proud privilege to interact with you as Principal of J D College of Engineering & Management, Nagpur. Our institute is presently offering Degree in Engineering in Mechanical, Civil, Electrical, Electronics and Telecommunication, Computer Science and Information Technology.

Few students of Mechanical Engineering Department are keenly interested to undergo live project as a part of their curriculum syllabus. Which will provide them industrial knowledge and fulfillment of Degree in Engineering Course.

I request you to kindly permit the students to undertake the Live Project in your esteemed organization and provide them necessary information and guidance. The Live project will greatly enhance their understanding of the subjects and give them the desired Industrial exposure.

The name of the student is enclosed herewith.

Thank you.

Name of student

1. Mr. Suryadev K. Yadav (Mechanical Final Year)
2. Mr. Kshitij D. Nikahre (Mechanical Final Year)
3. Mr. Akshay Munnawar (Mechanical Final Year)
4. Mr. Manish P. Bagde (Mechanical Final Year)
5. Mr. Rohit Z. Gaidhane (Mechanical Final Year)
6. Mr. GAutam C. Damahe (Mechanical Final Year)

Regards,

Principal, JDCOEM
Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

J D COLLEGE OF ENGINEERING & MANAGEMENT * NAGPUR *

Budhwanti Education

Budhwanti
Education and Research Foundation
empowerment through education
(Regn. # 18525)
Regd. Address: 1509, DLF Phase-IV,Gurugram (Haryana)
Mailing Address: 17, Sector-14, Gurugram, Haryana 122001
☎ 0124-2333293 Fax: 0124-4081679

PERMISSIONLETTER

To,
The Principal,
J D College of Engineering & Management,
Nagpur.

Respected Sir,

With Reference to your application Ref. No. **JDCOEM/1202/ LIVE PROJECT/2021-22/32** for Live Project of Final Year Mechanical Eng.students of your college for the permission to undertake Live Project at our organization. We are pleased to inform you that, we are permitting these 06 students to start their Live Project from 30thSeptember 2021 till completion of their project work.

Our staff to be available to assist the students to make help them to get familiarize with Industry.

Please contact us if there is anything that we can do more for you

Name of student

1. Mr. Suryadev K. Yadav (Mechanical Final Year)
2. Mr. Kshitij D. Nikahre (Mechanical Final Year)
3. Mr. Akshay Munnawar (Mechanical Final Year)
4. Mr. Manish P. Bagde (Mechanical Final Year)
5. Mr. Rohit Z. Gaidhane (Mechanical Final Year)
6. Mr. GAutam C. Damahe (Mechanical Final Year)

Guide Name – Prof.SuhasA.Rewatkar

Thanks & Regards,

Gopal Raut

Budhwanti Foundation

(Hingna M.I.D.C Nagpur)

Budhwanti Education & Research Foundation

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Budhwanti
Education and Research Foundation
empowerment through education
(Regn. # 18525)
Regd. Address: 1509, DLF Phase-IV,Gurugram (Haryana)
Mailing Address: 17, Sector-14, Gurugram, Haryana 122001
☎ 0124-2333293 Fax: 0124-4081679

TO WHOM IT MAY CONCERN

TO WHOM IT MAY CONCERN

This is to certify that the students mentioned below have successfully completed their project titled "Investigation of Nano coolant on CNC Turing operation" at our Organization with reference to the partial fulfillment of the requirement of the bachelor course in Mechanical Engineering.

Name of student

1. Mr. Suryadev K. Yadav (Mechanical Final Year)
2. Mr. Kshitij D. Nikahre (Mechanical Final Year)
3. Mr. Akshay Munnawar (Mechanical Final Year)
4. Mr. Manish P. Bagde (Mechanical Final Year)
5. Mr. Rohit Z. Gaidhane (Mechanical Final Year)
6. Mr. GAutam C. Damahe (Mechanical Final Year)

Guide Name – Prof.SuhasA.Rewatkar

All necessary details were provided from our side for the execution of this project.
We wish them a very best in all his future endeavors.
Thanking you,

With regards,

Budhwanti Education & Research Foundation

Gopal Raut (Manager)
Budhwanti Foundation,
Hingna MIDC, Nagpur-(MS)

Principal
D. College of Engineering & Management
Khandala, Katol Road,
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
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Education to Eternity

VISION	MISSION
To be a center of excellence imparting professional education satisfying societal and global needs.	1. Transforming students into lifelong learners through, quality teaching, training and exposure to concurrent technologies. 2. Fostering conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

Ref. No. Jdm/1104/ Live Proj/2021-22 Date: 31/ 07/2021

To,
The General Manager,
Dhawale Automobiles
Near Radha Krishna Theatre,
Murtizapur road, Akola

SUBJECT: Permission to undertake Live Project.

Respected Sir/ Mam,

It is my proud privilege to interact with you as Principal of J D college of Engineering and Management, Nagpur. Our institute is presently offering Degree in Management in Mechanical, Finance, Marketing, Human resources and Operations. A Student of Marketing Management in Department are Keen interested to Undergo Live Project as a part of curriculum of RTMNU syllabus. Which Will Provide Industrial Knowledge and fulfillment of Degree in Management Courses.

I request you to kindly permit the students to undertake the Live Project in your esteemed organization and provide them necessary information age guidance. The Live project will greatly enhance their understanding of the subjects and give them the desired Industrial exposure.

Thanking you,

The name of the student is enclosed herewith.

Sr.no	Name of the student	IInd year / Semester	Roll. No
1.	Mr.Rohan Koshti	2nd Year IIIrd Sem	22

Principal
J. D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Mahindra

SWARAJ

Deming Prize
2012
Mahindra & Mahindra Ltd
Farm Equipment Sector
Swaraj Division

Aug 2nd 2021

To,

The Principal,

J D College Of Engineering And Management,

Nagpur.

Respected Sir,

With Reference to your application Dated for **Live Project** of Final Year Management Studies students of your college for the permission to undertake Live Project at our organization. We pleased to inform you that, we are permitting student to start their Live Project from 5th Aug 2021 till completion of their project work.

Our staff to be available to assist the students to make help them to get familiarize with Industry.

Please contact us if there is anything that we can do more for you.

Sr.no	Name of the student	IInd year / Semester	Roll. No
2.	Mr.Rohan Koshti	IInd year III semester	22

Thanks & Regards,

DHAWALE AUTOZONE
AKOLA

(S. R. Gwgase)

Principal
J. D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Mahindra

SWARAJ

Deming Prize
2012
Mahindra & Mahindra Ltd
Farm Equipment Sector
Swaraj Division

08/10/2021

Certificate of completion

TO WHOM IT MAY CONCERN

This is to certify that **Mr. Rohan Nitin Koshti** , a student of J d College of Engineering and Management , has successfully completed his project titled **"A Study of Customer Satisfaction with Respect to Swaraj Tractors in Akola District "** at our Organization with references t o the partial fulfillment of the requirement of the Master course in Management Studies Marketing Management for RTM Nagpur University. All necessary details were provided from our side for the execution of this project.

We wish him a very best in all his future endeavors

Thanking you,

With regards,

DHAWALE AUTOZONE
AKOLA

(S. R. Gwgase)

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
An Autonomous Institute, with NAAC "A" Grade
Department of Management Studies
SESSION 2021-2022

VISION	MISSION
To evolve as a center that provides excellent learning and research environment for nurturing future management professionals.	1. To develop in the students strong domain knowledge and a passion for lifelong learning. 2. To develop managerial and leadership skills in the students along with a strong sense of ethics, social responsibilities and Professional values.

Ref. No. Jdm/1166/ Live Proj/2021-22 Date: 06/ 08/2021

To,

The General Manager,
Ketan Hyundai
Amravati Road , Kachimet
Nagpur

SUBJECT: Permission to undertake Live Project.

Respected Sir/ Mam,

It is my proud privilege to interact with you as Principal of J D college of Engineering and Management, Nagpur. Our institute is presently offering Degree in Management in Mechanical, Finance, Marketing, Human resources and Operations. A Student of Marketing Management in Department are Keen interested to Undergo Live Project as a part of curriculum of RTMNU syllabus. Which Will Provide Industrial Knowledge and fulfillment of Degree in Management Courses.

I request you to kindly permit the students to undertake the Live Project in your esteemed organization and provide them necessary information age guidance. The Live project will greatly enhance their understanding of the subjects and give them the desired Industrial exposure.

Thanking you,

The name of the student is enclosed herewith.

Sr.no	Name of the student	IInd year / Semester	Roll. No
1.	Sneha Lute	2nd Year IIIrd Sem	30

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HYUNDAI | NEW THINKING. NEW POSSIBILITIES.

AUTHORIZE DEALER

KETAN HYUNDAI

To,

The Principal,

J D College Of Engineering And Management,

Nagpur.

Respected Sir,

With Reference to your application for **Live Project** of Final Year Management Studies students of your college for the permission to undertake Live Project at our organization. We pleased to inform you that, we are permitting students to start their Live Project from 18th Aug 2021 till completion of their project work.

Our staff to be available to assist the students to make help them to get familiarize with Industry.

Please contact us if there is anything that we can do more for you.

Sr.no	Name of the student	IInd year / Semester	Roll. No
1	Ms. Sneha Prakash Lute	IInd year III semester	30

Thanks & Regards,

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HYUNDAI

HYUNDAI | NEW THINKING. NEW POSSIBILITIES.

AUTHORIZE DEALER

KETAN HYUNDAI

30/10/2021

Certificate of Completion

TO WHOM IT MAY CONCERN

This is to certify that **Ms Sneha Lute,** a student of J d College of Engineering and Management, has successfully completed his project titled **"Consumer Perception Toward Hyundai Cars"** at our organization with references to the partial fulfillment of the requirement of the Master course in Management Studies Marketing Management for RTM Nagpur University.

All necessary details were provided from our side for the execution of this project.

We wish him a very best in all his future endeavors

Thanking you,
With regards,

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HYUNDAI

JAIDEV EDUCATION SOCIETY'S
JD COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
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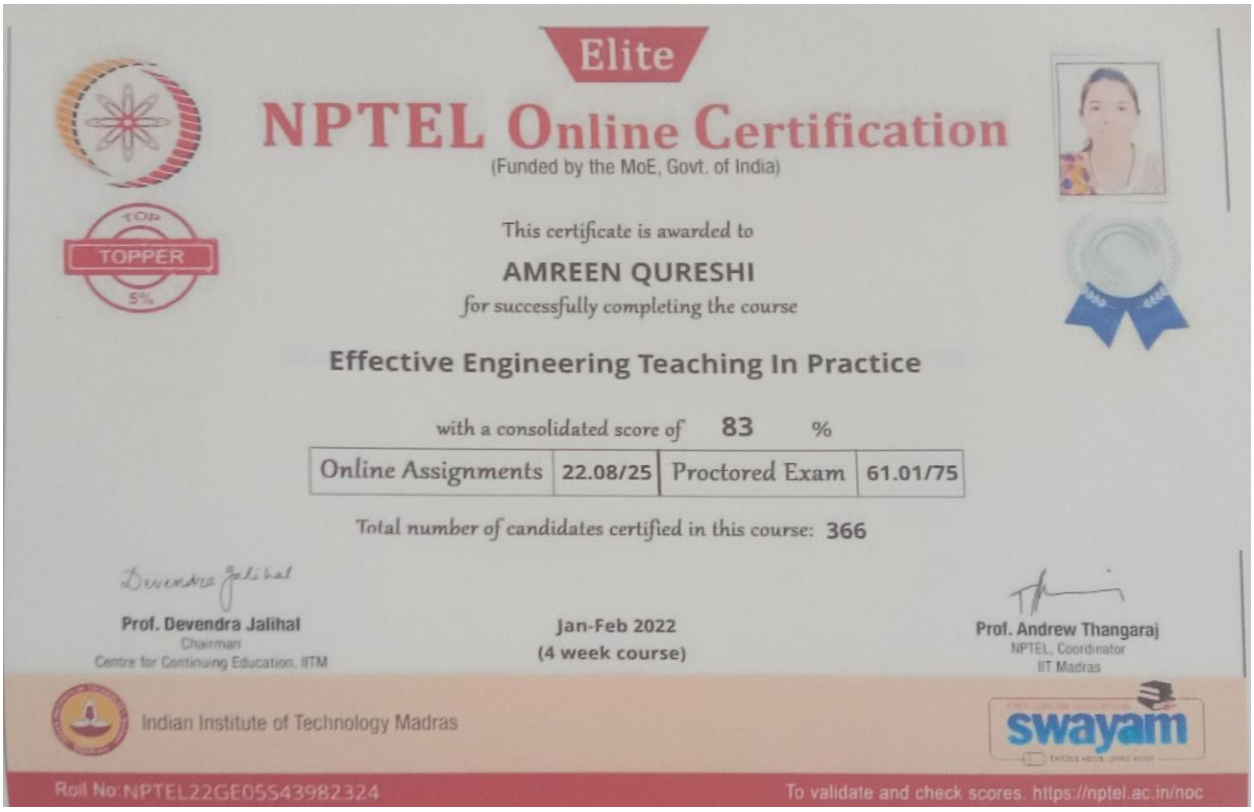
Affiliated to DBATU & RTMNU
Department of Civil Engineering
"Building Better Development"
Session 2021-22

VISION	MISSION
To be a well-known center for shaping professional leaders of Global Standards in Civil Engineering	• Provide quality education and excellent learning Environment for overall development of students. • Making Sustainable efforts for integrating academics with Industry.



CE- 2021-21

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HOD, (CE)

JAIDEV EDUCATION SOCIETY'S
JD COLLEGE OF ENGINEERING AND MANAGEMENT
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Affiliated to DBATU & RTMNU
Department of Civil Engineering
"Building Better Development"
Session 2021-22

VISION	MISSION
To be a well-known center for shaping professional leaders of Global Standards in Civil Engineering	• Provide quality education and excellent learning Environment for overall development of students. • Making Sustainable efforts for integrating academics with Industry.

CE- 2021-22

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HOD, (CE)

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J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in **E-mail:** info@jdcoem.ac.in

(An Autonomous Institute, with NAAC "A" Grade)

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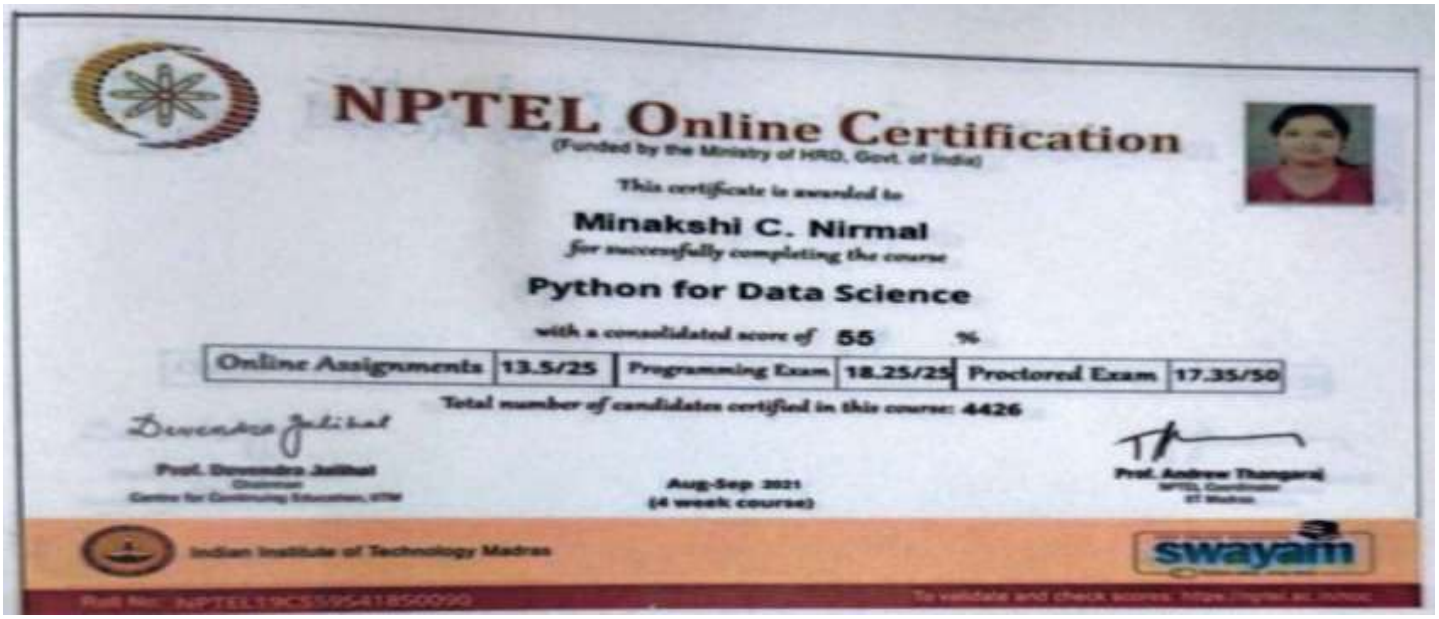
Department of Computer Science & Engineering

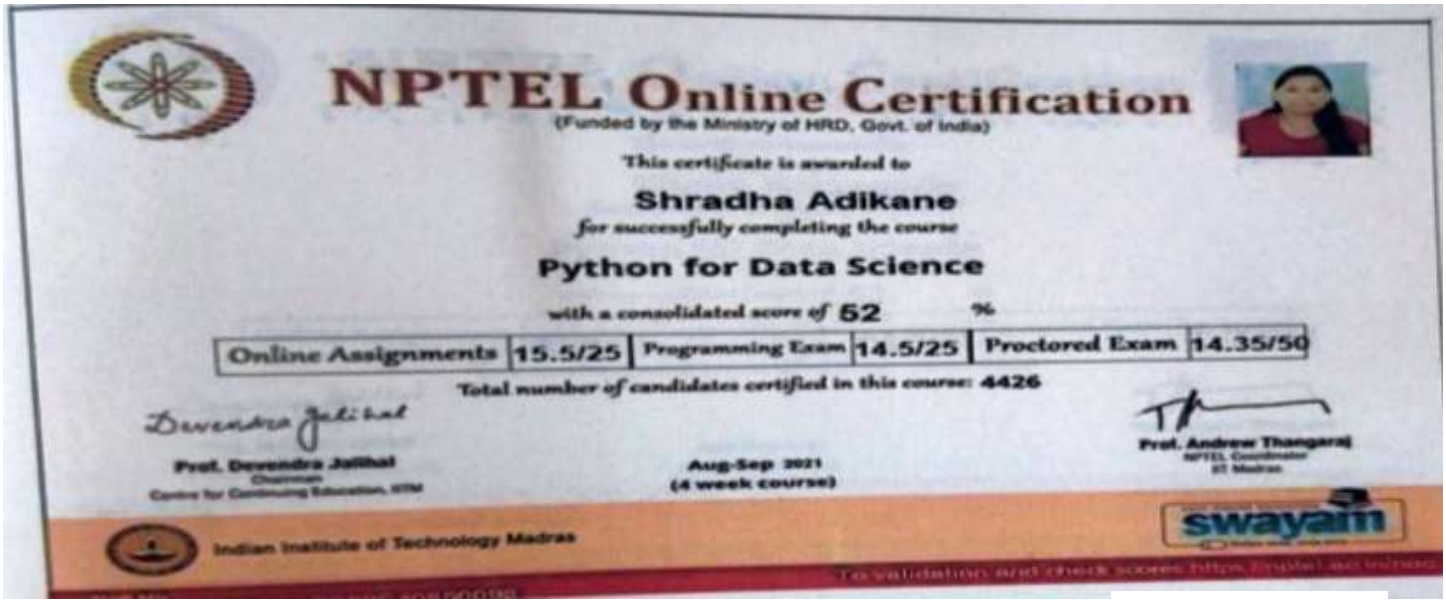
"A Place to Learn, A Chance to Grow"

Session: 2021-22

VISION	MISSION
To be recognized for excellent engineering, developing global leaders both in educational and research in the domain of computer science and wireless engineering.	1. To create self-learning environment by facilitating leadership qualities, team spirit and ethical responsibilities. 2. To improve department-industry collaboration, interaction with professional society through technical knowledge and internship program. 3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

CSE Student NPTEL Certificate 2021-22





Prof. Supriya Sawwashere
HOD. CSE
HOD
Computer Science & Engineering
JDCOEM, Nagpur

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Education to Eternity

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Department Of Electrical Engineering

"Igniting minds to illuminate the world"

2021-22

VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

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Department Of Electrical Engineering

"Igniting minds to illuminate the world"

2021-22

VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

NPTEL Certificate 2021-22

HOD EE

Principal

Principal
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J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

An Autonomous Institute, with NAAC "A" Grade

Affiliated to DBATU & RTMNU

Department of Electronics and Telecommunication Engineering

"Rectifying Ideas, Amplifying Knowledge"

2021-22

VISION	MISSION
To be a Department providing high quality & globally competent knowledge of concurrent technologies in the field of Electronics and Telecommunication."	1. To provide quality teaching learning process through well-developed educational environment and dedicated faculties. 2. To produce competent technocrats of high standards satisfying the needs of all stakeholders.

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Roll No: NPTEL22DE08S23932552

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AT HIRAPUR ROAD GOREGAON DIST-GONDIA
MAHARASHTRA - 441801
PH. NO :919527907960

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

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(Funded by the MoE, Govt. of India)

This certificate is awarded to

ABHIJEET MUKESH AMBADE

for successfully completing the course

Understanding Incubation and Entrepreneurship

with a consolidated score of **54** %

Online Assignments	21.1/25	Proctored Exam	32.99/75

Total number of candidates certified in this course: **341**

Jan-Apr 2022
(12 week course)

Prof. Sridhar Iyer
Head CDEEP & NPTEL Coordinator
IIT Bombay

Indian Institute of Technology Bombay

swayam

Roll No:NPTEL22DE08S23932552 To validate and check scores: https://nptel.ac.in/noc

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This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CS12S43982210

To
AKANSHA RAJU POTBHARE
NIMBAJI AKHADA ROAD , KAMPTEE
MAHARASHTRA - 441001
PH. NO :9689320827

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:1
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

AKANSHA RAJU POTBHARE

for successfully completing the course

Software Testing

with a consolidated score of **53** %

Online Assignments	23.33/25	Proctored Exam	30/75

Total number of candidates certified in this course: **898**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Feb 2022
(4 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

Roll No:NPTEL22CS12S43982210

To validate and check scores: https://nptel.ac.in/noc

2021-22 NPTEL Certificate

HOD, Dept. of EN/ETC
JD College of Engineering
& Management, Nagpur

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S

J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere

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An Autonomous Institute, with NAAC "A" Grade

Affiliated to DBATU, RTMNU & MSBTE Mumbai

Department of Information Technology

"Progress Beyond Excellence"

Session: 2021-22

VISION	MISSION
" To Produce Competent Professionals equipped with technical knowledge and commitment for satisfying the needs of society "	**1. To impart advanced knowledge with an inclination towards Research with well-equipped Labs.** **2. To develop an ability to work ethically and Responsive towards the need of society.**

Figure 1NPTEL_IT_2021-22

Principal
J. D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HOD IT

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22ME55S33930863

To
VAIBHAV FULCHAND DHUWARE
SAKOLI
MAHARASHTRA - 441802
PH. NO :7249245847

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

VAIBHAV FULCHAND DHUWARE

for successfully completing the course

Operations Management

with a consolidated score of **72** %

Online Assignments	19.38/25	Proctored Exam	52.5/75

Total number of candidates certified in this course: **703**

Prof. Sanjeev Manhas
Coordinator, Continuing Education Centre
IIT Roorkee

Jan-Apr 2022
(12 week course)

Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee

Indian Institute of Technology Roorkee

FREE ONLINE EDUCATION swayam शिक्षित भारत, उन्नत भारत

Roll No: NPTEL22ME55S33930863

To validate and check scores: https://nptel.ac.in/noc

STUDENT NPTEL CERTIFICATE 2021-22

Principal
D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22ME10S13930445

To
VAIBHAV FULCHAND DHUWARE
SAKOLI
MAHARASHTRA - 441802
PH. NO :7249245847

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

VAIBHAV FULCHAND DHUWARE

for successfully completing the course

Computer Integrated Manufacturing

with a consolidated score of **60** %

Online Assignments	16.56/25	Proctored Exam	43.5/75

Total number of candidates certified in this course: **865**

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Apr 2022
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

Roll No:NPTEL22ME10S13930445

To validate and check scores: https://nptel.ac.in/noc

STUDENT NPTEL CERTIFICATE 2021-22

Principal
...D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22DE02S13931744

To
YASHWANT SUDHAKAR HAJARE
PADMAVATI NAGAR,GODHANI,NAGPUR.
PADMAVATI NAGAR ,GODHANI,NAGPUR.
NAGPUR
MAHARASHTRA - 441111
PH. NO :8956450070

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

YASHWANT SUDHAKAR HAJARE

for successfully completing the course

Fundamentals of Automotive Systems

with a consolidated score of **49** %

Online Assignments	18.94/25	Proctored Exam	30/75

Total number of candidates certified in this course: **713**

Devendra Jalihal
Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Jan-Apr 2022
(12 week course)

Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

FREE ONLINE EDUCATION swayam शिक्षित भारत, उन्नत भारत

Roll No:NPTEL22DE02S13931744

To validate and check scores: https://nptel.ac.in/noc

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Principal
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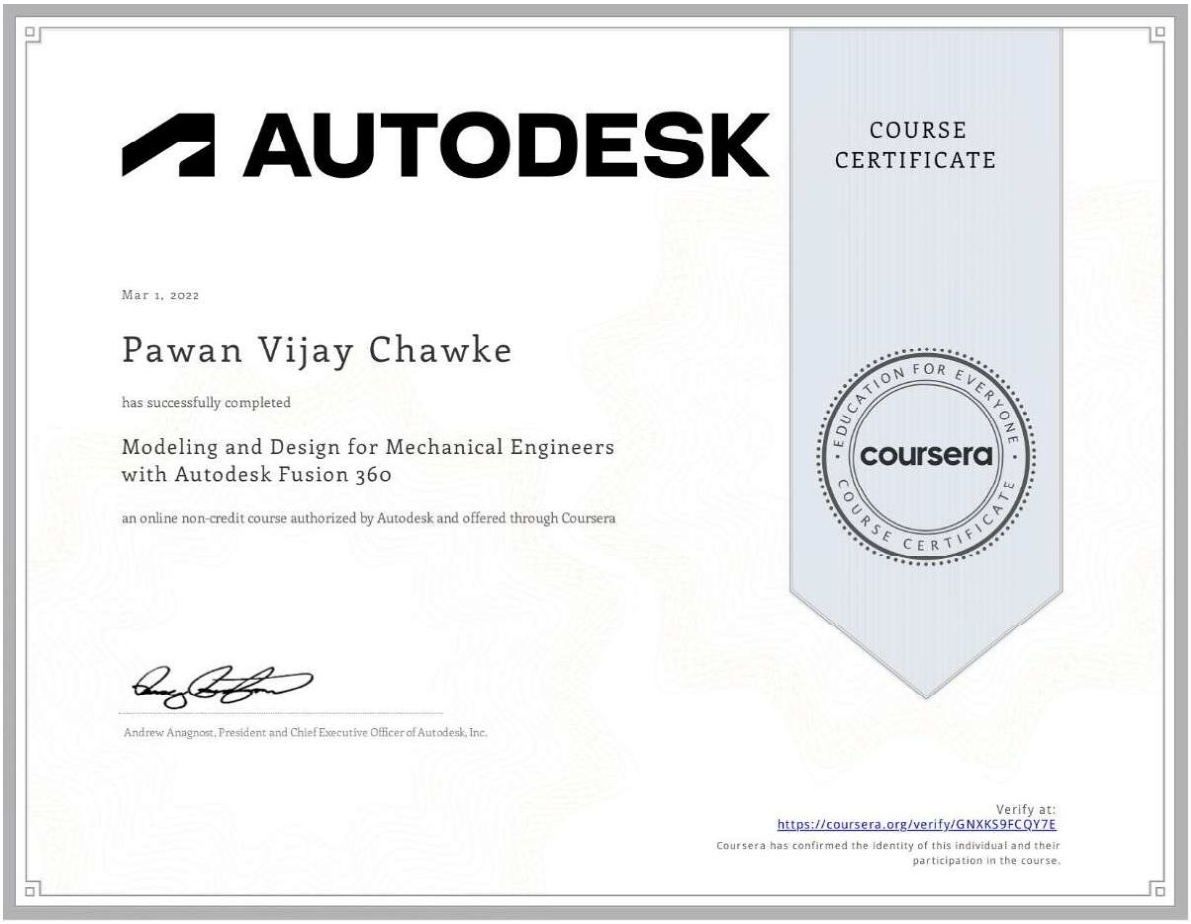
Khandala, Katol Road
Nagpur-441501



STUDENT COURSERA CERTIFICATE 2021-22

Principal
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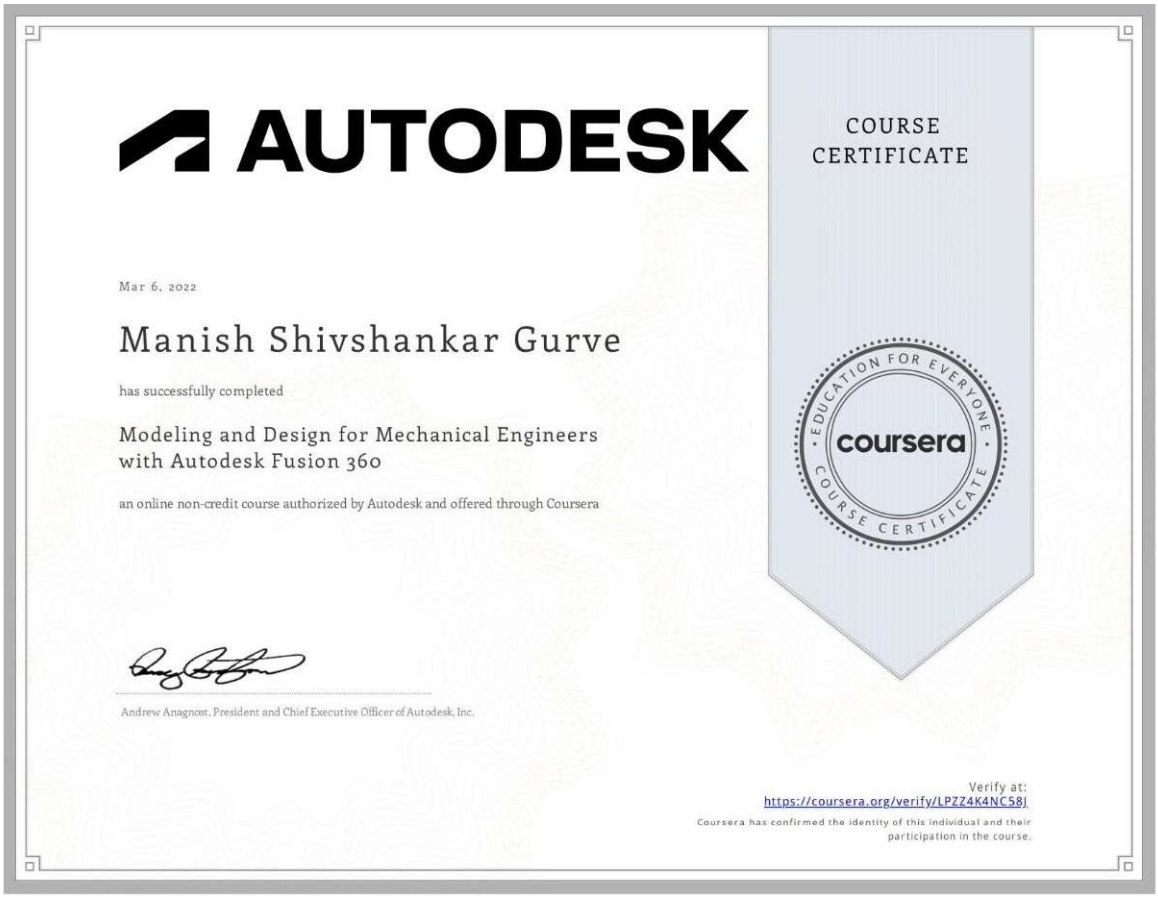
Khandala, Katol Road
Nagpur-441501



STUDENT COURSERA CERTIFICATE 2021-22

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Khandala, Katol Road
Nagpur-441501

Bhushan R.Mahajan
Head of Department,
DOME
JDCOEM, Nagpur

Head of Department
Mechanical Engineering
J D College of Engineering & Management
Nagpur

JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
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Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
(An Autonomous Institute, with NAAC "A" Grade)
Affiliated to DBATU, RTMNU
Department of Artificial Intelligence
"A Place to Learn, A Chance to Grow"
Session: 2021-22

VISION	MISSION
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AI Student NPTEL Certificate 2021-22


Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)
This certificate is awarded to
KULDEEP RAVINDRA BORKAR
for successfully completing the course
Programming, Data Structures and Algorithms using Python
with a consolidated score of 71 %
Online Assignments 25/25 | Programming Exam 25/25 | Proctored Exam 21.25/50
Total number of candidates certified in this course: 1600
Prof. Devendra Jalihal, Chairman, Centre for Continuing Education, IITM
Jan-Mar 2022 (8 week course)
Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras
Indian Institute of Technology Madras
swayam
Roll No: NPTEL22CS26S33980148
To validate and check scores: https://nptel.ac.in/noc


Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)
This certificate is awarded to
DAMINI SUNIL MISHRA
for successfully completing the course
Programming, Data Structures and Algorithms using Python
with a consolidated score of 75 %
Online Assignments 25/25 | Programming Exam 25/25 | Proctored Exam 24.75/50
Total number of candidates certified in this course: 1600
Prof. Devendra Jalihal, Chairman, Centre for Continuing Education, IITM
Jan-Mar 2022 (8 week course)
Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras
Indian Institute of Technology Madras
swayam
Roll No: NPTEL22CS26S43982492
To validate and check scores: https://nptel.ac.in/noc

Prof. Supriya Sawwashere
HOD AI

HOD
Artificial Intelligence
JDCOEM, Nagpur

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

VISION	MISSION
To be a center of excellence imparting professional education satisfying societal and global needs.	1. Transforming students into lifelong learners through, quality teaching, training and exposure to concurrent technologies. 2. Fostering conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

NPTEL CERTIFICATES

MBA: 2021-22

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Roll No: NPTEL21MG97S24121631

To
GANESH NARAYANRAO HIWARKAR
NEAR IT PARK ROAD NAGPUR
BANDU SONI LAYOUT HOUSE NO.74 NAGPUR
NAGPUR
MAHARASHTRA - 440022
PH. NO :9049838530

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

GANESH NARAYANRAO HIWARKAR

for successfully completing the course

Introduction to Marketing Essentials

with a consolidated score of **51** %

Online Assignments	17.92/25	Proctored Exam	33/75

Total number of candidates certified in this course: **559**

Prof. V. C. Srivastava
Coordinator, Continuing Education Centre
IIT Roorkee

Jul-Sep 2021
(8 week course)

Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee

Indian Institute of Technology Roorkee

Roll No:NPTEL21MG97S24121631 To validate and check scores: https://nptel.ac.in/noc

1. MBA: 2021-22

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Nagpur-441501

VISION	MISSION
To be a center of excellence imparting professional education satisfying societal and global needs.	1. Transforming students into lifelong learners through, quality teaching, training and exposure to concurrent technologies. 2. Fostering conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

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Roll No: NPTEL21EE85S23981328

To
GAURAV ZADE
147NEWSHUKRAWARI GANDHIGATE MAHAL NAGPUR
MAHARASHTRA - 440032
PH. NO :9307740961

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

GAURAV ZADE

for successfully completing the course

Design for Internet of Things

with a consolidated score of **58** %

Online Assignments	19.25/25	Proctored Exam	38.69/75

Total number of candidates certified in this course: **347**

Prof. G. L. Sivakumar Babu
Chairman, Center for Continuing Education
IISc Bangalore

Jul-Sep 2021
(8 week course)

Prof. L. Umanand
NPTEL Coordinator
IISc Bangalore

Indian Institute of Science Bangalore

swayam

Roll No:NPTEL21EE85S23981328 To validate and check scores: https://nptel.ac.in/noc

2. MBA: 2021-22

Principal
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Nagpur-441501

HOD- MBA

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue VI June 2022- Available at www.ijraset.com

Low-Cost Housing Using MonolithicDome and Cylindrical Structure

Ashwini Doke[1], Chaitanya Sahare[2], Ritik Tupe[3], Apekshit Chauhan[4], Divya Kannuri[5], Prajwal Kapse[6], Prof. Tejaswini S. Junghare[7]
[1, 2, 3, 4, 5, 6]*4th Year B.Tech, Department of Civil Engineering, J D College of Engineering and Management, Nagpur*
[7]*Assistant Professor, Department of Civil Engineering, J D College of Engineering and Management, Nagpur*

Abstract: ***Dome is an element similar to the hollow half of a sphere. It can also be defined as a thin shell generated by the revolution of a regular curve about one of its axes. The type of the curve and the direction of the axis of revolution determines the shape of the dome. Monolithic dome structures are cast in a one-piece form. The paper aims to do a comprehensive study of Monolithic Domes and the various advantages and key aspects of these structures and to determine whether they are more energy efficient, eco-friendly, cost effective and durable housing options compared to conventional structural systems.***
Keywords: Low Cost Housing, Monolithic Domes, Cylindrical Structures, Structural analysis, paper review

I. INTRODUCTION

Dome structures belong to the category of self-supporting structures that take the form of an arch. Loads are distributed around the sides and down towards the foundations. Domes are compacted by gravity and the external loads are carried by the compressive forces that develop internally. Dome structures have been in existence since ancient times as round huts and ancient tombs in the shape of solid mounds that have been found in the Middle East, Mediterranean region and India. In Modern times, domes come in various forms or types of latticed domes such as the Schwedler domes, geodesic domes and monolithic domes. Among the various types, the geodesic and monolithic domes are used widely today in various structures.

A Monolithic Dome is an element similar to the hollow half of a sphere built in one block. Not only Monolithic Structures are more energy efficient, eco-friendly, cost effective and durable housing options compared to conventional structural systems, a well-designed monolithic structure consisting of shear walls may decrease the overall project cost. They are also pretty disaster resistant, their strength and stability making them virtually immune to climatic catastrophe, or earthquakes, as well as to fire, or corrosion hazards.

A. Advantages Of Monolithic Dome Structure

1) Cost efficient
2) Low maintenance.
3) Provides good air circulation
4) Fire Resistant
5) Resistance against most adverse weather conditions

B. Disadvantages Of Monolithic Dome Structure

1) Narrow corners can lead to waste of space
2) Lack of seams

II. NEED OF STUDY

Urban life spaces are the needs of modern time and Monolithic Dome Structure can fulfill this need. There is a huge need for lowcost housing in India as a large percentage of the population is still lingering under poverty. Monolithic Dome Structures are cost effective, energy efficient and can easily be constructed in various weather conditions. With proper study and research, we can efficiently incorporate dome structures in today's construction world, be it residential buildings or more commercial buildings.

Research Paper (CE) - 2021-22

Principal
J. College of Engineering & Management
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Nagpur-441501

HOD, (CE)

International Journal for Modern Trends in Science and Technology, 8(07): 63-69, 2022

ISSN: 2455-3778 online
DOI: https://doi.org/10.46501/IJMTST0807010
Available online at: http://www.ijmtst.com/vol8issue07.html

A Review on "Replacement of cement by using lime and fly ash in mortar"

Aniket V. Marbate[1], Dipak Kurzekar[1], Nikita Barapatre[1], Pranjali Gote[1], Punyacharan Pradhan[1], Payal Ramteke[1], Shekhar Shivankar[1], Sharukh Kureshi[2]

[1]Civil Engineering Department, J D College of Engineering & Management, Nagpur.
[2]Assistant Professor, Guide, Civil Engineering Department, J D College of Engineering & Management, Nagpur.
Email Id: pranjaligote18jdcoem@gmail.com

To Cite this Article
Aniket V. Marbate, Dipak Kurzekar, Nikita Barapatre, Pranjali Gote, Punyacharan Pradhan, Payal Ramteke, Shekhar Shivankar and Sharukh Kureshi. A Review on "Replacement of cement by using lime and fly ash in mortar". International Journal for Modern Trends in Science and Technology 2022, 8(07), pp. 63-69. https://doi.org/10.46501/IJMTST0807010

Article Info
Received: 30 May 2022; Accepted: 28 June 2022; Published: 01 July 2022.

ABSTRACT

The replacement of cement by fly ash reduces the water demand for a given slump. When fly ash is used at about 20 percent of the total cementitious, water demand is reduced by approximately 10 percent.Lime can be used as a cement replacement in concrete. There are, as there have always been, two critical issues with this type of cement replacement: the change in physical properties with respect to compressive strength and the cost analysis of the alternatives.Cement is a binding material, a substance that sets and hardens independently, and can bind other materials together. In ancient civilization the binding materials were of traditional type such as jaggery, lead, jute, rice husk etc, now in modern civilization cement is main binding materials. The use of concrete containing high volume fly-ash has recently gained popularity as a resource efficient, durable and sustainable option for variety of concrete application. The use of fly ash in concrete at proportions ranging from 30 percent to 65 percent of total cementitious binders has been studied extensively over the last twenty years.Due to some of its drawbacks we have replaced the cement by HIGH VOLUME FLY-ASH AND LIMESTONE. These two materials reduce green house gas emission proportionately and result in a more "green concrete", through reduction of energy consumptions (energy required to produce cement) and prevent the depletion of natural resources. Our aim was to achieve the target strength of M40 grade, replacing cement by high volume fly ash and lime as per the normal mix design (using 53 grade of cement). We have achieved M40 target strength by replacing cement about 75 percent of its mass by fly-ash and lime.In this context cost analysis of mix design and the properties of the design are also studied. As compared to original mix design of M40 grade concrete i.e. cent percent cement, we have reduced the cost up to 40 percent by 75 percent replacement of cement by HVFA and LIMESTONE.

Keywords: HVFA, Limestone, M40 grade concrete, Admixture, Mix Design

1. INTRODUCTION

Lime can be used as a cement replacement in concrete. There are, as there have always been, two critical issues with this type of cement replacement: the change in physical properties with respect to compressive strength and the cost analysis of the alternatives. The first stage of this research looks at the change in physical properties of a standard concrete mix when lime is substituted for cement with respect to compressive strength. The results from this research show a linear

Research Paper (CE) - 2021-22

HOD, (CE)

Principal
J. D. College of Engineering & Management
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Nagpur-441501

CSE Student Research Paper 2021-22
International Journal of Engineering Applied Sciences and Technology, 2022
Vol. 7, Issue 2, ISSN No. 2455-2143, Pages 430-436
Published Online June 2022 in IJEAST (http://www.ijeast.com)

A REVIEW ON SMART HEALTHCARE USING MEDICAL CHATBOTS

Mirza Moiz Baig, Ameer Meshram, Abhishek Bansod, Nikhil Mishra, Komal Bagde, Mohini Lad
JD College of Engineering and Management, Nagpur, India

Abstract: **In the current situation people's are getting more concerned about well being and good health of themselves and their families. During this pandemic situation of COVID-19 the peoples are scared of visiting hospitals and lack proper medication. In recent years many technologies have been evolved in the medical field one of which is Medical Chatbot. An automatized medical chatbot is a system with human interaction using natural language diagnosis to provide medical aid. Use of NLP, NLU, AI, ML concepts are being done in development of chatbots. A person can keep an eye on his health using these chatbots. The following paper is a review over the technologies and applications of various proposed chatbots in recent years.**

Keywords: **Chatbot, AI, ML,Smart Healthcare.**

I. INTRODUCTION

One of the major dares that India as a country faces is to cater to great quality and affordable healthcare to its growing population. The World Health Report issued by WHO has ranked India's healthcare system at 112 out of 190 countries.[1] This inaccessibility of healthcare amenities particularly in rural India and the complexity in accessing means of transport further causes patients to postpone their treatment, or opt for medical amenities that may be closer but at the same time are not cost-efficient and well-matched to their medical needs. To seek more efficient ways to supply timely medical care, access and quality treatment to the patient, the role of chatbot Or we can call medbot comes into play which connects patients with healthcare providers and healthcare cognition.

Due to the recent COVID-19 pandemic, social distancing will stay in India for a long time, particularly for patients with chronic diseases, thereby massive a blockage for the population to access healthcare facilities. The data released by the National Health Mission, amid COVID-19 shows that there has been a collapse in distinct acrid illnesses being reported during the lockdown in India.[2] This data indicates that a reduced hospitalization case indicates a shortage of access to healthcare, rather than a shortage of illness. By using Interlocutory artificial intelligence, healthcare providers can diagnose and deal with patients without the need for a individual visit, whilst promoting social distancing and reducing the risk of COVID-19 transmission. Interlocutory bot with a voice and/or chat interface can play a main role by overcoming the current hurdles towards making primary healthcare affordable, accessible, and potentially sustainable in the new digital economy. With the advent of AI, virtual assistants can be seen penetrating to the nook and corner of the world. Voice assistants construct use of a natural language interface to interact via speech. Voice technology must be tailored to be useful in the field of healthcare.[3]

It makes use of voice objections to get answers, perform actions and instructions according to user commitments. They are flexible to the user's separate language usages, searches , and preferences with continuing use. The vast amount of information that is available on the internet allows chatbots to provide accurate and systematic statistics based on the users demand and requisite. The idea behind this is to focus on the preliminary symptoms and the problems that the user may be experiencing. After the automated medical chatbot has collected enough data from the initial conversation, it now forwards the conversation by asking questions to the user and trying to review diseases by converting the input data into queries and execute it to gather the solution of illness that the user might be suffering from. After the bot has shortlisted the possible diseases that the user may have according to rank to the possible diseases that the user may be suffering from. The Chatbot starts questioning the user about how the user is feeling. Once it gets a desired amount of data it finds the most likely disease that the user may be suffering through according to the input data.

THEORETICALBACKGROUND:

Srivastava et al.[4] The aim is to build a chatbot that engages patients and explains their condition with the help of natural language. The system is based on conversational data that the user provides while interacting with the chatbot. The idea behind this is to focus on the symptoms and problems the user is facing. After having an initial interaction with the user, the chatbot takes the conversation forward by asking the user questions and converting the input data into questions to attempt to review the diseases and execute them to gather the solution to the disease that the user has.may suffer. The bot then shortlists the possible diseases that the user may have in order to rank them according to the possible diseases that the user may suffer from. Then the chatbot starts asking the user how the user is feeling. Once the chatbot gets enough data it detects the

International Journal of Engineering Applied Sciences and Technology, 2022
Vol. 7, Issue 2, ISSN No. 2455-2143, Pages 430-436
Published Online June 2022 in IJEAST (http://www.ijeast.com)

most likely disease that the user might be suffering from as per the input data.

Divyaet al.[5] in proposed system symptom mapping is done. Where it identifies the symptoms of the patient and then diagnosis whether it's a major or minor disease, if it's major one then proper doctor will be referred to the patient. Doctor details will be extracted from database. One more thing, the user will be identified by the login details which is stored in the database.

Dev Vishal et al.[6] aims to built a medical chatbot with the help of Google API for voice to text conversion and vice versa. In proposed system, the Chatbot API sends question to chatbot and obtain connected answer and after getting answer refer this answer analysis thereon and show answer on humanoid app. Connected information like drugs name, drugs end details so on from drugs API.once user raise question to the theme, logic of the grievance is recognized by applying information processing. Sense of the words is found victimisation a part of speech tagging and WordNet lexicon by victimisation this sentiment analysis..

Gopi et al.[7] proposed a chatbot which handles user requests and identify message patterns using artificial intelligence markup language. AIML is an XML-based markup dialect which is used to create natural language software agents and which gives the real human interactive experience to users. With the help of user responses and Depending on them AIML logic retrieves symptomatic keywords to assess the existing user medical conditions. So, we aim to make sure that user should feel like they are having a conversation with a health specialist. A render question could help chatbot precisely understand the user's request..

Himanimittalet al.[8] proposed The Health-Care Chat Bot System using Python and run Google conversation platform Google Dialogue flow, GUI hyperlinks and a easy, reachable community API. The machine should offer a possible parallel operation and the machine layout should no longer introduce scalability problems with respect to the amount of floor computers, drugs or presentations available at any given time. To build a chatbot using python GhareShifaet al.[9] proposes to build a chatbot using python to get a clear idea of its basics and about NLP. The basic vocabulary applied to chatbots is the bot's intentions, institutions, and pronunciation training and the bot's confidence score. In the field of Artificial Intelligence which helps the computer to recognize and analyze human language and to apply NLP we must understand Natural Language Understanding. NPL processes the raw data for which it is supposed to be a chatbot brain, which cleans it and takes appropriate action. Dharwadkar [10] classifies the test image into the class with the highest distance to the neighboring point in training. The SVM training algorithm builds a model that predicts whether the test image falls into this class or another. SVM requires a huge training data to set the decision boundary and the computing cost is very high. Data that cannot be separated from the input are mapped to a higher-dimensional feature space where they can be separated by a hyper plane. SVM classifier is fast for training. The accuracy of SVM is higher than Naive Bayes and KNN method which is about 94% higher. [11]

CARO [12] uses the Facebook AI Empathetic Dialogue dataset and the Medical Question Answering dataset. The empathetic response generator consists of four parallel LSTMs, followed by concatenation and dense layers. It considers the last two statements along with the current user input to maintain the context of the conversation. The model determines the sentiment of the current user-text and associates it with the text before passing it to the model. In this method, the output is generated at each time instance, which has been generated by the model at the previous time steps where the sentence beganbegan.

Name & Year	Methodology and Algorithms	Working/Structure	Future Work/Limitations
1.Chatbot For Healthcare Using AI, June 2020. L Athota, VK Shukla, N Pandey, A Rana [13]	They've used N-gram, TFIDF technology to extract keywords from the user query. To help the users regarding minor health information.	They developed the application using the N-gram, TFIDF for extracting the keyword from the user query. Each keyword is weighed down to obtain the proper answer for the query.	Voice recognition chatbot can be developed. If the program is not only text-based, but also voice-based equipped, then it'll be easy for user to interact with chatbot.

International Journal of Engineering Applied Sciences and Technology, 2022
Vol. 7, Issue 2, ISSN No. 2455-2143, Pages 430-436
Published Online June 2022 in IJEAST (http://www.ijeast.com)

2.Medical Pratikshabansode, GowriKorekar, KarishmaBadhale, Prof.MadhaviPatil – IJASRET June 2021 [14]	Speech Recognition, Speech to Content Transition, and Language Interpreter modules in this application. Python was used to develop the chatbot.NLP NLU KNN algorithm: Speech synthesis:	A chatbot service provider may serve as a customer service representative for a variety of businesses, organisations, and sectors, or as a personal assistant for anyone on the planet. In this application, they used the Speech Recognition, Speech to Content Change and Language Interpreter modules.	In future, Can develop a system to communicate with doctors online through live chat or telephony. The input would be totally dependent upon the users comfort as system has voice as well text input option which might make it case sensitive.
3.Medical Chatbot For novel COVID-19. Fahad Mehfooz, SakshiJha, Sahil Singh, Shreya Soni, Nidhi Sharma-Springer-2021. [15]	Retrieval-based bots are the most common type of chatbots that are created. This approach is probably the best option for bots and system majorly uses this type of self-learning for the goal of making people aware of COVID-19	The system based on the concept of machine learning combined with the real-world entity to highlight and aware people about the prevention and seriousness of this deadly virus.	The rule-based approach has its benefits, but it is also limited by the set of rules. It lacksintelligence Due to this reason and to make chatbots human-like, in future we can use ML to make Chatbots.
4.Designand development ofsmart healthcare chatbot application using ai-ml, 2020. C.Balasubramaniam, S.Velmurugan, M. Saravanan [16]	The chatbot design were developed using natural language programming using artificial intelligence.	The proposed thought is to make a clinical chatbot utilizing Artificial Intelligence that can analyze the infection and give starter safeguards and pills to the ailment before counseling a specialist. Here the application created to give nature of answers in brief timeframe.	A few impediments exist to consider inside the chatbot configuration designs. Few out of every odd application is appropriate for conversational interfaces. There are errands that characteristically better handled by applications, with access to neighborhood computational assets and information stockpiling.
5. Building a Medical Chatbot using Support Vector Machine Learning Algorithm Tamizharasi B., Jenila Livingston L.M.* and S. Rajkumar [17]	JAVA, android application, Support Vector Machine (SVM) learning algorithm, dataset will be in AIML format, Natural Language Processing to achieve the style of chatting.	The code is written in JAVA and is an android application. Characteristics of this chatbot are, it collects basic personal details, symptoms and other medical related details. Data will be reviewed with dataset using the Support Vector Machine (SVM) learning algorithm	By taking the advantages of the SVM algorithm medical chatbots can be extended and used deeply with other medical systems where predictions can be done. It can be further extended to schedule doctor visits and remind patients of a next appointment or routine check-up.

		once the symptoms are given.	
6.Text Messaging-Based Medical Diagnosis Using Natural Language Processing and Fuzzy Logic, 2020. Nicholas A. I. Omoregbe, Israel O. Ndaman, Sanjay Misra, Olusola o. Abayomi-Alli, RobertasDamasevicius [18]	1. Outline of the Architecture 2. Knowledge Base. 3. Communication System. 4. Content Extraction and Text Preprocessing 5. Feature Selection and Extraction 6. Fuzzy Reasoning Module 7.Classification Module 8.Graphical User Interface (GUI)	Based on the highlighted needs, this study was able to successfully build a text-based medical diagnosis system, which provides a personalized diagnosis utilizing self-input response from users to effectively suggest a disease diagnosis.	However, considering the exponential growth of mobile users and the need for a real-time medical diagnosis assistance tool, it is therefore important to explore the need for a cost-effective telehealthcare platform, which allows the earlier detection of diseases and effective communication with patients to a diagnosis system.
7.Web-based chatbot fo Frequently Asked Queries (FAQ) in Hospitals, 2021.Mamta Mittal, GopiBattineni, Dharmendra Singh, ThakursinghNagarwal, Prabhakar Yadav [19]	The bot engine was integrated by several machine learning approaches like gradient descent (GD) and natural language processing (NLP) algorithms. The trained data entered into the bot were split into mini-word batches, and the GD algorithm was applied sequentially on each minibatch.	The proposed bot can be a better solution for data extraction from local hospitalwhich functioning as a good communication channel for both users and hospital staff and helpful in reducing the crowd.	Even if the response is quick there are limited response to user questions. Setting up AI on large scale and testing can be expensive for hospitals.
8. A smart chatbot architecture based NLP and machine learning for health care assistance, 2020.Soufyane Ayanouz, BoudhirAnouarAbdelhakim, Mohammed Benhmed [20]	Implementation of NLP	According to the scientific community, chatbots are userfriendly and any person who has an awareness of typing in their language on the desktop version and in the mobile application can use these chatbots very	Moreover, they interact with humans, using natural language, different applications of Chat-bots such as medical jichatbots, call centers, etc.

		easily.	
9. Medibot: End to end voice based AI medical chatbot with a smart watch, 2021 – KeerthanaSivaraj, KarthikeyanJeyabalasuntharam, Hanarshanyaganeshan, KumaranNagendran, JesuthasanAlosious, Janani Tharmaseelan- IJCRT 2021 [21]	A. AI chatbot with Disease prediction B. Prescription Reader C. Skin disease Prediction D. Smartwatch (IoT device).	This system eases the lifestyle of the modern world peoples. Language control has been a major drawback of the pre researchers build applications. To eliminate that shortcoming in our research.	This research has only the four main features itself. In the future additionally, connect with many more features such as medical and people needs related.
10. Medbot: Conversational Artificial Intelligence Powered Chatbot for delivering Tele-He-alth after COVID-19, 2020. Urmil Bharti, Deepali Bajaj, HunarBatra, Shreya Lalit, Shweta Lalit, AayushiGangwani [22]	Multilingual Voice Application based on Natural Language Processing AI, and coversion from voice to text and vice versa.	Includes a Multilingual Voice Natural Language Processing healthcare education and advice t women needing antenatal care..	ABringing professional healthcare closer to us-ers by providing live o connectivity with doctorincluding features like appointment by tap.
11. Chatbot in Mental Healthcare, M Vijayarani, G Balamurugan – IJPN 2019 [23]	Use of concepts of AI, ML, NLP.	A survey over different medical chatbots.	Flexible and accessible anytime but can have concerns like lack of standardization and monitoring, overdependence on the chatbots, and lack of serious mental disorders.
12. Smart chatbot for covid-19 using RASA - Aryan Munshi1, Shraey Bhardwaj2, V.V.Ramalingam3 [24]	Proposed use of AI ML concepts along with RASA. RASA is a framework for developing AI-powered, industrial-grade chatbots.	Rasa Open Source is a framework for NLP understanding, discourse the executives, and mixes. Rasa X is a free toolset used to improve logical collaborators manufactured utilizing Rasa Open Source.	The proposed chatbot aims to have a lot of applications which will require huge datasets for proper functioning of chatbot.

13. AI Based Healthcare Chatbot System - A KumaresanAngappan, N Jazeem Khan, M Sharan, S FazilAhamed EasyChair March 31, 2021 [25]	Spring Tool Suite, AIML, JAVA, .Pattern Matching, Datasets	The Spring Tool Suite is used to run the AIML file, which is a JAVA based platform highly useful for developing web applications. The <pattern> is used to match the users input text with the pre-stored data. The <template> is used to store the data for which the bot will respond according to the user's input.	The proposed system will include a brief summary of herbal medicines, their uses and suitable home remedies that can be used to treat and cure most of the common diseases requiring large datsets.

Table 1: Recent works of medical chatbot techniques.

II. FUTURE SCOPE:

With the increasing technologies in the field of AI, ML and implementation of chatbots in various fields there are many future modules that can be added to the current proposed chatbot/Medbot. Medical counseling via Video call connecting direct to the Doctor. Making the Chatbot available in different languages using NLP platforms. Linking the bot to the maps application for proper location of the hospital recommended. Making the Bot more user friendly and available and accessable in remote areas.

III. CONCLUSION:

We learn and research the paper about how to make a chatbot, what kind algorithm the chatbot uses, and how to get the data set to train the chatbot. From those algorithms, we have seen that the most match algorithm for a chatbot is natural language processing and machine learning. The major papers use natural language processing techniques to process the user input that usually formatted as a string, to a format that the program can process. The raw input can be a problem for chatbot to understand if not written in proper manner. After the user inputs are tokenized, it can be processed with machine learning such as classification to process the symptoms and match to the disease that available in the classification training. So the most suitable algorithm to make a chatbot from our point of view are NLP and Machine Learning.

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Prof. Supriya S Sawwashere
HOD CSE

HOD
Computer Science & Engineering
JDCOEM, Nagpur

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Implementation of Secure Smart Cart for Automatic Detection of Object using Arduino and RFID

[1]Prof.M.M Baig, [2]Rohit Salunke, [3]Payal Sangolkar, [4]Prajwal Bhaje, [5]Divya Bansod

[1]Professor, [2,3,4,5]Student

[1,2,3,4,5] Department of Computer Science and Engineering,

[1,2,3,4,5]J D College of Engineering (Autonomous), Nagpur, India

Abstract: People when they are shopping at a large shopping complex, people frequently go over their allotted spending limit. Moreover, they end up in long waits at the end of their shopping waiting for the things to be scanned and billed. The a fore mentioned issues are easily solved by the Smart Shopping Cart. It assists the customer in ensuring that he stays within his predetermined budget and only purchases the necessities for himself. Additionally, the system helps to reduce long lines at the checkout counter because the products have already been scanned; the customer only needs to pay the bill and bag the items bought. The method is advantageous for shopping malls because it can assist in lowering the number of billing counters, which will help to drastically lower labor costs.

***Index Terms* - RFID, Arduino, LED/LCD, IR Sensor, Motion Sensor, Weight Sensor.**

I. INTRODUCTION

For The innovation of technologies advances at an exponential rate in this period of fast change. Many businesses are making investments in innovations that guarantee consumer happiness at all levels. Technology in customer service, which offers new and reliable systems for customers, is one of the most common developments. Shopping carts, usually referred to as shopping trolleys, are a way to temporarily transfer your purchases before checking out. Since their creation, shopping carts have seen relatively few alterations. Most of the expansions have been made to change its weight and capacity. But as technology has advanced, some of the company's research has led to the creation of a user-friendly shopping system.

The shopping cart, for instance, has a touch panel and a RFID Reader attached. The customer can use the touch panel to learn about the details, promotions and the location of products. In addition, when a consumer places an item into the trolley, the RFID reader scans it, and the details of the product is presented on the touch panel display. Without waiting in a long line for the payment process, the consumer will only need to make a payment depending on the amount displayed to the cashier. The described upgrade to the shopping cart can save client shopping time, money and provide a better shopping experience.

Due to primarily fast expanding application to track products through the food supply chain, RFID and associated technologies have seen an explosion in attention over the past two years. Due to the relatively high cost of RFID deployment and the extremely low profit margin of supermarket goods, item-level tagging was not yet practicable, therefore these applications instead monitor Store-Keeping Units (SKU) rather than specific product items.

One can easily imagine a scenario in which every item in a supermarket is marked with an RFID label, shopping carts have RFID readers and perhaps even on-board computers that can identify items placed in the cart and display information and promotions that have been wirelessly or wired retrieved from the system's back-end. The introduction of RFID technology at the item level would also enable fast checkout lanes that scan all merchandise at once, eliminating lines consistently cited as one of the worst elements of grocery shopping.

II. PROBLEM STATEMENT

As is common practise throughout India, a customer must go to the billing counter at every store or mall to make a purchase. An employee of that store or mall will then scan the customer's RFID tag or barcode and issue a bill.

After that,

1.we must pay by cash or credit or debit card,
2.It is time consuming,
3.Need access of staff,
4.It is difficult to keep the record of consumer,
5.Sometimes lacks in the security.

III. LITERATURE REVIEW

An RFID reader and a touch-screen tablet are included in this project proposal. A website must be able to let users build new shopping lists in order for this system to work. By scanning each item in the customer's basket, the self-checkout component saves them from having to wait in line at the register. **[1]** This project includes a motion sensor, LCD, RFID reader, Zigbee, and more. When a user places a product in the cart, an RFID reader will detect the product's code. Buzzers are used to sound the alarm in the event of any fraudulent activity, and ZigBee technology is used to transport the created bill to the counter. analysing the effects of the various thinning techniques on an OCR system and compiling statistics from their performance on big data sets. **[2]** This paper offers suggestions for creating an intelligent shopping cart system that will record online purchases and transactions. Additionally, the system will offer recommendations based on the purchase. For anti-theft purposes, an RFID reader is installed at the exit**. [3]** Each trolley will be outfitted with an RFID reader and an LCD screen that will show all the product information as part of this project proposal. The Zigbee module will transfer the Bill to the counter. In this project, devices such as RFID tag, LCD, RFID reader, barcode reader, trolley, and Zigbee were used. **[4]** RFID, Reader, LCD, Buttons, Wifi Module, PIC, Microcontroller, and Indicator are among the materials used in these projects. The whole amount the customer wants to spend is entered into the micro system that is built into the smart shopping cart, which is presented in this paper as an intelligent smart cart system. **[5]** RFID and Zigbee components are utilized in these projects. Based on customer purchase history from a centralized system, these systems will provide suggestions for things to buy. Every item in the store will have RFID tags, and every cart will have an RFID reader and Zigbee attached to it with this system. A centralized system will be used for online transactions and recommendations. Additionally, an RFID reader for anti-theft purposes will be located at the exit door. **[6]** With this project, a user can instruct a virtual assistant to automatically remove items from a shopping basket to keep costs down. By deleting the least important item from the shopping cart, the virtual assistant chooses which goods to keep. E-commerce, a virtual assistant, voice commands, and smart speakers are among the components used. **[7]** When you use the trolley for shopping, by voice commands the sensor attached on the trolley reads information each time you place an item inside. It sends the data immediately to the main server. After then, since the counter has your complete information, you can proceed to make a payment. **[8]** This project idea uses integrated electrical hardware, such as an Arduino Mega, OLED Display, RFID reader, Wi-Fi module, and others. To use the cart, a user must first register on the market's internet page before receiving a smart card. The smart card will contain money that has been converted via an online website, and users will need to swipe the card each time they use it. **[9]** A cart that automatically follows the user and offers the possibility of automated billing was built in this project, which incorporates several subsystems in the IOT area. It transmits data to the cashier's safe point, tracks the movements of the customer, and immediately follows. The Coco motion function is used. **[10]** The store provides its loyal customers with membership cards, which have an RFID tag attached to them. A barcode scanner is used to generate the barcode that is transmitted to Arduino via the Bluetooth module**. [11]** As soon as a consumer enters the mall and uses the trolley, the proposed system is put into operation. Each RFID reader on a trolley is independent. As a result, the consumer with the associated RFID card, also known as a customer card, is followed by the trolley. The RFID tag and ultrasonic sensor regulate how the system moves. The QR scanner reads the QR code on the item the consumer has taken, using image processing, and shows the item's pricing and other details. **[12]** In this work, the author develops a system that includes several different technologies, including RFID, GSM, OTP, automatic billing, PIC, and Zigbee. The shopping item can be read by the reader in this system, and an LCD screen shows the total cost of the items. **[13]** In this article, the author created a system that featured smart billing and a smart trolley. When a new item was added to the cart, the system computed and updated the customer bill, adding additional functionality. **[14]** In this study, RFID was employed for billing purposes together with other shopping cart-related parts like PCB, Wi-Fi, and a power supply. **[15]**

IV. FINDINGS AND DISCUSSIONS

Mainly every paper were focused on creating a smart cart to make it more convenient for people to do shopping without worrying about their budget and standing in a long queue for billing on billing counters. Moreover, every project has included and focused over the use of RFID has a best suitable solution for addressing this issue.

As per our findings we have found that every project has it's unique value and a Special and helpful option for the customer who are going to use it but there isn't a complete package of a convienient, easily accessible, helpful , smart, and most importantly a secure cart we in our project are working to provide all these features at one place which will make it easier for the customer to pursue their shopping exceptionally well and this will also provide them a new and better experience.

V. PROPOSED WORKFLOW

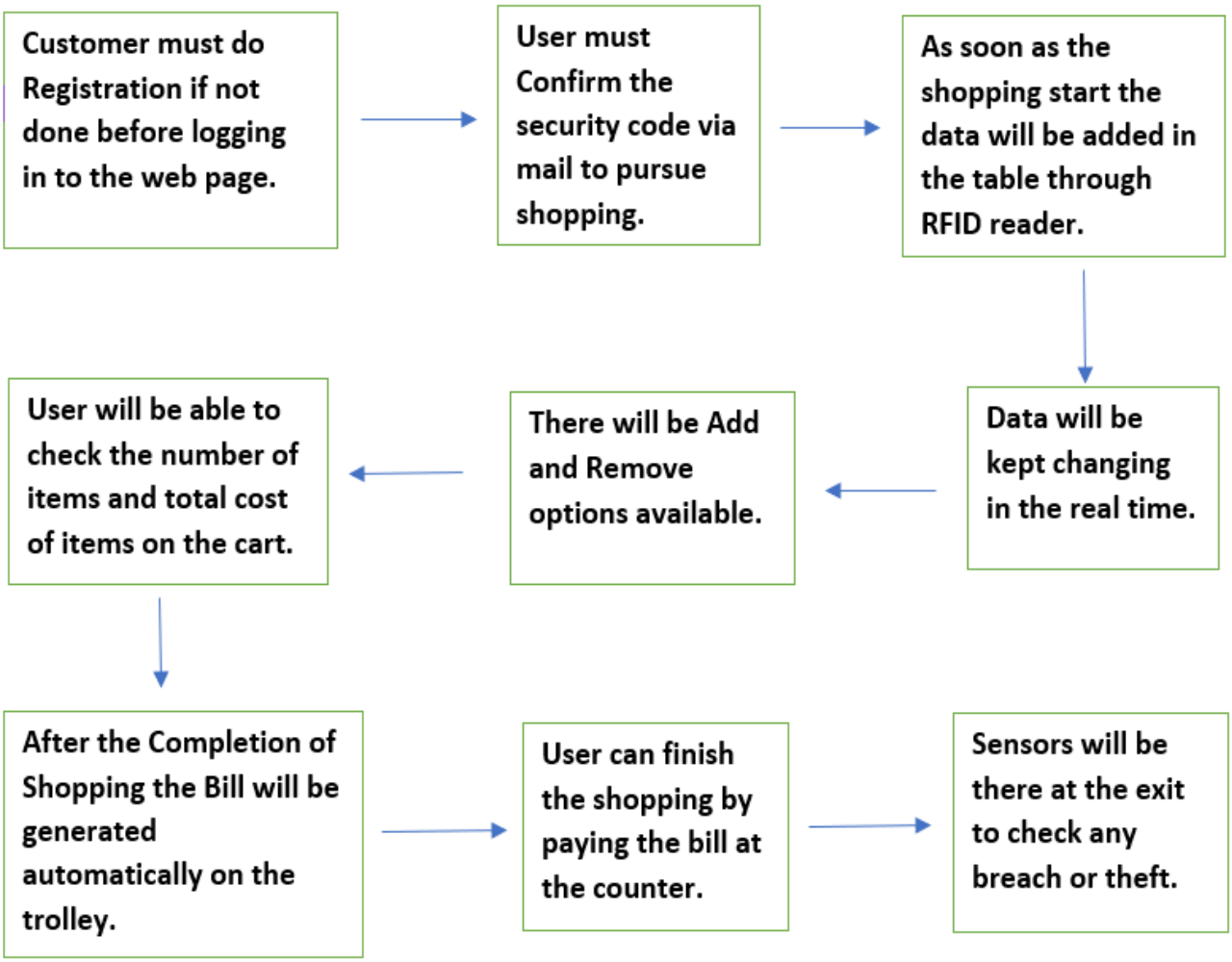

Fig : Workflow of Secure Smart Shopping Cart.

VI. CONCLUSION

The clients do not need to wait in line or for their turn to scan the product items when using this Smart Trolley System. The time spent standing in line is not wasted, especially on weekends or during festival season. Only those customers who are registered and whose IDs are entered into the smart cart may use it. The customer must only pay at the billing counter. In order to increase client traffic, supermarkets and hypermarkets employ this concept as a business strategy.

This will create awareness among the people and will make them familiar with the new technologies and thus we can implement new features also. Overall it will provide a new and wonderful experience to the user and can result in increase in the amount of sale as this technology will save time , save efforts, save extra labour cost also it provide safety to both the consumer and the shop owner and creates a medium of trust between them. Mainly according to the findings, we have focused on the safety and privacy from both the point of view be it of consumer or the shop owner

The customer will be able to scan the products within the cart and receive an immediate bill total and all the other product details on the cart itself. This would speed up consumer checkout from the billing counter. The fact that fewer people are needed at the billing counter is an additional benefit for the shop owner and the amount of profit generation will be more as compared to previous. The Secure Smart Shopping Cart differs from other designs.

Additionally, there is room for development. One feature would allow customers to input their shopping lists, ensuring they don't forget anything. Due to several characteristics, this shopping cart distinguishes apart from other models in the market.

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Prof. Supriya S Sawwashere
HOD CSE

HOD
Computer Science & Engineering
JDCOEM, Nagpur

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 6, June 2022
Impact Factor: 6.252

IoT Based Solar Power Monitoring System

Mr. Pravin M. Badole[1], Mr. Bhushan D. Giri[2], Mr. Akshay R. Zarodiya[3], Mr. Nikesh Gajbhiye[4], Ms. Prachi F. Jambhulkar[5], Mr.Shubham A. Harane[6]
Students, Department of Electrical Engineering[1,2,3,4,5]
Assistant Professor, Department of Electrical Engineering[6]
J D College of Engineering and Management, Nagpur, Maharashtra, India

Abstract: *As we know in the present time solar energy is at its booming stage compared to other sources, as it's the perfect alternative for all conventional sources required for electrical energy generation. This paper proposes a solar power monitoring system by the IoT. By using the Internet of things technology for supervision the solar power generation can greatly enhance the performance, monitoring and maintenance of the plant. With gradually increasing the technologies and the cost of renewable energy sources are going down globally encouraging the solar power plant installation. In this project the output of the solar panels is depends upon the radiation of heat. The project is based on the implementation of new cost-effective methodology based on IOT to remotely monitoring a solar plant for performance evaluation. By incorporating the IOT technology the data received from the panels and appliance are sending to the cloud from through internet for the future use as well the remote user can monitor the parameters of the connected devices.*

Keywords: Battery, Blink server, Solar panel, Current sensor, EPS32 Devkit, LED display, PWM, Temperature sensor.

I. INTRODUCTION

The memes of Things not is one of the most important technologies of everyday life, which helps people live and smarter. An IOT is a device, which is used to enable the connection between the machine and the cloud.

The Idea is to connect all sensors and devices on a common network i.e., internet through wired or wireless means so that the user can access the data and content the devices from anywhere around the Solar energy is clean, abundant and an easily harnessed form of energy. Solar energy although reliable is becoming more and more popular with advancement in technology and decreasing the cost.

Solar power has become very trendy as it is available in abundance and solar power generation is also cheaper in the conversion technology. In this technology the light energy is converted into electrical energy which is known as photovoltaic effect and this is called solar energy. By using solar power, the pollution will be reduced and by monitoring it the energy forecasting, households and communities, the productivity can also be enlarged [4], [2]. By monitoring this system, we can know the condition of it and also shows when there is a problem which is useful for us.

This system describes an IOT based solar power monitoring system. In this system the sunlight a converted into electricity by solar cells which are present in solar panels. We use an Arduino, Current voltage parameters are

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PRINCIPAL

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

J D COLLEGE OF ENGINEERING & MANAGEMENT * NAGPUR *

e-ISSN: 2582-5208
International Research Journal of Modernization in Engineering Technology and Science
(Peer-Reviewed, Open Access, Fully Refereed International Journal)
Volume:04/Issue:07/July-2022 Impact Factor- 6.752 www.irjmets.com

SPEED CONTROL OF DC MOTOR UNDER VARYING LOAD USING PID CONTROLLER

Samiksha Thaware*1, Harshad Raut*2, Dipali Ramteke*3, Naina Neware*4, Swati Prajapati*5

*1,2,3,4,5Electrical Engineering, J D College Of Engineering And Management Nagpur, Maharashtra, India.

ABSTRACT

DC motors are used extensively in industrial variable speed applications because of most demanding speed-torque characteristics and are simple in controlling aspects. This paper presents a DC motor speed controlling technique under varying load condition. The linear system model of separately excited DC motor with Torque-variation is designed using PID controller. A Matlab simulation of proposed system with no-Load and full-load condition is performed on Simulink platform to observe the system response. The motor speed is kept constant in this experiment. The simulation result of the experiment shows that a motor is running approximately at a constant speed regardless of a motor load. The Simulink results show that the speed of the motor is slow down only for about 270 rpm (9%) in 980 milliseconds under the effect of full load. However, the motor speed is hunting about 200 rpm (6.66%) in 900 milliseconds on unloading condition. It is concluded that a PID controller is successful tool for controlling the motor speed in presence of load disturbances.

Keywords: DC Motor Model, PID Control, Closed Loop, Load Disturbance, Speed Control On unloading, the motor speed is dropped by around 200 rpm (6.66 percent) in 900 milliseconds. The motor speed can be successfully controlled by a PID controller in the presence of load disturbances, it has been determined.
Keywords: Closed Loop, PID Control, Speed Control, Load Disturbance.

I. INTRODUCTION

DC motors have been widely employed in industrial control applications for a long time. DC motors have a lot of speed control flexibility and versatility. Due to its many beneficial qualities, such as their high starting, accelerating, and retarding torque, quick response performance, rapid braking, and ease of linear control, high performance DC motor drives are widely used in industrial applications. For robotic manipulators, guided vehicles, steel rolling mills, cutting tools, overhead cranes, electrical traction, and other applications, among others, a DC motor is a highly controlled electrical actuator. DC motor drives are straightforward and less expensive than AC drives [1]. In general, the feedback control loop is necessary for the system to perform as

H.O.D

PRINCIPAL

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

J D COLLEGE OF ENGINEERING & MANAGEMENT * NAGPUR *

CYBERPSYCHOLOGY, BEHAVIOR, AND SOCIAL NETWORKING
Volume 25, Number 4, 2022
* Mary Ann Liebert, Inc.
DOI: 10.1160/cyber.2022.29293.editorial

EDITORIAL

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AN ANALYTICAL REVIEW ON VARIOUS APPROACHES OF AUTOMATED DETECTION OF PCB DEFECTS

Harish O. Goupale [1], Dr. Neetu N. Gyanchandani[2], Pranay A. Chauhan [3], Sneha C. Kumbhare[4], Twinkal B. Bhaisare [5]

[1345]Department of Electronics and Telecommunication, J D College Of Engineering and Management
[2]Head Of Department (HOD) of Electronics and Telecommunication, J D College Of Engineering and Management
hgoupale9119@gmail.com[1], gyanineetu@gmail.com[2], pranaychavhan92@gmail.com[3], etc18sckumbharejd@gmail.com[4], twinkalbhaisare7@gmail.com[5]

Abstract— The printed circuit board (PCB) is one of the most important components in the electronic manufacturing business. The use of an automated visual inspection system is necessary to give a quick and quantitative assessment of printed circuit boards (PCBs), as human flaw detection systems are inefficient and time-consuming. Machine vision technology, which makes use of a high-resolution digital camera and image recognition, can be used to replace manual inspections and measurements in many situations. This paper discusses the numerous types of PCB flaws that might occur and how they can impair the operation of electronic devices. Major flaws are grouped primarily into two categories: Fatal and Potential. These defects can be discovered primarily by using one of three approaches: Referential, Non-referential, or Hybrid to determine whether or not defects are present on a printed circuit board. After conducting a comparative examination of various strategies, we attempted to identify the one that was both much faster and more accurate.

Keywords— PCB, Automated Visual inspection, Machine Vision, Image processing, Referential, Non-referential, Hybrid approach

INTRODUCTION

Automatic optical inspection (AOI) is used to inspect a wide range of products before they are released for sale. These products include circuit boards (PCBs), light sensitive displays (LCDs), transistors, transport equipment, lids and labels on manufacturing businesses, and agricultural products, among others (seed corn or fruits). Using an automated camera, the device under test (DUT) is checked for a range of surface feature defects such as scratches, stains, electromagnetic interference, and solder that has thinned as a result of the heat generated by the generator under test (DUT). In the instance of PCB inspection, it also searches for missing components, components that have been wrongly installed, and components that have been incorrectly placed.

In a fraction of a second, AOI systems as well as machine vision systems can capture big quantities of information (pixels) from a wide variety of angles and perspectives. Both for visual assessment and precise measurement applications, these data points are important in a variety of situations. The AOI optically scans the foundation of the printed circuit board. Additionally, the board is being checked by a scanning or by a group of high-definition cameras in additional to being lighted by a variety of other light sources. Monitoring of all areas of the board is possible, including some that are covered in one direction through other elements such as with the power supply, thanks to this technique. However, it should be noted that each manufacturer of AOI systems uses a unique set of inspection techniques and lighting techniques, and that each of those systems may have different strengths and weaknesses depending on the user or commodity that it inspects (see Figure 1).

Surface Mount Technology (SMT) has gained in popularity in the electrical industry over the last few years, owing mostly to its cost-effectiveness in the production of Printed Circuit Boards (PCBs). Since the solder joint is in charge of making electrical connections between electronic components and printed circuit boards (PCBs), the effectiveness of the soldering joint may have a significant impact on the overall performance of the electronic systems [1, 2].

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e-ISSN: 2582-5208
International Research Journal of Modernization in Engineering Technology and Science
(Peer-Reviewed, Open Access, Fully Refereed International Journal)
Volume:04/Issue:06/June-2022 Impact Factor- 6.752 www.irjmets.com

IMPLEMENTATION OF CAR-ROBO CONTROLLED OVER HAND GESTURE

Namira Khan *1, Sharmin Siddiqui *2, Rutuja Meshram *3, Shefali Meshram *4, Shahbaz Ahmad #5, Prof. Pranali Langde #6, Prof. Gayatri Padole #7

*1234#5Student, Department OF Electronics & Telecommunication, JD College of Engineering and Management, Nagpur, Maharshtra, India

*6Professor, Department OF Electronics & Telecommunication, JD College of Engineering and Management, Nagpur, Maharshtra, India

*7Professor & Head, Department OF Electronics & Telecommunication, JD College of Engineering and Management, Nagpur, Maharshtra, India

ABSTRACT

Controlled by gestures Car is a humanoid robot that responds to simple human motions. All that is required of the user is to wear a gesture gadget with a sensor. The sensor will record the movement of the hand in a specified direction, causing the robot to move in the same direction. Through radio waves, the robot and the Gesture instrument are connected wirelessly. Because of the wireless connectivity, the user may communicate with the robot in a friendlier manner. The automobile may be controlled with accelerometer sensors attached to a hand glove. The sensors are designed to take the place of the remote control that is typically used to operate the vehicle. The user will be able to control forward, backward, left, and right motions. while controlling the car's throttle with the same accelerometer sensor The differential mechanism is in charge of the car's movement. The system requires the left or right side's fourth and rear wheels to revolve in an anticlockwise way, while the other pair rotates in a clockwise fashion, causing the automobile to circle about its own axis without any forward or backward motion. The fundamental benefit of this technology is that it allows an automobile to make tight turns without trouble.

Keywords: Gesture controlled car, Accelerometer Sensor, Hand Gesture, Accelerometer, Transmitting circuit, Motor Drive IC.

I. INTRODUCTION

The Introduction A robot is an electromechanical machine that can execute activities on its own. Some robots need to be guided in some way, which can be done via a remote control or a computer interface. Robots can be fully autonomous, semi-autonomous, or controlled remotely. Robots have progressed so far and are now capable of imitating humans that they appear to have their own minds. The Human-Machine Interaction is a key part of a successful robotic system. The only method to communicate with a robot in the early years was to programmer, which took a lot of time and effort. Gesture-based recognition became possible as science and robotics progressed. Gestures can come from any physical move or state, although they are most typically made with the hands or the face. Gesture recognition is a method for computers to comprehend human body language. This has reduced the demand for text interfaces and graphical user interfaces (GUIs) (Graphical User Interface). In today's environment, gesture recognition technology is considerably more recent. There is a lot of on-going research in the subject right now, but there aren't many publicly available implementations. Several methods for sensing gestures and commanding robots have been developed. A well-known method of identifying hand motions is to use a glove. It works by attaching a sensor to a glove that monitors hand motions directly. A Gesture Controlled Robot is a type of robot that can be controlled by hand gestures rather than buttons as in the past. The user just has to wear a tiny transmitting gadget on his hand that contains a sensor, which in our instance is an accelerometer. A command is sent to the robot when the hand moves in a specified direction. The robot will then move in that direction. The transmitting device contains a Comparator IC for assigning suitable levels to the accelerometer's input voltages, as well as an Encoder IC for encoding the four-bit data, which is then communicated through an RF Transmitter module. An RF Receiver module will receive the encoded data at the receiving end and decode it using a decoder IC. This information is then analyzed by a microprocessor before being sent to a motor driver, who uses a unique combination of motors to make the robot move in the same direction as the hand.

2021-22 ETC RESESRCH PAPER

Dr. Pravin Kshirsagar
HOD

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue VII July 2022- Available at www.ijraset.com

Real Time Object Detection Using Deep Learning

Advaitya Padigel[1], Tushar Chintanwar[2], Shruti Landge[3], Pooja Khobragade[4], Tanu Awachat[5], Prof. Manoj Lade[6]
[1,2,3,4,5]UG Scholar, [6]Professor JD College of Engineering and Management, Nagp

Abstract: Visually impaired people have difficulty moving safely and independently, which interferes with normal indoor and outdoor work and social activities. Similarly, they have a hard time identifying the basics of the environment. This paper presents a model for detecting the brightness and key colors of real-time images using the RGB method with an external camera and identifying basic objects and face recognition from human datasets.[2]. Object detection is a department of pc imaginative and prescient that appears for times of lexical entities in photographs and videos. The gadget makes use of the ESP-32 Cam's digital digicam to continuously seize severa frames, which can be sooner or later converted to audio segments. In this project, we use the You Only Look Once V3 (YOLO v3)algorithm, which runs thru a version of a really complex Convolutional Neural Network structure with OpenCV. Then with the aid of using the usage of Google Text to Speech, we convert the photo to textual content and afterwards textual content - to - speech for the visually impaired individual. Thus, the Visually Impaired individual receives the place of the gadgets withinside the digital digicam's view through audio. Distance calculation is aided with the aid of using an ultrasonic sensor. By the usage of The amassed consequences show that the proposed prototype is a hit in presenting visually impaired customers with the cappotential to realise surprising settings the usage of a user-pleasant machine that integrates this unique item detection Model.[1]

I. INTRODUCTION

A big variety of people stay on this global with the inadequacies of know-how nature due to visible weakness. In spite of the reality that they could create optional approaches to deal and manipulate every day schedules, they revel in positive course problems in addition to social clumsiness. For example, it's far tough for them to find a particular room in a brand new situation. Furthermore, dazzle and outwardly debilitated people assume that it is tough to inform whether or not an person is conversing with them or another.

Object recognition was noteworthy Direction and focus of computer research Vision applicable to automatic vehicles, Robotics, video surveillance and pedestrians recognition. Disclosure of deep learning

Technology has changed the traditional way Object identification and object recognition. Depth Neural networks have powerful feature representations Image processing capacity, usually used as follows: Object recognition feature extraction module. No special model is required for deep learning models Handmade features and can be designed that way Classifier and regression device. Therefore, Deep learning technology is very important With object recognition. Problem of Object detection is designed to determine where an object is It's actually in a specific frame (object) Localization) and detect. So pipeline Mainly shared traditional object recognition model In three stages: Beneficial area selection, Feature extraction and recognition.

II. OVERVIEW OF DEEP LEARNING

Deep learning is artificial intelligence Functions that imitate human functions Brain data processing and pattern creation decide. A subset of machine learning Network-enabled artificial intelligence Unsupervised learning from data.

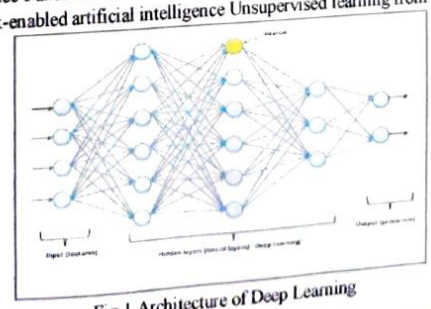

Fig. I Architecture of Deep Learning

Principal
J.D. College of Engineering & Management
Khandala, Katol Road

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Experimental Investigation Of An External Magnetic Field On Performance Of Vapour Compression Refrigeration System

Mr. Harsh Meshram
BTech Student
Department of Mechanical Engineering

Mr. Mayur Kumbhare
BTech Student
Department of Mechanical Engineering

Mr. Mayur Shelke
BTech Student
Department of Mechanical Engineering

Mr. Sanket Bandawar
BTech Student
Department of Mechanical Engineering

Mr. Omkar Vyavahare
BTech Student
Department of Mechanical Engineering

Mr. Vyankatesh Kalbande
BTech Student
Department of Mechanical Engineering

Abstract

Magnetic field being a source of energy shows influence on various fluids which reacts to the magnetic field. The energy of permanent magnets used for the treatment on hydrocarbon refrigerant reduces energy consumption of the compressor enhances cooling capacity, condenser heat rejection in the vapor compression cycle. In this current research work four pairs of permanent magnet of 3000 gauss field strength; will be installed at fixed distance on the refrigerant liquid line (exit of condenser) of the VCC setup. The comparison of the set up performance will be done with and without application of magnetic field to estimatethe improvement in the VCC system. Experiments will be carried out on hydrocarbon (R-404a) refrigerant. The test results mainly focus on the application of magnetic field which has a positive effect on the COP and power consumption of the system for the refrigerant. Literature has reported improvement in performance on application of magnetic field on account of decreasein the viscosity of the fluid, enhancing the flow rates and in turn cooling capacity simultaneously reducing the compressor power. The net result is improvement in the COP of the VCC and reduction in the compressor power consumption.

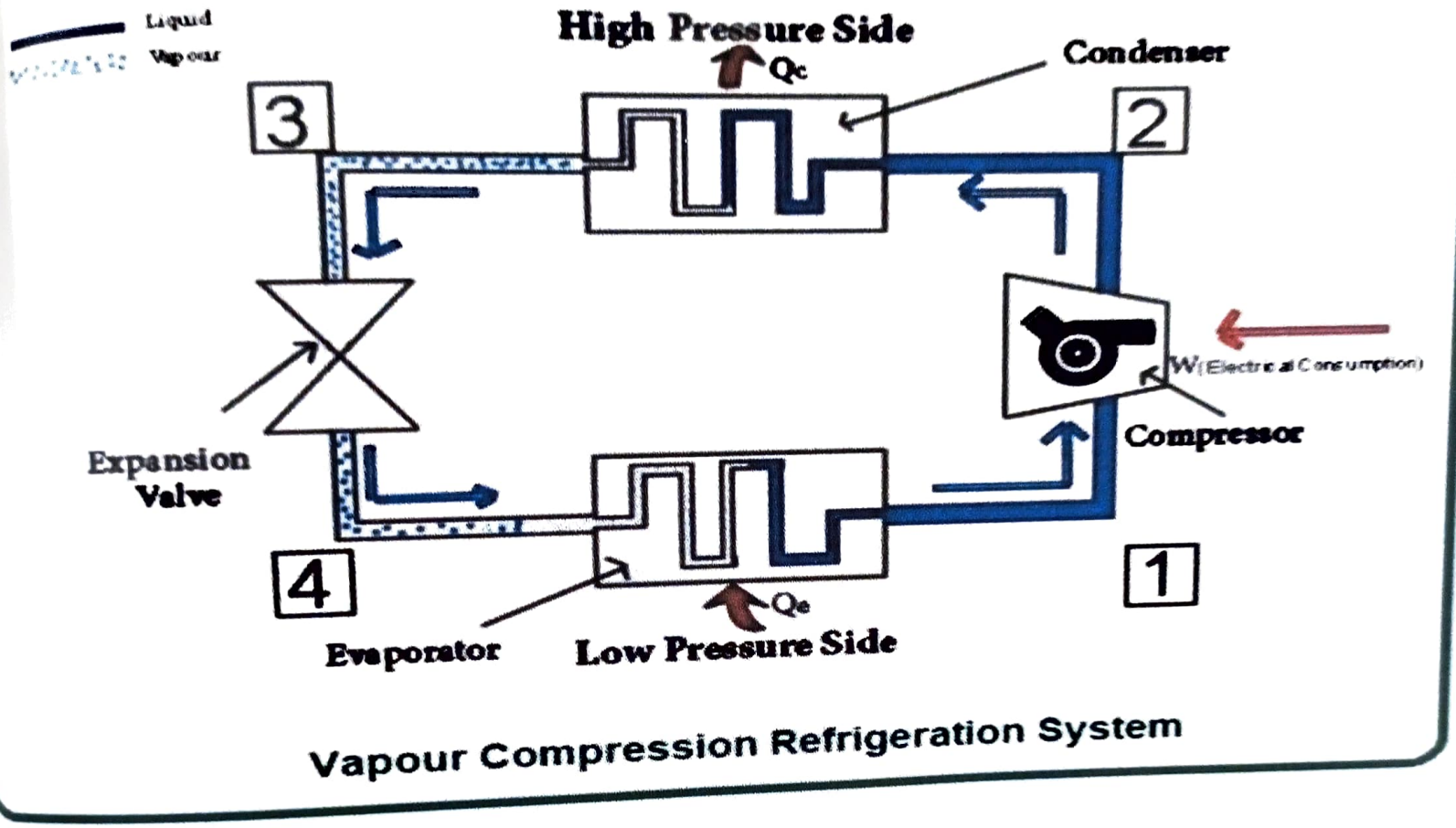
Keywords: Magnetic field, Hydrocarbon, Magneto-caloric effect, Compressor power consumption

I. Introduction

t is the vapor compression cycle that is most popular in refrigeration systems. Several studies have demonstrated the effectiveness of magnetic components in improving the vapor compression cycle. As a result of the discovery of the magneto- caloric effect, magnetic refrigeration began to be investigated. A magnetic refrigeration process uses magnetocaloric effect (MCE) for the cooling process. Magnets are characterized by their magnetic field, which is invisible, and is responsible for their main quality: the ability to pull or repels other magnetic elements and repel other ferromagnetic elements, such as iron, nickel, and cobalt. Around every magnet, there is a variable field called a magnetic field.

Magnetic refrigeration is a cooling process that uses the Magneto Caloric Effect (MCE). For this experiment, we will use varying numbers of permanent magnets placed at various distances along the refrigerant liquid line (near the condenser's output). The effects of various refrigerant parameters including specific heat, thermal conductivity, vapor density, and so on will be examined further. A comparison of the system's performance will be made with and without a magnetic field to determine the ways to improve it.

The main purpose of doing study is to analyzed the effect of magnetic field on energy savings in vapor compression system. When magnetic fields are applied, a dynamic environment is introduced through which a molecular cluster (de-clustering) is broken, with a dynamic result (decrease in viscosity) that decreases the pumping power. An alternative to the common vaporcycle refrigeration technology that is used today is magnetic refrigeration, which offers energy efficiency and the possibility for environmental benefits.



Vapour Compression Refrigeration System

III. EXPERIMENTAL PROCEDURE

Initial temperature of the water on the evaporator side, condenser side and fresh water tank is maintained at 27 °C at starting using a heater and stirrer mechanism. And adjust the flow rate of water at 1 LPM at evaporator side and 2 LPM at condenser side. Start the system to achieve a certain temperature so that the system will get into the stable condition of pervious datum. The readings were taken at interval of 10 min. Each experiment was repeated twice to reduce errors in the procedure and confirm repeatability. Initially experiment was conducted without applying magnetic field on the liquid line. Later experiments were conducted by applying magnetic field on liquid line of the VCR system. The magnetic field was then increased by increasing number of magnet pairs on liquid line to study the effect of magnetic field on system efficiency, i.e., COP. The number of magnetic pairs applied on the liquid line is varied from one pair to five pairs (3000 gauss each) to find out its effect on the compressor power and the COP of the system. The distance between the two magnetic pairs was kept constant, i.e., 5 cm

IV. EXPERIMENTAL SETUP AND TEST PROCEDURE

1) Compressor
2) Condenser
3) Expansion Valve
4) Evaporator
5) Rota meter
6) Magnets
7) Charging unit
8) Pressure gauge
9) Computer
10) Data Logger

An experimental setup of a vapor compression refrigeration system was built to investigate the performance of R134a and R600a. A schematic diagram of the experimental setup is shown in Fig. 4.1. It consists of the main loop. The main loop is composed of a compressor, condenser, capillary tube valve and evaporator. The compressor is a hermetically sealed reciprocating type. The condenser and evaporator were of both copper single tubes. In the single tube condenser, the refrigerant flows through the inner tube while air is outside the tubes. The refrigerant then flows into the evaporator through the capillary tube. The expansion valves are used to control the mass flow rate of the refrigerant into the evaporator coils and also to set the pressure difference. In the single tube evaporator, the refrigerant flow through the inner tube and water is outside the tubes. For minimizing the heat loss, the tube is well insulated.

Five magnetic pairs with a Gauss level of 3000 each were employed in this study and placed in the system on liquid line. The readings were taken with increasing number of magnetic pairs. Two pressure gauges were placed in the system to note down the compressor inlet and outlet pressure. Temperatures at various points in the system were noted with the help of an RTD (Resistance Temperature Detector). The voltage and the current in the system were measured with the help of calibrated energy meter. Six RTDs (with an accuracy of ±1.5 °C and resolution of 0.1 °C) were used to measure the temperature at different locations in the refrigeration loop (Evaporator inlet and outlet, condenser inlet and outlet, Cooling water and ambient air). Temperatures at various points mentioned in Fig. 4.1 were measured. Power consumed by the compressor was measured by an energy meter. The two calibrated pressure gauges at the compressor inlet and outlet were used to measure the suction and discharge pressure respectively.

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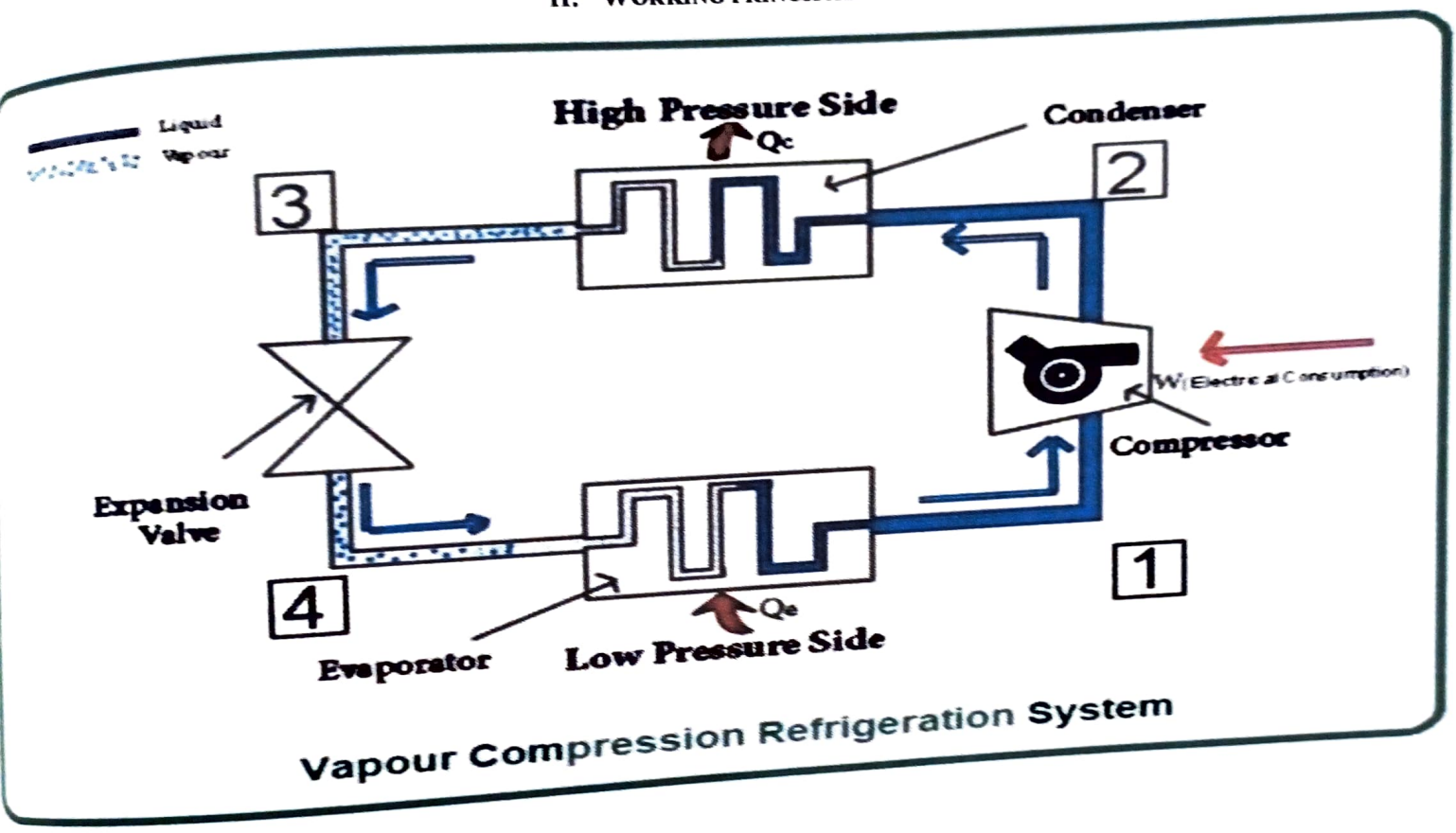
II. WORKING PRINCIPAL



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Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

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9) Computer
10) Data Logger

Head
DOME

Principal
JDCOEM

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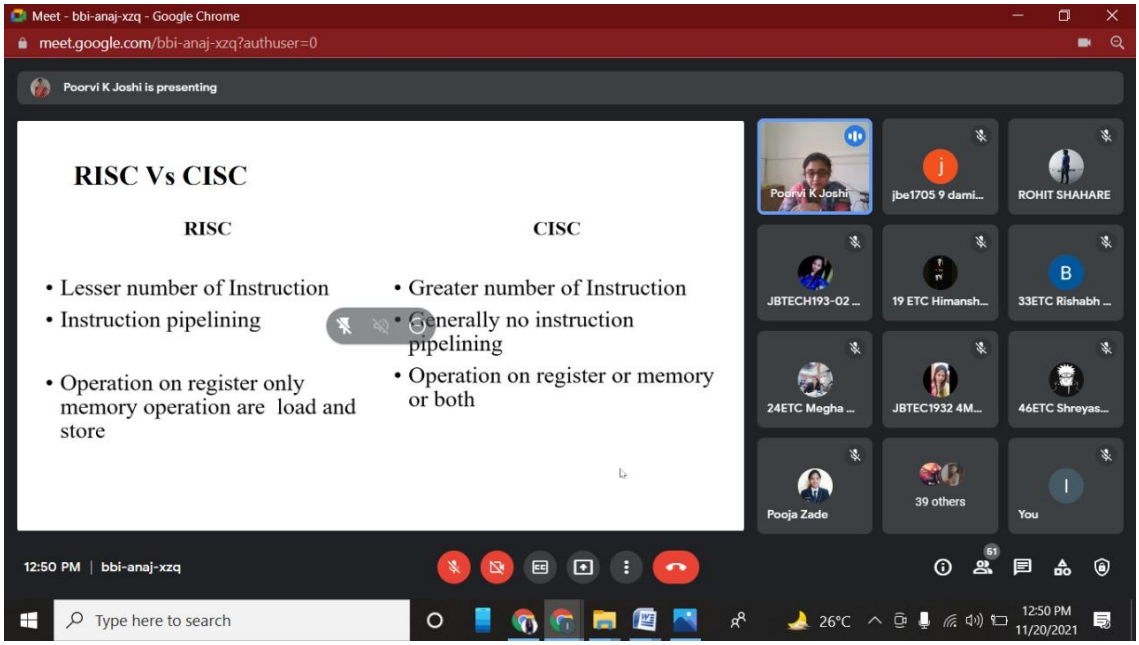
To be a center of excellence imparting professional education satisfying societal and global needs.	1. Transforming students into lifelong learners through, quality teaching, training and exposure to concurrent technologies. 2. Fostering conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

2021-22



Guest Lecture On Emerging Trend In Embedded System

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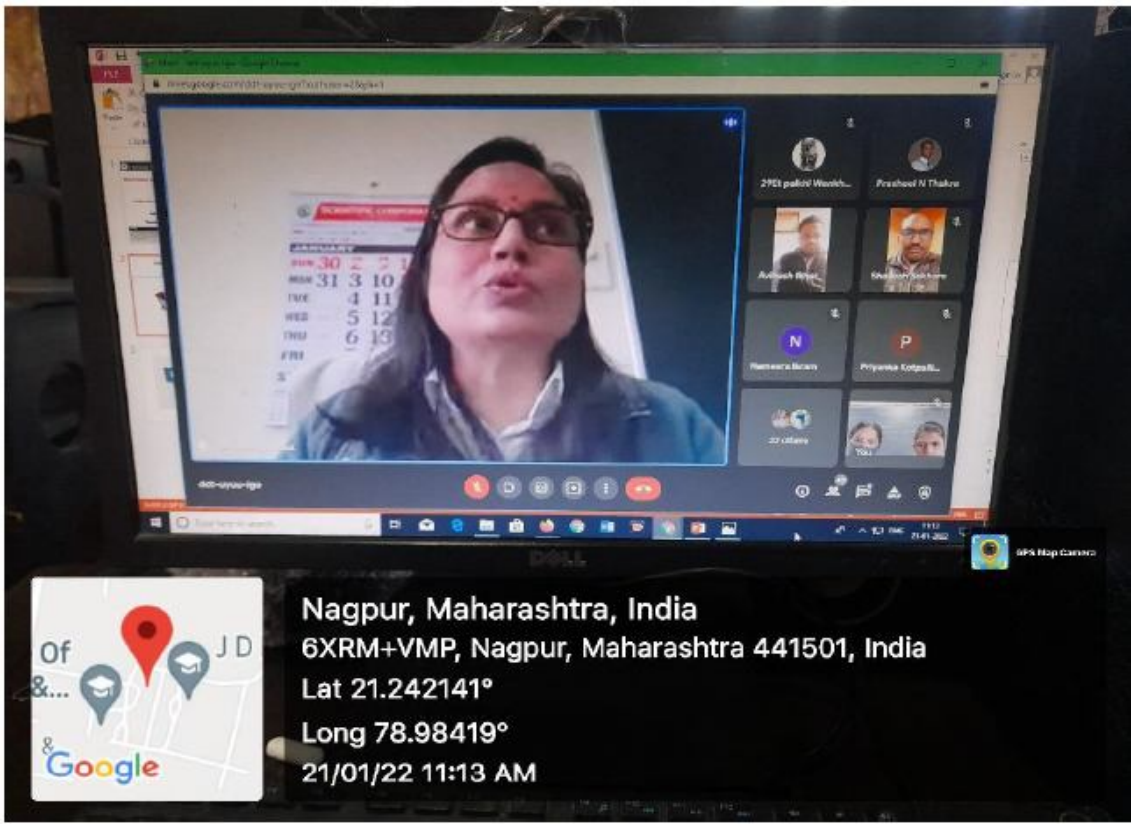
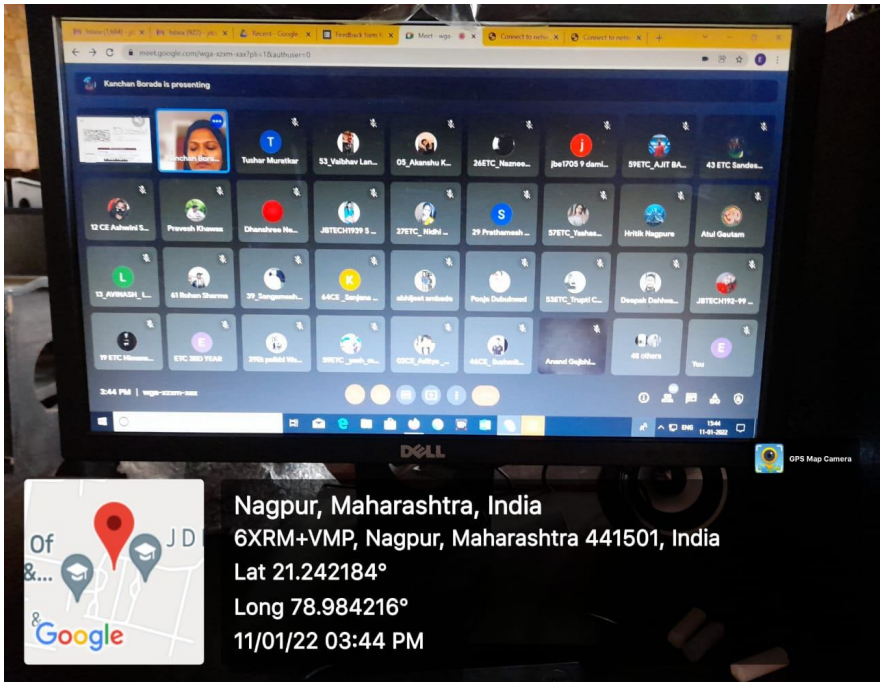


Guest lecture on Overview of Cognitive Radio Communication



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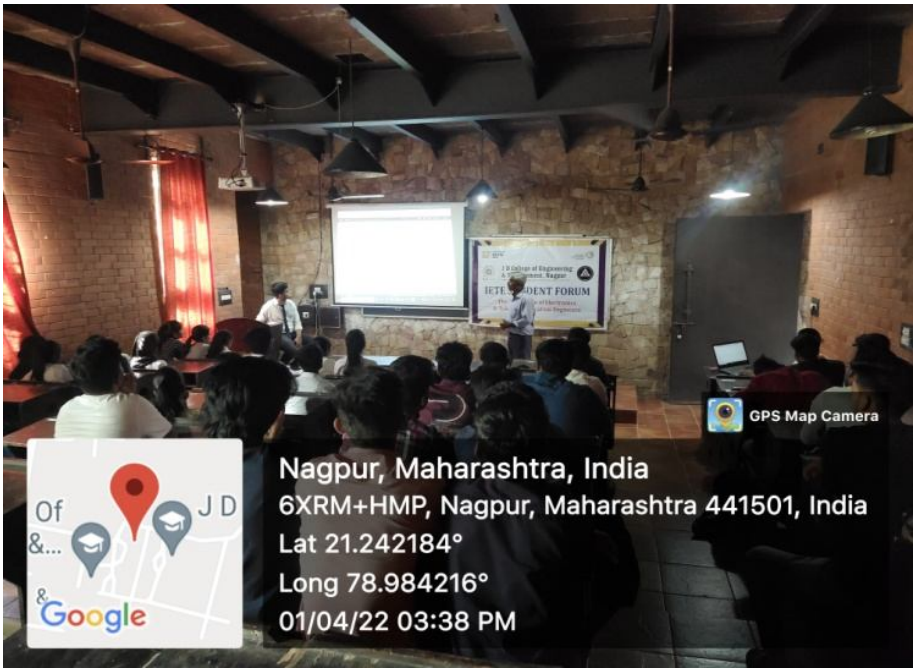
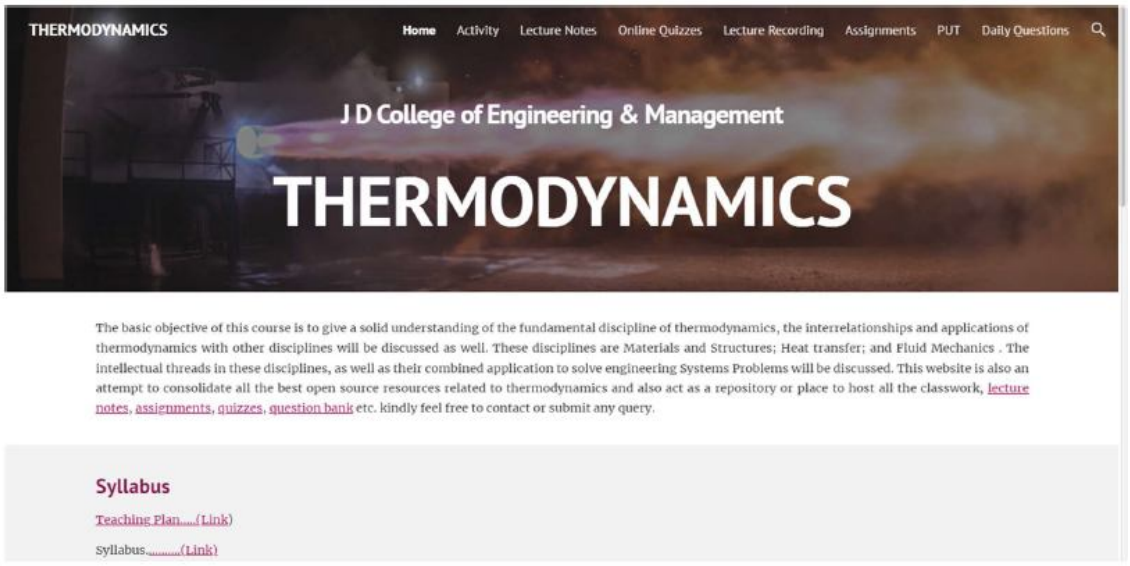
Webminar on Career Opportunities in Drone Technology



Hands on workshop on cloud computing



Google Sites platform

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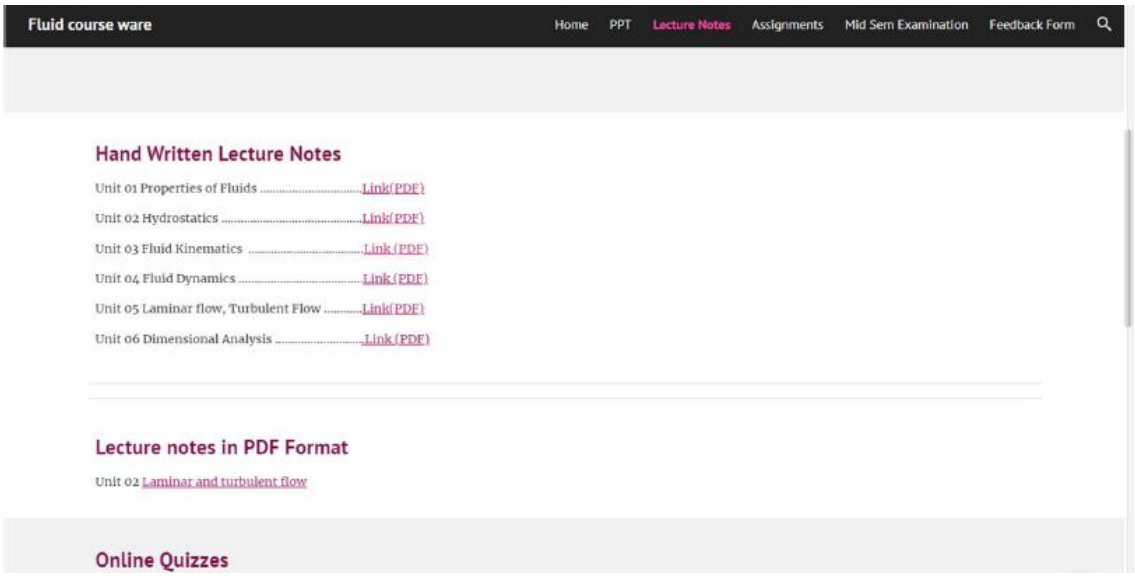

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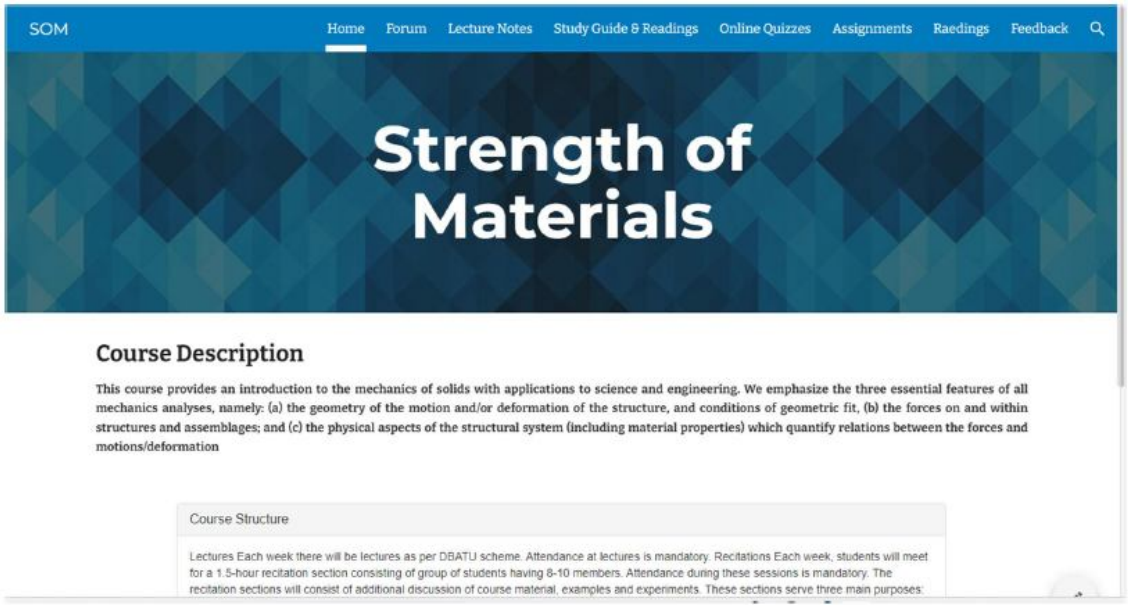

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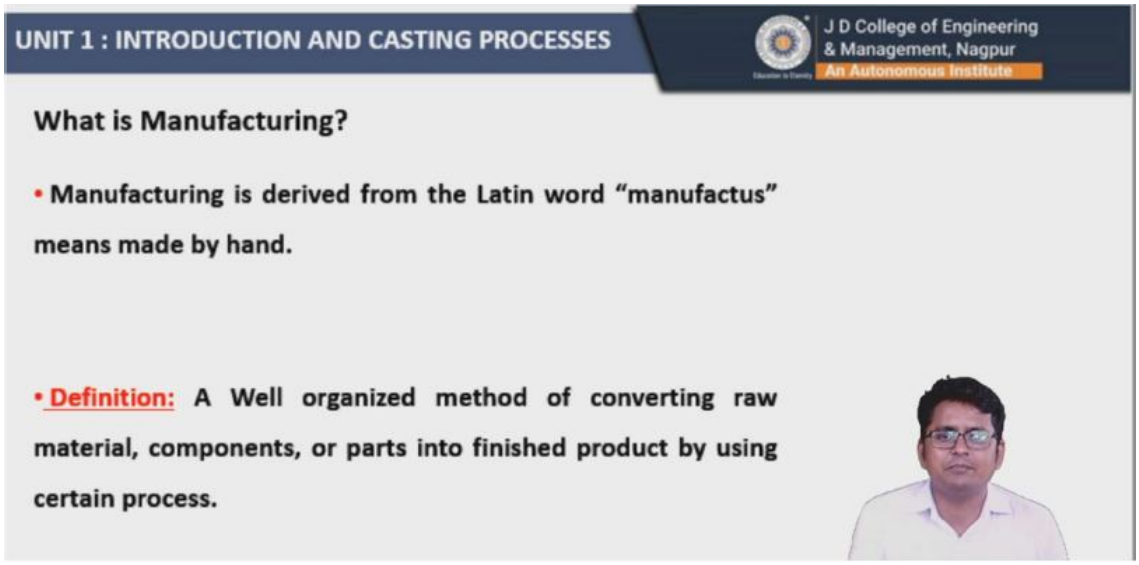
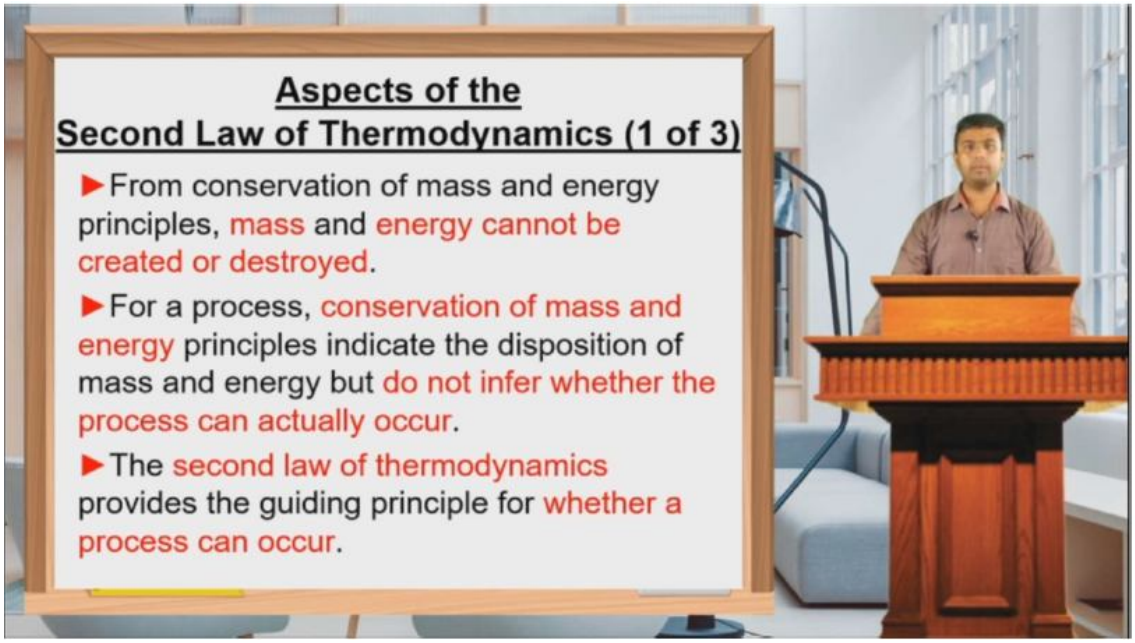


Chroma cut videos



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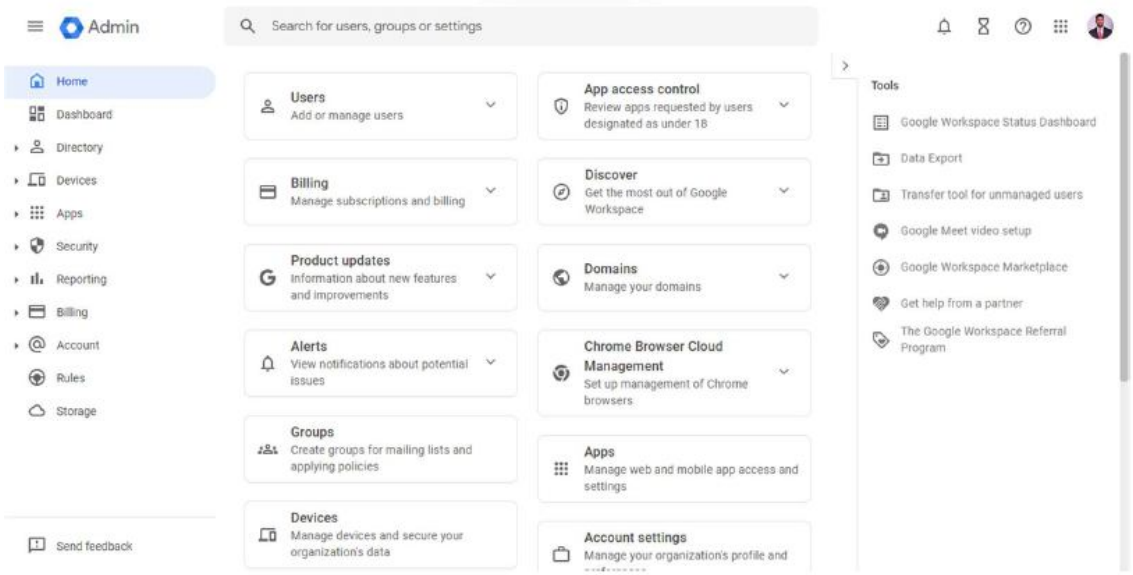

Gsuite platform

Virtual lab

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Innovative model development – e Yantra

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Basic Science and Humanities Department

Session- 2021-22

Semester-I

VISION	MISSION
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Assignment-1

Year/Semester: 1st Semester (First Year)

Subject: Engineering Physics

Subject Code: Cs/IT/AI/DS 1T 005

Max Marks: 20 **Date:15.01.2022**

Q1 Explain with diagram : Absorption ,Spontaneous emission, and Stimulated emisssion of radiation

Q2 Describe construction and working of solid state He-Ne LASER with necessary energy level diagram. Explain why diameter of discharge tube is narrow?

Q3 What is acceptance angle for an optical fiber and derive its expression for an optical signal propagating through optical fiber.

Q4 Write difference between :1) Single mode and Multimode Fiber
2) Step Index and Graded Index Fiber

Q5 Draw energy band diagram of n type and p type semiconductor at $0^{o}K$ and $300^{o}K$.

Q6 What is Hall effect. Derive an expression for Hall coefficient,Hall voltage,Hall angle and Hall mobility for an extrinsic semiconductor.Mentioned some application of Hall effect

Q7 What is Fermi energy . Derive an expression to show that Fermi energy lies in middle of band gap in intrinsic semiconductor.

Q8 What is thin film ? Obtain an expression for fringe width in wedge shaped thin film.

Q9 Expain the formation of Newton's ring and show that radius of n^{th} dark ring is proportional to square root of wavelength of light used.

Q10 What are antireflection coating? Derive condition for minimum thickness of film for antireflection .

Last Date of Submission : 22.01.2022

Mr.U.V.Rathod,
Subject Teacher

Dr.A.N.Gupta,
HOD, BSHD,JDCOEM

Principal
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Khandala, Katol Road
Nagpur-441501

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Department of Basic Science & Humanities

2021-22 (Odd Sem)

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Assignment for All Branches

Engineering Mathematics

Date of Assignment: 10/04/2022

Q.1. Define the order and degree of differential equation.

$\frac{d^2y}{dx^2} + 3\left(\frac{d}{dx}\right)^2 + y = 0$ CO1/1

Q2. Illustrate the C.F. $(D^3 + D^2 + 4D + 4) = 0$ CO2/2

Q.3. Interpret the differential equation $(D^2 + 4) = cos2x$ CO2/2

Q.4. Solve the P.I. of $(D^2 + 3D + 2) = e^{e^x}$ CO3/3

Q.5. Apply the variation of Parameter to get solution $\frac{d^2y}{dx^2} + y = Secxtanx$ CO4/4

Last date of submission: 18/04/2022

Ms.Prerna M.Parkhi,
Subject Teacher

Dr.A.N.Gupta,
HOD, BSHD,JDCOEM

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Khandala, Katol Road
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Session- 2021-22

Semester-II

VISION	MISSION
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Assignment-1

Subject:Engineering Physics Branch:ME/CE/EE/ETC Date:15.06.2022

Sr.No.	Questions
Q1	Explain with diagram : Absorption , Spontaneous emission, and Stimulated emisssion of radiation
Q2	Describe construction and working of solid state He-Ne LASER with necessary energy level diagram. Explain why diameter of discharge tube is narrow?
Q3	What is acceptance angle for an optical fiber and derive its expression for an optical signal propagating through optical fiber.
Q4	Write difference between :1) Single mode and Multimode Fiber 2) Step Index and Graded Index Fiber
Q5	Draw energy band diagram of n type and p type semiconductor at $0^{o}K$ and $300^{o}K$.
Q6	What is Hall effect. Derive an expression for Hall coefficient,Hall voltage,Hall angle and Hall mobility for an extrinsic semiconductor.Mentioned some application of Hall effect
Q7	What is Fermi energy . Derive an expression to show that Fermi energy lies in middle of band gap in intrinsic semiconductor.
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Q10	What are antireflection coating? Derive condition for minimum thickness of film for antireflection .

Last Date of Submission : 22.06.2022

Dr.U.V.Rathod,
Subject Teacher

Dr.A.N.Gupta,
HOD, BSHD,JDCOEM

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Session-2021-22(Even Semester)

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Engineering Mathematics-II Dt.: 05/06/2021

ASSIGNMENT-1
COMPLEX NUMBER

Q.1. Illustrate$2cos\theta = x + \frac{1}{x}$, $2cos\,\emptyset = y + \frac{1}{y}$, Prove that
$x^m y^n + \frac{1}{x^m y^n} = 2cos\,(m\theta + n\emptyset)$, $\frac{x^m}{y^n} + \frac{y^n}{x^m} = 2\cos(m\theta - n\emptyset)$ 4M]

Q.2. Identify the all values of $\left(\frac{1}{2} + i\frac{\sqrt{3}}{2}\right)^{3/4}$ and show that the continued product of all the values is 1. 4M]

Q.3. Analyze the functions$\sin(A + iB) = x + iy$, then prove that
(a) $\frac{x^2}{cosh^2 B} + \frac{y^2}{sinh^2 B} = 1$ (b) $\frac{x^2}{sin^2 A} - \frac{y^2}{cos^2 B} = 1$ 4M]

Q.4.Using Demoivre's theorem, solve$x^7 - x^4 + x^3 - 1 = 0$ 4M]

Q.5. Extend the function of $\frac{sin7\theta}{sin\theta}$ in power of $sin\theta$ only. 4M]

Last Dt of submission: 12/06/2021

Ms.Prerna M.Parkhi,
Subject Teacher

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Dr.A.N.Gupta,
HOD, BSHD,JDCOEM

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"A Place to Learn, A Chance to Grow"
Session: 2021-22

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To be recognized for excellent engineering, developing global leaders both in educational and research in the domain of computer science and wireless engineering.	1. To create self-learning environment by facilitating leadership qualities, team spirit and ethical responsibilities. 2. To improve department-industry collaboration, interaction with professional society through technical knowledge and internship program. 3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

Assignment

Semester/ Branch: - III Sem/ CSE **Subject Code:-CS5T002**

Subject Name: -Computer Network **Date of Display: 30/08/2021**

Subject In-charge: Prof. Supriya Sawwashere **Date of Submission: 06/09/2021**

==========

List of Assignment Question's:-

Que. No.	Questions	Unit No.	Topic Code	CO Mapping
1	Explain Network Architecture with its types.	1	T1.1	CO1
2	State & Explain types of Network Standards.	1	T1.7	CO1
3	Discuss different types of Connecting device in details.	2	T2.6	CO2
4	Differentiate between following a) LAN Vs WAN b) OSI Vs TCP/IP c) Extranet Vs Internet Vs Intranet d) Subnetting Vs Supernetting	2	T2.5/T2.3	CO2
5	Illustrate the following. a) Internet Backbones b) NAP c) ISPs d) RFCs	3	T3.6/ T3.7	CO3
6	Explain ARP and RARP with its working process.	3	T3.4/T3.5	CO3
7	Calculate weather following IP address is valid IP address block or not. a) 100.1.2.32 to 100.1.2.42 b) 192.1.1.47 to 192.1.1.60	4	T4.2	CO4
8	Describe Classful Internet address with its classes.	4	T4.1	CO4
9	Discuss DHCP with its component and working principle.	5	T5.6	CO5
10	Describe BOOTP.	5	T5.2	CO5

Prof. Supriya Sawwashere
Subject In charge

Prof. Swati Raut
Dept. Academic Incharge

Dr. Supriya Sawwashere
Dept. Head CSE

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Department Of Electrical Engineering

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2021-22 (Odd Sem)

VISION	MISSION
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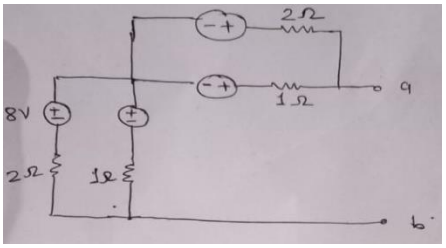
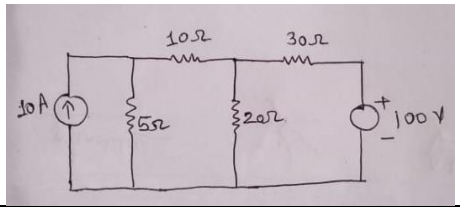
Assignment

Subject	Network Analysis
Subject code	**EE3T004**
Semester/Year	3rd/2nd year
Unit No. I	I & II
Date of display	31/08/2021
Date of submission	06/09/2021

Sr. No.	Question	Mapped Co
1	What do you mean by passive element.	CO1/ CO2
2	Give the classification of electrical sources.	CO1/CO3/CO4
3	Recall Inductance.	CO3
4	What is a loop.	CO3/CO4
5	Explain the equation for voltage and current in capacitor.	L2/CO4
6	Simplify and Reduce the network using source transformation 	L4/CO3
7	Estimate voltage across 20 ohm resistance using Mesh Analysis. 	L6/CO4

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8	Explain the equation for voltage and current in capacitor.	L2/CO4
9	Explain duality.	L4/CO4
10	Explain the derivation of Mesh analysis.	L2/CO4

Subject teacher

Academic incharge

HOD EE

PRINCIPAL

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Assignment 1

Date: 31/08/2021

Course: B. Tech in Electronics & Telecommunication

Subject: Microcontroller & its Applications

Subject Code: ET5T002

Year/Semester: 5th Semester (3rd Year)

		(Level/CO)
Q .1	Draw & explain block diagram of 8051 Microcontroller.	2/2
Q.2	Compare the functioning of Von Neuman & Harward architecture.	2/1
Q.3	Compare the difference between Microcontroller & Microprocessor.	2/1
Q.4	Explain the memory organization of 8051 Microcontroller.	2/2
Q.5	Summarize the Interrupt structure of 8051 Microcontroller.	2/2

Prof. Avinash K. Ikhar
Course Coordinator / Academic Incharge

Dr. Pravin Kshirsagar
HOD (ETC)

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2021-22 (Even Sem)

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Assignment 1 **Date: 29/01/2022**

Course: B. Tech. in Mechanical Engineering

Subject: Research Methodology

Subject Code: ME6T005

Year/Semester: 6th Semester (3rd Year)

Q. No.	Question	Level	CO	Marks
01.	Describe basic framework of research process.	2	1	10
02.	Demonstrate various sources of information for research.	1,2	2	10
03.	Explain various types of research design and techniques.	2,5	1,3	10
04.	Compare between primary and secondary sources of literature review.	2,4	4	10

Date of Submission: 12/02/2022

Submit via google classroom (Code- bp7rctw)

Prof. S. G. Chakrabarty
Subject Teacher

Prof. D. A. Agrawal
Academic In charge

Bhushan R.Mahajan
Head of Department,
DOME
JDCOEM
Mechanical Engineering
J D College of Engineering & Management
Nagpur

Department of Mech. Engg. JDCOEM

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

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Assignment

Semester/ Branch: - IV Sem/ AI **Subject code:-AI4T005**

Subject Name: -Database Management System **Date of Display: 29/01/2022**

Subject In-charge: Prof. Jolly Nikhade **Date of Submission: 12/02/2022**

==========

List of Assignment Question's:-

Que. No.	Questions	Unit No.	Topic Code	CO Mapping
1	Define DBMS with is advantages also explain Types of Databases.	1	T01/T02/ T03	CO.1
2	Explain Entity-relationship model with an examples.	1	T12	CO.2
3	Explain the following terms. i) Data Independence ii) Relational Integrity Constraints iii) Data Abstraction iv) Data Manipulation Operations v) File processing system Limitations.	1	TO7/T13/TO6/ T14/T04	CO.1
4	Differentiate between Open source and Commercial DBMS.	2	T20	CO.4
5	Explain the DDL and DML constructs.	2	T19	CO.4
6	Explain Tuple and domain relational calculus in detail.	2	T17	CO.3
7	Explain Relational algebra with its operation.	2	T16	CO.2
8	Explain the Domain and data dependency	3	T28	CO.2
9	Explain the Normalization of Database Tables with Normal Forms. Also explain its Need and Significance.	3	T26/T27/T30	CO.3
10	Explain Dependency preservation and Lossless design.	3	T31/T32	CO.3

Prof. Jolly Nikhade
Subject In charge

Prof. Swati Raut
Dept. Academic Incharge

Dr. Supriya Sawwashere
Dept. Head AI

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Semester: - MBA I Semester **Subject Code:-1T2**

Subject Name: - Management Information System **Assignment: 2021-22**

==========

All Questions are Compulsory:

Q.1.A. Shivam Infotech received a contract to design a MIS System for Ventura Corporation a newly started manufacturing unit for effective operational management. As operational head design a suitable MIS for this organization.

OR

Q.1.B. Modern day Business cannot be managed without an efficient MIS in place. Critically examine this statement while describing the different types of MIS from a management activity point of view.

Q.2.A. An inspection is scheduled at your organization by the labour Commissioner. As an HR Manager, discuss which statutory records you need to make available for inspection to the Labour Commissioner.

OR

Q.2.B.- Tarpulin Engg. engaged in manufacturing & marketing of four wheeler side glass, wants to install a computer program for its marketing department. if you are the marketing specialist in this organization, discuss which are the information update reports, you would require through programming.

Q.3.A. Explain the term Service Management System (SMS). Draw and discuss the conceptual SMS architecture model.

OR

Q.3.B. With the help of suitable example suggest the conceptual model of Project Management System (PMS). Also, draw a system model of integrated system.

Q.4.A. As a sales manager you need to quote a tender of various modules of ERP solution for Shradha Corporation.

OR

Q.4.B. Describe the impact of SCM software on operations of a firm

Q.5.A. Outline and elaborate the three dimensions used in evaluation of an IT Solution

OR

Q.5.B. Explain the tests which are used in TQM software testing

Subject In charge **Dept. Academic Incharge** **Dept. Head MBA**

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Semester: - MBA IV Semester **Subject Code:-4T5**

Subject Name: - Team Dynamic **Assignment: 2021-22**

==========

All Questions are Compulsory

Q1.A. Explain the Maslow Theory in detail

Or

Q1.B. Discuss the Application of Motivation concept in Team Behavior.

Q2.A. Discuss the Meaning and Importance of Interpersonal Communication

Or

Q2.B. Discovering facets of interpersonal trust through Johari window discuss

Q3.A. Write the Concept of Group and Team. Also discuss synergy of Team work

Or

Q3.B. Write notes on Team Decision making and team morale

Q4.A. Explain the Meaning of Conflict and Types of conflict

Or

Q4.B. Discuss competitive vs collaborative behavior

Q5.A. Explain the Concept of OD. Also discuss the Process of OD

Or

Q5.B. Elaborate various Experiential learning methodologies-T-group sensitivity training

Subject In charge **Dept. Academic Incharge** **Dept. Head MBA**

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

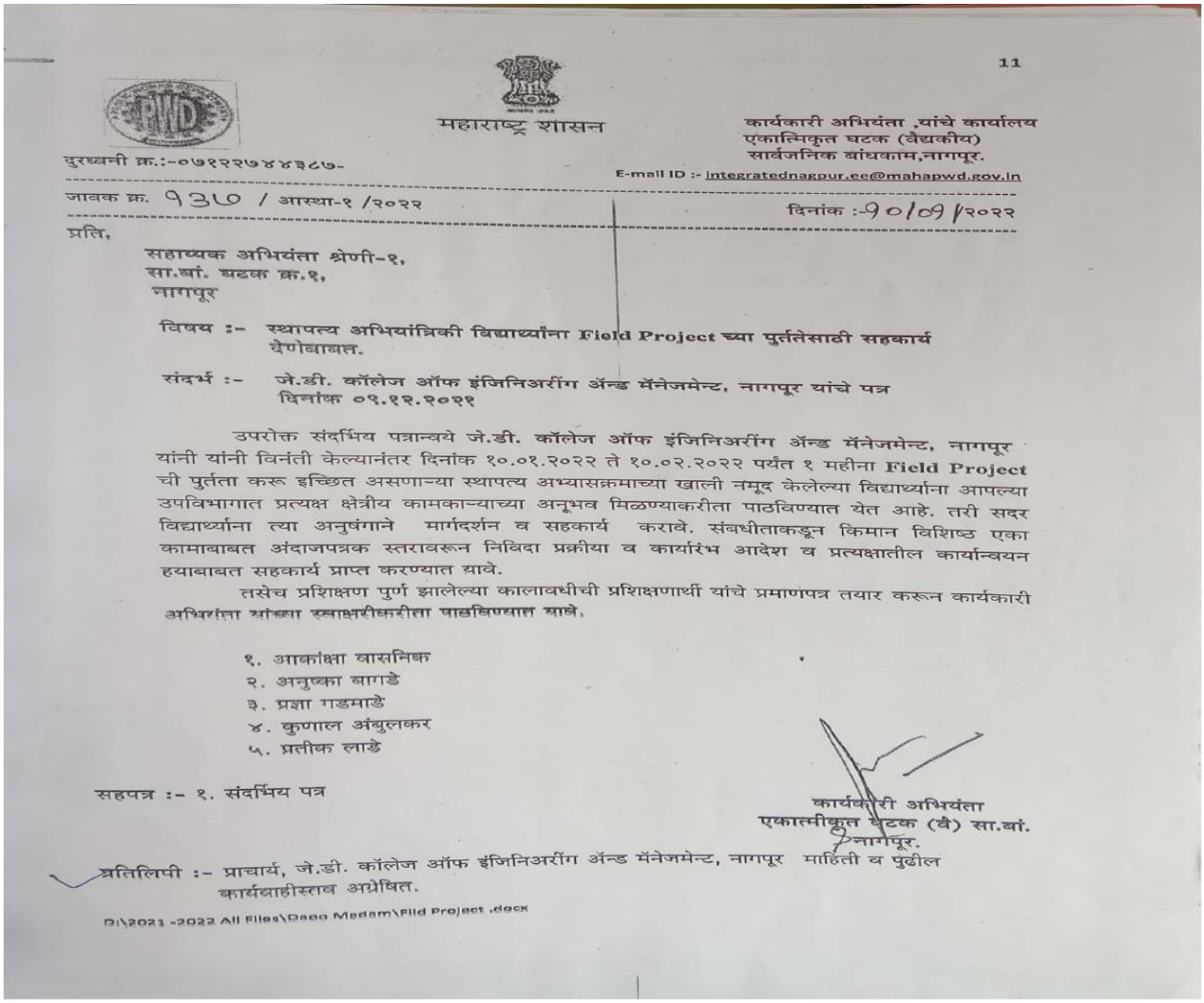
Dept. of Management Studies (MBA)
J. D. College of Engineering & Management

Education to Eternity

JAIDEV EDUCATION SOCIETY'S
JD COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
An Autonomous Institute, with NAAC "A" Grade
Affiliated to DBATU & RTMNU
Department of Civil Engineering
"Building Better Development"
Session 2021-22

।।ज्ञानम् सर्वार्थ साधनम्।।

VISION	MISSION
To be a well-known center for shaping professional leaders of Global Standards in Civil Engineering	• Provide quality education and excellent learning Environment for overall development of students. • Making Sustainable efforts for integrating academics with Industry.



11

महाराष्ट्र शासन

कार्यकारी अभियंता ,यांचे कार्यालय
एकात्मिकृत घटक (वैद्यकीय)
सार्वजनिक बांधकाम,नागपूर.
E-mail ID :- integratednagpur.ee@mahapwd.gov.in

दुरध्वनी क्र.:-०७१२२७४४३८७-

जावक क्र. ९३७ / आस्था-१ /२०२२ दिनांक :-१०/०१/२०२२

प्रति,

सहाय्यक अभियंता श्रेणी-१,
सा.बां. घटक क्र.१,
नागपूर

विषय :- स्थापत्य अभियांत्रिकी विद्यार्थ्यांना Field Project च्या पुर्ततेसाठी सहकार्य देणेबाबत.

संदर्भ :- जे.डी. कॉलेज ऑफ इंजिनिअरींग अॅन्ड मॅनेजमेन्ट, नागपूर यांचे पत्र दिनांक ०९.१२.२०२१

उपरोक्त संदर्भिय पत्रान्वये जे.डी. कॉलेज ऑफ इंजिनिअरींग अॅन्ड मॅनेजमेन्ट, नागपूर यांनी यांनी विनंती केल्यानंतर दिनांक १०.०१.२०२२ ते १०.०२.२०२२ पर्यंत १ महीना Field Project ची पुर्तता करू इच्छित असणाऱ्या स्थापत्य अभ्यासक्रमाच्या खाली नमूद केलेल्या विद्यार्थ्यांना आपल्या उपविभागात प्रत्यक्ष क्षेत्रीय कामकाऱ्याच्या अनुभव मिळण्याकरीता पाठविण्यात येत आहे. तरी सदर विद्यार्थ्यांना त्या अनुषंगाने मार्गदर्शन व सहकार्य करावे. संबधीताकडून किमान विशिष्ठ एका कामाबाबत अंदाजपत्रक स्तरावरून निविदा प्रक्रीया व कार्यारंभ आदेश व प्रत्यक्षातील कार्यान्वयन हयाबाबत सहकार्य प्राप्त करण्यात यावे.

तसेच प्रशिक्षण पुर्ण झालेल्या कालावधीची प्रशिक्षणार्थी यांचे प्रमाणपत्र तयार करून कार्यकारी अभियंता यांच्या स्वाक्षरीकरीता पाठविण्यात यावे.

१. आकांक्षा खासनिक
२. अनुष्का बागडे
३. प्रज्ञा गडमाडे
४. कुणाल अंबुलकर
५. प्रतीक लाडे

सहपत्र :- १. संदर्भिय पत्र

कार्यकारी अभियंता
एकात्मीकृत घटक (वै) सा.बां.
नागपूर.

प्रतिलिपी :- प्राचार्य, जे.डी. कॉलेज ऑफ इंजिनिअरींग अॅन्ड मॅनेजमेन्ट, नागपूर माहिती व पुढील कार्यवाहीस्तव अग्रेषित.

D:\2021 -2022 All Files\Dago Madam\Fild Project .docx

Scanned with CamScanner

Student Internship Completion Cerificate (CE)- 2021-22

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

HOD, (CE)

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JD COLLEGE OF ENGINEERING AND MANAGEMENT
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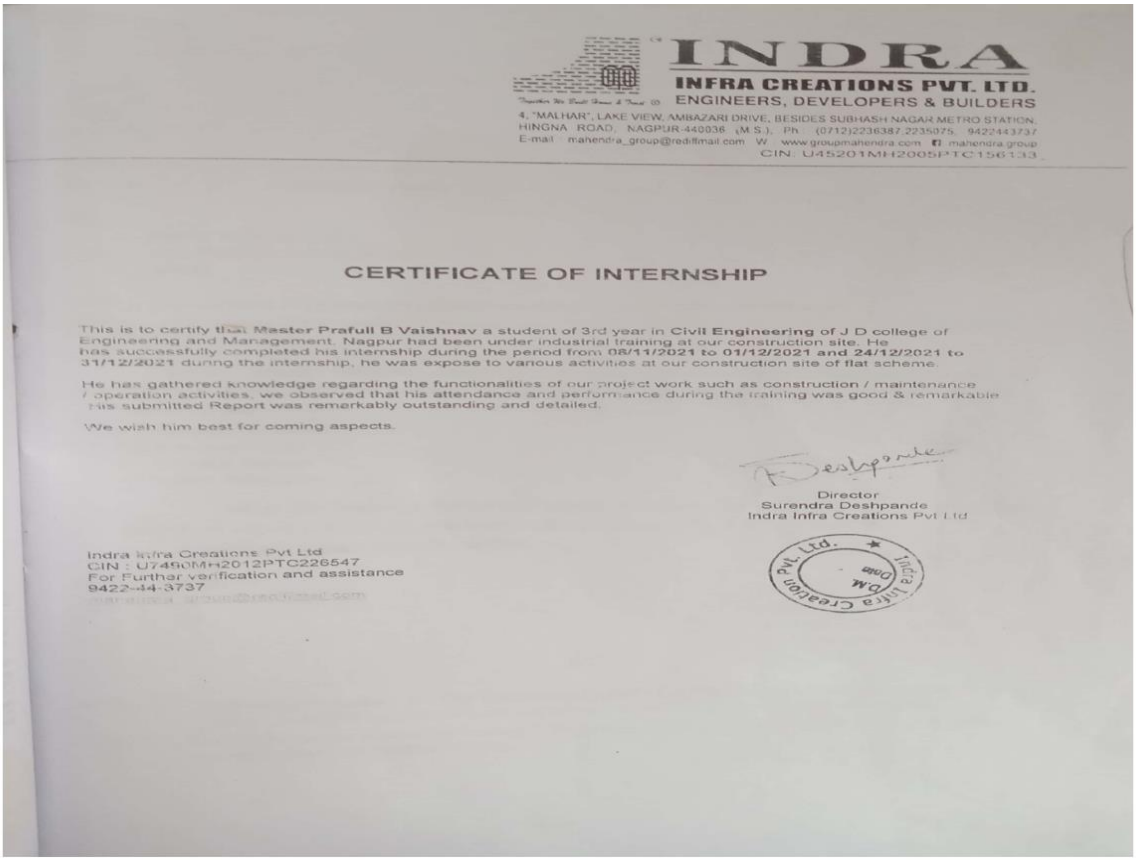

INDRA
INFRA CREATIONS PVT. LTD.
ENGINEERS, DEVELOPERS & BUILDERS
4, "MALHAR", LAKE VIEW, AMBAZARI DRIVE, BESIDES SUBHASH NAGAR METRO STATION, HINGNA ROAD, NAGPUR-440036 (M.S.), Ph. (0712)2236387,2235075, 9422443737
E-mail : mahendra_group@rediffmail.com W : www.groupmahendra.com mahendra.group
CIN: U45201MH2005PTC156133

CERTIFICATE OF INTERNSHIP

This is to certify that Master Prafull B Vaishnav a student of 3rd year in Civil Engineering of J D college of Engineering and Management, Nagpur had been under industrial training at our construction site. He has successfully completed his internship during the period from 08/11/2021 to 01/12/2021 and 24/12/2021 to 31/12/2021 during the internship, he was expose to various activities at our construction site of flat scheme.

He has gathered knowledge regarding the functionalities of our project work such as construction / maintenance / operation activities, we observed that his attendance and performance during the training was good & remarkable. His submitted Report was remarkably outstanding and detailed.

We wish him best for coming aspects.

Director
Surendra Deshpande
Indra Infra Creations Pvt Ltd

Indra Infra Creations Pvt Ltd
CIN : U74900MH2012PTC226547
For Further verification and assistance
9422-44-3737

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Student Internship Completion Cerificate (CE)- 2021-22

HOD, (CE)

Principal
Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S

J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

(An Autonomous Institute, with NAAC "A" Grade)

Affiliated to DBATU, RTMNU & MSBTE Mumbai

Department Of Electrical Engineering

"Igniting minds to illuminate the world"

2021-22

VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

Internship Certificate 2021-22 EE Department

H.O.D

PRINCIPAL

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JAIDEV EDUCATION SOCIETY'S

J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

(An Autonomous Institute, with NAAC "A" Grade)

Affiliated to DBATU, RTMNU & MSBTE Mumbai

Department Of Electrical Engineering

"Igniting minds to illuminate the world"

2021-22

VISION	MISSION
"To develop competent and committed Electrical Engineers to serve the society"	1. To impart quality education in the field of Electrical Engineering. 2. To be excellent learning centre through research and industry interaction.

UMEED INDIA FOUNDATION

TRUST REGISTRATION S. NO. DEL UR25851-0802

RefNo:UIF21/1058
Date:19-11-2021

Certificate of Internship

We present this certificate to

Ms. TEJASWINI WAKALKAR

In appreciation for your successful work as an intern at Umeed India Foundation in the area of Social Work, HR, Marketing, Finance & Environment.

The internship was conducted between 20-10-2021 and 19-11-2021.

During the tenure this internship the candidate was found to be dedicated, hardworking and efficient.

Subhrajeet Gautam
(Founder & Secretary)

RAJU PARK KHANPUR

Internship Certificate 2021-22 EE Department

H.O.D

PRINCIPAL

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

JSW Steel
Coated Products Limited

A-10/1& 10/2 MIDC iIndustrial Area ,
Kalmeshwar - 441 501,
Dist. Nagpur, Maharashtra,

Phone :(07118) 271401-06
Fax: (07118) 271128
Website: www.jsw.in

CIN No. U27100MH1985PLC037346

14th May 2022

CERTIFICATE

This is to certify that under mentioned student has undergone Internship IIndustrial Training in our organization and successfully completed the same.

Name of the student : *Miss.Aditi Godheswar*
B. TECH - ELECTRONICS AND TELECOMMUNICATION

Name of College : *J D College of Engineering & Management, Nagpur*

Duration of Training : *09.04.2022 to 09.05.2022*

We are happy to note the keen interest shown by the student during the training period.

Best Wishes for a bright future.

For JSW Steel Coated Products Limited

Authorised Signatory

JSW STEEL COATED PRODUCTS LTD. KALMESHWAR

HOD, Dept. of EN/ETC
JD College of Engineering
& Management, Nagpur

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Address: 131 A, Jafar Nagar, Nagpur, Maharashtra, India- 440013
Email: contact@iworkstation.in
CIN: U74999MH2019OPC323 46
www.iworkstation.in

IWORKSTATION CONSULTANCY (OPC) PVT. LTD.

iWorkstation

Date: 26/05/2022

SUB: INTERNSHIP COMPLETION LETTER

We are glad to inform you that Ms. Anas Khan from JD College of Engineering, Nagpur, has successfully completed her internship at iWorkstation from 01st December, 2021 – 31st May, 2022. During her internship, she was exposed to the various activities in Graphic Design.

We found her extremely inquisitive and hard working. she was very much interested to learn the functions of our core division and also willing to put her best efforts and get in to the depth of the subject to understand it better.

Her association with us was very fruitful and we wish her all the best in his future endeavors.

Adnan Ghori
Founder & Director

HOD, Dept. of EN/ETC
JD College of Engineering
& Management, Nagpur

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

केवल नागपुर कोर्ट के अधिकार क्षेत्र में

Under Jurisdiction of Nagpur Court only

वेस्टर्न कोलफील्ड्स लिमिटेड
Western Coalfields Limited
(मिनीरत्न कंपनी) (A Miniratna Company)
(कोल इंडिया लि. की अनुषंगी कंपनी)
(A Subsidiary of Coal India Limited)

मानव संसाधन विकास विभाग

Human Resource Development

email - gmhrd.wcl@gmail.com
CIN – U10100MH1975GOI018626
☎/FAX: 0712 -2510869
www.westerncoal.nic.in
मुख्यालय: कोयला विहार, सिविल लाइन्स, नागपुर (महाराष्ट्र)-440001
Regd. Off.: Coal Estate, Civil Lines, Nagpur (MS) -440001

संदर्भ संख्या/Ref.No.:

दिनांक/Date : / /201

संदर्भ नाग/डब्ल्यूसीएल/एचआरडी/2020-21/ 1518

दिनांक 05.02.2021

प्रति,
PROF. HEMANT BAITULE
TRAINING & PLACEMENT COORDINATOR
J D COLLEGE OF ENGINEERING & MANAGEMENT
NAGPUR - 442403

संदर्भ : NIL Date : 2/2/21

प्रशिक्षण हेतु स्वीकृति पत्र

आपके विश्वविद्यालय/महाविद्यालय से प्राप्त निवेदन पत्र के तहत नीचे तालिका में दर्शाए गए विवरण के अनुसार **B.TECH (MECHANICAL) STUDENT** को वेस्टर्न कोलफील्ड्स लिमिटेड में दिनांक **12.02.2021** से **03 MONTHS** के लिये निम्न उल्लेखित प्रशिक्षण शर्तों के आधार पर **Practical Training** की सुविधा प्रदान की जाती है।

SN.	Name of Student	Area Letter No.	Date	Allotted Deptt for Trg.
1	ISHRAR AHMED SHEIKH	NIL	NIL	RWS SILLEWARA, NAGPUR AREA

प्रशिक्षण शर्तें-

- प्रशिक्षण के दौरान प्रशिक्षणरत विद्यार्थी को किसी प्रकार का वेतन/स्टायफंड/छात्रवृत्ति प्रदान नहीं की जाएगी।
- वेकोलि द्वारा प्रशिक्षणरत विद्यार्थी/विद्यार्थियों को आवास एवं यातायात सुविधा प्रदान नहीं की जाएगी।
- प्रशिक्षणरत विद्यार्थी/विद्यार्थियों को अपने प्रशिक्षण प्रभारी/सुपीरियर द्वारा निर्देशित वैधानिक निर्देशों का पालन करना होगा।
- विद्यार्थी अपनी सुरक्षा के लिये स्वयं जिम्मेदार होंगे। वेकोलि प्रबंधन की ओर से उन्हें किसी भी प्रकार की नुकसान
- भरपाई नहीं की जाएगी।
- प्रशिक्षणरत विद्यार्थी/विद्यार्थियों को प्रशिक्षण के दौरान वेकोलि से संबंधित इकत्रित की गई कोई भी जानकारी, सूचना अथवा आँकड़ें गोपनीय रखना होगा। इसका उपयोग केवल शैक्षणिक प्रयोजन हेतु ही किया जाएगा।
- प्रशिक्षण प्रदान करनेवाले विभाग/इकाई से प्राप्त उपस्थिति प्रमाण-पत्र एवं प्रोजेक्ट रिपोर्ट की एक-एक प्रति, प्रशिक्षणरत विद्यार्थी को मानव संसाधन विकास विभाग में ज़मा करना अनिवार्य होगा।
- प्रशिक्षणरत विद्यार्थी/विद्यार्थियों को सलाह दी जाती है कि प्रशिक्षण ग्रहण करने जाते समय अपने साथ जन्म तिथि का प्रमाण अवश्य लेते जाएं।

5/2/21
महाप्रबंधक (कार्मिक)/मासंवि

प्रतिलिपि :

- क्षेत्रीय महाप्रबंधक, NAGPUR क्षेत्र ✓
- क्षेत्रीय प्रशिक्षण अधिकारी, NAGPUR क्षेत्र ✓
- संबंधित विद्यार्थी ✓

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

J D COLLEGE OF ENGINEERING & MANAGEMENT NAGPUR

MS CERT

WESTERN COALFIELDS LIMITED

Office of the Area General Manager,

Nagpur Area.

Area Training Department

Email - atonagpur@gmail.com

An ISO 9001:2015 Cerfified

पंजीकृत कार्यालय: कस्तुरबा नगर, जरिपटका, नागपुर-४४००१४ CIN - U10100MH1975GOI018628

संदर्भ : वे.को.लि/डी म.का /तक प्रशि /नागपुर/2020-21/ 50

वेस्टर्न कोलफील्ड्स लिमिटेड

मुख्य महा प्रबन्धक का कार्यालय

नागपुर क्षेत्र

क्षेत्रीय प्रशिक्षण विभाग

टेली क्रमांक - 0712-2561960

दिनांक- 02/02/2021

प्रति

वरि.प्रबंधक (वि/या)/प्रभारी
रिजनल वर्क शॉप सिलेवारा
नागपुर क्षेत्र

महोदय,

विषय : प्रशिक्षण हेतु ।

संदर्भ : नाग/डब्लूसी एल/एचआरडी/20-21 / 1518 दि. 05/02/2021

महाप्रबंधक (मसावि) के उपरोक्त संदर्भित पत्र के अनुसार J.D. COLLEGE OF ENGINEERING & MANAGEMENT, NAGPUR , B. TECH (MECHANICAL) के निम्नलिखित विद्यार्थी को वे.को.लि नागपुर क्षेत्र के रिजनल वर्क शॉप, सिलेवारा में **12.02.2021 से 3 माह** के लिए Practical Training की सुविधा प्रदान की जाती है ।

1. SRI- ISHRAR AH MED SHEIKH

प्रशिक्षण के दौरान विद्यार्थियों को पत्रानुसार निम्नलिखित शर्तें यथावत लागू होंगी ।

१. यह प्रशिक्षण सुविधा प्रशिक्षनार्थियो के स्वय के रिस्क और सेफ्टी पर आधारित होंगी ।

२. प्रशिक्षनार्थियो को वेकोली द्वारा किसी प्रकार का भुकतान /पारिश्रमिक नहीं दी जाएँगी ।

३.प्रशिक्षनार्थियो को प्रशिक्षण के दौरान Mines Act 1952 के नियम /विनियम का पालन करना होंगा।

४.प्रशिक्षनार्थियो को किसी चोट/दुर्घटना की स्थिति में कंपनी की जिम्मेदारी नहीं होंगी।

५.प्रशिक्षनार्थियो को अपने आवागमन/आवास की व्यवस्था स्वय ही करना होंगा ।

६.कंपनी पर किसी प्रकार का कोई वित्तीय दायित्तव नहीं होंगा ।

७.प्रशिक्षनार्थियो के किसी कार्य की वजह से कंपनी की संपत्ति को होनेवाले नुकसान भरपाई के लिए प्रशिक्षनार्थियो स्वय जिम्मेदार होंगे ।

८ प्रशिक्षणरत विद्यार्थी को प्रशिक्षण के दौरान वेकोली से सम्बंधित इकत्रित की गयी कोई भी जानकारी सुचना अथवा आकडे गोपनीय रखना होंगा इसका उपयोग केवल शैक्षणिक प्रयोजन हेतु किया जायेंगा ।

९. प्रशिक्षणरत विद्यार्थी को सलाह दी जाती है की प्रशिक्षण ग्रहण करने के समय अपने साथ जन्म तिथि का प्रमाण अवश्य लेते जाए ।

क्षेत्रिय प्रशिक्षण अधिकारी
नागपुर क्षेत्र

प्रतिलीपी

१.महा प्रबंधक नागपुर क्षेत्र
२.महा प्रबन्धक (संचालन) नागपुर क्षेत्र
३ क्षेत्रिय कार्मिक अधिकारी नागपुर क्षेत्र

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

nagarro

Nagarro Software Pvt. Ltd
(CIN :U72900DL1996PTC075453)

Date:February 14, 2022

Vishwesh Prakash Mule,
(Maharashtra) India

Subject: Training Letter

Dear Vishwesh Prakash Mule,

This is further with reference to the tests and interviews conducted by us. We are pleased to inform you, that we have decided to provide you appointment as **Trainee** at **Nagarro**.

You are requested to join us on or before **March 9, 2022**. During the period of training you would be paid a stipend of **Indian Rupee (INR) 19,0(** per month.

The details of your compensation package and terms and conditions of your employment are enclosed herein.

You are requested to send us the signed duplicate copy of this letter as a token of your acceptance.

We welcome you to a pursuit of excellence with **Nagarro**.

To help complete joining formalities, may we request you to carry the following documents with you on the date of joining:

- **Mark sheets and Certificates for Class X, XII, Graduation and Post Graduation (if applicable)**
- **Copy of Aadhar Card, PAN Card, Driving License and Passport (if applicable)**
- **Five Passport size photographs**

Yours Sincerely,

For **Nagarro Software Pvt. Ltd.**

Swati Yadav
Director

Registered Office: 19/20, Punjabi Bagh (East), New Delhi - 110 026
Unit II: Plot No. 36, Electronic City, Sector-18, Gurgaon - 122015, Haryana, India Ph: (+91 124) 2450807 Fax : (+91 124) 2450832
Unit III: Plot No. 37, Electronic City, Sector-18,Gurgaon - 122015, Haryana, India Ph: (+91 124) 2450807 Fax : (+91 124) 2450832
www.nagarro.com email: info.in@nagarro.com

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Nagpur-441501

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Nagarro Software Pvt. Ltd
(CIN :U72900DL1996PTC075453)

Ref: Nagarro Software Pvt. Ltd./APP/18001917/1448756

Date: February 14, 2022

Vishwesh Prakash Mule,
(Maharashtra) India

Dear Vishwesh Prakash Mule,

This has reference to your application for employment with **Nagarro Software** and your subsequent interview.

We are pleased to appoint you as **Associate Engineer** at **Nagarro Software Private Limited Unit-II** of **Nagarro Software Pvt. Ltd. Plot No. 13, Vihar, Sector - 18, Gurgaon, India**. You can join us on or before **September 9, 2022**

The terms and conditions of your employment are enclosed as **Annexure "B"**.

We welcome you to a pursuit of excellence with Nagarro.

Please sign the duplicate copy of this letter, Annexure "A" and Annexure "B" as a token of your acceptance and deliver it to us in persor mail/courier within ten days from the date of receipt of this letter.

To help complete joining formalities, may we request you to carry the following documents with you on the date of joining:

- **Mark-sheets and certificates for Class X, Class XII, Graduation and Post-graduation if applicable**
- **Copy of Aadhar Card, PAN Card, Driving License and Passport (if applicable)**
- **Five passport-size photographs**

Yours truly,

For **Nagarro Software Pvt. Ltd.**

Swati Yadav
Director

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Name	Vishwesh Mule

Monthly Earnings	Amount in Indian Rupee (INR)	Annualized Amount in Indian Rupee (INR)
Basic Pay	15,000.00	180,000.00
HRA	7,500.00	90,000
Executive Allowance	12,278.00	147,336.00
Total (A)	**34,778.00**	**417,336.00**
Annual Earnings	**Amount in Indian Rupee (INR)**	
Medical Reimbursement*	0	
Employer's Contribution to Provident Fund	23,400.00	
Employer's Contribution to ESIC	0.00	
Leave Travel Allowance**	0.00	
Gratuity***	8,664.00	
Labour Contribution Fund	600.00	
Total Yearly (B)	**32,664.00**	
Variable Bonus	0	
Total Fixed Compensation (A+B)	**450,000.00**	

Note:

**Leave Travel Allowance (LTA) will be paid once in a year on submission of bills & subject to Income Tax rules

***Payment as per Gratuity Act

Income Tax in respect of the above mentioned compensation package should be borne by the employee. There would be follc deduction from Monthly A- Tax/ Mediclaim / PF-employee contribution and Transport (Optional)

PLs will accrue each month on a prorated basis. Amount of accrual for the month is calculated on the basic pay exist at the end of each month

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Group Insurance

Guidelines:-

Group Mediclaim Insurance

a) An employee has a mediclaim insurance cover of 3 lac by default and he/she at the time of joining can increase his/her sum insured upto 1 lakhs & cover his dependents (spouse, kids and parents). Premium deduction details has been provided in table below.

b) During mid-term of the policy, only newly-wed spouse, Parents in Law (on account of marriage) and new born child can be included in the p within 90 days from Date of Marriage and Date of Birth respectively. No other dependent can be included during mid-term of the policy.

c) Downward revision of Sum Insured will be allowed at the time of renewal as per the then prevalent term and conditions of the policy.

d) Exclusion of dependents will be allowed at the time of renewal only as per the then prevalent terms and conditions of the policy.

Group Personal Accident Insurance (GPA)

The GPA Policy provides the insured a cover for disability or death caused by an accident.

a) An employee has personal accident insurance cover of 3X of his TFC by default and he/she at the time of joining can go in for a sum insure upto 4X to 10X as per policy terms. Premium deduction details has been provided in table below.

b) Once an employee is enrolled in the policy he/she cannot exit the policy till he leaves the company.

Group Term Life Insurance (GTL)

The GTL policy provides the insured a cover in case of death.

a) Enrollment in GTL is optional and on discretion of the employee and employee can opt for a cover of upto 10X of their TFC. The most comm practice is to cover within 3X to 5X of your TFC. Premium deduction details has been provided in table below.

b) Exit from the policy can be done at the time of renewal only by selecting “0X” multiplier in internal insurance application.

Premium for Group Insurance

	Premium	Deduction
Premium Deduction for Mediclaim Insurance	Calculated Formula	In equal instalments starting from the following month of DOJ till Policy end date.
Premium Deduction for GPA	Calculated Formula	From the following month of DOJ
Premium Deduction for GTL (optional)	Calculated Formula	From the following month of DOJ

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Terms and Conditions

The key service conditions applicable to your employment are given below. The Company reserves the right to revise these terms and conditic any time.

1. Place of Posting and Assignment:
Your place of posting will currently be GURUGRAM. However, you are liable to be temporarily assigned or permanently transferred from one pl another, one job to another, one unit to another, wherever located in the country or abroad, at any point of time as the exigencies of work dema You can also be deputed to work in and/or for any client or affiliate company.

2. Whole Time Service:
Your employment with the Company is full time and while so employed, you must under no circumstances engage yourself directly or through agency in any work, business, profession or employment, either honorary or otherwise without obtaining written prior permission from the Management. Any breach of this condition may result in your immediate termination from the services of the Company.

3. Inventions and Discoveries:
The rights created or accrued out of any and all discoveries, inventions, copyrights, patents, etc., which you may make or obtain during the per your employment with Nagarro shall exclusively vest with the Company and may be re-assigned by it as it deems fit. This does not apply to cr non-commercial products that are wholly unconnected with the business of the Company.

4. Termination on Misconduct or Breach of any Service Condition:
If you are found guilty of any misconduct or should you commit any breach of the service conditions or get involved in an act which in the opir the Company is prejudicial to the interest of the Company, the Company may without any notice terminate your services.

5. Termination by Notice:
Without prejudice to clause 4 above, your services can be terminated at any time by giving two calendar months' notice or two months' salary of notice. In case you desire to leave the services of the Company, you will have to give us two calendar months' notice. In case you do not gi two calendar months' notice, the Company will have the authority to recover up to two months' salary from your full and final dues (inclusive o performance linked bonus, if any) depending upon the impact of your resignation on the work assigned to you.

I have read and understood the above terms and conditions and I agree to abide the same.

Signature

6. Company's decision on Termination to be Final and Binding:

The Company's decisions regarding termination under clauses 4 & 5 shall be final and binding.

7. Retirement:

The Company's retirement age is 60.

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Nagpur-441501

8. General Policies and Procedures:

A copy of the General Policies and Procedures of the Company will be given to you on the date of joining. You will be required to adhere to the well as to any other service conditions governing your unit and location that may be in force currently and/or which may be issued from time t by the Management with respect to hours of work, weekly offs, paid holidays etc.

9. Reference/Background Checks:

Your employment by the Company is conditional upon and subject to completion of an Employment Application, the completion of a reference/background check, and approval thereof by the Company, in its sole discretion.

10. Confidentiality of this Offer:

The package offered to you is highly confidential and must not be revealed between now and the joining date or while in employment or there any individual/agency/organization, by word of mouth or otherwise.

11. Jurisdiction:

Any dispute arising out of the employment or terms of service shall be subject to the jurisdiction of the competent courts in Delhi.

12. Final Agreement:

This written offer supersedes all verbal or written agreements between you and the Company.

For Nagarro Software Pvt. Ltd.

Authorized Signatory

I have read and understood the above terms and conditions and I agree to abide the same.

Name Signature Date

Registered Office: 19/20, Punjabi Bagh (East), New Delhi – 110 026 email:info@nagarro.com

Unit II: Plot. 14, Electronic City, Sector 18, Gurgaon 122 015, Haryana, India Ph: (+91 124) 3048647 Fax: (+91 124) 3048646

Unit III: Plot 37, Electronic City, Sector 18, Gurgaon – 122 015, Haryana, India Ph : (+91 124) 3048647 Fax : (+91 124) 3048646

Bhushan R.Mahajan
Head of Department,
DOME
JD College of Engineering & Management
Nagpur

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

J D COLLEGE OF ENGINEERING & MANAGEMENT * NAGPUR *

VISION	MISSION
To be a center of excellence imparting professional education satisfying societal and global needs.	1. Transforming students into lifelong learners through, quality teaching, training and exposure to concurrent technologies. 2. Fostering conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

MBA: 2021-22

INTERNSHIP CERTIFICATES

Mahindra

SWARAJ

Deming Prize 2012
Mahindra & Mahindra Ltd
Farm Equipment Sector
Swaraj Division

Date: 07.12.2021

TO WHOM IT MAY CONCERN

This is to certify that**Mr. Rohan Nitin Koshti**, S/O-**Nitin Ramesh Koshti**, a student of MBA (Major in Marketing), JD College of Engineering and Management, Nagpur has successfully completed 01 (One) month (From 21st September, 2021 to 21st October, 2021) long internship programme at this Dhawale Autozone Authorised Centre of Swaraj Tractors Mahindra & Mahindra Ltd., Farm Equipment Sector Swaraj Division. During the period of his internship programme with us, he was found punctual, hardworking and inquisitive.

We wish him every success in life.

For,

Dhawale Autozone

DHAWALE AUTOZONE AKOLA

(S. R. Gwgase)

(Authorized Signature)

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

J D COLLEGE OF ENGINEERING & MANAGEMENT

Authorised Dealer
Dhawale Autozone
Near Radha Krishna Theatre, Murtizapur Road,
Akola (Mh.) - 444001 Tel.: + 919767483823
E-mail ID- dhawale.autozone@gmail.com

VISION	MISSION
To be a center of excellence imparting professional education satisfying societal and global needs.	1. Transforming students into lifelong learners through, quality teaching, training and exposure to concurrent technologies. 2. Fostering conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

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अमेरिकन रूलर प्राइवेट लिमिटेड
AMERICAN RULER PRIVATE LIMITED

Internship Completion Certificate

This is to certify that

Dipti Chinchkhede

has successfully completed an internship with IFORTIS WORLDWIDE as a

Marketing & Sales Intern

in the Marketing Department from

10/09/2021 to 10/10/2021

Besides showing high comprehension capacity, managing assignments with the utmost expertise and exhibiting maximal efficiency, he/she has also maintained an outstanding professional demeanor and showcased excellent moral character throughout the internship period.

Wishing the candidate all the best for his/her future endeavors.

Certificate code: IA/2021/M-HR04000316
Place: Tirunelveli, India
Date: 20/10/2021

Rohit Naidu S.
Chief Executive Officer

ISO 29993:2017

Internship In- charge **Academic Coordinator** **HOD- MBA**

Principal
J D College of Engineering & Management
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Head
Dept. of Management Studies (MBA)
J.D. College of Engineering & Management
Nagpur

JAIDEV EDUCATION SOCIETY'S

J D COLLEGE OF ENGINEERING AND MANAGEMENT

KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

(An Autonomous Institute, with NAAC "A" Grade)

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Department of Computer Science & Engineering

"A Place to Learn, A Chance to Grow"

Session: 2021-22

VISION	MISSION
To be recognized for excellent engineering, developing global leaders both in educational and research in the domain of computer science and wireless engineering.	1. To create self-learning environment by facilitating leadership qualities, team spirit and ethical responsibilities. 2. To improve department-industry collaboration, interaction with professional society through technical knowledge and internship program. 3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

CSE Student Presentation Photo 2021-22

2021-22 CSE Presentation Photo

2021-22 CSE Presentation Photo

Prof. Supriya Sawwashere
HOD. CSE

HOD
Computer Science & Engineering
JDCOEM, Nagpur

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Nagpur-441501