



JAIDEV EDUCATION SOCIETY'S
JD COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
Affiliated to DBATU & RTMNU
Department of Civil Engineering
"Building Better Development"
Session 2019-20



VISION

To be a well-known center for shaping professional leaders of Global Standards in Civil Engineering

MISSION

- Provide quality education and excellent learning Environment for overall development of students.
- Making Sustainable efforts for integrating academics with Industry.



Live Project (CE) - 2019-20


Principal
JD College of Engineering & Management
Khatolnaka, Katol Road
Nagpur-441103



HOD, (CE)



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



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|--|---|
|  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Ms. Sakshi Gawande, a student of JDCEM, Nagpur has successfully completed his project titled "Experimental Study of Flexural Behavior of Slab Panel by Using Bamboo as Reinforcement" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  <p>ABDUL MONISH SHEIKH CEO</p>  |  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Mr. Ayush Khobragade, a student of JDCEM, Nagpur has successfully completed his project titled "Experimental Study of Flexural Behavior of Slab Panel by Using Bamboo as Reinforcement" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  <p>ABDUL MONISH SHEIKH CEO</p>  |
|  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Mr. Vipul Bombade, a student of JDCEM, Nagpur has successfully completed his project titled "Experimental Study of Flexural Behavior of Slab Panel by Using Bamboo as Reinforcement" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  <p>ABDUL MONISH SHEIKH CEO</p>  |  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Mr. Rishabh Mohod, a student of JDCEM, Nagpur has successfully completed his project titled "Experimental Study of Flexural Behavior of Slab Panel by Using Bamboo as Reinforcement" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  <p>ABDUL MONISH SHEIKH CEO</p>  |

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॥ ज्ञानम् सर्वार्थ साधनम् ॥

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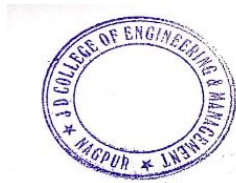
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|  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Mr. Vishal Sahare, a student of JDCOEM, Nagpur has successfully completed his project titled "Performance of Concrete with the Addition of Crown Cork as Steel Fibre" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  ABDUL MONISH SHEIKH CEO  <p>Address: Shop No 108, Jiji Complex, Padmavati Nagar, Godhani Road, Nagpur 441123 Contact: +91 9158551237 email id: amsconstruct.in@gmail.com website: www.amsconstruct.in</p> |  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Mr. Piyush Parate, a student of JDCOEM, Nagpur has successfully completed his project titled "Performance of Concrete with the Addition of Crown Cork as Steel Fibre" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  ABDUL MONISH SHEIKH CEO  <p>Address: Shop No 108, Jiji Complex, Padmavati Nagar, Godhani Road, Nagpur 441123 Contact: +91 9158551237 email id: amsconstruct.in@gmail.com website: www.amsconstruct.in</p> |
|  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Mr. Pravin Dalal, a student of JDCOEM, Nagpur has successfully completed his project titled "Performance of Concrete with the Addition of Crown Cork as Steel Fibre" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  ABDUL MONISH SHEIKH CEO  <p>Address: Shop No 108, Jiji Complex, Padmavati Nagar, Godhani Road, Nagpur 441123 Contact: +91 9158551237 email id: amsconstruct.in@gmail.com website: www.amsconstruct.in</p> |  <p>Er. Abdul Monish Sheikh Gov. Licensed Engineer +91 9158551237 amsconstruct.in@gmail.com www.amsconstruct.in</p> <p>Certificate of completion TO WHOM IT MAY CONCERN</p> <p>This is to certify that Mr. Khomesh Patharabe, a student of JDCOEM, Nagpur has successfully completed his project titled "Performance of Concrete with the Addition of Crown Cork as Steel Fibre" at our Organization with reference to the partial fulfillment of the requirement of the Degree course of Civil Engineering for RTMNU/JDCOEM Nagpur.</p> <p>All necessary details were provided from our side for the execution of this project.</p> <p>We wish him a very best in all his future endeavors.</p> <p>Thanking you,</p>  ABDUL MONISH SHEIKH CEO  <p>Address: Shop No 108, Jiji Complex, Padmavati Nagar, Godhani Road, Nagpur 441123 Contact: +91 9158551237 email id: amsconstruct.in@gmail.com website: www.amsconstruct.in</p> |

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CSE Student Live Project Details

Date:12/08/2019

Title: "Development of Android Application for Medicinal Search System"

Abstract

Information and Communication Technologies (ICTs) are commonly using in healthcare organizations worldwide. The android operating system (AOS) based electronic devices such as Smartphones and computer tablets are extensively used for many purposes like instant messaging, gaming, word processing. Internet and download number of applications online. A rapid growth of android phones has enabled to replace PC's software and other licensed software development technologies. There are different kinds of healthcare applications developed in android Smartphones which help patients and their caregivers to reduce time and cost efficiency. In this work, an application is developed that locates the nearest medical shop with the desired medical or product required. The nearest position of hospitals is calculated with a built-in feature of Global Positioning System (GPS) in Smartphones and finds the route from their current location through Google Map Application Program Interfaces (API). With the help of this application, a user can find the nearest shop or medical pharmacy to get the desired product or medicine.

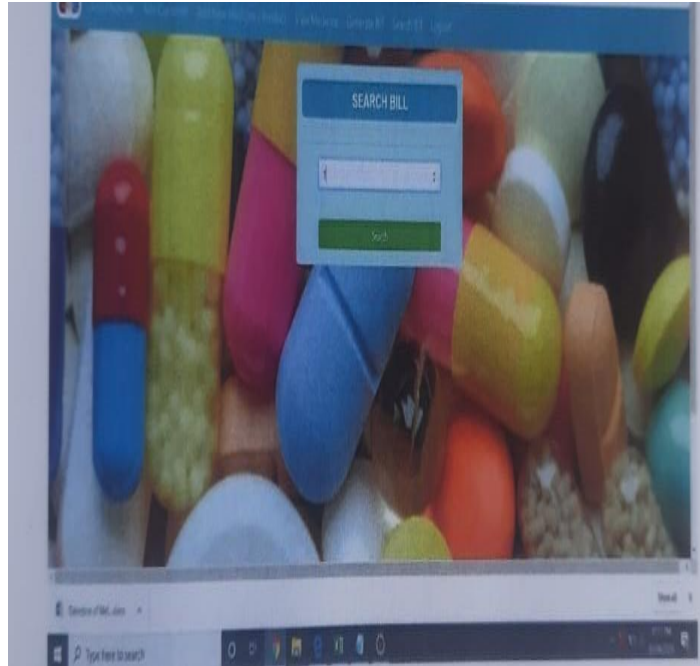
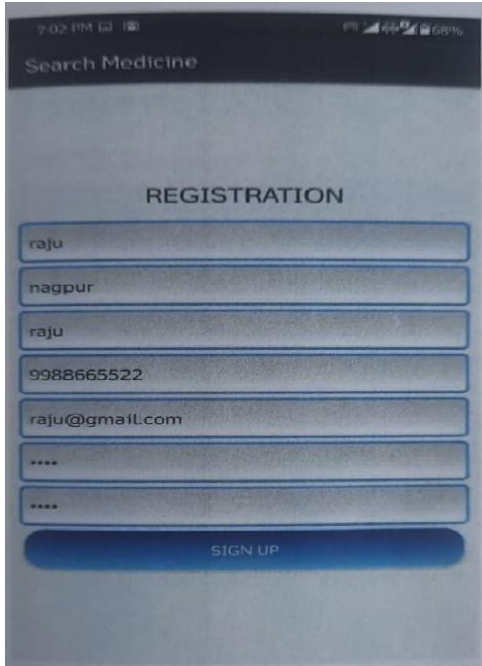
Summary

The main intention of this project is to designed online medicine search application which allows a visitor to search for a medicine and addresses of the medical stores where the medicine is available. The visitor can quickly find the nearest medical store by selecting suitable area according to their choice in the search tool. And the web application also provides a login account to a registered medical shop and registration for the new users. Using that member of medical store can update the list of medicines and their stocks on daily basis.

According to the location of the user the application will search the nearest medical store in that area and give results. As per the availability of stock the application. The direction feature shows the finest route for the nearest shop. The system provides the safe and secure platform for all the users.


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Photographs:



CSE-Development of Android Application for Medicinal Search System-2019-20

Group Members Name

- Prajakta Gawali
- Sonal Chaudhari
- Mayuri Jawade
- Mrunali Gawande
- Shubham Ghodeswar



Prof. Supriya Sawwashere
Project Guide



Prof. Supriya Sawwashere
Project Co-Ordinator



Prof. Madhuri Pal
HOD, CSE



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Nagpur-441103

HOD
Computer Science & Engineering
JDCEM, Nagpur



Adwajira Technologies Private Limited

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Ref No.: ATPL/2020/1926

17/04/2020

CERTIFICATE

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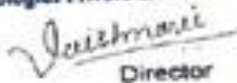
This is to certify that following student of J D College of Engineering and Management; Nagpur has successfully completed Live Project titled "**Development of Android Application for Medicinal Search System**" during Academic Session 2019-20. They worked for mentioned Period i.e. from 16th August 2019 to 15th March 2020.

| Sr.No. | Name of Student | Branch |
|--------|--------------------------|--------------------------------|
| 1 | <u>Prajakta Gawali</u> | Computer Science & Engineering |
| 2 | <u>Sonal Chaudhari</u> | Computer Science & Engineering |
| 3 | <u>Mayuri Jawade</u> | Computer Science & Engineering |
| 4 | <u>Mrunali Gawande</u> | Computer Science & Engineering |
| 5 | <u>Shubham Ghodeswar</u> | Computer Science & Engineering |

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

Thanking you,

For Adwajira Technologies Private Limited


Director

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

Adwajira technologies private limited
Ganapalli, Telangur Road, Hyderabad - 500046
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Date: 19/08/2019

Title: "The Real Time Evidence Grabber System for Crime Control"

Abstract

Mobile devices, such as Smartphone or tablet, have become an important part of human life. The mobile positioning capability, the service that identify the location of mobile device, has become a captivate feature used in various applications such as check-in function in the social network. Likewise, for the police duty, the record of the crime location is important to reveal the distribution area of crime, which can be used to analyse and plan for the future crime prevention.

The purpose of this research paper is to propose and develop an android mobile application for the general public awareness of the crime situation of their area and to provide them crime location. Closed Circuit Television Systems (CCTV) are becoming more and more popular and are being deployed in many housing estates, offices, and also in most public spaces. CCTV monitoring systems have been implemented in many American, European and Indian cities. As the number of camera views a single CCTV operator can handle is limited by human factors, such monitoring systems makes for an enormous load for the CCTV operators.

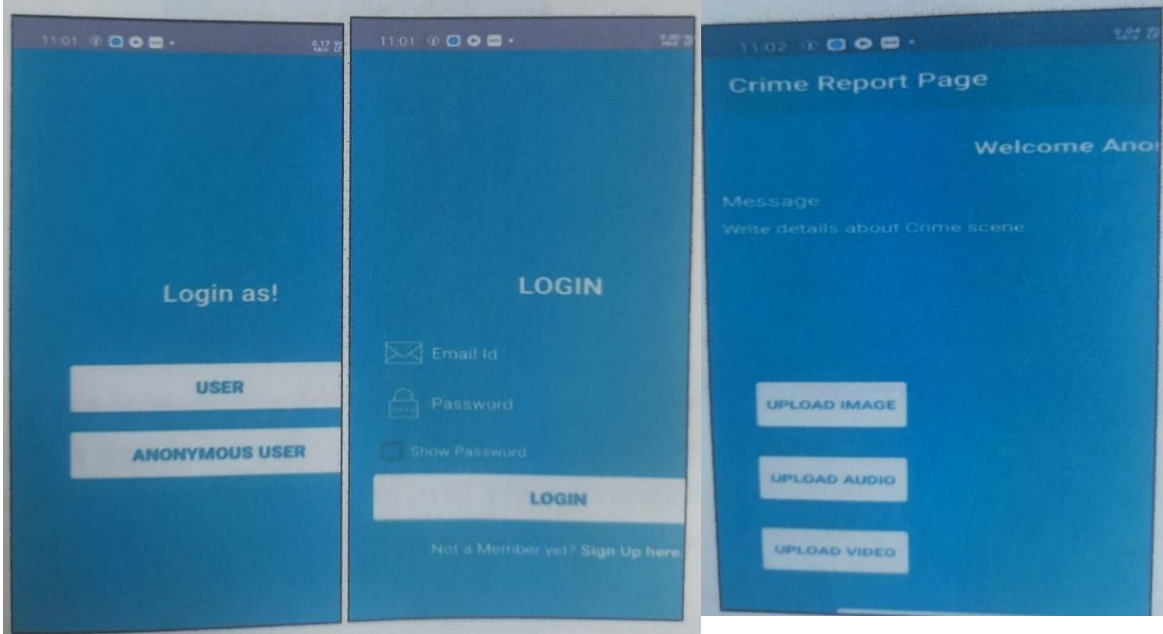
Here, in this project named Real Time Evidence Gabber for Crime Control. If any criminal activity happens then crime evidences can't be recorded at real time because of policing fear. Police can't reach on time at crime location and unable to collect evidences. So, criminals get enough time to fly away, damage the evidences which makes the case week. There for we are developing real time evidence gabber for crime controls.

Summary

The most important thing in any security related system is their result or simply says the outcome of that project. In our project we tried to provide most effective solution to solve the crime related issues. As we discussed in above modules we were used most successive technologies on the basis of our research. We will have concluded that we can get near about 80 to 90% chances to maintain the true evidences in our calculations.


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M.P. 441101

Photographs:



CSE- The Real Time Evidence Grabber System for Crime Control-2019-20

Group Members Name

Abhimanyu Pagade

Gaurav Manwatkar

Himanshu Kale

Mohammed Dharar

Rajat Sahar



Prof. Aniket V. Bhojar
Project Guide



Prof. Supriya Sawwashere
Project Co-Ordinator



Prof. Madhuri Pal
HOD, CSE



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Nagpur-441101

HOD
Computer Science & Engineering
JDCEM, Nagpur



Adwajra Technologies Private Limited

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Ref No.: ATPL/2020/1920

17/04/2020

CERTIFICATE

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This is to certify that following student of J D College of Engineering and Management, Nagpur has successfully completed Live Project titled **"The Real Time Evidence Grabber System for Crime Control"** during Academic Session 2019-20. They worked for mentioned Period i.e. from 16th August 2019 to 15th March 2020.

| Sr.No. | Name of Student | Branch |
|--------|------------------|--------------------------------|
| 1 | Abhimanyu Pagade | Computer Science & Engineering |
| 2 | Gaurav Manwatkar | Computer Science & Engineering |
| 3 | Himanshu Kale | Computer Science & Engineering |
| 4 | Mohammed Dharar | Computer Science & Engineering |
| 5 | Rajat Sahara | Computer Science & Engineering |

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

Thanking you,

For Adwajra Technologies Private Limited

Vaishnavi
Director

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

Adwajra technologies private limited
Ganapatti, Tollanur Road, Hyderabad - 5600046
www.adwajra.com, +91-63006 45723

[Signature]

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Report

Topic: Live Project on “Speed control of DC motor by using IOT at Shakti Electricals”

Name of Industry : Shakti Electricals Industries, Hinganghat.

Name of Students :

- 1) Aarti Sindhimeshram
- 2) Pratima Uparwat
- 3) Chaitrali Dhenge
- 4) Lalit Khiradkar
- 5) Kunal Kamble

Objectives: To control speed of DC motor by using PID controller. To increase and decrease the speed of motor, to reverse the speed of motor and perform fault detection and temperature detection.

Brief Outline of Project:

In this project, DC Motor is controlled through website. DC Motor is connected with MOSFET at the trigger pin of the MOSFET. The drain is connected with 12 volts through relay. The pole of the relays has been connected to the DC Motor. The relays are used to control the direction of the DC motor. The Wi-Fi module ESP8266 is connected with the Arduino at pin no2 and 4. The 3 pin is connected with the gate pin of the microcontroller. ESP 8266 is the IOT device through which the router gets connected. The website is connected through this router and control the DC Motor. The IP address of the Wi-Fi module is sent through the website. The website has the links like start, stop, speed increment, speed decrement, directions like clockwise, anti-clock wise. All these link buttons have identification like spec etc. The "S" it is passed through router to the WIFI module. WIFI module then accepts this id and passes that value to the Arduino. Arduino at pin 3 start the motor at the minimum speed. Character "P" coming from the website is to stop the motor. C is used for clockwise direction. When C id gets read by Arduino, it moves the motor into clockwise direction by changing the pins of the Arduino. These pins are connected with the relay through relay driver IC ULN 2003. When the Speed increment button is click at the webpage, the id "I" is send to the DC Motor controller side. The ESP8266 reads this character through Arduino, Arduino then increment the speed of the DC motor by firing the trigger pin of MOSFET by apply IV at it. At that time the DC Motor moves in minimum speed.

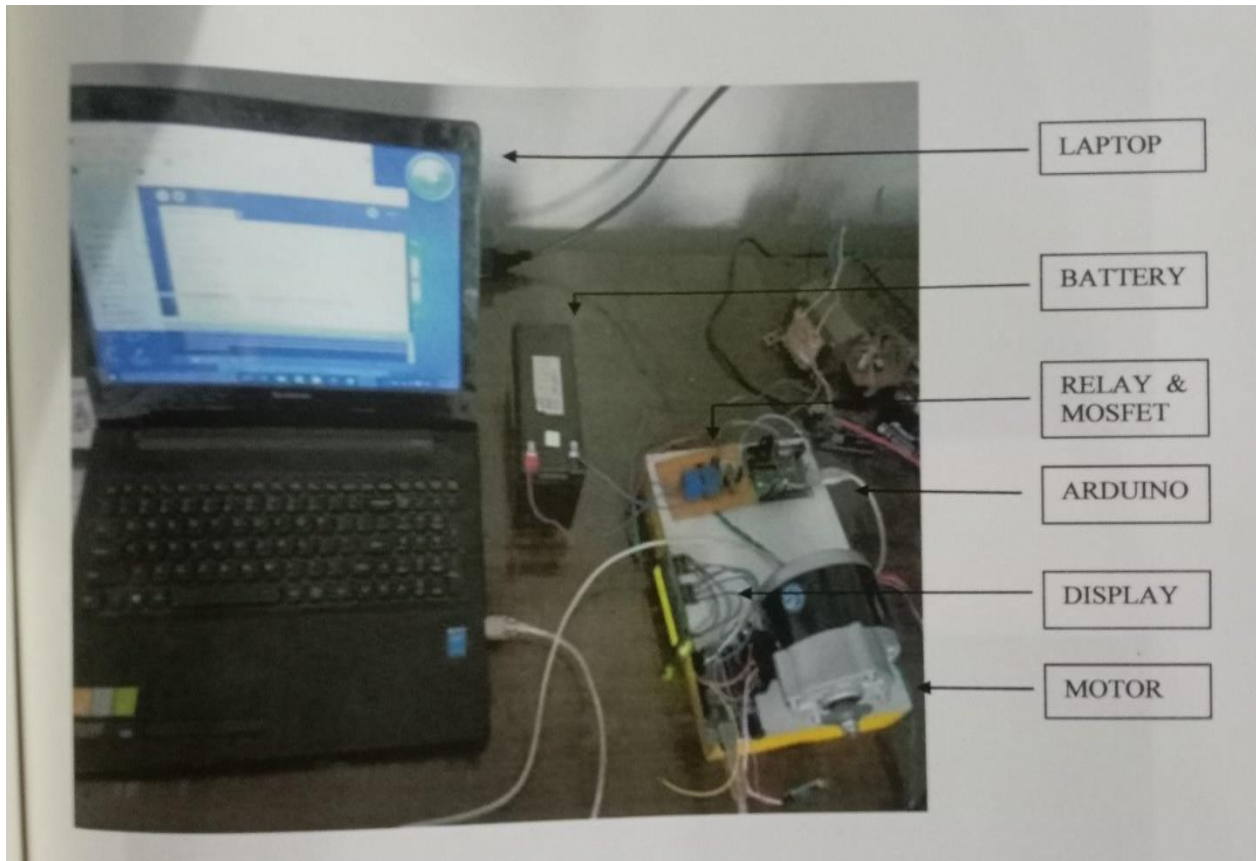


Figure 1 Speed control of DC motor by using IOT



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Figure 2 Speed control of DC motor by using IOT

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Permission Letter:

 **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 14th July 2019 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 | Roll No |
|------------------------|---------|
| 1) Aarti Sindhimeshram | 01 |
| 2) Pratima Uparwat | 17 |
| 3) Chaitrali Dhenge | 14 |
| 4) Lalit Khiradkar | 37 |
| 5) Kunal Kamble | 41 |

Thanks & Regards,




Shakti Electricals Industries
Hinganghat, Maharashtra- 442301

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



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Certificate:

 **SHAKTI ELECTRICAL INDUSTRIES**
Near Mohata Garden, NH-44, Hinganghat, Maharashtra- 442301

Certificate of completion

TO WHOM IT MAY CONCERN

This is to certify that Aarti Sindhimeshram, Pratima Uparwat, Chaitrali Dhenge, Lalit Khiradkar, Kunal Kamble, students of J D College of Engineering and Management, has successfully completed their project titled "Speed control of DC motor by using IOT" 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.



Contact us :- Email id : swapnil@cflawmaterial.org web sit:-www.cflawmaterial.org

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Report

Topic: Live Project on "Electrical Energy audit of kinetic gear Industry"

Name of Industry: Kinetic Gears, MIDC Industrial Area, Hingna Road, Nagpur

Name of Students: Ankita Makade, Antush Nitnaware, Amar Chaware, Niraj Wankhede, Vaibhav Bansod and Vivek Jawale

Objectives: To carry out lighting audit and electric load management audit in Kinetic Gears Industry. To evaluate use of energy in above industry for lighting purpose and determine opportunities for energy saving.

Brief Outline of Project:

Energy audit was carried out using various methods such as by observation, by asking question to machine operator and by interviewing key person.

There are three parts to an energy audit: evaluation, testing, and efficiency recommendations. Once the audit is complete, a report outlining energy consumption is submitted. A final energy grading, and home improvement suggestions to cut energy costs on energy bills.

Energy usage and problem areas in industry is identified. Analysis of specific elements that contribute to industries overall energy efficiency is done.

Analysis of heating and cooling systems, or HVAC system, and your insulation levels, including the basement and exterior attic walls is completed. In addition, measurement and count of doors and windows the building is taken and also external measurements are done.

The second part of an energy audit involves an airtightness test, also known as a blower door test. During this test, determination of how tight a building's envelope is done by checking for air leakage of a industry. During an airtightness test, an air sealing procedure is done. The auditor will seal the front door of the building, and they will place a large fan inside.

The testing fan will pull the interior air outside the industry, which will force outside air to come through any cracks or holes. Often, these air leaks are easily felt with your hand, but most auditors will use feathers or incense to accurately determine where the cracks are located.


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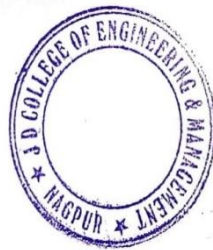


Figure 1 Electrical Energy audit of kinetic gear Industry

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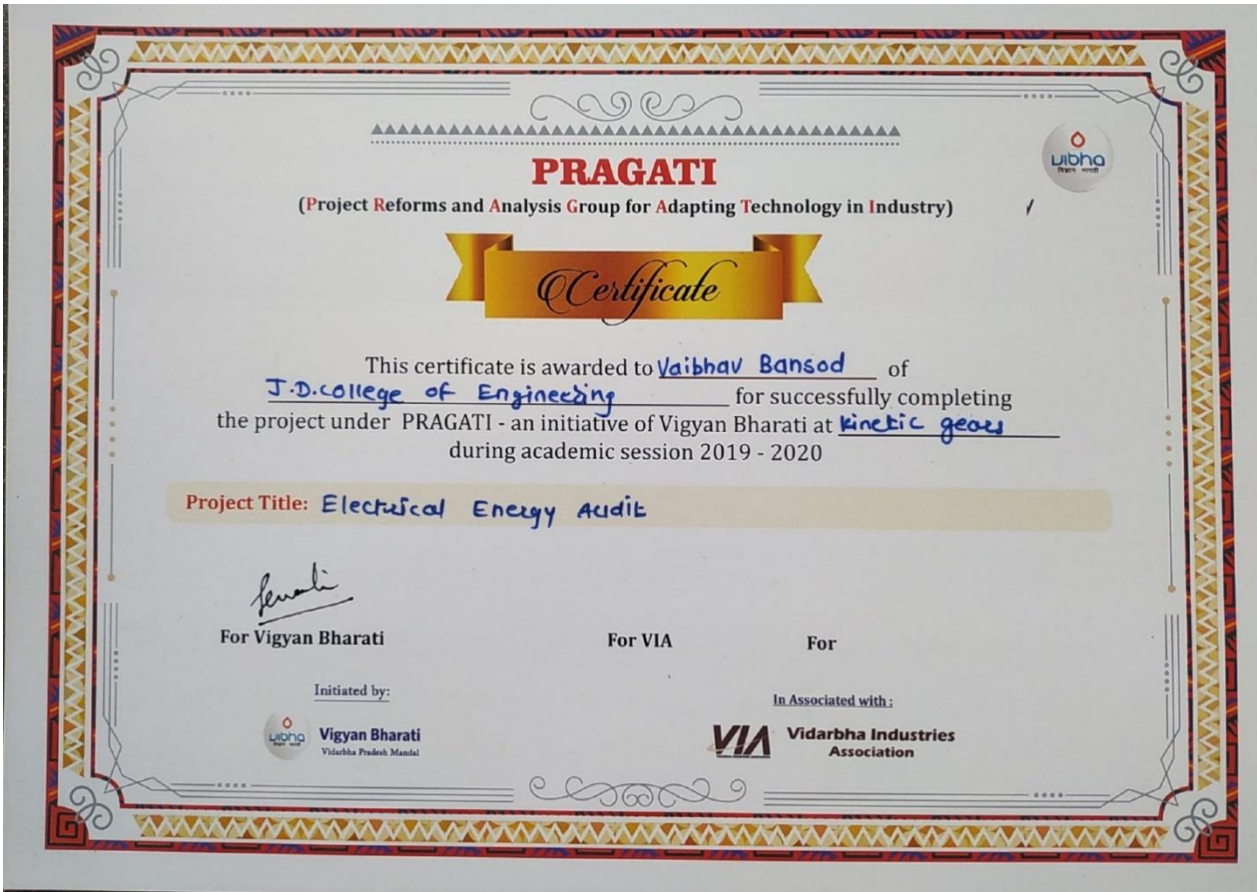


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Certificates:



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J.D. College of Engineering & Research
Khamzale, Khamzale Road
Warananagar-441101




Project Title: Electrical Energy Audit

[Signature]
For Vigyan Bharati

For VIA

For

Initiated by:
 **Vigyan Bharati**
Vidarbha Pradesh Mandal

In Associated with:
 **Vidarbha Industries Association**

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Department of Electronics and Telecommunication Engineering
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Maharashtra-442001
Email ID: ttplwardha@gmail.com
+91 9850888320, +91 9850888325

Ref. TTPL/19-20/25

Date: 02/02/2020

PROJECT COMPLETION CERTIFICATE

This is to Certify that Ms.Pranali Ramteke, Ms. Neeta Yadav, Mr.Yogesh Kawale, Ms. Poonam Narnaware & Mr. Khushnuma Haider of Electronics & Telecommunication Department of JD College of Engineering and Management, Nagpur had successfully completed Live Project Title "SMART MIRROR USING RASPBERRY PI" under the supervision of Project Engineer TECHNOVISION TECHNOLOGIES PVT. LTD. And Prof. Firoz Akhtar, Assistant Professor JDCOEM, Nagpur for Session 2019-20.


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



2019-20 ETC LIVE PROJECT CERTIFICATE



Principal
J.D. College of Engineering & Management
Mhasala, Kato Road
Nagpur-441101

REVAT NETWORK

3 Sai Nagar, Jaitala Nagpur – 440036, www.revatnetwork.com, revatnetwork@gmail.com, Ph. 7774009378



Date: 25/02/2020

PROJECT COMPLETION CERTIFICATE

This is to Certify that Ms.Arati Chavhan, Ms. Harshapriya Dhok, Ms.Ashwini Wani, Ms.Damini Deware, Mr.Ayesh Sheikh & Ms.Damini Choudhari of Electronics & Telecommunication Department of JD College of Engineering and Management, Nagpur had successfully completed Live Project Title "WEATHER MONITORING SYSTEM USING IOT" under the supervision of Project Engineer REVAT NETWORK NAGPUR and Prof. Shyam Bawankar, Assistant Professor JDCOEM,Nagpur for Session 2019-20.

REVAT NETWORK NAGPUR



2019-20 ETC LIVE PROJECT CERTIFICATE

Principal

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



JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING & MANAGEMENT
KATOL ROAD, NAGPUR
Department of IT
"A Place to Learn; A Chance to Grow"
Session 2019-20



Ref. No. JDCEM/101/IT/ LIVE PROJWCT/2019-2020/29

Date: 01/05/2019

To,
The Director
PSK Technologies Pvt.Ltd.,
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.

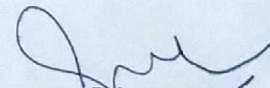
Few Student of IT Department are Keen interested to Undergo Live Project as a part of curriculum of DBATU. Which Will Provide them Industrial Knowledge and fulfillment of Final year Project in Engineering Course.

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 |
|----------|---------|---------------------|
| 06 | 27 | MANISH NERKAR |
| | 31 | PRITISH MENDHEKAR |
| | 35 | SONALI MANDAL |
| | 42 | APURVA NAGARWAR |
| | 51 | ANUSHKA DESHBHRATAR |


Principal

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





JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING & MANAGEMENT
KATOL ROAD, NAGPUR
Department of IT
"A Place to Learn; A Chance to Grow"
Session 2019-20



Ref. No. JDCEM/101/IT/ LIVE PROJWCT/2019-2020/29

Date: 01/05/2019

To,
MaSyCoDA Solutions
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.

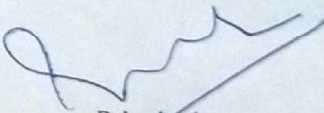
Few Student of IT Department are Keen interested to Undergo Live Project as a part of curriculum of DBATU. Which Will Provide them Industrial Knowledge and fulfillment of Final year Project in Engineering Course.

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 | 27 | PANKAJ KOCHÉ |
| | 31 | PRATIKSHA SINGH |
| | 35 | PRAJWAL CHAUVHAN |
| | 42 | DYANIKA TONDE |
| | 51 | DIMPLE BAGDE |


Principal



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



PSK Technologies Pvt. Ltd.

Software Development | Digital Marketing & Hosting | Sales & Services

Address:- Lower Ground Floor Fortune Mall Sitabuldi Nagpur 440012

Email: - hr@pskitservices.com Phone:-09975288300, 09422123343

www.pskitservices.com

Ref. No. *PSKT/2018/018*

Date: 10/05/2019

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 01 group and involve itself in the students' academic advancement.

Signature & Company

Seal



A handwritten signature in black ink, appearing to be "Ankur".

A small, faint logo or stamp located at the bottom center of the page, partially obscured by a watermark.

Ref. No. MSPL/1920/01

Date: 10/05/2019

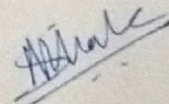
To,
HOD, Information Technology
JD College of Engineering and Management
Nagpur

SUBJECT: Acceptance to undertake Live Project.

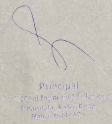
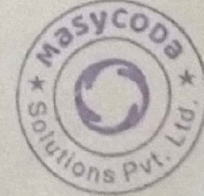
Respected Sir,

We are delighted to inform you that at our place we intend to take the project as a external supervisor for 01 group and involve itself in the students' academic advancement.

| Group No | Roll No | Name of student |
|----------|---------|------------------|
| 01 | 27 | PANKAJ KOCHÉ |
| | 31 | PRATIKSHA SINGH |
| | 35 | PRAJWAL CHAUVHAN |
| | 42 | DYANIKA TONDE |
| | 51 | DIMPLE BAGDE |



Signature &
Company Seal





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 conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

Ref. No. JDCOEM/1101/ LIVE PROJECT/2019-2020/21

Date: 11/8/2019

To,
Mr. Arun Verma,
Shubhangi Castings,
Balaji Industrial Park, 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 Student 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.

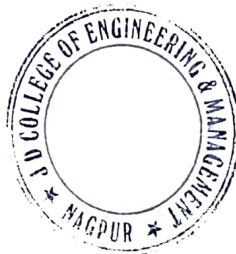
Name of student

1. Mr. Akash Shankar Khogade (Mechanical Final Year)
2. Mr. Akash Shrichand Lilhare (Mechanical Final Year)
3. Mr. Bablu Pradip Bhimte (Mechanical Final Year)
4. Mr. Akshay Ratankar Wankhede (Mechanical Final Year)
5. Mr. Durgesh R. Dhande (Mechanical Final Year)
6. Mr. Tarique Ahmed (Mechanical Final Year)

Regards,

Dr. S. R. Choudhary,
Principal, JDcoem

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



SHUBHANGI CASTINGS
M. K. Verma
PROPRIETOR



SHUBHANGI CASTINGS

Plot No.37, B Block, Balaji Industrial Park, Mouza
Bhovari Tahsil Kamptee, NAGPUR 440037
Ph. No. +91 8208868902, +91 7387299951
E-mail: shubhangicastings@gmail.com,
Visit: www.shubhangicastings.com
GSTIN: 27BQTPV1366G1Z6
An ISO 9001:2015 Certified Company

PERMISSION LETTER

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

With Reference to your application Ref. No. **JDCEM/1101/ LIVE PROJECT/2019 -2020/21** 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 17th August 2019 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. Akash Shankar Khogade (Mechanical Final Year)
2. Mr. Akash Shrichand Lilhare (Mechanical Final Year)
3. Mr. Bablu Pradip Bhimte (Mechanical Final Year)
4. Mr. Akshay Ratankar Wankhede (Mechanical Final Year)
5. Mr. Durgesh R. Dhande (Mechanical Final Year)
6. Mr. Tarique Ahmed (Mechanical Final Year)

Guide Name- Prof. Aamir Sayed

Thanks & Regards,

SHUBHANGI CASTINGS


Mr. Arun Verma,
Shubhangi Castings, PROPRIETOR
Balaji Industrial Park, Nagpur-(MS)


Principal
J.D. College of Engineering & Management
Bhovari, Kamptee, Nagpur
440037



SHUBHANGI
CASTINGS

SHUBHANGI CASTINGS

Plot No.37, B Block, Balaji Industrial Park, Mouza

Bhovari Tahsil Kamptee, NAGPUR 440037

Ph. No. +91 8208868902, +91 7387299951

E-mail: shubhangicastings@gmail.com,

Visit: www.shubhangicastings.com

GSTIN: 27BQTPV1366G1Z6

An ISO 9001:2015 Certified Company

TO WHOM IT MAY CONCERN

This is to certify that the students mentioned below have successfully completed their project titled "Experimentation of Welding Process on Cast iron material by using different electrode to repair the casting" at our Organization with reference to the partial fulfillment of the requirement of the bachelor course in Mechanical Engineering.

Name of student

1. Mr. Akash Shankar Khogade (Mechanical Final Year)
2. Mr. Akash Shrichand Lilhare (Mechanical Final Year)
3. Mr. Bablu Pradip Bhimte (Mechanical Final Year)
4. Mr. Akshay Ratankar Wankhede (Mechanical Final Year)
5. Mr. Durgesh R. Dhande (Mechanical Final Year)
6. Mr. Tarique Ahmed (Mechanical Final Year)

Guide Name- Prof. Aamir Sayed

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,

SHUBHANGI CASTINGS

Mr. Arun Verma,

Shubhangi Castings,

PROPRIETOR


Principal
J.O. College of Engineering & Management
Yashwantrao Chavan Road
Nagpur-441101



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

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. JDCEM/1202/ LIVE PROJECT/2019-20/326

Date: 09/8/2019

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 Student 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 students

1. Mr. Prashant Kumar Hemane (Mechanical Final Year)
2. Mr. Anwar Sheikh (Mechanical Final Year)
3. Mr. Manish Singh (Mechanical Final Year)
4. Mr. Prasanna Shambharkar (Mechanical Final Year)
5. Mr. Palash Kathane (Mechanical Final Year)
6. Mr. Milind Kumar Patle (Mechanical Final Year)

Regards,


Principal, JDCEM

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

PERMISSION LETTER

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

Respected Sir,

With Reference to your application Ref. No. **JDCEM/1202/ LIVE PROJECT/2019-20/326** 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 16th August 2019 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. Prashant Kumar Hemane (Mechanical Final Year)
2. Mr. Anwar Sheikh (Mechanical Final Year)
3. Mr. Manish Singh (Mechanical Final Year)
4. Mr. Prasanna Shambharkar (Mechanical Final Year)
5. Mr. Palash Kathane (Mechanical Final Year)
6. Mr. Milind Kumar Patle (Mechanical Final Year)

Guide Name- Prof. Suhas A. Rewatkar

Thanks & Regards,

Gopal Raut

Budhwanti Foundation

(Hingna M.I.D.C Nagpur)




Principal
J.D. College of Engineering & Management
Hingna, Kalyani Road
Nagpur-441103



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

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

Name of student

1. Mr. Prashant Kumar Hemane (Mechanical Final Year)
2. Mr. Anwar Sheikh (Mechanical Final Year)
3. Mr. Manish Singh (Mechanical Final Year)
4. Mr. Prasanna Shambharkar (Mechanical Final Year)
5. Mr. Palash Kathane (Mechanical Final Year)
6. Mr. Milind Kumar Patle (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,

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



Principal
College of Engineering & Management
Khandola, Katti Road
Nagpur-441101



JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
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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 conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

Ref. No. JDcoem/1202/ LIVE PROJECT/2019-20/327

Date: 09/8/2019

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 Student 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. Kunal R. Naukarkar | (Mechanical Final Year) |
| 2. Mr. Gaurav A. Ragit | (Mechanical Final Year) |
| 3. Mr. Gajanan M. Lambat | (Mechanical Final Year) |
| 4. Mr. Liladhar K. Kambdi | (Mechanical Final Year) |
| 5. Mr. Niraj Thakre | (Mechanical Final Year) |

Regards,

Principal, JDcoem
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

PERMISSION LETTER

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

Respected Sir,

With Reference to your application Ref. **NoJDCEM/1202/ LIVE PROJECT/2019-20/327** 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 05 students to start their Live Project from 18th August 2019 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. Kunal R. Naukarkar (Mechanical Final Year)
2. Mr. Gaurav A. Ragit (Mechanical Final Year)
3. Mr. Gajanan M. Lambat (Mechanical Final Year)
4. Mr. Liladhar K. Kambdi (Mechanical Final Year)
5. Mr. Niraj Thakre (Mechanical Final Year)

Guide Name – Prof. Anup A. Junankar

Thanks & Regards,

Gopal Raut (Manager)

Budhwanti Foundation

(Hingna M.I.D.C Nagpur)




Principal
J.D. College of Engineering & Management
Hingna, Kavit Road
Nagpur-441113



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 "Experimental Investigation of effect of Nano fluid during Turing operation on EN31 Steel" at our Organization with reference to the partial fulfillment of the requirement of the bachelor course in Mechanical Engineering.

Name of student

1. Mr. Kunal R. Naukarkar (Mechanical Final Year)
2. Mr. Gaurav A. Ragit (Mechanical Final Year)
3. Mr. Gajanan M. Lambat (Mechanical Final Year)
4. Mr. Liladhar K. Kambdi (Mechanical Final Year)
5. Mr. Niraj Thakre (Mechanical Final Year)

Guide Name- Prof. Anup A. Junankar

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,



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


Principal
J. J. College of Engineering & Research
Ghansale, Nashik Road
Nagpur-441101



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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Affiliated to DBATU, RTMNU



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.

Date: 10/07/2019

To,
The Branch Manager,
Nagpur Nagrik Sahkari Bank Ltd
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.

Few Students of Finance Management in Department are Keen interested to Undergo Live Project as a part of curriculum of RTMNU syllabus. Which Will Provide them 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. Alpesh Manohar Kalaskar | II nd year IV th semester | 03 |
| 2 | Mr. Linesh Moreshwarro Thakre | II nd year IV th semester | 18 |

Place: Nagpur
Date : 10/07/2019

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



PERMISSION LETTER

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

Respected Sir,

With Reference to your application 10/07/2019 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 these 2 students to start their Live Project from 18th July 2019 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. Alpesh Manohar Kalaskar | II nd year IV th semester | 03 |
| 2 | Mr. Linesh Moreshwarro Thakre | II nd year IV th semester | 18 |

Thanks & Regards,

Nagpur Nagrika Sahakari Bank Ltd.

15/07/2019

Principal
J.D. College of Engineering & Management
Khandala, Warje Road
Nagpur-431005

08/09/2019

Certificate of Completion

TO WHOM IT MAY CONCERN

This is to certify that **Mr. Alepsha Kalaskar** , a student of J D College of Engineering and Management , has successfully completed his project titled **“A Study of general Banking and Finance Facilities of Nagpur Nagarik Sahakari Bank Ltd.”** at our Organization with references to the partial fulfillment of the requirement of the Master course in Management Studies Financial 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,

Nagpur Nagrik Sahakari Bank Ltd.


Principal
J. College of Engineering & Management
Chandula, Kato Road
Nagpur-441103



08/09/2019

Certificate of Completion

TO WHOM IT MAY CONCERN

This is to certify that **Mr. Linesh Thakre**, a student of J d College of Engineering and Management, has successfully completed his project titled **“A Study on loan of Nagpur Nagrik Sahakari Bank Ltd.”** at our organization with references to the partial fulfillment of the requirement of the Master course in Management Studies Financial 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,



Nagpur Nagrik Sahakari Bank Ltd.


Principal
J. College of Engineering & Management
Khandala, Khandala Road
Nagpur-441101



JAIDEV EDUCATION SOCIETY'S
JD COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
Affiliated to DBATU & RTMNU
Department of Civil Engineering
"Building Better Development"
Session 2019-20



VISION

To be a well-known center for shaping professional leaders of Global Standards in Civil Engineering

MISSION

- Provide quality education and excellent learning Environment for overall development of students.
- Making Sustainable efforts for integrating academics with Industry.



CE- 2019-20

HOD, (CE)

Principal
JD College of Engineering & Management
Katol Road,
Nagpur-441101



JAIDEV EDUCATION SOCIETY'S
JD COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
Affiliated to DBATU & RTMNU
Department of Civil Engineering
"Building Better Development"
Session 2019-20



VISION

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MISSION

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- Making Sustainable efforts for integrating academics with Industry.

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This certificate is awarded to
SURAJ PURNACHANDRA SARKAR
for successfully completing the course
Integrated Waste Management for a Smart City
with a consolidated score of **60 %**

| | | | |
|--------------------|----------|----------------|---------|
| Online Assignments | 18.13/25 | Proctored Exam | 41.5/75 |
|--------------------|----------|----------------|---------|

Total number of candidates certified in this course: 1140

A. Goswami
Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

Jul-Oct 2019
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL19CE31561850404

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CE- 2019-20

HOD, (CE)

Principal
JD College of Engineering & Management
Khandala, Katol Road
Nagpur-441503



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Session 2019-20



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This certificate is awarded to
SAMRUDHI TITARMARE
for successfully completing the course
Programming In Java
with a consolidated score of **56 %**

| | | | | | |
|--------------------|----------|------------------|----------|----------------|-------|
| Online Assignments | 16.75/25 | Programming Exam | 11.88/25 | Proctored Exam | 27/50 |
|--------------------|----------|------------------|----------|----------------|-------|

Total number of candidates certified in this course: 3876

A. Goswami
Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL, Coordinator
IIT Kharagpur

Jul-Oct 2019
(12 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL19CS64541850256

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This certificate is awarded to
RUSHALI SURESH BADHANE
for successfully completing the course
Data Base Management System
with a consolidated score of **48 %**

| | | | |
|--------------------|----------|----------------|---------|
| Online Assignments | 10.00/25 | Proctored Exam | 37.5/75 |
|--------------------|----------|----------------|---------|

Total number of candidates certified in this course: 3475

A. Goswami
Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL, Coordinator
IIT Kharagpur

Jul-Sep 2019
(8 week course)

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL19CS46521720178

Prof. Madhuri Pal
HOD, CSE

HOD
Computer Science & Engineering
JBCOEM, Nagpur

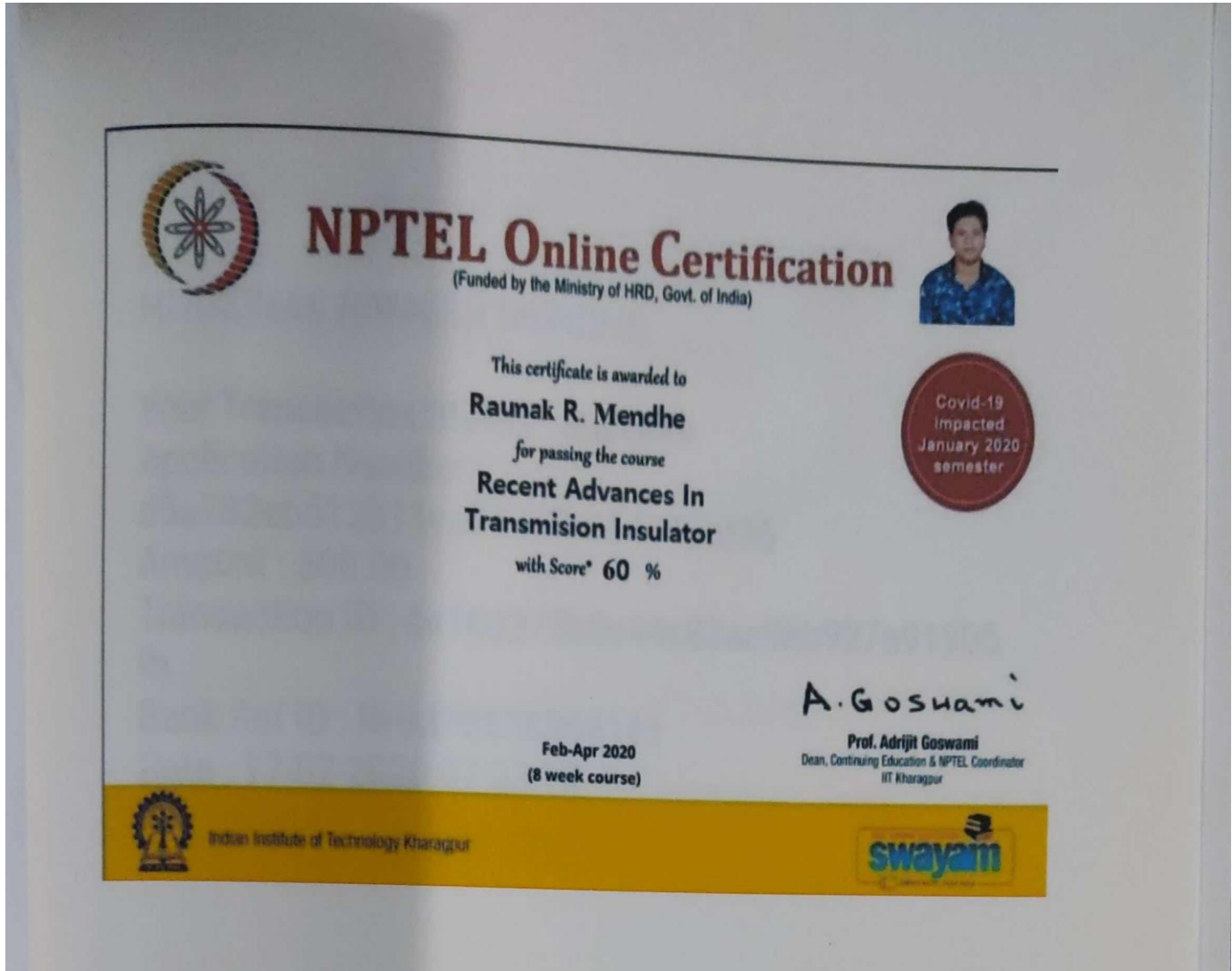


Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501



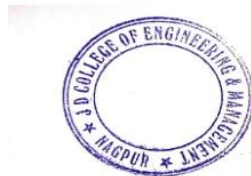
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To: DINESH RAMDAS LAGAD
KALMESHVAR ROAD
JD COLLEGE
NAGPUR
MAHARASHTRA
441501
PH. NO :9075389565

| 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
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This certificate is awarded to
DINESH RAMDAS LAGAD
for successfully completing the course
Organic Farming for Sustainable Agricultural Production
with a consolidated score of **47** %

| | | | |
|--------------------|----------|----------------|-------|
| Online Assignments | 13.75/25 | Proctored Exam | 33/75 |
|--------------------|----------|----------------|-------|

Total number of candidates certified in this course: 522

A. Goswami
Prof. Ashutosh Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

Jul-Sep 2019
(8 week course)

Indian Institute of Technology Kharagpur

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Principal
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 Roll No: NPTEL19CS41S61850038

To
 BHUSHAN M. PAWAR
 PLOT NO 45, RAJ NAGAR, NEAR HUSNOOR
 CONVENT, JAIBHOLE NAGAR, CHANKAPUR.
 KHAPERKHEDA
 NAGPUR
 MAHARASHTRA
 441102
 PH. NO :8446049838

| 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
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Elite
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This certificate is awarded to

BHUSHAN M. PAWAR
 for successfully completing the course



The Joy of Computing Using Python

with a consolidated score of **76** %

| | | | | | |
|--------------------|-------|------------------|-------|----------------|-------|
| Online Assignments | 25/25 | Programming Exam | 25/25 | Proctored Exam | 26/50 |
|--------------------|-------|------------------|-------|----------------|-------|

Total number of candidates certified in this course: **8505**

Devendra Jalihal

Prof. Devendra Jalihal
 Chairman
 Centre for Continuing Education, IITM

Jul-Oct 2019
 (12 week course)

Prof. Andrew Thangaraj

Prof. Andrew Thangaraj
 NPTEL Coordinator
 IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL19CS41S61850038

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

2019 NPTEL Certificate

Principal
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 Khandola, Katol Road
 Nagpur-441101

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Roll No: NPTEL19CS41S61850056

To
SHRUTIKA SUNIL GIRAMKAR
PLOT NO 703,C/O THAKRE, NEW SUBHEDAR
LAYOUT
NAGPUR
MAHARASHTRA
440032
PH. NO :7721882708



| 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 Ministry of HRD, Govt. of India)



This certificate is awarded to

SHRUTIKA SUNIL GIRAMKAR

for successfully completing the course

The Joy of Computing Using Python

with a consolidated score of **74** %

| | | | | | |
|--------------------|---------|------------------|-------|----------------|-------|
| Online Assignments | 24.5/25 | Programming Exam | 25/25 | Proctored Exam | 24/50 |
|--------------------|---------|------------------|-------|----------------|-------|

Total number of candidates certified in this course: **8505**

Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Jul-Oct 2019
(12 week course)

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL19CS41S61850056

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

2019 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

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Roll No: NPTEL20AE03S1574414

To
AMIT GHODESHWAR
PLOT NO. 101, NEAR NMC PRIMARY SCHOOL,
LASHKARIBAGH, HARIDAS NAGAR,
NAGPUR
MAHARASHTRA-440017
PH. NO :9518715893



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 Ministry of HRD, Govt. of India)



This certificate is awarded to

AMIT GHODESHWAR

for passing the course

Aircraft Maintenance

with Score* **87** %

Covid-19
impacted
January 2020
semester

Prof. Rajesh M. Hegde
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Feb 2020
(4 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur



Indian Institute of Technology Kanpur



*Continuous online assessment score

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

NPTEL STUDENT CERTIFICATE 2019-20

Principal
College of Engineering & Management
Bhandara, Khar Road
Nagpur-441151

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, <https://nptel.ac.in/noc/>

Roll No: NPTEL20CS20S1173376

To
AMIT GHODESHWAR
PLOT NO. 101, NEAR NMC PRIMARY SCHOOL,
LASHKARIBAGH, HARIDAS NAGAR,
NAGPUR
MAHARASHTRA-440017
PH. NO :9518715893



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
AMIT GHODESHWAR
for passing the course
Cloud Computing

with Score* **87** %



A. Goswami

Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

Feb-Apr 2020
(8 week course)



Indian Institute of Technology Kharagpur



*Continuous online assessment score

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

NPTEL STUDENT CERTIFICATE 2019-20

Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441503

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

Annexure-III

NPTEL Elite Certificate

Elite

NPTEL Online Certification
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This certificate is awarded to
KSHITIJ CHOUBEY
 for successfully completing the course

Cloud Computing

with a consolidated score of **64** %

| | | | |
|--------------------|----------|----------------|----------|
| Online Assignments | 22.29/25 | Proctored Exam | 41.66/75 |
|--------------------|----------|----------------|----------|

Total number of candidates certified in this course: 2209


Prof. G.P. Haje Sekhar
Dean, Continuing Education
IIT Kharagpur

Sep-Nov 2020
(8 week course)


Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



To validate and check scores: <https://npTEL.ac.in/noc>

Elite

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




This certificate is awarded to
VIPUL GAJBHIYE
 for successfully completing the course

Cloud Computing

with a consolidated score of **60** %

| | | | |
|--------------------|----------|----------------|----------|
| Online Assignments | 22.50/25 | Proctored Exam | 37.25/75 |
|--------------------|----------|----------------|----------|

Total number of candidates certified in this course: 2209


Prof. G.P. Haje Sekhar
Dean, Continuing Education
IIT Kharagpur

Sep-Nov 2020
(8 week course)


Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



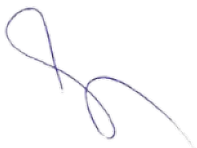
Indian Institute of Technology Kharagpur



To validate and check scores: <https://npTEL.ac.in/noc>

37

Figure 1 NPTEL CERTIFICATE_IT_2019-20


 Principal
 J.D. College of Engineering & Management
 Khandala, Katol Road
 Nagpur-441503



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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: NPTEL19MG34S11720504

To
JYOTI DADARAO SHENDE
AT+POST : KOTHULNA, TA: SAONER, DIST:
NAGPUR
KOTHULNA
NAGPUR
MAHARASHTRA
441101
PH.NO-9130400755

| 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 Ministry of HRD, Govt. of India)



This certificate is awarded to
JYOTI DADARAO SHENDE
for successfully completing the course
Leadership

with a consolidated score of **47** %

| | | | |
|--------------------|----------|----------------|-------|
| Online Assignments | 14.17/25 | Proctored Exam | 33/75 |
|--------------------|----------|----------------|-------|

Total number of candidates certified in this course: 2330

A. Goswami

Jul-Aug 2019
(4 week course)

Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL19MG34S11720504

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

1. MBA: 2019-20



Principal
JD College of Engineering & Management
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Roll No: NPTEL19MG34S11720506

To
PRANALI GULABRAO SONBHADRE
HOUSE NO.313,JAWAHAR NAGAR, MANEWADA
ROAD
NAGPUR
MAHARASHTRA
440024
PH. NO :8552818246



| 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

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This certificate is awarded to
PRANALI GULABRAO SONBHADRE
for successfully completing the course
Leadership

with a consolidated score of **47** %

| | | | |
|--------------------|----------|----------------|-------|
| Online Assignments | 13.67/25 | Proctored Exam | 33/75 |
|--------------------|----------|----------------|-------|

Total number of candidates certified in this course: 2330

Jul-Aug 2019
(4 week course)

A. Goswami

Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL19MG34S11720506

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

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Khandala, Katol Road
Nagpur-441503

HOD- MBA



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Chandrashekhra D. Sahare et al.; International Journal of Advance Research, Ideas and Innovations in Technology



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Experimental study on waste foundry sand and steel slag concrete

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ABSTRACT

Generation of waste foundry sand as by- the product of metal casting industries causes environmental problems because of its improper disposal. Thus, its usage in building material, construction and in other fields is essential for reduction of environmental problems. Similarly, in foundries (where the ferrous and non-ferrous metals are melted.), the slag is produced after the completion of the melting process it can also be used as a building material, construction and in another field. This research is carried out to produce low-cost and eco-friendly concrete. This paper demonstrates the use of waste foundry sand as a partial replacement by fine aggregate and slag is as coarse aggregate in concrete. An experimental investigation is carried out on concrete containing waste foundry sand in the range of 0%, 20 %, 40% by weight and slag is fully replaced (100%) for M-25 grade concrete (OPC). The material was produced, tested and compared with conventional concrete in terms of workability and strength. These tests were carried on a standard cube of size 150mm×150mm×150mm for 7, 14 and 28 days to determine the mechanical properties of concrete.

Keywords— Waste foundry sand, Steel slag, Cement (OPC), Low-cost concrete, Eco-friendly, Compressive strength, Split tensile strength

1. INTRODUCTION

Concrete is an artificial material which is widely used in all the construction sectors. All the constructions around the world are constructed with the help of concrete such as Buildings, Roadways, Bridges, and Dams etc. The concrete is a costly material and due to which the cost of the construction increases with the increase in the quantity of the concrete. To overcome this problem we have used industrial waste materials as a fine aggregate and coarse aggregate. Waste foundry sand is used as a fine aggregate and Steel slag is used as a coarse aggregate

1.1 Waste Foundry Sand (WFS)

Metal industries use sand casting in which moulds are made of uniform sized, clean, high silica sand. After the casting, process foundries recycle and reuse the sand several times but after some time, it is discarded from the foundries known as waste foundry sand. Its harmful effect on environment and disposal problem can be minimized if used in engineering structures. Indian foundries produce approximately 1.71 million tons of waste foundry sand each year (metal world, 2006).



Fig. 1: Waste Foundry Sand

Research Paper (CE) - 2019-20

Principal
JD College of Engineering & Management
Katol Road, Nagpur
Nagpur-441101

HOD, (CE)



The effective width of cold-formed C-section by IS:801 and comparing it with AISI:2007

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J D College of Engineering and
Management, Nagpur, Maharashtra

ABSTRACT

Buildings built with cold formed sections as primary members (frames) and secondary members (purlins) offers viable alternative solutions for wide range applications of social sectors like housing, education etc. Design of cold formed sections has obvious complexity in view of buckling of sections and stress in the compression element, especially in flexure. In this study, using IS: 801 equations, effective section properties of C section are calculated for a wide range of configurations with different b/t ratios for flange subjected to maximum allowable stress. The study also includes simple design tools and few standard colds formed sections having a similar configuration but for thickness to be used for residential or community shelters for different wind zones. A resource is made to compare the results with similar studies using AISI code.

Keywords— Cold formed section, Primary members, Buckling of section, B/T ratio, IS: 801, AISI

1. INTRODUCTION

Cold form sections as primary members (frames) and secondary members (purlins) offer a wider range of applications in varying sectors like education, health, housing etc. CFS section has large flat width to thickness ratio and leading to buckling of element still CFS have following inherent characteristics.

- Flexibility in designs.
- Easy and fast manufacturing and erection.
- Ease in transportation and handling.
- Low maintenance.
- Easy future expansion.

Methods of forming of cold formed sections are:

- Cold rolled forming operation.
- Press break operation.

In this study, usual stiffened CFS C-section with lips has been focused. Works on flexural strength performance and buckling mode prediction of cold-formed steel has been done and conclude that “web stiffeners to the C-section do not improve the bending capacity significantly, it just helps to reduced local buckling”.

2. DESIGN METHODOLOGY

2.1 Assumptions

The whole study has been concentrated on following assumptions.

- C-section with lips is considered for analysis.
- The section is predominantly in flexure.
- Only compression flange shall undergo buckling.
- Though compression flange undergoes buckling, the shift in neutral axis towards tension flange is negligible.

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Research Paper (CE) - 2019-20

HOD, (CE)

Principal
J. D. College of Engineering & Management
Khandala, Kato Road
Nagpur-441503

Digital Ticket Booking and Checking Using Aadhaar Card or Fingerprint and Android Application

Adesh Jamnik

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Nikesh Kale

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Abstract—In the current system, we can get ticket both over the counter and online, but often we do not get ticket due to black-marketing and also it generates the paper ticket with the carbon printing. And in ticket checking process, there is lots of manual work to take place for maintaining passenger's records which is tedious to manage. To deal with these problems, this paper gives the solution by regulating ticket booking process using Aadhaar card no. or fingerprint which will reduce the use of carbon printed paper tickets and paper waste. We are developing an android application that will help the ticket checker to check the ticket and keep records effectively.

Keywords—Aadhaar card, biometric fingerprint, ATVM, Android Application, TC.

I. INTRODUCTION

The interest of vehicle framework has built step by step with the expansion in India's population. Rail transport is one of the most significant vehicles of voyaging and transport, where a huge number of traveler travel by means of traveler train and 30 million tons of merchandise transport through cargo train. From a previous couple of years, Indian Railway makes in excess of 70 lakh tickets for each day. In traditional or existing paper-based ticketing framework has certain disadvantages, since parcel of paper tickets are being printed utilizing carbon printing and waste their approx. 102 crore Rupees/year. In the wake of voyaging, the travelers, for the most part, discard the ticket which at last contaminates nature and those carbon printed paper tickets are destructive to people, which causes different medical problems.

Online Platform is made for booking tickets of saved compartments, yet the clients who travel when all is said in done compartment still confront issues since they should hold up before the ticket counter in a long line to buy tickets [32]. In a transition to diminish hurriedness or blockage at ticket counters, Indian Railways introduce Automatic Ticket Vending Machines (ATVMs) at a few railroad stations for the ticket booking process, Passenger can purchase different kinds (top of the line and below average, single, return, and so forth) of ticket from ATVM machine. In any case, there are numerous disadvantages of ATVM savvy card like traveler need to revive the shrewd

card according to prerequisite and there is no web based reloading framework for keen card, the cardholder doesn't have the legitimacy of his card and the card can be harm because of terrible condition We book the ticket utilizing two way, 1st purchasing the ticket from the counter and second is by internet booking .But because of fast increment in the debasement level and illicit selling, ticket no longer accessible for the individuals and the unapproved vender sell that ticket in high rate. What's more, at some point we lost our tickets or we miss that ticket at home then we need to purchase that equivalent ticket again or we need to pay fine in an adventure which is charged by ticket gatherer as per the railroad rule. What's more, in the railroad ticket booking and ticket checking process there is significantly more desk work going on. As a result of this TC falls into difficulty for keeping up the more records.

To minimize the congestion at the unreserved ticket counter and also to allow cashless transaction using smart card, Indian railway developed Automatic Ticket Vending Machine. This machine are touchscreen which uses a smart card. The card will have to be purchased first and recharged before the duration of the card is exhausted. Passenger can choose their route and destination after placing the card on a slot. The ticket will be printed and hard over after confirmation and debit the amount [2]. Biometric ATVM to overcome the defect of ATVM by using AADHAAR Card and Biometric Fingerprint for booking ticket. The fingerprint recognition system is the most secure authentication method. The purpose is to enable cashless payment through a biometric device. As each and every person has a unique fingerprint, they can store it in already existing database or they can link it to Aadhaar card. After the payment is done and details are confirmed, the ticket will be printed and delivered [3], [25]. It proposed an arrangement of booking the advanced ticket utilizing AADHAAR CARD this will lessen dark promoting and make it simpler for normal individuals to purchase a ticket. They are utilizing R-wallet to pay the cash. So the work should be possible rapidly. Android application will deal with the record and it will lessen the paper work [4]. In this system, a handheld device is provided to the ticket collector for quick authentication of passengers. A QR code is given on the ticket, which contains the complete data store of the passengers.

To verify the passenger, the ticket collector will scan on the ticket and confirm the passenger [5]. Android application called Instant General Ticketing Service (IGTS), developed to provide an ease of booking the general compartment tickets as well as platform tickets. Feature of the application is station locator which employing the google map API, the route module embedded into the system [32]. Service of railroads permit m-Aadhaar, a computerized rendition of the Aadhaar card, as confirmation of personality for explorers in any saved class. One of a kind recognizable proof authority of India propelled m-Aadhaar the portable application on which the individual can download their Aadhaar card just on the versatile number to which Aadhaar has been connected. At the point when traveler has open the application and enter the required his/her secret phrase the Aadhaar will appear.

II. METHODOLOGY

We are going to implement a system for the ticket booking process by using Aadhaar ID and biometric fingerprint on ATVM and Android Application for Ticket Collector for the purpose of ticket checking.

Right off the bat the traveler needs to fill every close to home detail to the framework at the hour of enlistment. Aadhaar card and biometric fingerprint registration are necessary for the use of a secure travel system. Start with BTBS i.e. Biometric Ticket Booking System, passengers use this for selecting the route, fare details and booking the ticket. Subsequent to choosing the specific source and goal for adventure traveler needs to pay the admission for the voyage direct from the traveler ledger by utilizing Aadhaar pay, BHIM UPI and different installments applications too. For example, Google Pay, Phone Pay and Paytm which are legitimately connected to the traveler financial balance. Since this is a simple and secure path for the online installment exchange without utilizing any shrewd card or R-Wallet. The main advantage of this system, it will not generate the carbon ticket means it will send the ticket details on registered mobile number as an SMS.

The flow diagram given below provides our system workflow.

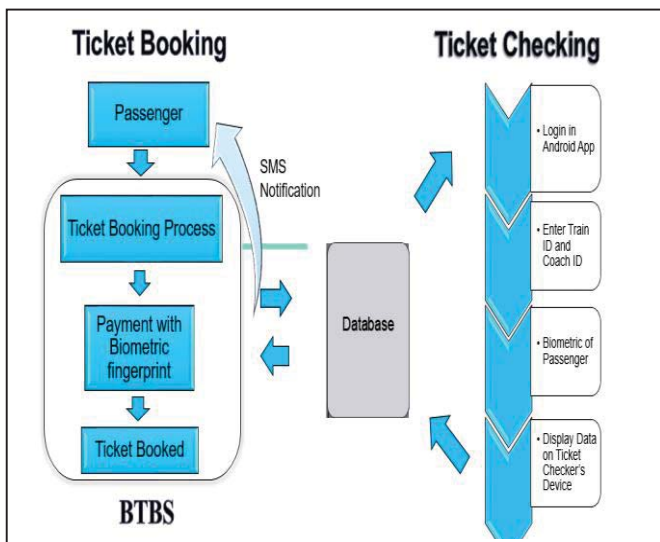


Figure 1: Flow Diagram of ticket booking and ticket checking process

In case we take a ticket using Aadhaar card, it will make the ticketing and checking process more straightforward and less difficult. For the process of ticket checking, Ticket checker/collector will use an Android app. For that TC needs to Log In and enter the train details (train id, coach id, and coach type) into an Android Application and whole details about the passenger who booked the ticket will be visible in an

Application. The TC should just scan the fingerprint of the passenger or enter the Aadhaar Number and check whether the passenger has booked the ticket or not. If he does not book tickets, then the TC will collect fine from that passenger and book the ticket from an Android application.

Algorithm:

Step 1: START

Step 2: Register user

Then Fill all required fields

- a) User Details
- b) Aadhaar Number
- c) Contact Details
- d) Username
- e) Password
- e) Fingerprint

After submitting the users data will save into the railway database

Step 3: Log In

If (New User)

Then go to Step 2

Enter user name and password or scan Fingerprint

If (Field is empty)

Then throw warning

If (Field is not valid)

Then throw warning

If (matches)

Open home screen and start session

Switch (option)

If (ticket=="platform")

Then proceed to checkout (Aadhaar Pay)

Else if (ticket=="train")

Then proceed to fill form like number of passengers, adult or child (Aadhaar Pay) and process to checkout

Step 4:

After that it will generate [TICKET] in database and SMS to users phone.

Step 5: END.

II (A). Android Application

We are developing an android application for ticket collector (TC) to check the passenger ticket digitally. So TC doesn't need to carry the paper based records for the identification of the passengers, due to the use of Aadhaar Id and the fingerprint for ticket booking the ticket checking process becomes more easy.

Algorithm:

Step 1: START

Step 2: Register TC

Then Fill all required fields

- a) TC Details
- b) Aadhaar Number
- c) Contact Details
- d) Username
- e) Password
- e) Fingerprint

After submitting the TC's data will save into the railway database

Step 3: Log In

If (New TC)

Then go to Step 2

Enter TC's name and password or scan Fingerprint

If (Field is empty)

Then throw warning

If (Field is not valid)

Then throw warning

If (matches)

Then go to step 4

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Step 4: Enter Train details i.e. train number and other

If (valid)

Then display all passengers list and

goto step 5

Otherwise throw warning

Step 5: Checking Process

Enter passengers Aadhaar number or scan Fingerprint

If (matches)

Then display the ticket

If (not matches)

Then apply fine and book ticket and saved into database

OR

Passenger will show the SMS of ticket and TC will verify

If (valid)

Then go to step 6

If (not valid)

Then apply fine and book ticket and saved into database

And go to step 6

Step 6: END.

In our proposed framework, the TC needs to login into an android application utilizing his/her client Id and secret key. After fruitful login, TC will enter the train number, mentor id and mentor kind of the train and the entire subtleties of travelers who booked the ticket will be show on the screen of android application due to all travelers information will stay in the android application will be accessible to the ticket gatherer. On the off chance that somebody goes without ticket, TC will put fine on his/her and will make a ticket utilizing android application.

II (B). Fingerprint Scanner

In our system, we are using the biometric fingerprint scanner for more secure and easy Registration/login process because each person has the unique fingerprint identities. Passenger will register their fingerprint during ticket booking through capacity scanner which scan the unique patterns i.e. edge patterns on the fingers and store the data into system database. The fingerprint matcher algorithm matches information and authenticate user. If the information matches with database then user will proceed for the next process. Author gives the solution to the fingerprint verification problems on Nokia N800. They added the new field which is Token ID. They utilizes the X.509 for the Digital Certification of Security, stage autonomous engineering and number of modes which sheltered and hearty installment framework perfect with the heritage X.509 declaration foundation [20]. Authors describe the Random Projection based representation technique for fingerprint verification. The unique mark coordinating depends on the Euclidean separation between two relating Finger-Code and henceforth it is amazingly quick. The interpretation invariance in the Finger-Code is set up by the reference point. They explain how the fingerprint will match with the saved fingerprint code which is stored in the database. The gobar filter can used to give data in explicit direction in the picture, ensure the genuine edge and valley structure and evacuate clamor. They normalize the locale of enthusiasm for every division independently to consistent mean and change before filtering the unique finger impression picture. To evacuate the impacts of sensor commotion and gray level disfigurement because of finger weight contrasts, standardization is performed. Let M_i and V_i signifies assessed mean and fluctuation of area S_i , $I(x, y)$ indicates the dim an incentive at pixel (x, y) , and $N_i(x, y)$, the standardized dark level an incentive at pixel (x, y) . The Normalized picture is characterized as pursues for every one of the pixels in sector S_i

$$N_i(x, y) = \begin{cases} M_0 + \sqrt{\frac{V_0 \times (I(x, y) - M_i)^2}{V_i}}, & \text{if } I(x, y) > M_i \\ M_0 - \sqrt{\frac{V_0 \times (I(x, y) - M_i)^2}{V_i}}, & \text{otherwise} \end{cases} \quad (1)$$

Standardization is a pixel-wise activity which doesn't change the lucidity of the edge and valley structures. In the event that standardization is performed on the whole picture, at that point it can't make up for the force varieties in various pieces of the picture because of the versatile idea of the finger. The primary advantage is its computationally attractive matching/indexing capability.

II (C). Payment

Wherever at the time of procurement, there are numerous techniques for installment in the time of multiplication of data innovation, for example, cash, charge card, net-banking and others. The rapid increase in the online transaction results in the demand of fast and accurate user identification and authentication. But there is a problem of security. Presently we depend on the money exchange at railroads ticketing counters, we may likewise offer different methods for exchange for the installment at the Indian rail line ticket counters like Aadhaar Pay and BHIM UPI. Biometric can be used to prevent unauthorized access to smart cards, ATMS, Information etc. Biometric play very important role in identification and authentication. Author give the overview of E-Payment and there security. The protocol name SET (Secure Electronic Payment) which is only proposed for Visa and MasterCard. This survey gives the figure of increasing percentage of E-Wallet, Credit Card, and Debit Card with 40% .

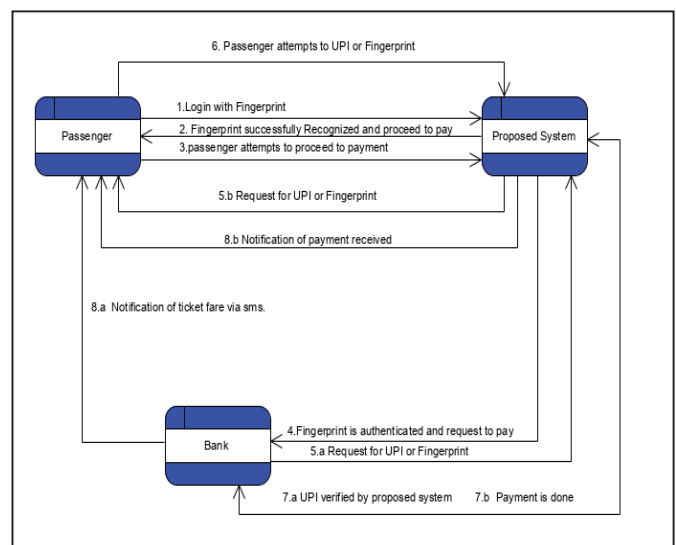


Figure 2: Data Flow Diagram of Payment Process

Aadhaar Pay is an installment framework through which client can make installment utilizing his/her Aadhaar Number and Biometric confirmation. Along these lines, there is no compelling reason to recall PIN and PASSWORDS, can pay from any Aadhaar empowered ledger.

II (D). SMS

To confirm that the ticket has been effectively confirmed and payment is done, we will send tickets to passengers on their submitted versatile registered number which enlisted in the database and the ticket which is reserved is put away consequently into the database in the messege format. That ticket will incorporate ticket id, starting point and end, number of

travelers, number child and adult, ticket charge, time and date. This will diminish carbon printed paper tickets.

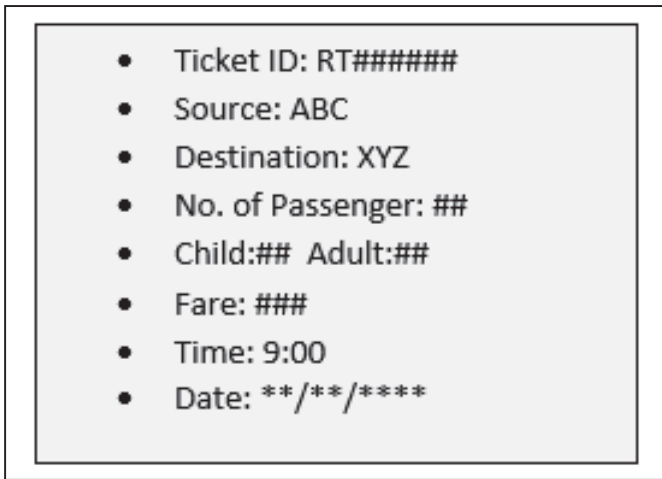


Figure 3: SMS Format

As a result of this the traveler doesn't have to convey the printed copy of the booked ticket and traveler can go unafraid of losing the ticket

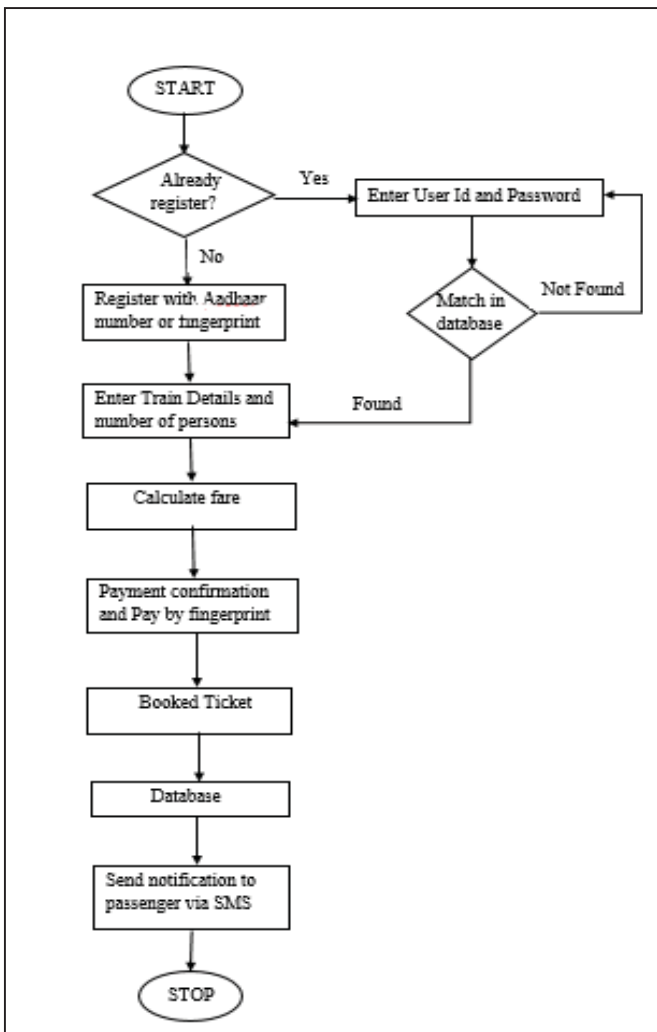


Figure 3: Flow Chart of Proposed System

II(E). Role of System Mediator for ticket booking:

Illiterate or semi-literate rail passenger faces many problems while booking the ticket, as they do not know how to use the system, because they don't have that much of knowledge. For this problem there will be a mediator who will help such

passengers for registering into the system and booking the ticket. Also the instructions regarding the ticket booking will be given in the system

In future we need to maintain the hardware which we are going to use for ticket booking. So that our system will work in proper way. Also this system will provide more security to passenger.

III. CONCLUSION

The proposed system addresses the issue of the existing system and make it more user friendly which provide better, secure travel using Aadhaar Card or fingerprint. This system will make the ticket booking and ticket checking process digital which is well suited and easy for use. It will save our time, reduce paper waste/work, black-marketing, corruption.

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IOT Based On-Road Vehicle Breakdown Assistance

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ABSTRACT

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Our lives got simpler with the Quick accumulation of innovation and framework. The coming of innovation has likewise risen the traffic perils and the road accident occurs over and again which causes gigantic death toll and property on account of the poor emergency offices. Due to chatting/talking on the Cell phone during driving and furthermore because of rash driving of the drivers. Numerous lives could have been spared if emergency service could get accident data and contact in time. Vehicle accidents are one of the most driving reasons for setbacks. The time between an accident event and the emergency restorative work force are dispatched to the accident area is the significant factor in the endurance rates after an accident. By wiping out that time between an accident event and the specialists on call are dispatched to the scene diminishes death rates with the goal that we can spare lives. And another issue in our daily life we don't know when and where we get stuck on the road and we don't know where we are and we also won't be able to find the nearest mechanic location. This project targets to develop an android application that will help the user to register through installing the application and can get access to the nearest mechanics location and contact him personally this uses the internet and messages permissions to go on with the application. This application is an android app which can be run on any android compatible tablets and mobile phones. Now with this day by day advancing technology we get access to the mechanic and mechanic gets access to the location user through the GPS location send to him and them both will save a lot of time and that's how it is done and this can be used anywhere and at any time. In this paper, we are center about all the current framework or analogies for accident revealing and anticipation to order another framework which is improved and succinct of existing properties. Overall, we are pondering the framework which decreases the time of activity, for example, suggestion to police, implication to family, intimation to hospital and a lot more angle.

Keywords : Accident Detection, Vehicle Breakdown, Accident Prevention, Location Tracking, GPS/GSM, IoT.

I. INTRODUCTION

In the daily life we all use android devices in all over the world among them there are many applications which we can use daily. There are two groups of applications that are used for drivers and other people. It is used for health and monitoring navigation. It can optimize fuel detection and road hazards. So in life the first priority of individual is all about the safety. An accident is an event that can happen with anybody. It is an event which we cannot assume and predict anyhow. Accident is a specific type that can happen with any one and incidents have one of the major causes of traffic at daily basis. It is a combination of incidents and accidents. The risk of accidents grows daily by daily. In the system incidents are raised. Accident duration prediction becomes a very important role in life. It is a reliable duration that can help further. The efficiency of the management system is used in this type of problem that can occur daily. The risk of the life is in a very crucial stage. In this paper we can analyze the real time problem. Traffic has become the national occasion of the collision. Poor emergency occurrence is a reason for the high number of traffic and the immense rate increase in our nation. Various mechanical and sociological advances decrease traffic fatalities during the older decade of the nation. Every moment that can harm and injure that individual doesn't get that data of efficiency. In this the microcontroller and the GPS, GSM module offers the alarm section of the part. And the alarm message can send that section. Which can be sent to rescue team that can initiate the effort for the people. Be the constraints because the data can send for the help. This is the impact of successful warning and crashes, in this framework find a vehicle that can assist the rescue team. When any incident can occur on that area they can get assist by the team so as to recognize the impact of this project is very high in intensity. As far as the impact of impact warning crash and other moderation of the data are occur then it

will happen. This in this framework which would find a vehicle that started to attempt the data of the accident. Mobile software used for all the detection that can save the life of people. It is possible to monitor all the things.

II. LITERATURE REVIEW

Gradually traffic goes increases due to this accident increases for avoid accident problem several papers have been studied [1]. This paper worked out on accident detection and accident prevention. IR sensors are it detect the accident and alert the people by sending SMS using GSM module. Accident prevention by using IR sensors that could warn the driver about neighbouring vehicles when distance between them beyond the threshold value. This all contain in SDLC methodology which include Analysis, planning, design, implementation and maintenance.

In one of the papers [2], established the connection between OBD-II adapter and Bluetooth. Vehicle connect to the OBD-II adapter for diagnose the data like fuel efficiency calculator, maximum distance cover in minimum amount of fuel. OBD-II adapter connect with Android smartphone from Bluetooth. Adapter collect the data and show specific data on android screen. It can detect the location of parking and fault in vehicle. It can detect vehicle crashing and incoming call automatically disconnected. It also instructed where it has to change the gear of vehicle. Paper [3], In this paper Author proposed new smart vehicle over speed detector using IOT give the alert information to concerned authorities while over the speed limit. It measure the vehicle speed with speed app using radar. It recognised the road accuracy based on road name inserted in Google map. It used Electronic tracking device runs in 12 V lithium batteries with network of GPS sensing and IOT implementation.



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Paper [4], This paper aims to investigate the design and development of next generation roadside assistance services for ITS and future smart cities. IoT and M2M communications are considered as two main pillars of smart cities [2]. Thus, we propose an IoT Framework for intelligent roadside assistance system that can provide wide range of assistance to drivers and passengers. We have identified research and engineering challenges related to the proposed IoT framework. Our research contributions in this paper are - (i) creating a coexistence of distributed data analysis (ii) horizontal IoT application development (iii) IoT and Web of Things (WOT) standard based implementation to break data silos and (iv) open interfaces and APIs allowing third party developers to create inexpensive roadside assistance application. The paper focuses on the IoT based next generation roadside assistance services for ITS and smart cities. The currently deployed such services pose many challenges and must be upgraded to an open, secure and standard system. This will unleash the true consumer potential of such services. As for future work, we would evaluate the performance of the complete prototype and deploy it in a real test bed.

Paper [5], In this paper, we are dealing with Telematics/ITS service based on new IT technologies using smart roadside server in smart road systems, and we focus in particular on the system architecture and components including service processing algorithm and issues. This paper is given as follows: Section II introduces the state of the art related to project using roadside server in ITS part. In section III, we proposed a smart road side server's framework and two applications based on traffic and weather conditions. Here, we suggest the system model about roadside server, processing algorithm and the methods for driver assistance/safety alarm in section IV and V, respectively. In section VI, we state the conclusions of this paper and provide perspective for future work.

III. PROPOSE SYSTEM

The proposed design can consist of various component such as IR sensor, crushing switch, GSM module, LCD, LED and RF module transistor and receiver. The IR sensor and crushing switch is responsible for detecting the accidents and sends the command to the microcontroller. GSM and GPS are the device that sends sms and location to the users. Our system is coupled with an android app called vehicle break down assistance. Our system has the facility where machine and users and register themselves. If there is any vehicle break down the user can raise a request and nearest mechanical can assist them on the spot this online machine locator reduce work and can easily find the Mechanics from various location.

Our system has the feature to detect the over speeding whenever speed of the vehicle will go above 80 km hr the buzzer will be raised thus alerting the driver. Our system has a special function called DND mode in this feature the mobile of the driver will automatically change to salient mode, when the speed of the vehicle cross the 15 km hr mark it will be switch to normal mode when the speed will be reduce below 15 km hr. In case of accident of vehicle the alert msg will be send to the nearest hospital, police station, and one of relative of the driver. This feature very crucial for providing early medical assistance to the victim.

IV. CONCLUSION

An accident is an unexpected and inadvertent occasion. In this day and age road accidents perspective among the main source of human death, Road wellbeing for driver is a fundamental necessity of society, As the Number of vehicles increment step by step, Collision of vehicle additionally increments broadly, in this circumstance this paper satisfies the reason for sparing lives first by

examination the escape clause in the current frameworks. A framework is required which the framework which decrease time of activity, for example, suggestion to police, implication to traffic police, insinuation to family, hint to hospital and a lot more viewpoint. In this paper, we presented the design and implementation of android application called IOT based On-Road Vehicle Breakdown assistance system, with which providing emergency road side breakdown assistant on the spot. It is easy to use & free of cost on android store. Thus, it is time a time saving as well as cost efficient application. So, we can conclude that the proposed system can be used to reduce human efforts and luxuriate human lives, hand in hand, with the modern technology.

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Energy Generation using Interconnected Motor in a Closed Loop

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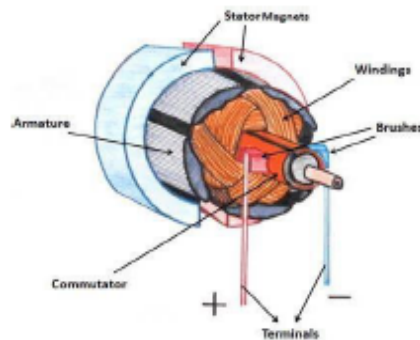
Abstract: This work is based on “Electricity Generation in a Closed Loop”. As number of motors are coupled to each other as motor generator set for the generation of electricity. In this project we are going to regenerate energy in a close loop with the help of PMDC Motor whose shaft are interconnected to each other. This technology can be used in electric vehicles to regenerate the electricity to increase the efficiency of the system which can be used in the electric vehicles.

Keywords: PMDC motor, diodes, converter, Plugin Hybrid Electric Vehicle (PHEV) and Electric Vehicle (EV)

INTRODUCTION

As we know that, the environmental pollution caused by fossil fuels and the depletion of fossil fuels are greatly hot issues around the world in the recent years. Over the last decade the understanding of the environmental problems has grown. The electric vehicle is considered to be an effective solution of these problems which are expected to reduce the pollution and fuel cost. In order to fulfill the aim new technologies have been launched and rolled out like Plugin Hybrid Electric Vehicle (PHEV) and Electric Vehicle (EV).^[1]

Fig: PMDC Motor



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REVIEW OF ELECTRICAL ENERGY AUDIT AT KINETIC GEARS

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Abstract - - In Today's scenario India is facing a shortage of electrical power availability. The large area in high energy consumption in world is industrial area. The gap between demand and supply is increasing due to increase in demand of electrical energy. Day by day, energy demand expanding so that it is necessary to diminish energy consumption for that energy conservation is required. The energy audit is the best alternative for Conservation. The main aim of this project is to calculate use of energy in above industry for lighting load, machine load purpose and find the opportunities for energy saving .

Key Words: Energy Conservation, Energy Audit, Energy Consumption

1. INTRODUCTION

According to energy conservation act 2001, Energy audit is defined as the verification, monitoring and analysis of use of energy including submission of technical report containing recommendation for improving energy efficiency with cost benefit analysis and an action plan to reduce energy consumption". The three top ranker operating expenses in an industry are energy, labour and material. The most expenses required for energy. Hence it is necessary to reduce operating cost. An energy audit gives various methods for energy saving opportunities, Maintenance methods, quality control of energy, information of new upgrade technologies in energy saving ,area which require energy conservation and improvements.

1.2 Type of Energy Audit

1. Preliminary energy audit

This is also known as walk through energy audit. In this audit simple analysis of energy use and performance of the plant is check. These audit take a relatively less time and the results are more general providing common opportunity for energy efficiency.

2. Detailed energy audit:

Three phases of detailed energy audit;

Phase I - Pre-audit phase

Phase II - Audit phase

Phase III - Post audit phase

2. ENERGY AUDIT FOR KINETIC GEARS

2.1 Introduction of company

We planned to conduct Energy Audit of industry "Kinetic Gears in MIDC, Hingna, Nagpur" is a top player in the category Bevel Gear Box Manufacturers in the Nagpur.

The product of the company are as follows :-

1. Bevel Gear Box Manufacturers

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IOT Based Transformer Monitoring System

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ABSTRACT

A distribution transformer is a transformer that provides the final voltage transformation in an electric power distribution system network. Because of, large of transformer and various components over a wide area in a power system, the data acquisition, condition monitoring are the important issues. The remote monitoring of transformer health over internet system is a system that could be used for the real-time data monitoring of transformer through internet of things (IOT). Also it proposed to send the central database via Wi-Fi module for further process. The real time monitoring system consist of embedded system. Wi-Fi and sensors are installed at transformer site which reads and measure the physical quantity from the distribution transformer and further it converts into the analog signal. As the parameters used it processed and records the data in system. In case of emergency situation at distribution transformer the obtained parameters sense the signal and it sends alert to the Android app regarding information about the parameter signals at distribution transformer according to the data occurred by the microcontroller. Arduino board designs use a variety of microprocessors and controllers the are equipped with a set of digital and analog input/output pins that may be interfaced to various expansion boards and other circuits.

Keywords : Distribution Network, Distribution Transformer, Electrical System, Communication Technology

I. INTRODUCTION

Transformers are important equipments in power system network. A healthy power supply at the customer end mainly depends on the performance of the distribution transformer. The monitoring and control of distribution transformer is an important procedure for diagnosing the rapid alerts of the electrical network and also for the proper functioning of the electrical network.

The monitoring of distribution transformer is done by an electronic system with the capacity of sampling,

storage, prosecution and mailing of information. If there is a real time monitoring or inspection of the system, so that we can prevent the sudden breakdown of the transformer that may lead to stop serving the electric power to several charges and produces serious affectations to the functioning of the electrical network. The monitoring of distribution transformer includes the measurement of transformer parameters like voltage, current, power and frequency. The important factor that necessary to consider is the inspected information regarding the distribution transformer should be transmitted properly by considering the coverage to the electrical network. So



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CERTIFICATE OF PRESENTATION

This is to certify that

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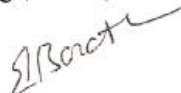
has successfully presented a paper entitled

Design and Implementation of QR Code Based

Automatic Parking System

in the 4th International Conference on Computing Methodologies and Communication (ICCMC 2020) organised by Surya Engineering College, Erode, Tamil Nadu, India during 11-13, March 2020.


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Digital Ticket Booking and Checking Using Aadhaar Card or Fingerprint and Android Application

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Abstract—In the current system, we can get ticket both over the counter and online, but often we do not get ticket due to black-marketing and also it generates the paper ticket with the carbon printing. And in ticket checking process, there is lots of manual work to take place for maintaining passenger's records which is tedious to manage. To deal with these problems, this paper gives the solution by regulating ticket booking process using Aadhaar card no. or fingerprint which will reduce the use of carbon printed paper tickets and paper waste. We are developing an android application that will help the ticket checker to check the ticket and keep records effectively.

Keywords—Aadhaar card, biometric fingerprint, ATVM, Android Application, TC.

I. INTRODUCTION

The interest of vehicle framework has built step by step with the expansion in India's population. Rail transport is one of the most significant vehicles of voyaging and transport, where a huge number of traveler travel by means of traveler train and 30 million tons of merchandise transport through cargo train. From a previous couple of years, Indian Railway makes in excess of 70 lakh tickets for each day. In traditional or existing paper-based ticketing framework has certain disadvantages, since parcel of paper tickets are being printed utilizing carbon printing and waste their approx. 102 crore Rupees/year. In the wake of voyaging, the travelers, for the most part, discard the ticket which at last contaminates nature and those carbon printed paper tickets are destructive to people, which causes different medical problems.

Online Platform is made for booking tickets of saved compartments, yet the clients who travel when all is said in done compartment still confront issues since they should hold up before the ticket counter in a long line to buy tickets [32]. In a transition to diminish hurriedness or blockage at ticket counters, Indian Railways introduce Automatic Ticket Vending Machines (ATVMs) at a few railroad stations for the ticket booking process. Passenger can purchase different kinds (top of the line and below average, single, return, and so forth) of ticket from ATVM machine. In any case, there are numerous disadvantages of ATVM savvy card like traveler need to revive the shrewd

card according to prerequisite and there is no web based reloading framework for keen card, the cardholder doesn't have the legitimacy of his card and the card can be harm because of terrible condition. We book the ticket utilizing two way, 1st purchasing the ticket from the counter and second is by internet booking. But because of fast increment in the debasement level and illicit selling, ticket no longer accessible for the individuals and the unapproved vender sell that ticket in high rate. What's more, at some point we lost our tickets or we miss that ticket at home then we need to purchase that equivalent ticket again or we need to pay fine in an adventure which is charged by ticket gatherer as per the railroad rule. What's more, in the railroad ticket booking and ticket checking process there is significantly more desk work going on. As a result of this TC falls into difficulty for keeping up the more records.

To minimize the congestion at the unreserved ticket counter and also to allow cashless transaction using smart card, Indian railway developed Automatic Ticket Vending Machine. This machine are touchscreen which uses a smart card. The card will have to be purchased first and recharged before the duration of the card is exhausted. Passenger can choose their route and destination after placing the card on a slot. The ticket will be printed and hand over after confirmation and debit the amount [2]. Biometric ATVM to overcome the defect of ATVM by using AADHAAR Card and Biometric Fingerprint for booking ticket. The fingerprint recognition system is the most secure authentication method. The purpose is to enable cashless payment through a biometric device. As each and every person has a unique fingerprint, they can store it in already existing database or they can link it to Aadhaar card. After the payment is done and details are confirmed, the ticket will be printed and delivered [3], [25]. It proposed an arrangement of booking the advanced ticket utilizing AADHAAR CARD this will lessen dark promoting and make it simpler for normal individuals to purchase a ticket. They are utilizing R-wallet to pay the cash. So the work should be possible rapidly. Android application will deal with the record and it will lessen the paper work [4]. In this system, a handheld device is provided to the ticket collector for quick authentication of passengers. A QR code is given on the ticket, which contains the complete data store of the passengers.

Design and Development of an Intelligent Robot for Improving Crop Productivity using Machine Learning

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Abstract– In this paper, we are developing an agrobot - a robot that communicates with humans through voice commands and text chats. The paper provides an idea of how the agrobot will roam in the farm area to analyse the plants' needs. The paper also enlightens the area of irrigation which is a boon for farming. The paper provides the idea of an automatic irrigation system. In the automatic irrigation system, the agrobot will sense the soil moisture using the soil moisture sensor, depending upon the moisture of the soil the agrobot will fill up the need of water of the plant and collaborate for proper irrigation. This paper reviews some beneficial achievements in agricultural robot such as rainfall trend analysis, disease detection of leaf and their proper medication. Automatic Irrigation System is intended to create an automated irrigation mechanism which turns the pumping motor ON and OFF on detecting the dampness content of the earth. In the domain of farming, utilization of appropriate means of irrigation is significant. The work in these fields is still in progress. Till date many robotics projects have been developed in the field of agriculture but none of them has such an interaction with the farmers. This paper is mainly focused on improving the agricultural fields yield by providing a monitoring system with effective and efficient usage of water resources. Thus, further development in this project will lead to greater efficiency in the field of agriculture. This feature lets the project to protrude from others.

Keywords: *Artificial Intelligence, Mobility, Soil Moisture, Chat bot*

I. INTRODUCTION

India is the fast developing country and agriculture is the backbone for our country's development. Due to industrialization and globalization concepts of the field. In India agriculture contributes 18% of the country's gross

domestic product (GDP) and employs more than 50% of the population. The agrobot provides a way of proper interaction with the farmers, and the robot is trained with machine learning algorithms using the datasets.^[2] The water management for storage and irrigation is a vital issue for agricultural cultivation. In order to do water management, the rainfall prediction is also an important process to get the data for optimum size of water storage and irrigation planning.^[2] Irrigation is an artificial way of watering the soil for the proper growth of the plant. It is mainly used in the dry areas, and the places where rainfall is less.

Machine learning uses predictions and hence produces an intelligent system that has the capability to take decisions. Machine learning is a type of AI that gives machines the ability to learn from experience. Its algorithms use computational methods to learn directly from datasets without depending on predetermined equations as a model.^[3] The algorithms progressively adapt to enhance their performance as the available number of training samples increases. Continuous increasing demand of food requires the control in highly specialized greenhouse vegetable rapid improvement a food production technology.

The confined feeding operation land consists of the ecosystems which have been modified by human to provide a large and specialized livestock production. On the other hand, cropland and pasture land is usually used for agricultural crop production such as soybean, corn and wheat, and it is also being used for pasture.^[5] The contribution of agriculture plays an important role in the economic growth of India. In India, more than 60% of the people depend upon agriculture.^[6] Recently, the number of farmers in India are decreasing day by day. The need to feed the growing global population has led to industrialization of agriculture. We designed the wireless sensor network in which agrobot will be controlled by Wi-Fi, the sensed data is under the microcontroller from sensing material, and for regulating the value of pump. In all it is a multipurpose agricultural robot that takes care of all the essentials of farming to increase the crop productivity.

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HOD IT

Design & Development of Automated & Customized Gomay Soap Machine For Vatsalya Unique Products pvt. Ltd.

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ABSTRACT:

In today's scenario in every industries automation is required to increase the productivity, but the small scale industries does not afford the costly automation system for their industry. So this paper based on the cost effective customized automation for small scale industry.

In this paper the working model of customized soap machine introduced. this model is work on both the electric supply and battery also. The mixture of material is use for soap is purely natural and it supply to the machine by hopper and passes through the extruder and get converted in the final circular shape soap with the help of circular shape die.

KEY WORDS: Extruder, Circular Die, Chain drive, Hopper etc.

1. REVIEW & LITERATURE SURVEY

Review of System:

When we start working on this project we studied various Mechanically operated Automation system. Then we came across the various mechanical components like Main base, Extruder, Hopper, Bearings, chain drive, Motors, cutting device, etc. While designing this model we face various difficulties like the problem for cutting and shrinkage after drying.

Literature Survey:

For effective Manufacturing there is a need of developing new concept or new method of production. So that we have to develop automated system for the manufacturing. The model which we introduced is the small & combined version of automation used in big industries. There are so many soap making machines available in market for soap manufacturing, but all this are work on chemically bonded material or wax & fatty acid based materials. But the soap for which we are introducing this model is purely natural and its main ingredients are cow-dung, turmeric, sandalwood, sesame oil, Sinoper etc. for that soap any automated machine is not available for small scale industries, so that we are made such type of model.

2. INTRODUCTION

Now days there is a lot of competition in small scale industries over the big manufacturing industries to develop quality product with the high production rate. A low cost automation is need of time for purpose of development of cottage level industries. Its necessary to reduce the machining time. Soap is commonly used as a cleaning agent and it remain an essential ingredient in modern living, it used daily for personal hygiene. The mission of this project is to design a cheap and affordable automatic soap making machine for small scale industry which makes the soap by cow dung material with the help of extrusion process.

After completion of this project we hope that the machine will be used in the industry for making the soap to increase the production rate and minimize the damaged product due to labor mishandling this machine assemble domestically in simple way so it's price reduced drastically that is why it is economically stable for the small scale industries

Initially after reading the research paper and by seen other previous process we plan to make a soap making machine for cow dung which is easy to use and cost-effective. The objective of this project to reduce the time and hard work of labor and increase the productivity and production rate

3 CONSTRUCTION

There are different parts are used in the customized soap making machine system

- 1) Main base
- 2) Dc motors
- 3) Extruder
- 4) Bearings
- 5) Chain drive
- 6) Cutting blade
- 7) Gears
- 8) Hopper
- 9) Metal shaft
- 10) Circular die

The whole assembly of this setup is mounted on the main base. The base size is 650*320 mm, the extruder is placed at 230 mm above the base. It's blade thickness is 14 gauge and 100 mm length. Extruder blade is mounted on the shaft at one end and at other end there is a big gear attached. The extruder shaft is rotate in two ball bearing with the help of DC motor with the help of chain drive. Chain drive connect the heavy duty DC motor and big gear. Hopper is placed above the extruder to provide semisolid soap material.

The another motor is placed at in front of the extruder to cut the output soap bar in circular shape with cutting blade. The cutting blade is attached with gear and rotate in with specific rpm


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Fig - Customized Soap Machine

4. WORKING

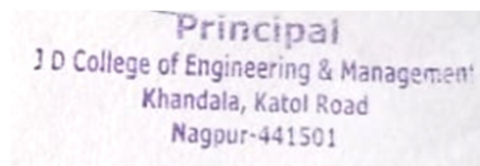
The cow dung soap making machine is works with the help of DC motor which work on battery or electric power supply. When the motor is start it provides power to the smaller gear and it transfer by chain drive to the another big gear connected with extruder shaft. These shaft help to rotate extruder in the circular chamber. These gears works as a speed reduction unit. The material of cow dung soap is feed from the top of the hopper. due to the wet material there is spring connected to press handle. due to applying the press handle the material is forcefully feed in the extruder chamber. the rotation of extruder blades soap material get push forward to the narrow circular opening. due to continuous rotation of extruder and supply of material the compact bar of soap comes out from the opening at the end of the chamber. there is a motor provides power to the gear on which sharp cutting blade is fixed which rotate continuously at particular time interval to cut the soap in the particular size. there is gear arrangement to reduce the speed of the motor and reduction ratio is 6:1 also the cutter is cut the bar in a specific length. After cutting the soap bar these pieces of soap is collected at the well placed housing which made to collect the soap bars.

5. CONCLUSION

- ❑ As per the previous research work it is observed that the machine for manufacturing the bath soap from cow dung is not available.
- ❑ The machines are available to manufacture a soap from other constituents but natural cow dung soap making automatic machine is not done.
- ❑ Thus based on the literature review Automatic conveying, punching soap making machine be designed, developed and tested under optimum conditions

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Field visit to Doordarshan Kendra



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THERMODYNAMICS

The basic objective of this course is to give a solid understanding of the fundamental discipline of thermodynamics, the interrelationships and applications of thermodynamics with other disciplines will be discussed as well. These disciplines are Materials and Structures; Heat transfer; and Fluid Mechanics . The intellectual threads in these disciplines, as well as their combined application to solve engineering Systems Problems will be discussed. This website is also an attempt to consolidate all the best open source resources related to thermodynamics and also act as a repository or place to host all the classwork, [lecture notes](#), [assienments](#), [quizzes](#), [question bank](#); etc. kindly feel free to contact or submit any query.


Syllabus

[Teaching Plan.....\(Link\)](#)

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Unit 05 Laminar flow, Turbulent Flow[Link \(PDF\)](#)

Unit 06 Dimensional Analysis[Link \(PDF\)](#)


Lecture notes in PDF Format

Unit 02 [Laminar and turbulent flow](#)

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Strength of Materials

Course Description

This course provides an introduction to the mechanics of solids with applications to science and engineering. We emphasize the three essential features of all mechanics analyses, namely: (a) the geometry of the motion and/or deformation of the structure, and conditions of geometric fit, (b) the forces on and within structures and assemblages; and (c) the physical aspects of the structural system (including material properties) which quantify relations between the forces and motions/deformation

Course Structure

Lectures Each week there will be lectures as per DBATU scheme. Attendance at lectures is mandatory. Recitations Each week, students will meet for a 1.5-hour recitation section consisting of group of students having 8-10 members. Attendance during these sessions is mandatory. The recitation sections will consist of additional discussion of course material, examples and experiments. These sections serve three main purposes:

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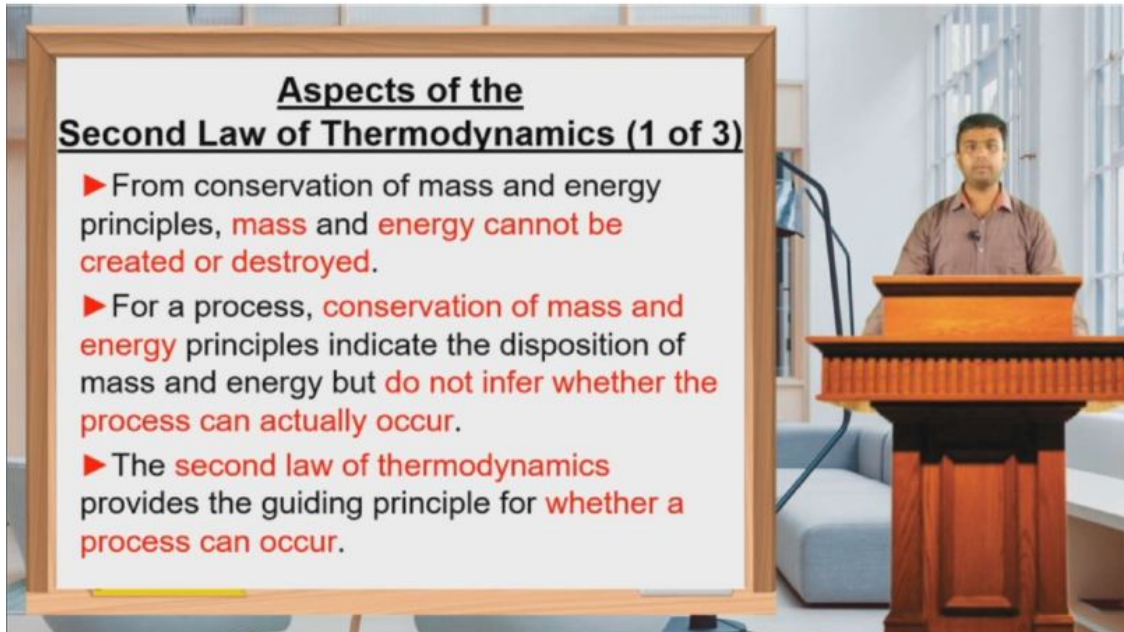
What is Manufacturing?

- Manufacturing is derived from the Latin word “manufactus” means made by hand.

- **Definition:** A Well organized method of converting raw material, components, or parts into finished product by using certain process.



Chroma cut videos




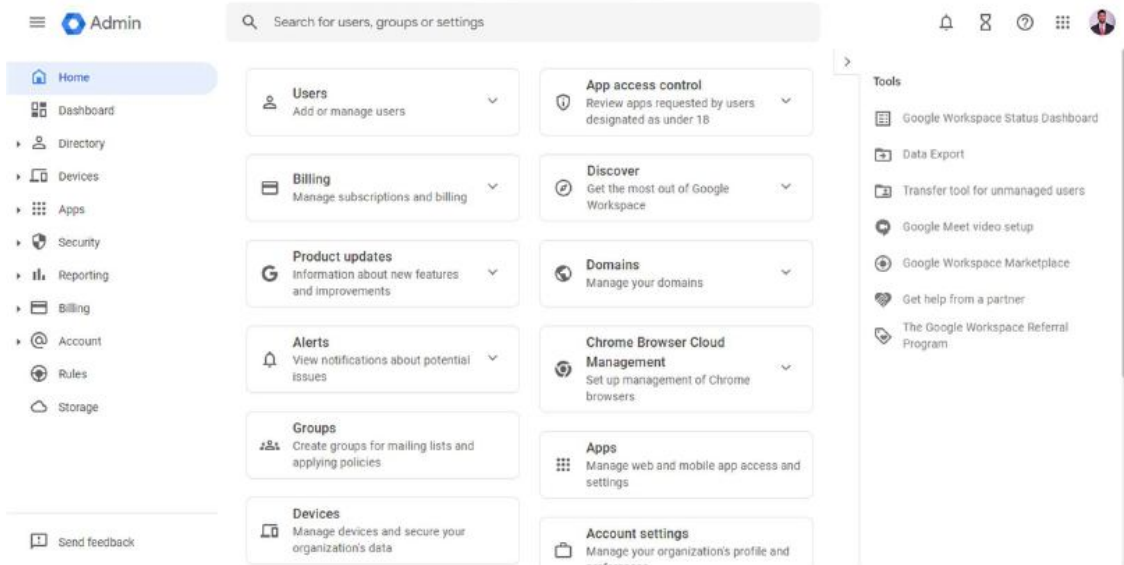
**Aspects of the
Second Law of Thermodynamics (1 of 3)**

- ▶ From conservation of mass and energy principles, **mass and energy cannot be created or destroyed.**
- ▶ For a process, **conservation of mass and energy** principles indicate the disposition of mass and energy but **do not infer whether the process can actually occur.**
- ▶ The **second law of thermodynamics** provides the guiding principle for **whether a process can occur.**

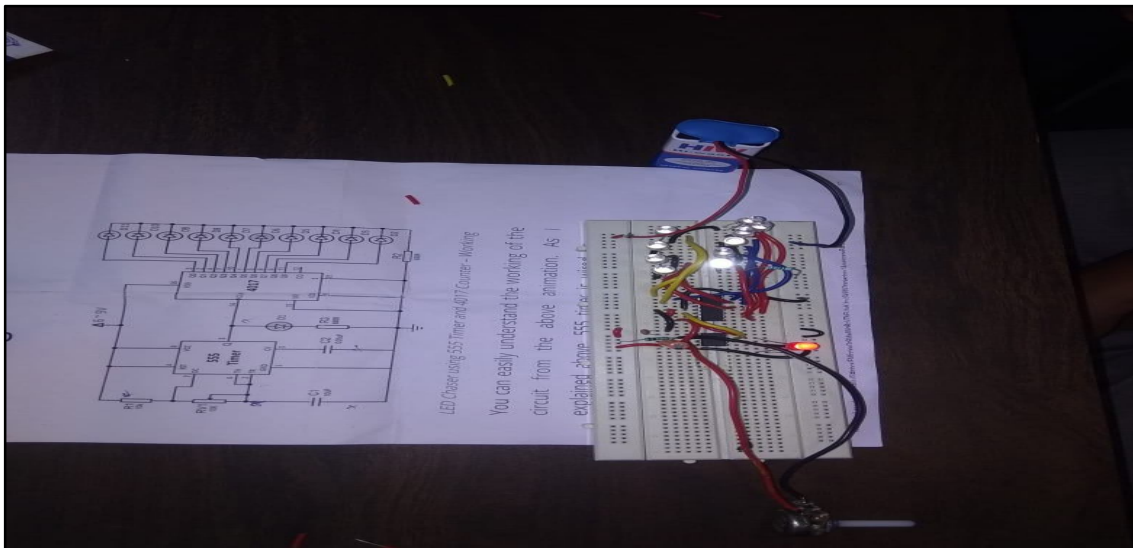
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Gsuite platform



Laboratory Session




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(An Autonomous Institute, with NAAC "A" Grade)
Basic Science & Humanities Department
Semester-I_SESSION: 2019-20

Subject: Engineering Physics (BTBS102/202)

Assignment I

Date of Assignment: 18.09.2019

Date of Submission: 25.09.2019

Unit I: Oscillation and Ultrasonic's and Dielectric Materials

- Q.1** Define the term free oscillation, damped oscillation and forced oscillation also give suitable examples.
- Q.2** Derive the differential wave equation.
- Q.3** Derive the differential wave equation of damped oscillation
- Q.4** Derive the differential wave equation of forced oscillation
- Q.5** Explain Sharpness of resonance.
- Q.6** What are Ultrasonic waves? State any two properties of Ultra sonic waves.
- Q.7** What is Magnetostriction effect? Explain the principle of and production of ultrasonic wave using this effect.
- Q.8** What is Piezo electric effect? Explain the principle of and production of ultrasonic wave using this effect.
- Q.9** Write short notes on Quartz crystals
- Q.10** Explain the concept of flaw detection, and cavitations.
- Q.11** How one can use ultrasound for :
- (a) Drilling (b) Soldering (c) Welding (d) Cleaning
- Q.12** Explain medical application of Ultrasonic Waves.
- Q.13** Explain various types of polarization mechanism in a dielectric.
- Q.14** Discuss the effect of temperature and frequency on dielectric.
- Q.15** What do you mean by dielectric? Define Dielectric constant, Polarizability and Electric Susceptibility

Dr. Bhavna Ilamkar
Subject Teacher

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

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Basic Science & Humanities Department
Semester-I_SESSION: 2019-20



Year/Semester: 1st Semester (First Year)
Engineering Mathematics-I
Assignment-I

Date: 10.09.2019

Max Marks: 20

| Q.No. | Questions | CO's | Marks |
|-------|---|-------|-------|
| Q1 | Reduce the following matrix to its normal form and find its rank. $A = \begin{bmatrix} 4 & 2 & -1 & 2 \\ 1 & -1 & 2 & 1 \\ 2 & 2 & -2 & 0 \end{bmatrix}$ | CO2/2 | 4 |
| Q2 | Find non-singular matrices P and Q such that PAQ is in normal form hence find the rank. $A = \begin{bmatrix} 1 & 1 & 1 & 2 \\ 3 & -3 & 1 & 2 \\ 2 & 1 & -3 & -6 \end{bmatrix}$ | CO3/3 | 4 |
| Q3 | Using Gauss- Jordan method to find the inverse of the matrix $A = \begin{bmatrix} 8 & 4 & -3 \\ 2 & 1 & 1 \\ 1 & 2 & 1 \end{bmatrix}$ | CO4/4 | 4 |
| Q4 | Find $\frac{dy}{dx}$ if $(\cos x)^y = (\sin y)^x$ | CO3/3 | 4 |
| Q5 | Examine for functionally dependent, for $u = e^x \sin y$; $v = e^x \cos y$ | CO4/4 | 4 |

Last Date of Submission: 17/09/2019

Sagar S. Kathalkar

Mr.Sagar S. Kathalkar
Subject Teacher

Dr. A. N. Gupta

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

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Basic Science & Humanities Department

Semester-II_SESSION: 2019-20

Subject: Engineering Physics (BTBS102/202)


Assignment II

Date of Assignment: 15.01.2020

Date of Submission: 22.01.2020

Unit II: Optics, Fibre Optics and Laser

- Q.1** Derive the path difference formula for reflected light for thin film and hence give condition of maxima and minima.
- Q.2** Explain the change in conditions in transmitted light for the thin films.
- Q.3** Show that fringe width remains constant in case of wedge shaped thin films.
- Q.4** Derive theory of Newton's Ring.
- Q.5** Why Newton's Ring are circular and wedge shaped films are straight.
- Q.6** Distinguish between plane polarized and unpolarized light.
- Q.7** Explain polarization by reflection.
- Q.8** State Brewster's Law and use it to prove that when light is incident on a transparent substance at polarizing angle, the reflected and refracted rays are at right angles to each other.
- Q.9** What is double refraction and what are double refracting crystals?
- Q.10** Explain Huygens's theory of double reflection.
- Q.11** Explain spontaneous emission, stimulated emission population inversion and metastable state.
- Q.12** Explain the working of Ruby laser.
- Q.13** Explain the working of He-Ne Laser.
- Q.14** What are Optical Fibers?
- Q.15** Derive Numerical aperture and Acceptance angle for SI fiber.


Mr. U.V. Rathod,
Subject Teacher


Dr. A.N. Gupta,
HOD, BSHD, JD COEM




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Basic Science & Humanities Department
Semester-II_SESSION: 2019-20




Year/Semester: 1st Semester (First Year)
Engineering Mathematics-II
Assignment-I

Date: 15.01.2020

Max Marks: 20

| Q.No. | Questions | CO's/Level | Marks |
|-------|--|------------|-------|
| Q1 | Solve the equation $x^{10} + 11x^5 + 10$ | CO4/4 | 4 |
| Q2 | To separate real and imaginary part of $\tan^{-1}(x + iy)$ | CO3/3 | 4 |
| Q3 | Solve $(1 + x^2)\frac{dy}{dx} + y = e^{\tan^{-1}x}$ | CO4/4 | 4 |
| Q4 | Solve $(1 + xy)ydx + (1 - xy)x dy = 0$ | CO4/4 | 4 |
| Q5 | Solve $\frac{dy}{dx} = \frac{x^2 + y^2 + 1}{2xy}$ | CO4/4 | 4 |

Last Date of Submission: 22.01.2020


Ms. Prerna M. Parkhi,
Subject Teacher


Dr. A.N. Gupta,
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॥ ज्ञानम् सर्वार्थ साधनम् ॥

Assignment

Semester/ Branch: - IV Sem/ CSE

Subject Name: -Operating System

Subject In-charge: Prof. Supriya Sawwas here

List of Assignment Question's:-

| Que. No. | Questions | | | | | | | | | | | | | | | | | | |
|----------------|---|----------|------------|----------|----------------|----|---|----------------|---|---|----------------|---|---|----------------|---|---|----------------|---|---|
| 1 | Examine Deadlock recovery. | | | | | | | | | | | | | | | | | | |
| 2 | Differentiate between preemptive and non-preemptive scheduling. State why strict nonpreemptive scheduling is unlikely to be used in computer system. | | | | | | | | | | | | | | | | | | |
| 3 | Discuss with neat diagram various file allocation methods. | | | | | | | | | | | | | | | | | | |
| 4 | Write a detail description of Memory Management and Contiguous Memory Allocation. | | | | | | | | | | | | | | | | | | |
| 5 | Explain different steps to handle page fault. | | | | | | | | | | | | | | | | | | |
| 6 | State different Process Scheduling Models in the system. Explain in detail. | | | | | | | | | | | | | | | | | | |
| 7 | Solve the following page reference string 8 2 4 1 8 2 5 8 2 1 5 3 4 6 7. Assume frame size = 3 calculate page fault for: i) FIFO ii) LRU iii) Optimal | | | | | | | | | | | | | | | | | | |
| 8 | Discuss with neat diagram various file allocation methods. | | | | | | | | | | | | | | | | | | |
| 9 | <p>Consider the following set of processer with the length of the CPU-burst time given in milliseconds.</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Burst time</th> <th>Priority</th> </tr> </thead> <tbody> <tr> <td>P₁</td> <td>10</td> <td>3</td> </tr> <tr> <td>P₂</td> <td>1</td> <td>1</td> </tr> <tr> <td>P₃</td> <td>2</td> <td>4</td> </tr> <tr> <td>P₄</td> <td>1</td> <td>3</td> </tr> <tr> <td>P₅</td> <td>5</td> <td>2</td> </tr> </tbody> </table> <p>The processes are assumed to have arrived in order P₁, P₂, P₃, P₄, P₅ at time 0 ms. Draw Gantt chart and calculate average writing time and average turnaround time for the following algorithms. i) FCFS ii) SJF iii) Priority iv) RR (time quantum = 2 ms)</p> | Process | Burst time | Priority | P ₁ | 10 | 3 | P ₂ | 1 | 1 | P ₃ | 2 | 4 | P ₄ | 1 | 3 | P ₅ | 5 | 2 |
| Process | Burst time | Priority | | | | | | | | | | | | | | | | | |
| P ₁ | 10 | 3 | | | | | | | | | | | | | | | | | |
| P ₂ | 1 | 1 | | | | | | | | | | | | | | | | | |
| P ₃ | 2 | 4 | | | | | | | | | | | | | | | | | |
| P ₄ | 1 | 3 | | | | | | | | | | | | | | | | | |
| P ₅ | 5 | 2 | | | | | | | | | | | | | | | | | |
| 10 | Draw the process state transition diagram. Explain each process state in detail | | | | | | | | | | | | | | | | | | |

Prof. Supriya Sawwas here
Subject Incharge

Miss. Swati Raut
Academic Incharge

Prof. Madhuri Patil
Head of Department IT-CSE

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Session 2019-20



॥ ज्ञानम् सर्वार्थ साधनम् ॥

Assignment

Semester/ Branch: - IV Sem/ CSE

Subject Name: - Internet of Things

Subject In-charge: Prof. Madhuri Pal

List of Assignment Question's:-

| Que. No. | Questions |
|----------|---|
| 1 | Discuss five layered architecture in Internet of Things framework |
| 2 | Recognize Data Integration and Data Acquisition. |
| 3 | Illustrate Zigbee architecture with the help of diagram. |
| 4 | Explain Arduino board. List and explain the pins of Arduino board. |
| 5 | Interpret CoAP protocol in detail. |
| 6 | Examine working principle of RFID protocol also state its advantages and disadvantages. |
| 7 | Illustrate cloud computing in detail. And explain the various services and deployment models provided by the cloud. |
| 8 | Interpret MQTT architecture in detail. Explain methods and components of MQTT. |
| 9 | Estimate in brief about "An IoT strategy for smarter cities" and smart city IoT Architecture. |
| 10 | Distinguish between Sensors and Actuators. |


Miss Madhuri M. Pal
Subject Teacher


Miss. Swati Raut
Academic Incharge


Miss. Madhuri M. Pal
Head of Department, IT-CSE
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2019-20 (Odd Sem)

| | |
|------------------------|--------------------|
| <i>Subject</i> | Elective-II [ARES] |
| <i>Subject code</i> | EE5TE02 |
| <i>Semester/Year</i> | V/ 3rd |
| Unit No. I | Biomass Energy |
| <i>Submission date</i> | 03/07/2019 |

Question: Solve

| |
|--|
| 1. Explain the factors that depend to improve the efficiency of biogas generation. |
| 2. Compare Fixed dome and floating drum type biogas plant. |
| 3. Explain biomass energy conversion technologies. |
| 4. Discuss Anaerobic digestion process. |
| 5. List the different biogas plant developed in India |
| 6. List the rules used for sizing biogas plants or for estimating their performance. |
| 7. How briquette is made from biomass? |

Subject teacher-ARES

Academic incharge

HOD EE

PRINCIPAL

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ASSIGNMENT 1

Subject : VLSI Signal Processing

Sem / Branch : 7th / ETC

Date: 14/08/2019

Que 1) Consider a direct form implementation of FIR filter.

$$y(n) = ax(n) + bx(n-1) + cx(n-2)$$

Explain the pipelining of above FIR Digital Filter

Que 2) Design a parallel system for

$$y(n) = ax(n) + bx(n-1) + cx(n-2)$$

With L (level of parallel processing) = 3, n (Iteration factor) = 3k, Where K = no. of clock cycle.

Que 3) How parallel processing can be used to reduce power consumption? Explain in detail.

Que 4) Explain the terms:

- i) Data Broadcast structure.
- ii) Fine grain pipelining.

Date of Submission : 19/08/2019

Prof. Avinash K. Ikhar

**Course Coordinator /
Academic Incharge**

Dr. Pravin Kshirsagar

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ASSIGNMENT 2

Subject : VLSI Signal Processing

Sem / Branch : 7th / ETC

Date: 21/08/2019

Que 1) What is Retiming. Explain Quantitative description of Retiming.

Que 2) Explain properties of Retiming

Que 3) Explain Cutset Retiming and Pipelining technique in detail.

Que 4) With an example explain the following -

A) Retiming for clock period minimization.

B) Retiming for register minimization.

Date of Submission : 25/08/2019

Prof. Avinash K. Ikhari

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ASSIGNMENT 3

Subject : VLSI Signal Processing

Sem / Branch : 7th / ETC

Date: 05/09/2019

Ques. 1) Construct a 2×2 convolution algorithm using Cook Toom Algorithm with $B = 0, 1, -1$.

Ques. 2) Derive a 2×2 convolution algorithm using the modified Cook Toom Algorithm with $B = 0, -1$

Ques. 3) Consider a 2×3 linear convolution, construct an efficient realization using winograd algorithm with, $m(p) = p(p-1)(p+1)$

Ques. 4) Explain the steps of modified winograd algorithm.

Ques. 5) Construct a 4×4 line as convolution algorithm using 2×2 short convolution.

Date of Submission : 09/09/2019

Prof. Avinash K. Ikhar

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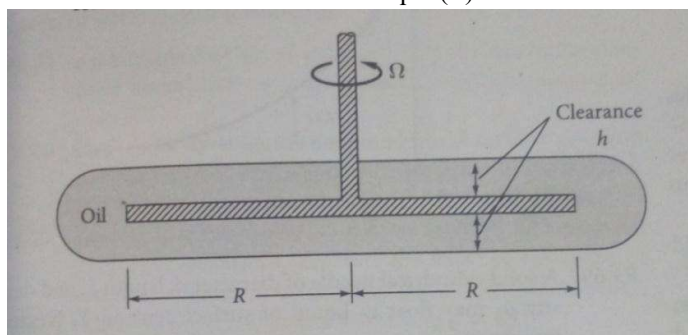


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Maharashtra)
DEPARTMENT OF MECHANICAL ENGINEERING
Session 2019-20

Subject Teacher: Prof. J. S. Pachbhai
Subject Name: Fluid Mechanics and Fluid machinery (ME4T006)
Semester: IV **Section:** A

Assignment No.1 (Unit no. 1 & 2)

- 1) State Newton's law of viscosity. What is the effect of temperature on viscosity of water and air?
- 2) Determine the intensity of shear of an oil having viscosity = 1 poise. The oil is used for lubricating the clearance between a shaft of diameter 10 cm and its journal bearing. The clearance is 1.5 mm and the shaft rotates at 150 rpm.
- 3) A disk of radius R rotates at an angular velocity ω inside a disk shaped container filled with oil of viscosity μ , as shown in fig. Assuming a linear velocity profile and neglecting shear stress on the outer disk edges, derive a formula for the viscous torque (T) on the disc.



- 4) An annular plate 4m external diameter and 2m internal diameter with its greatest and least depth below the surface being 3m and 1.5m respectively. Calculate the magnitude, direction & location of force acting upon one side of plate due to water pressure.
- 5) A rectangular plate 0.6 m wide and 1.2 m deep is submerged an oil bar of specific gravity 0.8. The maximum and minimum depths of the plate are 1.6 m and 0.75 m from the free surface. Calculate the hydrostatic force on face of plate and depth of the centre of pressure.
- 6) Derive the continuity equation in Cartesian co-ordinate form.

Prof. S. G. Chakrabarty
Subject Teacher

Prof. D. A. Agrawal
Academic In charge

Bhushan R. Mahajan
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2. Fostering conducive atmosphere for research and development through well-equipped laboratories and qualified personnel in collaboration with global organizations.

Semester: - MBA I Semester
Subject Name: - Financial Statement Reporting and Analysis

Subject Code:-1T1
Assignment: 2019-20

=====
All Questions are Compulsory:

Q.1.A. Indian Oil is a bulk distribution of high Octane Petrol. A periodic inventory of period on hand is taken when the books are closed at the end of each month. The following summary of information is available for the month.

| | | |
|---|------------|--|
| Sales (between 2 nd and 29 th June) | Rs. 945000 | Purchases (Including freight in-ward): |
| General administration cost | Rs. 25000 | June 1, 200000 litres @ Rs. 2.85 per litre |
| Opening stock: 100000 litres @ Rs. 3 per litre | Rs. 300000 | June 30, 100000 litre @ Rs. 3.03 per litre |
| | | June 30, Closing stock 130000 litres |

Compute the following data by FIFO & LIFO method of Inventory

1. Value of Inventory on June, 30.
2. Amount of cost of goods sold for June.
3. Profit/Loss for the month of June.

OR

Q.1.B. In the books of Optic Fiber Ltd., plant and machinery stood at Rs.6,32,000 on 1.4.2013. However on scrutiny it was found that machinery worth Rs.1,20,000 was included in the purchases on 1.6.2013. in part exchange of a new machine costing Rs.2,56,000. The company charges depreciation @ 20% WDV on plant and machinery. You are required to calculate as per AS 6:

- (i) Depreciation to be charged to P/L
- (ii) Book value of Plant and Machinery A/c as on 31.3.2014

Q.2.A. ABC Ltd. was registered with a nominal capital of Rs. 500000 divided into share of Rs. 100 each. The following trial balance is extracted from the books on 31st March 2011:

| Particular | Dr. Amount | Particular | Cr. Amount |
|-------------------------------------|----------------|--|----------------|
| Buildings | 290000 | Sales | 520000 |
| Machinery | 100000 | Salaries outstanding | 2000 |
| Closing stock | 90000 | Provision for doubtful debt (1/4/2011) | 3000 |
| Purchase (adjusted) | 210000 | Share capital | 200000 |
| Salaries | 60000 | General reserve | 40000 |
| Director fees | 12000 | Profit & Loss A/c (1/4/2011) | 25000 |
| Rent | 26000 | Creditors | 92000 |
| Depreciation | 20000 | Provision for depreciation: | |
| Bad Debts | 6000 | Building 50000 | |
| Interest Accrued on Investment | 2000 | Machinery <u>55000</u> | 105000 |
| 12000 share of A ltd of Rs. 10 each | | 14% debenture | 200000 |
| Rs. 8 Paid-up | 120000 | Interest on debenture accrued | |
| Debenture interest | 28000 | But not due | 14000 |
| Loose tools | 23000 | Interest on investment | 12000 |
| Advance tax | 60000 | Unclaimed dividend | 5000 |
| Sundry expenses | 18000 | | |
| Debtor | 125000 | | |
| Bank | 28000 | | |
| | <u>1218000</u> | | <u>1218000</u> |



You are required to prepare trading and profit & loss a/c for the year ending 31st march 2011 and balance sheet as at that date after taking into consideration the following information:

1. Closing stock is more than opening stock by Rs. 80000
2. Provide for doubtful debts @ 4% on debtors.
3. Make a provision for income tax @ 35%
4. Depreciation expenses includes depreication of Rs. 8000 on building and that of Rs. 12000 on machinery.

Or

B. Following are the trial balance of KEC Company Ltd. As on 31st March, 2016. Prepare balance Sheet as on 31st March, 2016.

| Particulars | Dr. Amount | Cr. Amount |
|---|------------|------------|
| Stock | 7500 | |
| Sales | | 35000 |
| Purchases | 24500 | |
| Wages | 5000 | |
| Discount | 700 | |
| Salaries | 750 | |
| Rent | 497 | |
| General Expenses | 1705 | |
| Profit & Loss A/c (31 st March 2012) | | 1503 |
| Dividend Paid | 900 | |
| Capital | | 10000 |
| Sundry Debtors & Creditors | 3750 | 1750 |
| Plant & Machinery | 2900 | |
| Cash in Hand | 1620 | |
| Reserves | | 1550 |
| Bad debts | 483 | |
| | 50303 | 50303 |

Adjustments:

1. Closing stock is value at Rs. 8200
2. Depreciation on Machinery at 10%.
3. Provide 5% discount on Debtors
4. Allow 2.5% discount on creditors
5. Provide managing Director Commission 15% on the net profit before deducting the commission.
6. One month rent Rs. 45 is due on 31st march 2016
7. Six Month insurance is unexpired Rs. 38 which is included in general expenses.

Q.3.A. "Cash flow statement deals with flow of cash fund but does not consider movement among cash, bank balance and cash equivalent?" comment.

OR

Q.3.B.

Illu.1 : From the following balance sheets prepare Cash Flow Statement:

| Liabilities | 31-3-2005 | 31-3-2006 | Assets | 31-3-2005 | 31-3- |
|-------------------|-----------|-----------|-------------|-----------|----------|
| | Rs. | Rs. | | Rs. | 2006 Rs. |
| Share capital | 20,000 | 28,000 | Goodwill | 16,000 | 13,000 |
| Profit & Loss a/c | 10,000 | 13,000 | Land | 10,000 | 20,000 |
| General Reserve | 8,000 | 10,000 | Machinery | 25,000 | 50,000 |
| 12% Debentures | 25,000 | 35,000 | Investments | 10,000 | 12,000 |
| Creditors | 26,000 | 30,000 | Stock | 20,000 | 15,000 |
| Provision for tax | 10,000 | 14,000 | Debtors | 10,000 | 13,000 |
| | | | Cash | 8,000 | 7,000 |
| | 99,000 | 1,30,000 | | 99,000 | 1,30,000 |

Additional Information:

- (a) Investments costing Rs.5,000 sold for Rs.6,000 during the year.
- (b) Depreciation charged on Machinery was Rs.5,000



(Signature)
Principal
J.D. College of Engineering & Management
Khairatabad, Katol Road
Warananagar-411001

Q.4.A. In projecting the financial plan of firm, the use of the following accounting ratio is made: Estimated Annual Sales: 200000, Sales to Net Worth: 2.5, Current Debt to Net Worth: 25%, Total Debt to Net Worth 60%, Current

Ratio: 3.6, Net Sales to Inventory: 4Times, Average Collection Period (Year = 360 days): 36days, Fixed Assets to Net Worth: 70%. On the above basis, prepare Proforma Balance Sheet of the firm.

OR

Q.4.B. From the following particulars draw up the balance sheet of the company:

Current Ratio: 2.5, Liquid Ratio : 1.5, Net Working Capital: Rs. 30000, Stock Turn Over Ratio: (Cost of Sales/Closing Stock) 6 Times, Gross Profit Ratio: 20%, Fixed Assets Turnover Ratio: (cost of sales) 2 Times,

Q.5.A. From the following data relating to the assets of Balance Sheet of ABC Ltd., for the period ended March 31, 2011 to March 31, 2014, calculate trend percentages.

| (Rs. in lakhs) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|----------------------|---------|---------|---------|---------|
| Particulars | | | | |
| Cash | 100 | 120 | 80 | 140 |
| Debtors | 200 | 250 | 325 | 400 |
| Stock | 300 | 400 | 350 | 500 |
| Other current assets | 50 | 75 | 125 | 150 |
| Land | 400 | 500 | 500 | 500 |
| Building | 800 | 1,000 | 1,200 | 1,500 |
| Plant | 1,000 | 1,000 | 1,200 | 1,500 |

OR

Q.5.B.

Question 1. From the following Profit and Loss Account and Balance sheet of XYZ Ltd for the year ended 2017 and 2018. You are required to prepare a Comparative Income Statement and Comparative Balance sheet. Also give comments on the Profitability and Financial performance of the XYZ Ltd

Profit and Loss Account

| Dr. | | | Cr. | | |
|-------------------------|------|-------|---------------|------|-------|
| Particulars | 2017 | 2018 | Particulars | 2017 | 2018 |
| To cost of goods sold | 6000 | 7500 | By, Net Sales | 8000 | 10000 |
| To Operating Expenses : | | | | | |
| Administrative | 200 | 200 | | | |
| Selling | 300 | 400 | | | |
| To, Net Profit | 1500 | 1900 | | | |
| | 8000 | 10000 | | 8000 | 10000 |

Balance Sheet as on 31st December

| Liabilities | 2017 | 2018 | Assets | 2017 | 2018 |
|------------------------|-------|-------|-----------|-------|-------|
| Bills Payable | 500 | 750 | Cash | 1000 | 1400 |
| Sundry Creditors | 1500 | 2000 | Debtors | 2000 | 3000 |
| Tax Payable | 1000 | 1500 | Stock | 2000 | 3000 |
| 6% Debenture | 1000 | 1500 | Land | 1000 | 1000 |
| 10% Preference Capital | 3000 | 3000 | Building | 3000 | 2700 |
| Equity Capital | 4000 | 4000 | Plant | 3000 | 2700 |
| Reserves | 2000 | 2450 | Furniture | 1000 | 1400 |
| | 13000 | 15200 | | 13000 | 15200 |

Sublarge
Subject In charge

Rhad
Dept. Academic Incharge

Soni
Dept. Head MBA





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Semester: - MBA II Semester

Subject Code:- 2T5

Subject Name: - Cost Accounting

Assignment: 2019-20

=====

All Questions are Compulsory:

Q.1.A. Mr. Gopal furnishes the following data relating to the manufacture of a standard product during the month of April 2013:

| | |
|-------------------------|------------------------|
| Raw Material Consumed | Rs.15000 |
| Direct labour charges | Rs.9000 |
| Machine hour worked | 900 |
| Machine hour rate | Rs.5 |
| Administration overhead | 20% on work cost |
| Selling overhead | Rs.0.50 per unit |
| Unit produced | 17,100 |
| Unit sold | 16000 at Rs.4 per unit |

You are required to prepare a cost sheet from the above, showing:

- a. The cost per unit
- b. Cost per unit sold and profit for the year

OR

Q.1.B. Discuss the Opportunity cost. Explain the element of Costing.

Q.2.A. Present the following information to show to the management: (a) the marginal product cost and the contribution per unit: (b) the total contribution and profits resulting from each of the following sales mixtures:

| | Product | Per Unit Rs. |
|--------------|------------------|-----------------------------------|
| D. materials | A | 10 |
| | B | 9 |
| D. wages | A Rs.3, B Rs. 2. | Sale Price for A Rs. 20, B Rs. 15 |

Fixed expenses Rs. 800

Variable expenses are allocated to products as 100% of direct wages

Sales Mixtures:

1000 units of product A and 2000 units of B

1500 units of Product A and 1500 units of B

2000 units of product A and 1000 units of B

OR

Q.2.B. A company had incurred fixed expenses of Rs.450000 with sales of Rs.1500000 and earned a profit of Rs. 300000 during the first half year. In the second half year, it suffered a loss of Rs.150000. calculate:

- i. the profit-volume ratio, break -even point and margin of safety for the first half year.
- ii. Expected sales volume for the second half year assuming that selling price and fixed expenses remain unchanged during the second half year
- iii. the break -even point and margin of safety for the whole year.

Q.3.A. The Road Transport Co. which keeps fleet of Lorries, gives the following information:

| | |
|---------------------------|----------|
| Kilometer run for April | 30000 |
| Wages for April | Rs. 2000 |
| Petrol oil, etc for April | Rs.4000 |




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Original Cost of vehicles Rs.100000
 Depreciation to be allowed @ 25% per annum on original cost
 Repair for the month of April Rs. 6000
 Garage Rent etc for April Rs. 1000
 License, Insurance etc for the year Rs.6000
 Prepare a statement for April, showing the fixed and variable cost per running km.

OR

Q.3.B. Shanker has been promised a contract to run a tourist car on a 20 km. long route for the chief executive of a multinational firm. He buys a car costing Rs.1,50,000. The annual cost of insurance and taxes are Rs. 4,500 and Rs.900 respectively. He has to pay Rs.500 per month for a garage where he keeps the car when it is not in use.

The annual repair costs are estimated at Rs.4,000. The car is estimated to have a life of 10 years, at the end of which the scrap value is likely to be Rs.50,000.

Q.4.A. . From the following forecast of income & expenditure prepare a cash budget for the three months commencing 1st June, when the bank balance was Rs. 100000.

| | Sales | Purchase | Wages | Factory Exp. | Admin. & Selling Exp. |
|--------|-------|----------|-------|--------------|-----------------------|
| April | 80000 | 41000 | 5600 | 3900 | 10000 |
| May | 76500 | 40500 | 5400 | 4200 | 14000 |
| June | 78500 | 38500 | 5400 | 5100 | 15000 |
| July | 90000 | 37000 | 4800 | 5100 | 17000 |
| August | 95000 | 35000 | 4700 | 6000 | 13000 |

A sales commission of 5% on sales, due 2 months after sales, is payable in addition to selling expenses. Plant valued at Rs. 65000 will be purchased and paid for in August, and the dividend for the last financial year of Rs. 15000 will be paid in July. There is a two month credit period allowed to customer and received from supplier.

OR

Q.4.B. A factory engaged in manufacturing plastic buckets is working at 40% capacity and produces 10,000 buckets per month. The present cost break up for one bucket is as under:

Materials Rs.10

Labour Rs.3

Overheads Rs.5 (60% fixed)

The selling price is Rs.20 per bucket. If it is desired to work the factory at 50% capacity the selling price falls by 3%. At 90% capacity the selling price falls by 5% accompanied by a similar fall in the price of material. You are required to prepare a statement the profit at 50% and 90% capacities and also calculate the break- even points at this capacity production.

Q.5.A. From the following information compute (i) Material Cost Variance (ii) Material Price Variance (iii) Material Usage Variance (iv) Material Mix Variance and (v) Material Sub-usage Variance.

| Material | Standard | | | Actual | | |
|--------------|-----------|------|------------|-----------|------|------------|
| | Qty. | Rate | Amount | Qty. | Rate | Amount |
| A | 10 | 2 | 20 | 5 | 3 | 15 |
| B | 20 | 3 | 60 | 10 | 6 | 60 |
| C | 20 | 6 | 120 | 15 | 5 | 75 |
| Total | 50 | | 200 | 30 | | 150 |

OR

Q.5.B. What do you understand by standard costing? Discuss in detail. Also explain how standard costing can be used as management tool in a business.

Ashay Chandonthale
 Subject In charge

Ashad
 Dept. Academic Incharge

Soni
 Dept. Head MBA

[Signature]

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 Nashik-441501

[Signature]
 Dept. of Management Studies (MBA)
 J. D. College of Engineering & Management
 Nashik





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Semester: - MBA III Semester

Subject Code:- 4T2

Subject Name: - Entrepreneurship Development

Assignment: 2019-20

=====
All Questions are Compulsory:

Q.1.A. Explain the term Entrepreneur. What are the importance roles of Entrepreneurs in Economic Development?

OR

Q.1.B. Kiran Mazumdar Shaw initially faced many problems regarding funds for her business. Banks were hesitant to give loan to her as biotechnology was a totally new field at that point of time and she was a woman entrepreneur, which was a rare phenomenon. Discuss

Q.2.A. Explain the sources of Business Ideas. Also explain various methods of generating New Business Ideas.

OR

Q.2.B. What is a Business Plan ? Discuss various elements of Business Plan.

Q.3.A. What do you understand by feasibility study ? Explain market; technical and financial feasibility.

OR

Q.3.B. Marketing research is of utmost importance before starting the new venture.' Discuss the statement

Q.4.A. What are the activities and objectives of Khadi and Village Industries Commission?

OR

Q.4.B. There are various measures taken by Govt. of India to tackle the problems faced by MSME's. Discuss

Q.5. Write short notes on :

- (A) Social Entrepreneurship
- (B) Errors in preparation of Business Plan
- (C) Concept of Project Appraisal
- (D) Corporate Social Responsibility

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Subject In charge

Dept. Academic Incharge

Dept. Head MBA

Dept. of Management Studies (MBA)
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Nagpur



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Department of Civil Engineering
"Building Better Development"
Session 2019-20

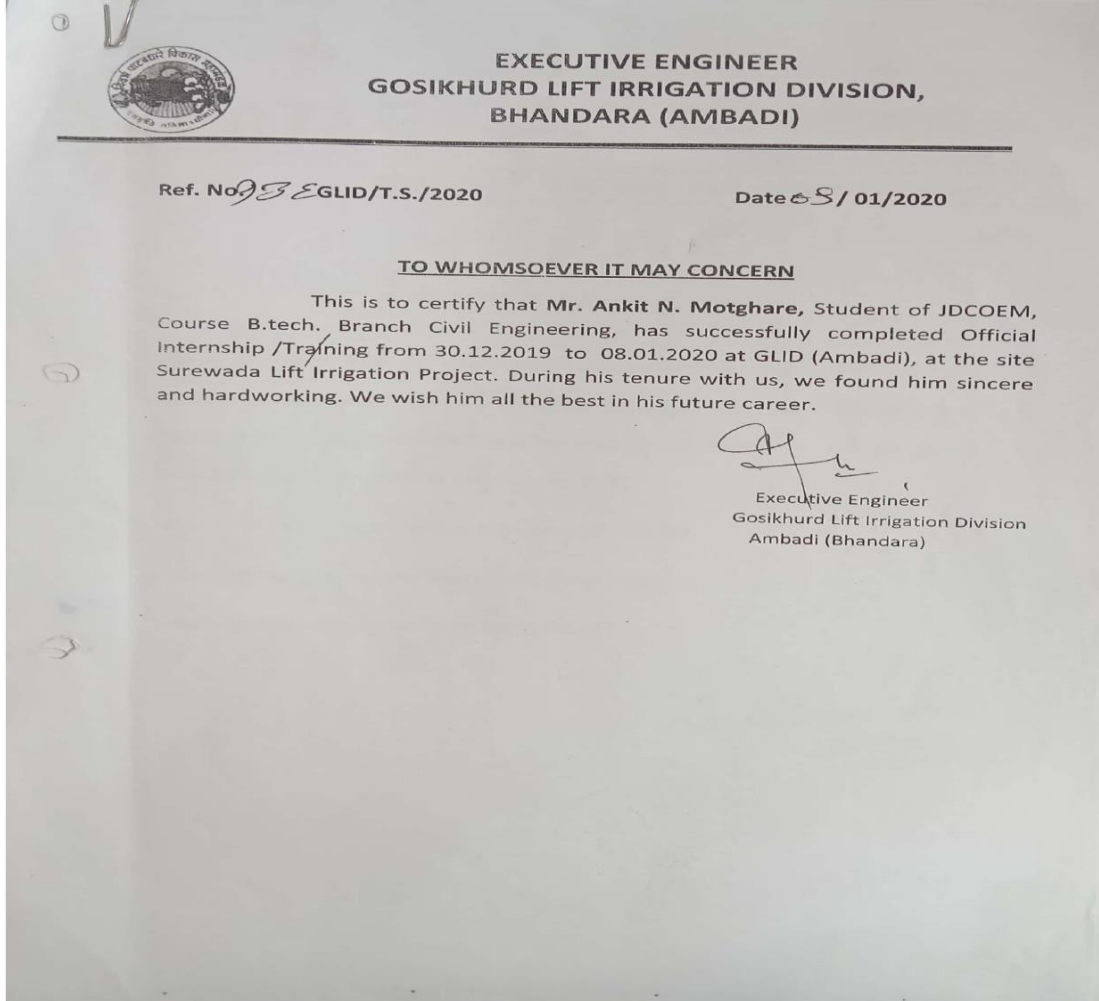


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- Making Sustainable efforts for integrating academics with Industry.



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HOD, (CE)





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Department of Civil Engineering
"Building Better Development"
Session 2019-20

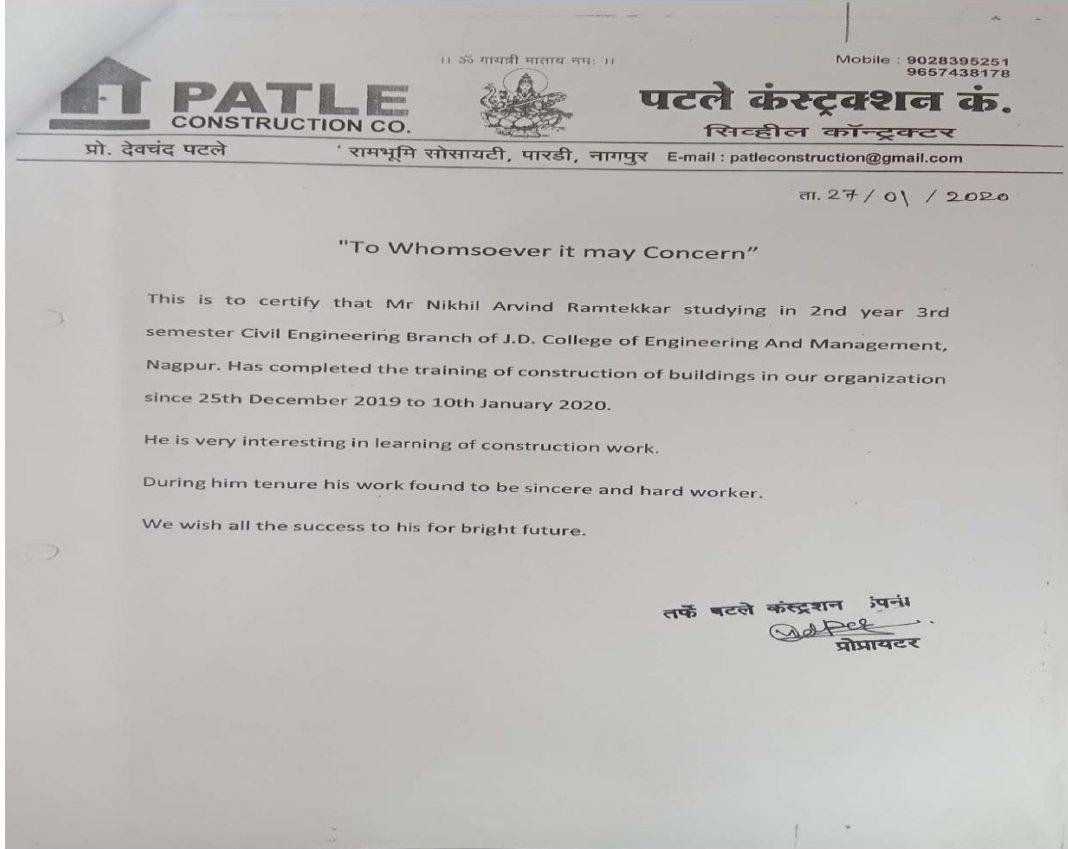


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- Making Sustainable efforts for integrating academics with Industry.



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HOD, (CE)



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2019-20



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J D College Of Engineering & Management

Ref. No.: JDCOEM/EE/T&P/2019-20/

Date: 26-12-2019

To,
Gautam Magaswargiya
Kapus Utpadak
Sahakari Sootgiri Ltd.
Nimba

Subject: Request for Permission of Industrial Training and Internship

Respected Madam/Sir,

It gives us a great pleasure to communicate you on behalf of "GOYAL GROUP'S", JD College of Engineering and Management, Nagpur (An Autonomous Institute). Yours being a premier engineering organization having state of the art technical facilities and using modern management techniques, we are requesting you to kindly grant the permission for training and internship to our engineering perusing student in your reputed organization. This really helps the students to understand the way industry works.

Following is our student of Electrical Engineering who is keen to do internship at your premises under yours guidance.


| S No. | Name of the students | Semester | Mo. number | Email ID |
|-------|----------------------|----------|------------|--------------------------|
| 1 | Vishnu Mankar | V | 9518723849 | vishnumankarvm@gmail.com |
| 2 | Yashwant Borkar | V | 8605353190 | Yashborkar1999@gmail.com |

We request you to kindly permit her for industrial internship and enable her to enrich the knowledge and skills.

Thanking you,


Ms. Y. Malhotra
T&P Officer
JDCOEM, Nagpur


Y.P. Mundhada
TPC, EE
JDCOEM, Nagpur


Dr. S.R. Vaishnav
HoD, EE
JDCOEM, Nagpur


Dr. S. R. Chaudhari
Principal
JDCOEM, Nagpur
Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Internship Certificate 2019-20 EE Department



H.O.D



PRINCIPAL

Principal
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2019-20



JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING & MANAGEMENT

At : Khandala, Post : Valni, Near Hanuman Mandir, Borgaon Phata,

Ref. No.: JDCEM/EE/T&P/2019-20/

Date: 23-12-2019

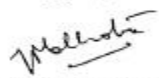
To,
Future supply chain
Mide Mihan, Nagpur
Subject: Request for Permission of Industrial Training and Internship


Respected Madam/Sir,
It gives us a great pleasure to communicate you on behalf of "GOYAL GROUP'S", JD College of Engineering and Management, Nagpur (An Autonomous Institute). Yours being a premier engineering organization having state of the art technical facilities and using modern management techniques, we are requesting you to kindly grant the permission for training and internship to our engineering perusing student in your reputed organization. This really helps the students to understand the way industry works.
Following is our student of Electrical Engineering who is keen to do internship at your premises under yours guidance.


| S No. | Name of the students | Semester | Mo. number | Email ID |
|-------|----------------------|----------|------------|---------------------------|
| 1 | Payal rewatkar | III | 9834967834 | rewatkarpayal1@gmail.com |
| 2 | Bhushan Giri | III | 7775950756 | bhushangiri1199@gmail.com |
| 3 | Akshay Zarodiya | III | 7888161518 | akshayzarodiya@gmail.com |


We request you to kindly permit her for industrial internship and enable her to enrich the knowledge and skills.

Thanking you,


Ms. V. Malhotra
T&P Officer
JDCEM, Nagpur


Y.P. Mundhada
TPC, EE
JDCEM, Nagpur


Dr. S.R. Vaishnav
HoD, EE
JDCEM, Nagpur


Dr. S. R. Chaudhari
Principal
JDCEM, Nagpur

Training and Placement Department
J D College of Engineering & Management
Khandala, Katol Road,
Nagpur-441501.

HOD
Dept. of Electrical Engineering
J.D College of Engineering
& Management, Nagpur

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

Internship Certificate 2019-20 EE Department



H.O.D



PRINCIPAL

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



VERIFIED

CERTIFICATE of ACHIEVEMENT

M UNIVERSITY OF MICHIGAN

This is to certify that

Mayur t. Hattimare

successfully completed and received a passing grade in

py4e101x: Programming for Everybody (Getting Started with Python)

a course of study offered by MichiganX, an online learning initiative of the University of Michigan.


Charles Severance
Professor, School of Information
University of Michigan

VERIFIED CERTIFICATE
Issued July 30, 2019

VALID CERTIFICATE ID
ectfa32cee08d43edbfa1c12be81fd84





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Khandala, Katol Road
Nashik-441501



Gurushishya

Gurushishya Multiskills Pvt Ltd
CIN : U72900MH2016PTC286325
ISO 9001 : 2015 Certified

Date :

TO WHOM IT MAY CONCERN


This is to certify that Mr. Ritesh Khangar, s/o- Mr. Ravindra Khangar, a student of JD collage Nagpur (Electronic tel. comm - 3rd sem.) has successfully completed 15 day (From 24th December 2019 to 10 January 2020) C++ Programming internship at Bhandara branch. During the period of his internship Training with us he was found punctual, hardworking and inquisitive

we wish him every success in life

for gurushishya multiskills pvt ltd


Authorized Signature

Dr. Pravin Kshirsagar
HOD


Principal
J.D. College of Engineering & Management
Khamtila, Karol Road
Nagpur-441501



MAHARASHTRA STATE ROAD TRANSPORT CORPORATION
BHANDARA , DIVISION BHANDARA
National Highway No. 06 Nagpur Road, Bhandara

Ref No.ST/MEO/BHN/DWS/training/2019-20

Date:-11/01/2020

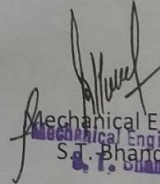
To,
The Principal
J D College of Engineering
& Management
Nagpur

Subject:- Industrial training to Divisional Workshop S.T. Bhandara
Reference No:- DOME/2019-20 T&P/20 Dt: 20.12.2019

With reference to above subject the student Name
Mr. ROHIT Z.GAIDHANE of 3TH Semester Second year from your
college visited our Divisional Workshop on dated 02/01/2020 to
11/01/2020 & studied various activities and working procedures in
the workshop. A symbiotic interaction between Institute & Industry
is a Must. In his Future.

He Has completed industrial training successfully.

We wish students for their bright future.


Mechanical Engg. (opn)
Mechanical Engineer (OPN)
S.T. Bhandara

STUDENT INTERNSHIP 2019-20




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Nagpur-441501



GOLD

Certificate

—◇— OF INTERNSHIP —◇—

THIS IS TO CERTIFY THAT

Gulshan Mukesh Shahare

FROM MAHARASHTRA WAS ASSOCIATED
WITH AASHMAN FOUNDATION IN THE CAPACITY OF AN INTERN
FROM APRIL 2021 TO OCTOBER 2021 WITH OUR
ASSISTANT SUPERVISOR (HR) GROUP.

HE/SHE HAS COMPLETED HIS/HER INTERNSHIP
WITH A THREE STAR PERFORMANCE

OCTOBER 21



Munishpundir
FOUNDER / DIRECTOR

STUDENT INTERNSHIP 2019-20




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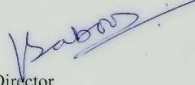
Date _____

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Miss. Nikita S. Mahajan has did his summer internship from 11 May to 10 June. In this duration he found sincere and hard worker.

We wish him successful life.

For Saboo Plastics Pvt Ltd




Director

Date: 12/6/2016

Place: Nagpur





Bhushan R. Mahajan
Head of Department,
DOME

DDOEM Department
Mechanical Engineering
JD College of Engineering & Management
Nagpur



Principal
JD College of Engineering & Management
Khandala, Katol Road
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MBA: 2019-20

INTERNSHIP CERTIFICATES



This is certify that , Gopal Hari Rathod Student Of Master Of Business Administration Of JD COLLEGE OF ENGINEERING AND MANAGEMENT , Nagpur university has successfully completed a summer internship in the field of finance from 1 June 2019 to 30 June 2019 under the guidance of Mr. MOHIT SHARMA.

During the period of his internship program with us he had been exposed to different process was found punctual, hard working and inquisitive.

We wish her all the best for his future endeavors.


Authorised signatory

199, Raigad Apartment , Narveer Tanaji Wadi, Shivajinagar, Nagpur .

Email : <http://www.haldiram.com>.





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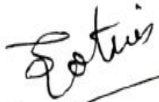
Tel : 2761386, 2764313, 2763301; Fax : (0712) 2760156

E-mail : info@nnsbank.com Web site : www.nnsbank.co.in

HO/STAFF/262/2019-20

TO WHOMSOEVER IT MAY CONCERN CERTIFICATE

This is to certify that Ms. Amruta Baban Thakre MBA student from J.D. College of Engineering and Management, Nagpur, pursuing MBA -I Year has Successfully undergone the Practical Training (Internship/fieldwork), from 21st May, 2019 to 28th June, 2019, at our Sadar Branch.


GENERAL MANAGER



Place : Nagpur

Date : 16.09.2019




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Akola Merchant Co-op. Bank Ltd., Akola

Plot No. 6, Jawahar Nagar Chowk, Akola,

0724-2458092, Fax No.0724-2454600

Email-akolamerchantcoopbankltd@gmail.com

AMB/Certificate/24-A /2019-2020

Date 01/08/2019

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

Certify that, Miss Neha Rajendra Thakre has completed summer Intership from dt. 01/06/2019 to 31/07/2019. And subject was a Study of Bank Operation.



Dr. Omprakash W. Talokar
Chairman

Akola Merchant Co-op Bank Ltd., Akola

Paavni

Internship In- charge

Rhad

Academic Coordinator

sem

HOD- MBA

[Signature]

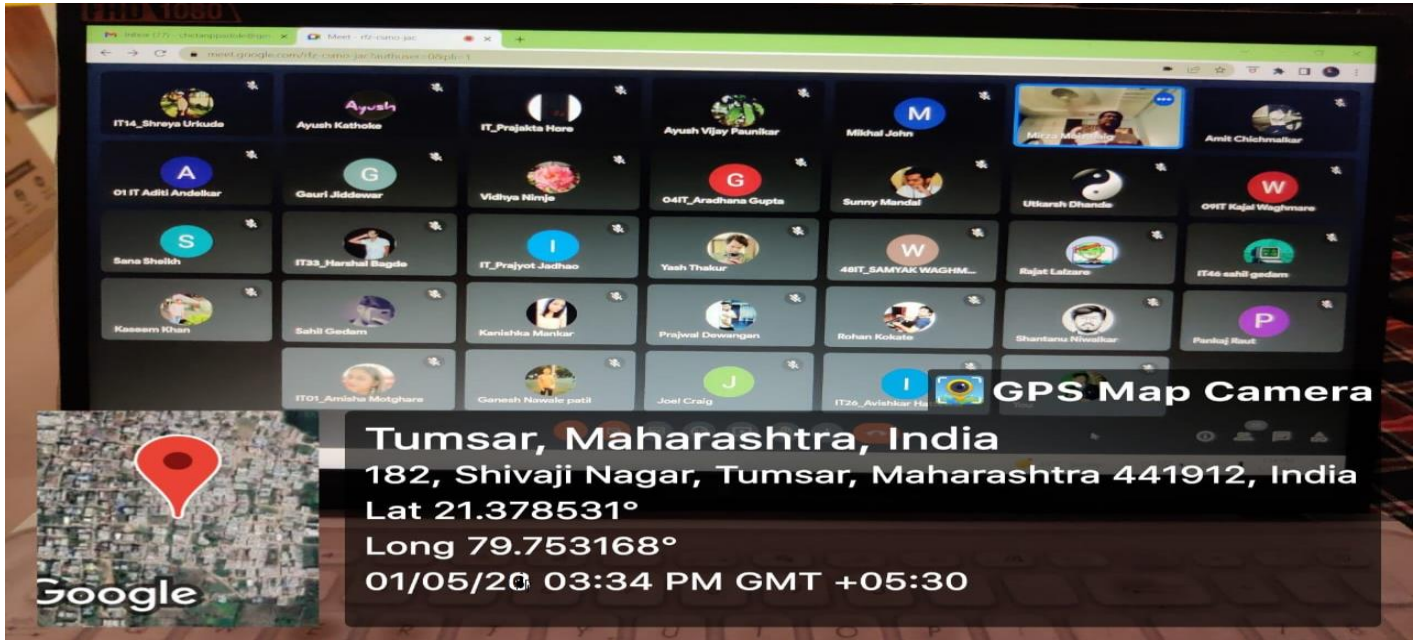
Principal

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

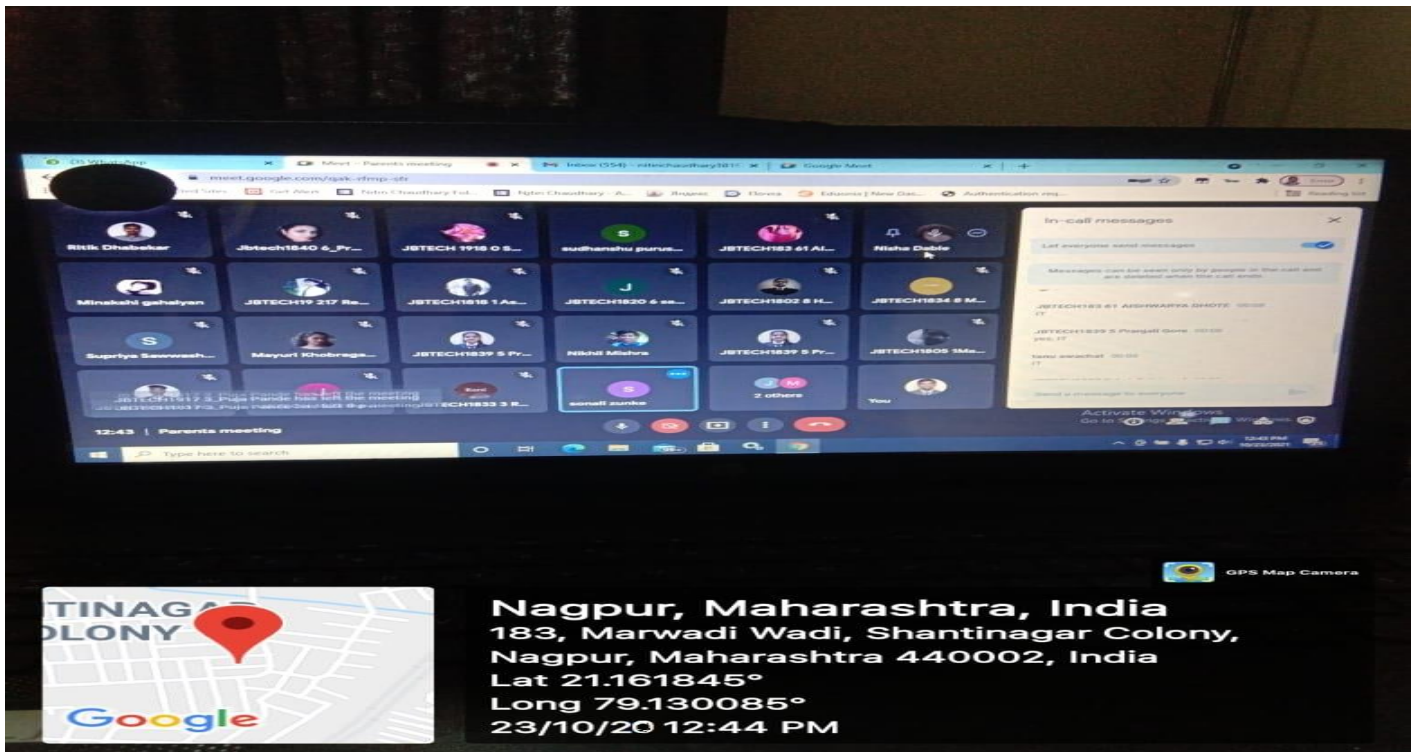
**Head of Management Studies (HMS),
J.D. College of Engineering & Management,
Nagpur**



CSE Student Presentation Photo 2019-20



2019-20 CSE Presentation Photo



2019-20 CSE Presentation Photo

Prof. Madhuri Pal

**Prof. Madhuri Pal
HOD, CSE**

**HOD
Computer Science & Engineering
JDCOEM, Nagpur**



Principal

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