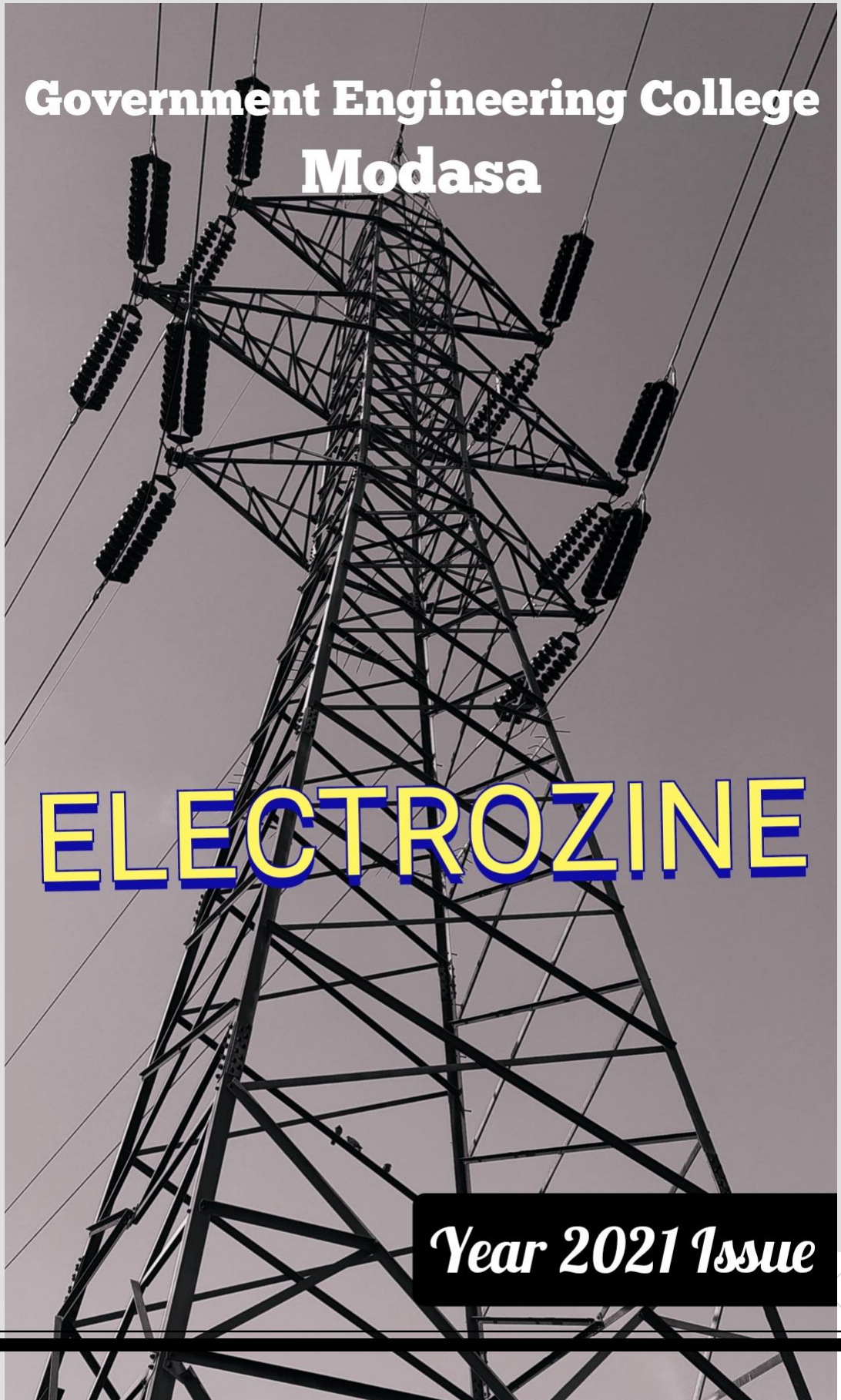
Government Engineering College
Modasa
ELECTROZINE
Year 2021 Issue

प्राथॅना

हे शारदे माँ, हे शारदे माँ

अज्ञानता से हमें तार दे माँ,
तू स्वर की देवी है संगीत तुझसे,
हर शब्द तेरा है हर गीत तुझसे ।
हम हैं अकेले हम है अधुरे,
तेरी शरण में हमें प्यार दे माँ ।।
हे शारदे माँ, हे शारदे माँ.....
मुननयों ने समझी मुननयों ने जानी,
बेदों की भाषा पुराणों की बानी ।
हम भी तो समझें हम भी तो जाने,
नवद्या का हमको अनधकार दे माँ ।।
हे शारदे माँ, हे शारदे माँ.....
तू श्वेतवणी कमल पे नवराजे,
हाथों मे बीणा मुकुट सर पे साजे ।
अज्ञानता के मटा दे अंधेरे,
उजालों का हमको संसार दे माँ ।।
हे शारदे माँ, हे शारदे माँ.....

ABOUT THE MAGAZINE

This magazine aims to focus on the Department of Electrical engineering of GEC Modasa, where various activities are being conducted among students and faculties. It also dives into the Extra-ordinary talent among the students who do their level best in their academics as well as broadcast their inner talents and hobbies to enhance the glory of the Department.

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VISION

To thrive for excellence in the field of Electrical Engineering by imparting quality education that produces skilled, innovative and ethical engineers to meet the needs of academia, industry and society.

MISSION

- To provide an effective Teaching -Learning environment to acquire skills and knowledge in the field of Electrical Engineering.
- Strengthen industry institute interaction to enable the students to work on innovative and real time problems.
- To foster a culture of entrepreneurship amongst the students.
- To instill values in students for lifelong learning and service to the society.

Program Educational Objectives (PEOs)

The Graduates will be able to

- Design, model, analyze and provide appropriate solutions to the industry based problems.
- Demonstrate entrepreneurial skills and lifelong learning during the career.
- Adapt themselves with the new technological challenges.
- Exhibit professional leadership skills imbibing ethical practices.
- Contribute idea with effective communication and work in a team to develop projects and plans.

Program Specific Outcomes (PSO)

PSO 1: Utilize the domain knowledge cultivated from courses of Electrical Engineering encompassing Analysis, Control, Protection, Design of Electrical Machines and Power Systems.

PSO 2: Evaluate the existing system and provide technical solutions to meet the societal needs.

PRINCIPAL'S DESK

Dear Students & Faculty members,

Warm greetings to all students and faculty members of this institute. I have joined this institute as a Principal from 1st, June, 2019. Before that I served here as a Professor & Head of Applied Mechanics Department for about four years. Hence I am quite aware about strength and weakness of this institute. The institute has grown by improving quality and quantity in terms of academic activities as well as extracurricular activities in the last decade. But there is always a scope for improvement. Hence with the effort of all students, faculties and staff, we wish to place the institute to the next level of success.

Today the world is accelerating very fast due to rapid technological developments. Hence it is very difficult to impart engineering education in a conventional classroom method. We insist frequent visit to industries, project based learning, innovative way of teaching learning, pedagogy etc. for making engineering education more meaningful and excited. The institute has very good, qualified, sincere and dedicated faculties as well as very well developed laboratories in all courses it runs. Hence students are requested to take the maximum benefits of the knowledge available from the campus for capacity building of the nation.

Due to technological developments, there is boom across the globe regarding reduction in jobs and due to increasing population there is a cut-throat competition. Hence there is a lot of expectation from the society that engineers should become job giver or job creator rather than job taker. Our Hon'ble Prime Minister has also acted on this issue by initiating various missions like Make in India, Digital India, Skill India, Start Up India etc. I urge all engineering students to put sincere efforts to the best of your capacity to succeed in various mission of our Hon'ble Prime Minister in reducing the problem of unemployment. Institute provide all sorts of help in initiating your start up and making you successful entrepreneur. The only thing you need is, to develop out of box thinking, hard work and stop not till the goal is reached.

HEAD OF THE DEPARTMENT'S DESK

Greetings!
I take the privilege to welcome you all to this new edition of Electrozine. Electrozine is a barometer of the activities taking place in the department and the achievements of students/faculty of the department.

The strength of Electrical engineering Dept, is well qualified and dedicated faculty with good infrastructure facility. The faculty in the department is of the opinion that the individual diligence, quest for knowledge and excellence and hard work by the students in the right direction play a crucial role in his/her success. The students are motivated to take maximum advantage of the knowledge in the department. A number of co-curricular and extra-curricular activities take place in the department to harness the potential and talents of students.

The department provides an environment where teaching and learning process is supplemented with critical thinking and problem solving skills that would help the students mould themselves to become competent in the engineering field and thus serve the society.

I appreciate and acknowledge the zeal and enthusiasm of the students who have worked towards the making of this magazine. My heartfelt gratitude to them .
All the best to my students!

ABOUT THE DEPARTMENT

It is the very first building on entering the campus. This department has various laboratories in the areas of Basic Electrical , Microprocessor , Electrical Machine Electrical Measurement , Power Electronics , Computer Laboratory , High Voltage and Switchgear & Protection Laboratory . The Department has excellent Computer Centre . This department has laboratories in the field of Electrical Measurement , Electrical Machine , Power System , Micro Processor , High Voltage engineering , Electronics and Control . It looks after the electrical service / maintenance of the campus .

ABOUT THE COURSE

Electrical engineering , one of the core courses of engineering discipline deals with the study of design , development , and maintenance of electrical systems and their components , ensuring quality , safety , reliability , and sustainability . The course focuses on the manufacturing of electrical equipment used in a number of sectors including construction and building and the production and distribution of power . Students pursuing electrical engineering study about semiconductors and microprocessors . The undergraduate course will award a B . Tech / B . E . degree and the postgraduate course , an M . Tech . An electrical engineer is someone who designs and develops new electrical systems , solves problems and tests equipment . They study and apply the physics and mathematics of electricity , electromagnetism and electronics to both large and small scale systems to process information and transmit energy . They work with all kinds of electronic devices , from the smallest pocket devices to large supercomputers . An electrical engineer is someone who designs and develops new electrical stone solves problems and tests equipment . They study and apply the physics and mathematics of electricity , electromagnetism and electronics to both large and small , scale systems to process information and transmit energy . They work with all kinds of electronic devices , from the smallest pocket devices to large supercomputers .

Facilities

- **Basic Electrical Lab**
- **Electrical Machine Lab**
- **Electrical Measurement Lab**
- **Instrumentation Lab**
- **Digital Electronics Lab**
- **PLS and DSP Lab**
- **Microprocessor Lab**
- **Switchgear and Protection Lab**
- **Basic/Analog Electronics**
- **Power Computation Lab**
- **High Voltage Lab**
- **Control Lab**

FACULTY & STAFF

Prof. V.J.Updhyay	**Professor and Head of the Department**	**Prof. R. K. Kapadia**	**Assistant Professor**
Prof. M. J. Patel	**Associate Professor**	**Prof. N. B. Panchal**	**Assistant Professor**
Prof. N. V. Upadhyay	**Assistant Professor**	**Prof. S. V. Banker**	**Assistant Professor**
Prof. J.B.Pujara	**Assistant Professor**	**Prof. D.U.Thakar**	**Assistant Professor**
Prof. K. K. Bhatt	**Assistant Professor**	**Prof. H.S.Pandya**	**Assistant Professor**
Prof. M. N. Priyadarshi	**Assistant Professor**	**Shri S. K. Panchal**	**Electrician**
Prof. T. A. Chaudhari	**Assistant Professor**	**Shri. S. J. Patel**	**Electrician**
Prof. C. K. Bariya	**Assistant Professor**	**Shri A. K.Bhangi**	**Hamal**

Faculty Corner

Trainings Attended by Faculty

Sr. No.	Name of Faculty	Training Title	Starting Date of Training			Ending Date of Training			Training Venue
			Day	Month	**Year**	**Day**	**Month**	Year	
1	Darshan U. Thakar	Online Udayam E-Content Developement Course	28	July	2020	18	August	2020	Online Mode, KCG and HRDC, Gujarat University
2	Darshan U. Thakar	Comprehensive Online Intellectual Property Rights (IPR)	6	July	2020	14	September	2020	Online Mode, i-Hub
3	Darshan U. Thakar	NURTURING INNOVATION AND STARTUP ECOSYSTEM (NISE)	8	Septerber	2020	23	October	2020	Online-i Hub
4	V.J.Upadhyay	Comprehensive Online Intellectual Property Rights (IPR)	6	July	2020	14	September	2020	Online Mode, i-Hub
5	V.J.Upadhyay	Advanced Power System Protection	1	December	2020	5	December	2020	Online mode IEEE PES- IAS Chapter, Pune Section.

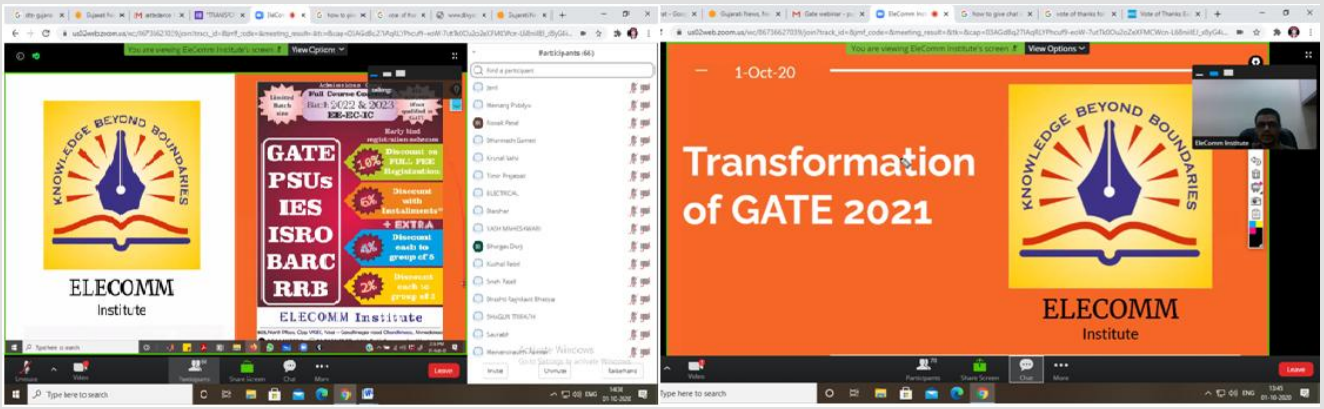
6	J.B.Pujara	Online Udayam E-Content Developement Course	28	July	2020	18	August	2020	Online Mode, KCG and HRDC, Gujarat University
7	J.B.Pujara	Comprehensive Online Intellectual Property Rights (IPR)	6	July	2020	14	September	2020	Online Mode, i-Hub
8	Kaushal Bhatt	Online Udayam E-Content Developement Course	28	July	2020	18	August	2020	Online Mode, KCG and HRDC, Gujarat University
9	Kaushal Bhatt	Comprehensive Online Intellectual Property Rights (IPR)	6	July	2020	14	September	2020	Online Mode, i-Hub
10	N.B.Panchal	Tools and trends in online education system	15	March	2021	19	March	2021	Online Mode
11	N.V.Upadhyay	Online Udayam E-Content Developement Course	28	July	2020	18	August	2020	Online Mode, KCG and HRDC, Gujarat University
12	N.V.Upadhyay	Comprehensive Online Intellectual Property Rights (IPR)	6	July	2020	14	September	2020	Online Mode, i-Hub

Departmental Activities

Webinar organized by department

Transformation of GATE 2021

Government Engineering College, Modasa, Electrical Engineering Department and elecomm institute has organized a combined Webinar on" Transformation of GATE 2021" and date of webinar was 1/04/2020 There were 60 participants.



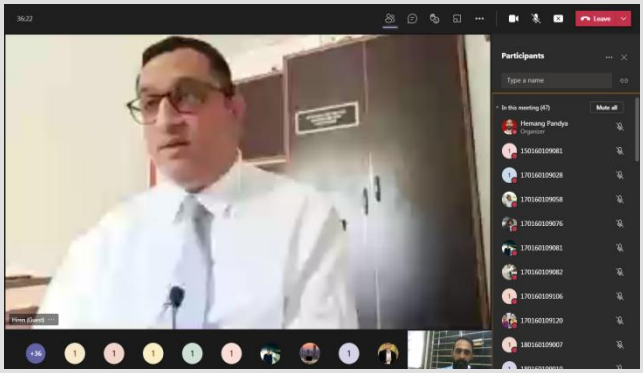
"Prepare yourself Future Ready"

An interactive webinar session was conducted on "Prepare yourself Future Ready" for pre-final and final year (Sem 6th and Sem 8th) students with a view to target carrier oriented guidance need of the students to be graduated in a year or two.

The expert, Shri Hiren U. Thaker, Counselor and Founder, Ayana Academy, has worked with GTU from 2011 to 2016 as International Department Head and establish a unique program named International Experience Program (IEP) with foreign Universities of Germany, Russia, Canada, USA and UK. Wherein, around 1500 students from GTU have benefited by participating in short term study programs at mentioned countries.

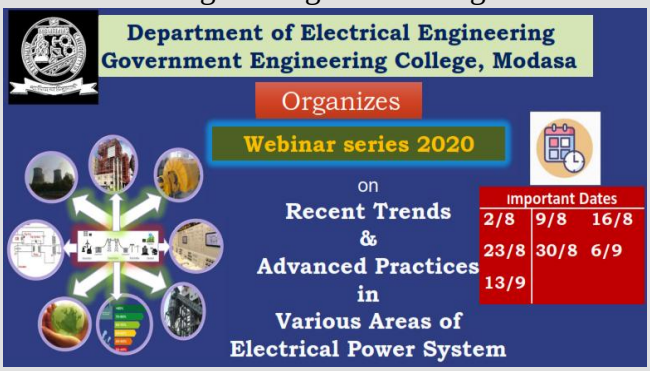
The students have participated in good numbers (67students+ 3 Faculy) been interactive throughout the session since beginning and made the prgramme successful.

The pictorial memory and feedback is shared here with in the following section. This is to offer heartfelt thanks to the Head of the Department Electrical Engineering to permit and guiding for the said programme, the expert for sparing valuable time and the participants to make session interactive and interesting.

Banner:	Session moments
	

A webinar series

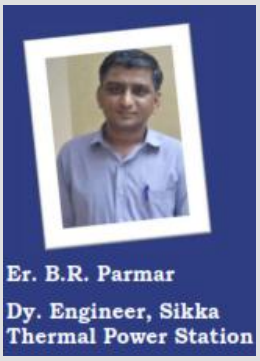
1. A webinar series on "Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE).



SCHEDULE

Sr No	Date/Time		Name of expert	Designation	subject
1	02.08.2020	10 am	Er. B R PARMAR	Dy. Engineer	Power plant fundamentals
2	09.08.2020	10 am	Er. A D Patel	Dy. Engineer	Boiler and its auxiliaries
3	16.08.2020	10 am	Er. D M Ambani	Dy. Engineer	Turbine and its auxiliaries
4	23.08.2020	10 am	Er. S S Sondagar	Jr. Engineer	Electrical protection systems of power plant
5	30.08.2020	10 am	Er. P R Khunt	Dy. Engineer	Instrumentation systems of power plant
6	06.09.2020	10 am	Er. R B Parmar	Dy. Engineer	Coal and ash handling in power plant
7	13.09.2020	10 am	Er. P H Gagiya	Dy. Engineer	Environment Legislation
	13.09.2020	10 am	Er. R A Sakariya	Dy. Engineer	Power plant efficiency

i. A webinar series on "Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on "Power Plant Fundamentals" was delivered by Er B.R.Parmar (Dy.Engineer,Thermal Power plant, Sikka) . on 2nd Aug, 2020, Total **92** students have attended.



ii. A webinar series on "Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on "Boiler and its auxiliaries" was delivered by Er A.D.Patel (Dy.Engineer,Thermal Power plant, Sikka) , on 09th Aug 2020 Total **83** students have attended.

Er. A.D. Patel
Dy. Engineer, Sikka
Thermal Power Station

iii. A webinar series on "Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on "Turbine and its auxiliaries" was delivered by Er D.M.Ambani (Dy.Engineer,Thermal Power plant, Sikka) .on 16th Aug 2020, Total **86** students have attended.

Er. D M Ambani
Dy. Engineer, Sikka
Thermal Power Station

iv. A webinar series on "Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on "Electrical protection systems in power plants " was delivered by Er S.S. Sonagar (Jr.Engineer,Thermal Power plant, Sikka) . on 23rd Aug 2020,Total 58 students have attended.

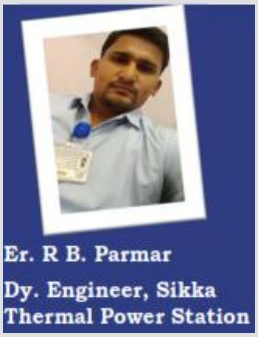
Er. S S Sondagar
Jr. Engineer, Sikka
Thermal Power Station

v. A webinar series on "Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on "Instrumentation systems of power plant" was delivered by Er P.R.Khunt (Dy.Engineer,Thermal Power plant, Sikka), on 30th Aug 2020,. Total 86 students have attended.

Er. P. R. Khunt
Dy. Engineer, Sikka
Thermal Power Station

vi.

A webinar series on “Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on “Coal and Ash handling in power plant” was delivered by Er R.B.Parmar (Dy.Engineer,Thermal Power plant, Sikka), on 06th Sept 2020,. Total 65 students have attended.

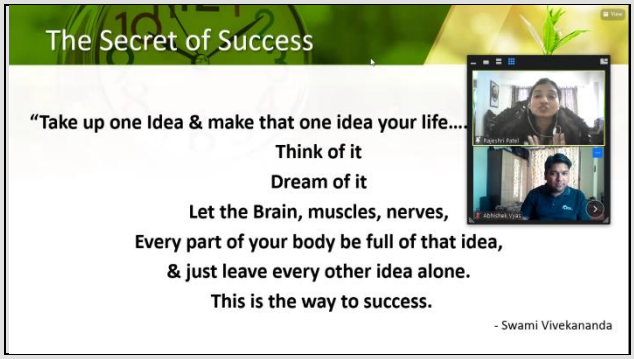


vii. A webinar series on “Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on “Environment Legislation” was delivered by Er P.H.Gagiya (Dy.Engineer,Thermal Power plant, Sikka), on 13th Sept 2020,. Total 72 students have attended.

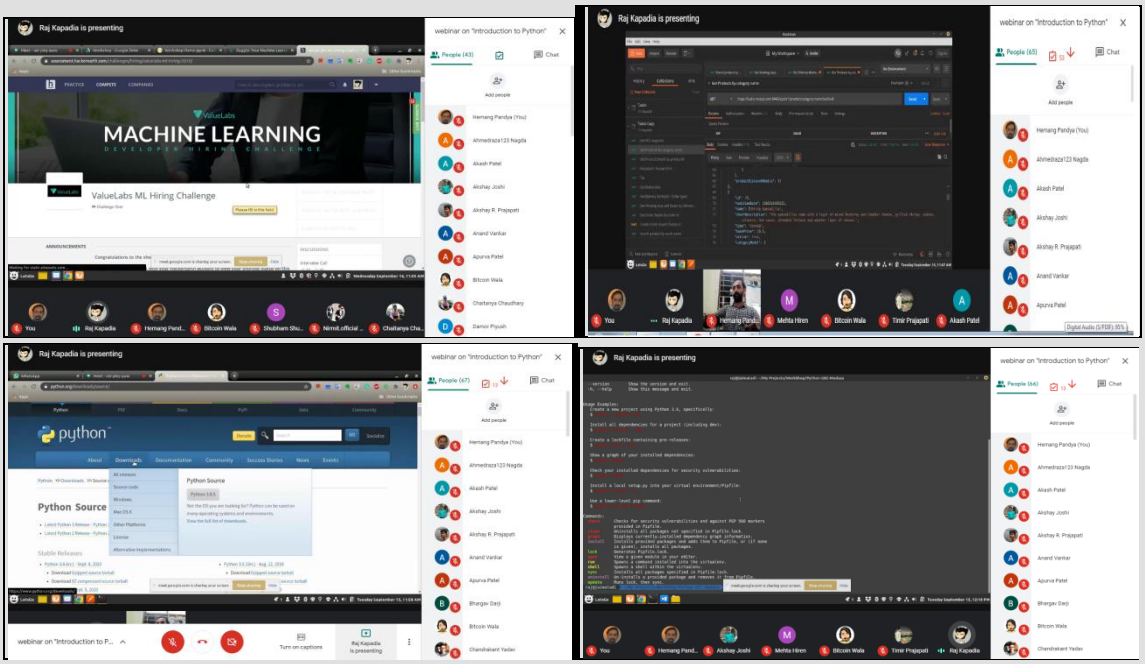
viii. A webinar series on “Recent trends in power plant technologies was organized by Department of Electrical Engineering on 02nd Aug 2020 to 20th sept 2020 for sem 6th and 8th sem(EE). The topic on “Power plant Efficiency” was delivered by Er R.A.Sakariya (Dy.Engineer,Thermal Power plant, Sikka), on 13th Sept 2020,. Total 72 students have attended.

2. A webinar was organized by Department of Electrical Engineering on 06th Sept 2020 for sem 6st (EE).The topic was “Secret of success” Rajshree Patel (Art of living Faculty - Meditation & Yoga program, Ex-employee TUV Sud South Asia ,Information Technology),) Abhishek Vyas(Assistant Manager, Amada India Pvt Ltd ,BE - Mechanical Engineer, Art of Living Volunteer) and 3) Mr.Chintan Vyas (CA – Government of Gujarat.,Art of living Faculty - Meditation and yoga,

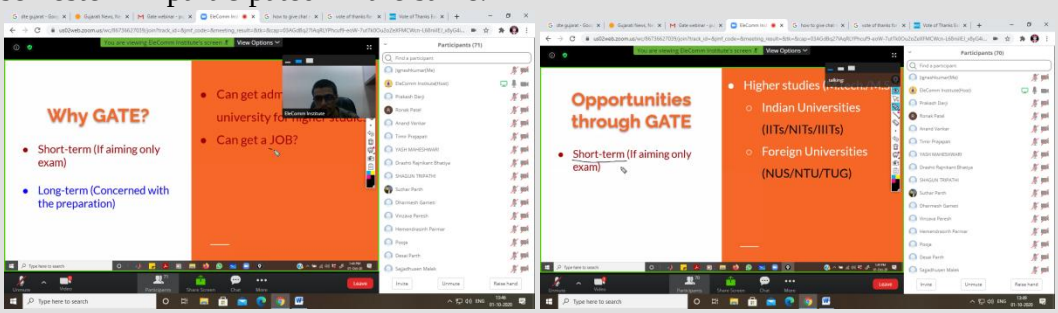
program; Organic Farming program; Gau palak program) have disseminated interactive session .Total **37** students of 6th -8th semester EE participated in the same.



3. A webinar was organized by Department of Electrical Engineering on for sem 6th and 8th sem (EE). On the occasion of "Enginner's day" The topic was "Workshop on Python" in-coordination with with SSIP cell. Prof. Raj Kapadia, Dept. Elect.Engg, GECM, has disseminated interactive session .Total **56** students of 6th -8th semester EE participated in the same.



4. A webinar was organized by Department of Electrical Engineering on 1st Oct 2020 for sem 6 and 8th(EE).The topic was "Transformation of GATE 2021". Experts from EleComm Institute have disseminated very useful session for preparation for GATE.Total **71** students of 6th -8th semester EE participated in the same.



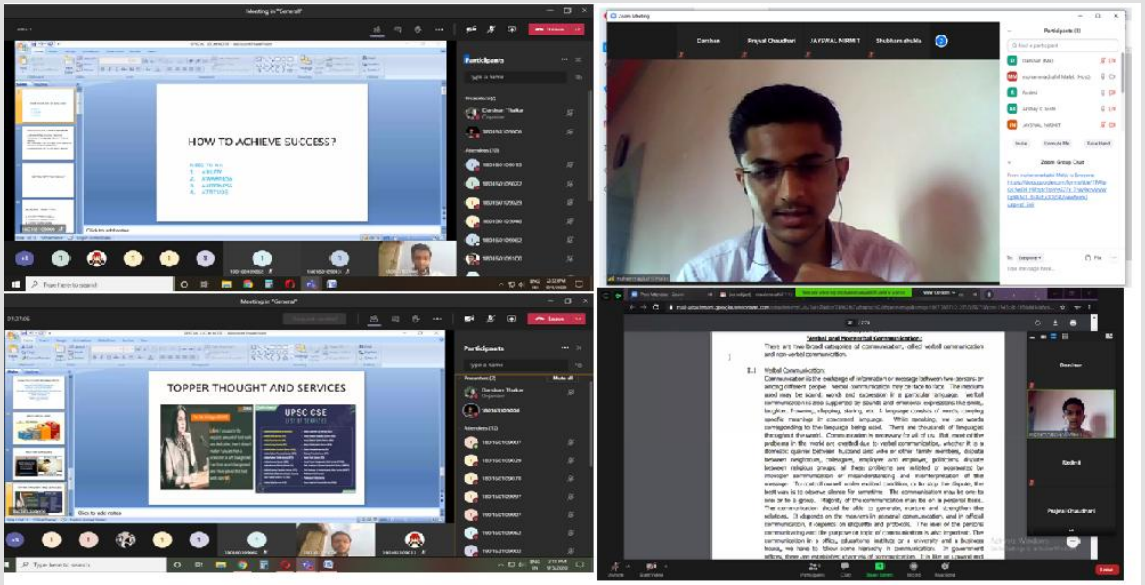
Name of Seminar: "Turn Your Ideas into Reality"

Date of Webinar: 12/03/2021

Government Engineering College, Modasa, Electrical Engineering Department has organized a combined seminar for design engineering and SSIP on " Turn Your Ideas into Reality " and date of webinar was 12/03/2021 and the duration of the webinar was from 1.00 P.M. to 3.00 P.M.. There were 19 participants. The main focus of the seminar was how to think towards the innovative solution of daily life problems. During the seminar the guide lines of covid were followed as all the students have worn the mask and seated with social distancing. At the end of the seminar many students have asked the doubt which has been cleared by the expert.

Teacher's Day Special 5/09/2020

Electrical Engineering Department, GECM organized Teacher's day celebration online via Zoom/MS Teams on 05/09/2020. Two Students from 5th semester and 1 student from 7 th semester taught the students. Total 19 students participated for online teaching as a Teacher's day celebration.



Design Engineering Project Expo

Electrical Engineering Department, GECM organized project expo for 5th semester students on 19th oct., 2020. 25 teams and 95 students have participated and represented their project model.

Sr Number	Name of the Project
1	Interfacing Of The Ultrasonic Sensor And Measurement Of Distance Using Arduino
3	Smoke Detector Using Mq2 Gas Sensor & Arduino
4	Temperature Based Fan Speed Controller
5	Home Automation Using IOT
6	LED Distance Indicator Using Ultrasonic Senser And Arduino
7	Distance Measurement Using Arduino And Sensor
8	Underground Cable Fault Detection With SMS Alert
9	Three Phase Transmission Line Fault Detection And Analysis System.
10	Fingerprint Doorlock Using Arduino
11	Automatic Hand Sanitizing Machine
12	Home Automation Remote Control LED Using Arduino
13	MINOR PROJECT ON AUDURINO
14	Floor Cleaning Robot Using Arduino
15	Automatic Power Factor Measurement Using Arduino Atmega 328p Microcontroller.
16	Railway Crossing Smart Using Sensor
17	Gas Detector Using Audrino And Mq2 Sensor
18	Farming Security
19	Interfacing Of The IR Sensors And Measurement Of Distance (Finding Range) Using Arduino
20	Smart Refrigerator
21	Home Automation System Using Arduino Uno
22	Interfacing Of The IR Sensors And Measurement Of Distance Using Arduino.
23	BLUETOOTH CAR USING ARDUINO
24	LED Distance Indicator Using Ultrasonic Senser And Arduino
25	Digital Clock Using Arduino UNO 16*2 LCD DS3231 RTC Module

SSIP Electrical dept Project details (2020-21)

Sr. No.	Name Of Team Leader	Name Of Innovation/Start Up	Previously Assigned Mentor	Approximate Cost	ISC Remarks	Approved (Y/N/On Hold)
1.	Patel Shrey Dineshbhai	Delivery Robot	Prof. R.K.Kapadia	30537/-		On Hold
2.	Prajapati Kinjal Ashokbhai	Smart Blind Stick Using Arduino And Sensors	Prof. M.N.Priyadarshi	5040/-	Ok	Y
3.	Vinzava Paresh Bhayabhai	Multipurpose Remote Control Fumigation Machine	Prof. N.V.Updhyay	21046	Ok	Y
4.	Modi Meet Rohitkumar	Smart Refrigerator	Prof. S.V.Bankar	26030	Ok	Y
5.	Sheladiya Deep Ghanashyambhai	Contact Less Voltage Detector	Prof. T.A.Chaudhari	**10000/-**	**Ok**	**Y**
6.	Desai Parth Tusharkumar	"Multifunction Cooler For Vendors"	Prof.Darshan Thakar	22125/-	Ok	**Y**
7.	Chaudhary Prajval J.	Eco Clean Ocean Wave Power Energy	Prof. V.J.Updhyay	24075/-	Ok	**Y**

You should Know-By Prof. Darshan U. Thakar

1. Ola to set up world's largest factory in Tamil Nadu

This will be the world's largest two-wheeler production plant and the mega-factory will be set-up on a 500-acre site.The factory will create nearly 10,000 jobs and will be the world's largest scooter manufacturing facility upon completion, reported news agency PTI. The facility will initially have an annual capacity of 2 million units. The first phase will be operational in the next few months, according to the company.

2. DST INSPIRE Faculty from Bhopal develops lightweight carbon foam that can replace lead batteries

Dr. Rajeev Kumar from CSIR-Advanced Materials and Processes Research Institute, Bhopal an recipient of the INSPIRE Faculty award instituted by the Department of Science &Technology, Govt. of India is developing porous carbon materials which have the potential to replace lead grid in lead-acid batteries.It can also be useful for heat sinks in power electronics, electromagnetic interference shielding in aerospace, hydrogen storage and electrode for lead-acid batteries and water purification systems

3. Indian Scientists Develop Hybrid Super capacitors with Unique Electrode Material

A team of scientists has developed a low-cost supercapacitor device with excellent capacitive retention using a novel electrode material they synthesized which can pave the way for the next generation of high power-high energy storage devices.Supercapacitors have high-power density, long cycle life, and excellent capacity retention compared to their battery counterparts.

4. Eco-friendly batteries from aloe vera

Lucknow-based Aloe Ecell Pvt. Ltd, pioneered the world's first eco-friendly and non-hazardous batteries from Aloe Vera. During their research on managing waste, Nimisha Varma and Naveen Suman found that the everyday batteries are highly hazardous. These batteries are one of the biggest e-waste generators. It was then after extensive research, the two students found aloe vera extracts and other natural herbs to make the world's first eco-friendly batteries as an apt replacement for toxic metals like Lead and Mercury.

5. Khadi India to launch Organic Vedic Paint

Khadi India under Khadi & Village Industries Commission, Government of India, is soon launching Vedic Paint made out of cow dung. As per the Patrika report, the paint is consistent with national and international standards. The institute has tested on all aspects, including thickness, smoothness and brushing. It has been reviewed by national and international level government and private labs. It will be available in 2lt to 30lt packing. While talking about the production from raw material, it mentioned that by using 100 KG of cow dung, 30-40 KG paint could be manufactured. That means, if a production unit consumed 500 KG of cow dung daily, it could produce up to 200 KG of paint.

Faculty Achievement

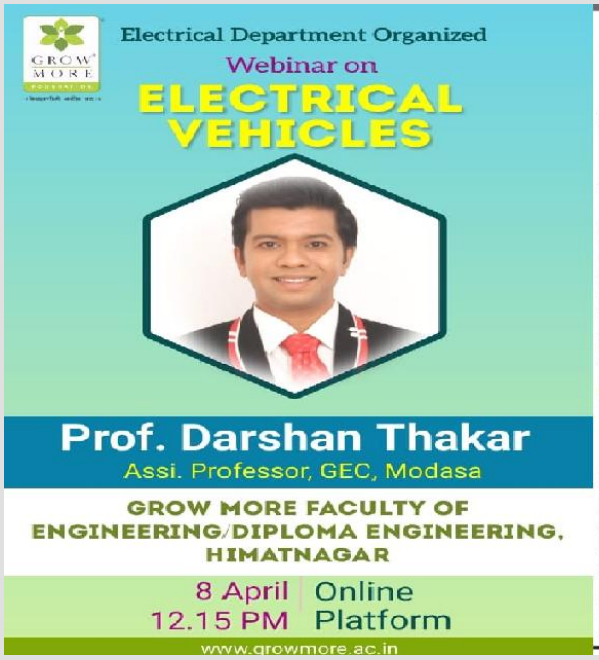
1. Prof. J. R. Iyer got promotion from associate Professor to Professor and transferred to L.D.C.E.,Ahmedabad.

2. Prof. H.D.Mehta got promotion from associate Professor to Professor and transferred to V.G.E.C,Chandkheda.

3.Prof. V.J.Updhyay got promotion from associate Professor to Professor and transferred to G.E.C. Modasa.

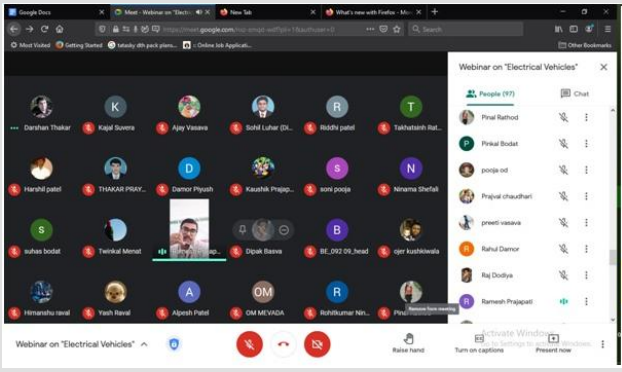
Expert lectures delivered by faculty

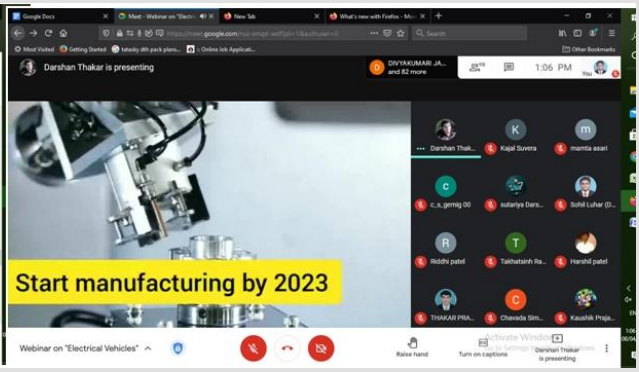
An expert talk is delivered by Prof. Darshan U. Thakar on 08/04/2021.The topic of the expert talk was 'Electric Vehicles." Total 200 plus students have registered for the webinar and at the end of the session certificates are provided to the participants.



ગ્રોમોર એન્જીનીયરીંગ કોલેજ ખાતે "ઇલેક્ટ્રિકલ વ્હીકલ"નોવેબિનાર યોજાયો

ગુજરાત વિકાસ ન્યૂઝ, હિંમતનગર : ગ્રોમોર ફેકલ્ટી ઓફ એન્જિનિયરિંગ/ડિપ્લોમા એન્જિનિયરિંગ, હિંમતનગર ખાતે તારીખ ૦૮માર્ચ ૨૦૨૧ ના રોજ ઇલેક્ટ્રિકલ વિભાગના વિદ્યાર્થીઓ માટે "ઇલેક્ટ્રિકલ વ્હીકલ" વિષય પર વેબિનાર નું આયોજન કરવામાં આવ્યું હતું. વેબિનાર ના સ્પીકર તરીકે પ્રોફેસર દર્શન ઠાકર(આસિ.પ્રોફેસર, સરકારીએન્જી. કોલેજ, મોડાસા) દ્વારા વિદ્યાર્થીઓને વિષય અનુસંધાને માર્ગદર્શન આપવામાં આવ્યુહતું.જેમાંટોટલ ૧૮૫ વિદ્યાર્થીઓએ રજિસ્ટ્રેશનકરાવ્યું હતું. આ રજિસ્ટ્રેશનમાં ગ્રોમોર કોલેજ સિવાયની અન્ય કોલેજોનાવિદ્યાર્થીઓએ પણ ભાગ લીધો હતો.તમામ ને ઈ-સર્ટીફીકેટ આપવામાં આવ્યા હતા. આ સંપૂર્ણ પ્રોગ્રામનું આયોજન ઇલેક્ટ્રિકલ વિભાગ ના હેડ પ્રો. રમેશપ્રજાપતિ ના માર્ગદર્શન હેઠળ પ્રો.સોહીલ લુહાર (વેબિનાર કોર્ડીનેટર)એકર્યુહતું.આકાર્યક્રમ બદલ સંસ્થાનાસેન્ટરહેડ અને પ્રિન્સિપાલ પ્રો. ભરત સુથાર, ટ્રસ્ટીડો. બી. ઓલ. પટેલે તમામનો આભાર વ્યકત કર્યો હતો.





A Virtual Visit, Demonstration And Awareness Program On

"Energy Conservation in day to day life" in coloration with GEDA

A virtual visit, demonstration and awareness program on "Energy Conservation in day to day life" by GEDA at the premises of Electrical Engineering, GEC, Modasa on 16/03/2021, wherein 138 online, 26 offline students and faculty members have participated.

The experts from GEDA viz., Dr. Anil K. Patel, Managing Trustee Nisarg Community Science Center (GUJCOST Recognised District Science Centre), Shri Naresh Thakor, GPCB and Prof. Girish Vekaria from PT science college visited the campus with a GEDA demonstration van.

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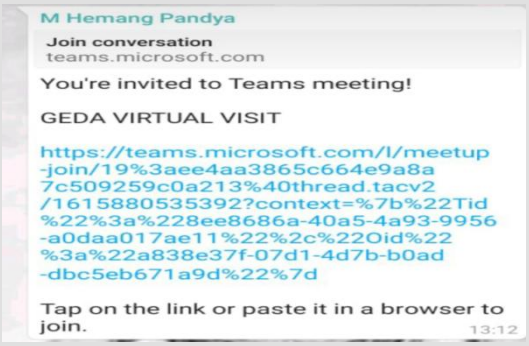
<td> 
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VIRTUAL PROJECT EXPO

The Electrical Engineering Department of GEC Modasa organized the Final Year Virtual Project Fair 2021 on 30th April (Friday) 2021. The purpose was to evaluate the project carried out by our under graduate students as a part of their IDP/UDP. Total 33 projects consisting of 121 students of final year were displayed. All the projects were judged by an esteemed panel of judges which include judges from industrial and academic sectors. Shri Nikhilbhai Shah – Founder, CEO, NIFA electronics pvt. Ltd and Prof.(Dr) Hiren D. Mehta, Professor and head, Electrical engg. Department, Vishwakarma Govt. Engg. College were our judges. The projects were divided into two groups, A and B. All the projects in Group A were evaluated by Shri Nikhilbhai and Prof. Hiren Mehta evaluated the projects of Group B.

After evaluation, the judges and the evaluation committee of our department short listed 3 best projects as the winners:

Rank	Title of the Project	Name of the participants	Enroll No.
1	Automatic Power Factor Correction	Prashant Shahu	180163109024
		Rana Miteshkumar	180163109019
		Prakash Darji	180163109003
		Divakar Bhupendra	180163109004
2	Fault Detection In Transmission Line Using Arduino	Sahil Shekh	170160109103
		Momin Samirali	170160109045
		Vohra Almas	170160109119
		Parmar Anant	170160109058
3	Touchless Hand Sanitizer Machine With Body Temperature Detector	Patel Kushalkumar Maheshbhai	180163109015
		Dangar Nitin Kumar Nagdan Bhai	180163109002
		Maheta Shayam Bhaskar Bhai	180163109010
		Suthar Ainesh Chinu Bhai	180163109026

Student activity

VISHWAKARMA YOJNA PROJECT PHASE – VIII

This year 2020-21, Two students from the electrical engineering department were selected for ***Vishwakarma yojna project*** which also contributes to their final year project. The project involves a year full of making proposal for the urbanization of the rural village areas present in the state of Gujarat. It works towards the development and modernization of village both in infrastructure as well as proving energy needed for a suitable lifestyle. Hence the students of civil as well as electrical department works as a team in a group of three students, to focus on the idea of how the village would be developed by their thoughtful ideas and proposal.

Shah Vivek Nandlal [180163109023] and ***Gohel Sagar Rasilaben***[180163109006] from the final year were selected for this great opportunity of learning.

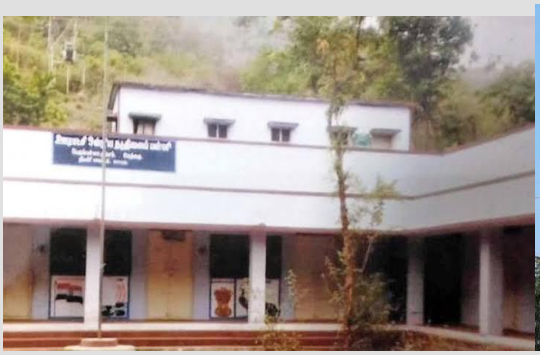
The students pay frequent visit to the village and work on the development by providing the suitable ascept of electrical engineering knowledge with the help of the nodal officer which is selected faculty of the college which helps them to nurture the idea and guide them throughout the difficulty.

The name of the village selected to be developed by students of our department were ***Handiya, Balasinor*** which is located in the ***Mahisagar district*** and the other village is ***Pindharada*** located in the ***Gandinagar.***

What is Vishwakarma Yojna?

- Developing village with a 'rural soul' but with all urban amenities that a city may have"
- Vishwakarma Yojana is one of the initiatives towards Rurbanization by Government of Gujarat, which was allotted as a real time situation type project provide to GTU.
- The students and Faculty Members meet all the citizen of a village, survey the existing facilities.
- Then they re-imagine and design the whole of the infrastructure of the village.
- The students use their engineering skills to prepare detailed project reports for the infra-structure as a part of their final year project work.

Primary Survey of Handiya during village visit:



Primary school at handiya

Water facility

Open drainage system

Localized Irrigation

<u>Visit Of Village School During the Survey:</u>

A REPORT ON PLC TRAINING PROGRAMME ATTENDED BY OUR DEPARTMENT STUDENTS AT INDO-GERMAN TOOL ROOM,VATVA

A total of 25 students from electrical engineering department of final year were send for an industrial training on PLC programming at **INDO-GERMAN TOOL ROOM,VATVA** in the month of February,2021.

The training was for 15 days starting from 26th of February to 11th ofMarch, 2021[8 hours per day].The training was sponsored by RUSA [*Rashtriya Uchchatar Shiksha Abhiyan*].

About PLC System

PLC system is the major key in the technology and world development. PLC or Programmable Logic Controller is the system that makes machineries work automatically. It incorporates three basic features of input, process, and output where everything has to go along well and harmoniously. The input or data should go along with the suitable operation or process in order to produce the intended result or output. It's a quite complicated process to make all machineries become automatic. This system is responsible for all the growth in industry, manufacturing process, and even entertainment. Without such system, amusement rides or movie making process can't be done. That's why PLC system is very important and needed by all kinds of industry.

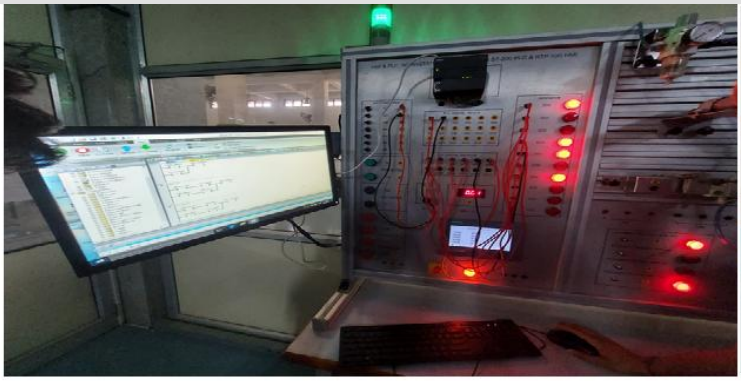
Everything inside the PLC System

The PLC system is quite complicated. It requires special computers, special programs, special language and even special design. The special computers are needed because the computers will be located inside harsh industry environment. The computers should be strong and resistant to almost everything: starting from dust, liquid, moisture, shake, vibration, and bump. It's impossible to store the PLC configuration inside regular computer because the computers aren't designed to be used inside harsh environment. The PLC language basically uses the ladder logic. But when the industry requires more comprehensive and complicated process, the system can be designed with several languages so that it can do several different tasks. It's important to have reliable and skilled PLC experts that can handle everything, including making the design. Each automation process is unique and different from one another. It's the experts' job to make sure that the program can run well and won't experience any issues. When business people want to make sure that their PLC system to work well, they should also hire professional and qualified PLC experts.

Experience gained by students at INDO-GERMAN TOOL ROOM:

- The students were taught the basics of PLC and were explained the theoretical knowledge about the world of PLC, Its application in industrial field.
- They were taught to develop the ladder diagram of different logic gates to make the concept of working of different appliance more simpler and reliable.

- Many examples were given to the students to solve for better understanding of use of ladder logic and implement them in the practical world.
- Knowledge regarding the timers, counters, gates and there usage at different places were given.
- It was a great industrial exposure for the students of the final year to learn something which would definitely help them in the further practical world.

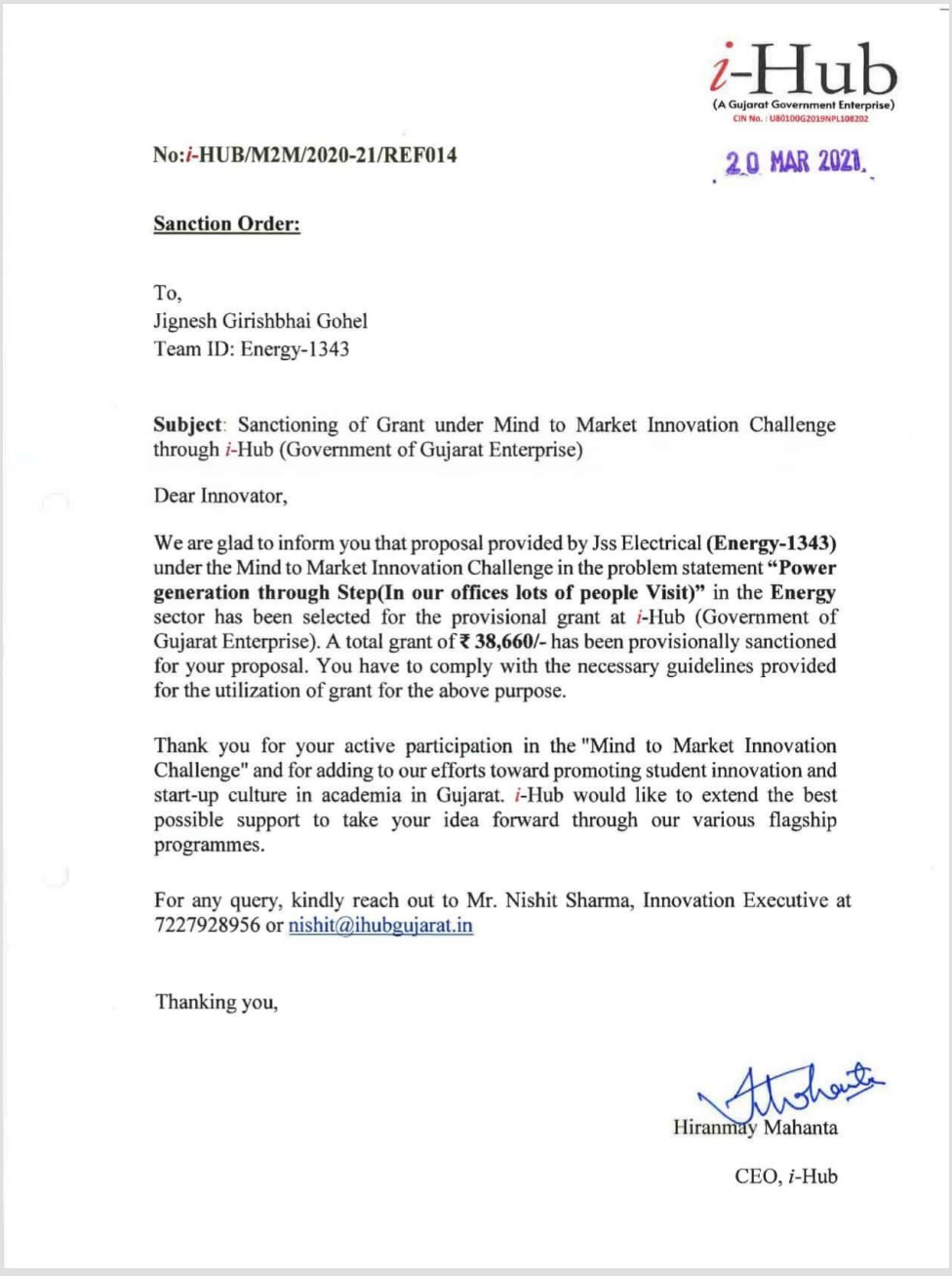


Student Achievement

The project of below listed students have selected for mind to market innovation challenge through i-hub. The students got grant of Rs. 38660.

Team Members:-

- 190163109009 - Gohel Jignesh .G.
- 190163109024 - Prajapati Saurabh .R.
- 190163109012 -Malek Sajjadhusen .S.



i-Hub
(A Gujarat Government Enterprise)
CIN No. : U80100GZ019NPL108202

No:*i*-HUB/M2M/2020-21/REF014

20 MAR 2021.

Sanction Order:

To,
Jignesh Girishbhai Gohel
Team ID: Energy-1343

Subject: Sanctioning of Grant under Mind to Market Innovation Challenge through *i*-Hub (Government of Gujarat Enterprise)

Dear Innovator,

We are glad to inform you that proposal provided by Jss Electrical **(Energy-1343)** under the Mind to Market Innovation Challenge in the problem statement **"Power generation through Step(In our offices lots of people Visit)"** in the **Energy** sector has been selected for the provisional grant at *i*-Hub (Government of Gujarat Enterprise). A total grant of **₹ 38,660/-** has been provisionally sanctioned for your proposal. You have to comply with the necessary guidelines provided for the utilization of grant for the above purpose.

Thank you for your active participation in the "Mind to Market Innovation Challenge" and for adding to our efforts toward promoting student innovation and start-up culture in academia in Gujarat. *i*-Hub would like to extend the best possible support to take your idea forward through our various flagship programmes.

For any query, kindly reach out to Mr. Nishit Sharma, Innovation Executive at 7227928956 or nishit@ihubgujarat.in

Thanking you,

Hiranmay Mahanta

CEO, *i*-Hub

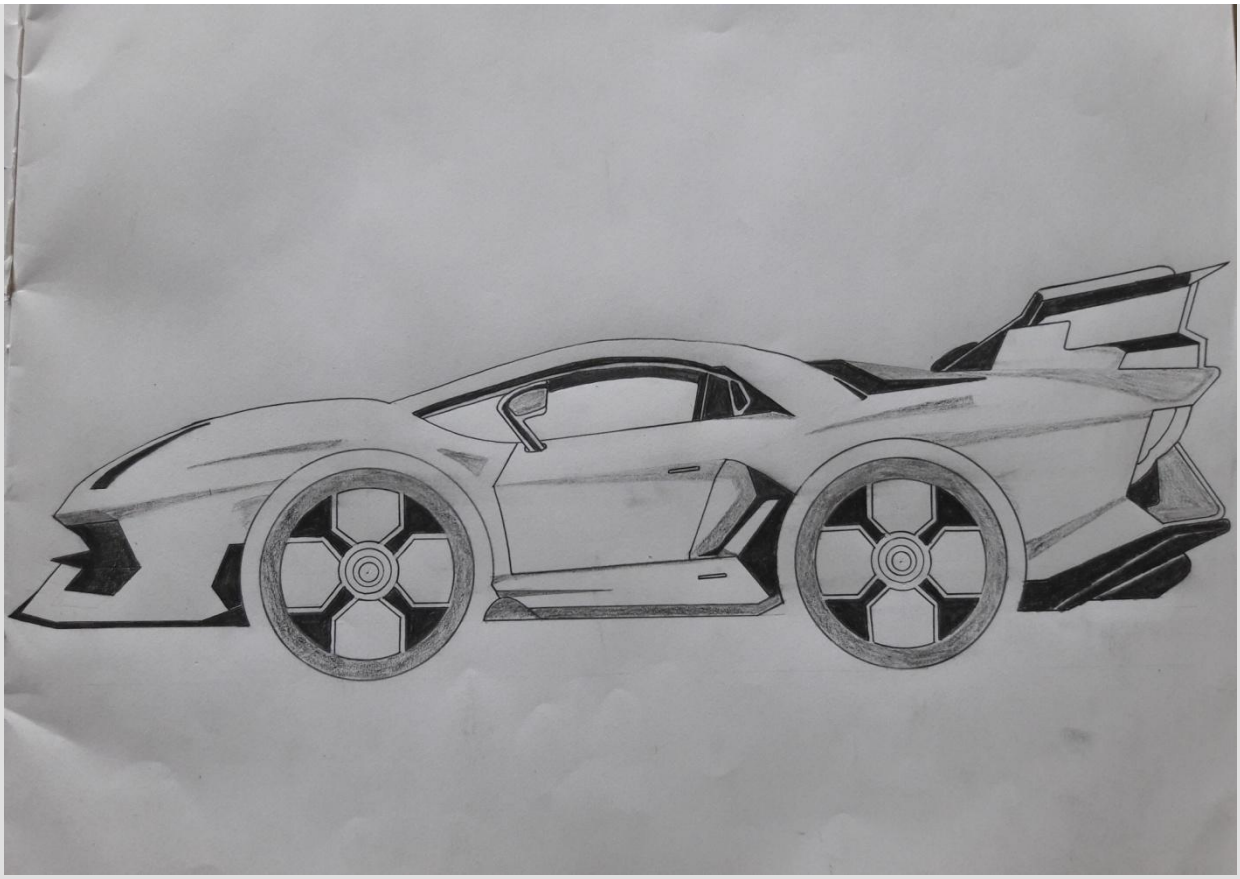
Swapnil Jayswal(170160109029) ,student of 8th semester has successfully completed the below listed Webinar/Training.

Sr. Number	Title of Webinar/Training	Duration
1	Finishing School	45days
2	Solar System Design	1 Month
3	Industrial Training	5 days
4	Cisco Web Training	4 days
5	Siemens Web Training	15 days
6	WHO Pandemic Training	1month
7	India Fact Quiz Course	Every Week

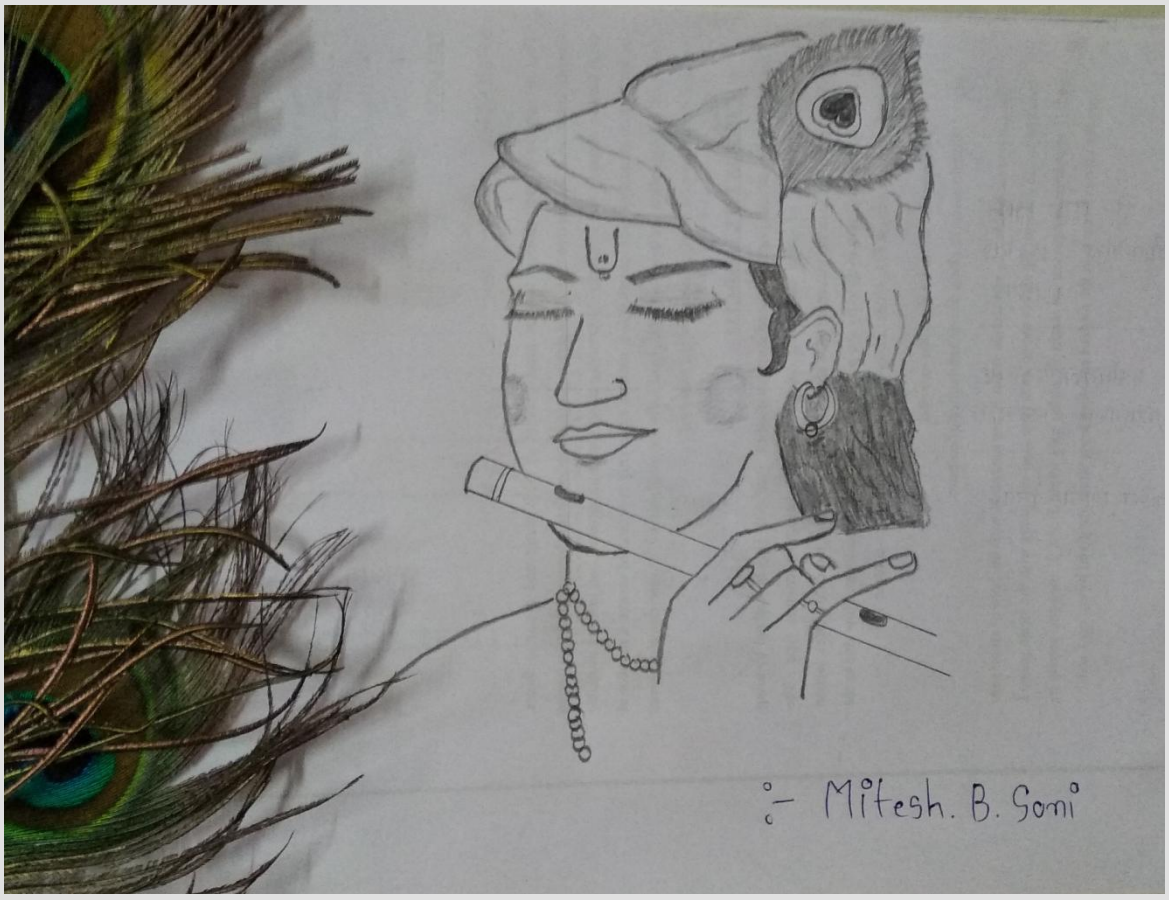
NAME : DARJI PRAKASH VISHNUBHAI

EN.NO. : 180163109003

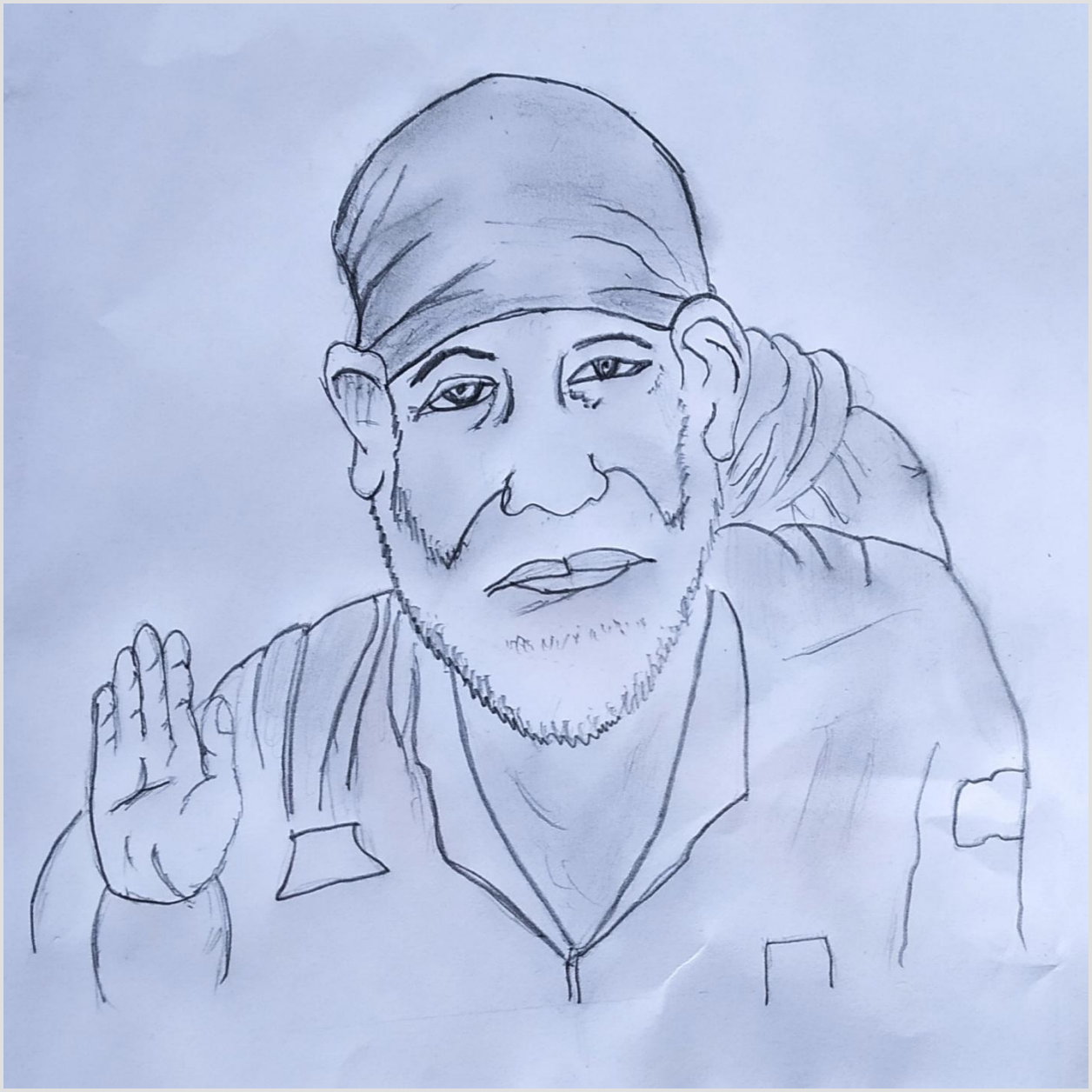
SEM : 8



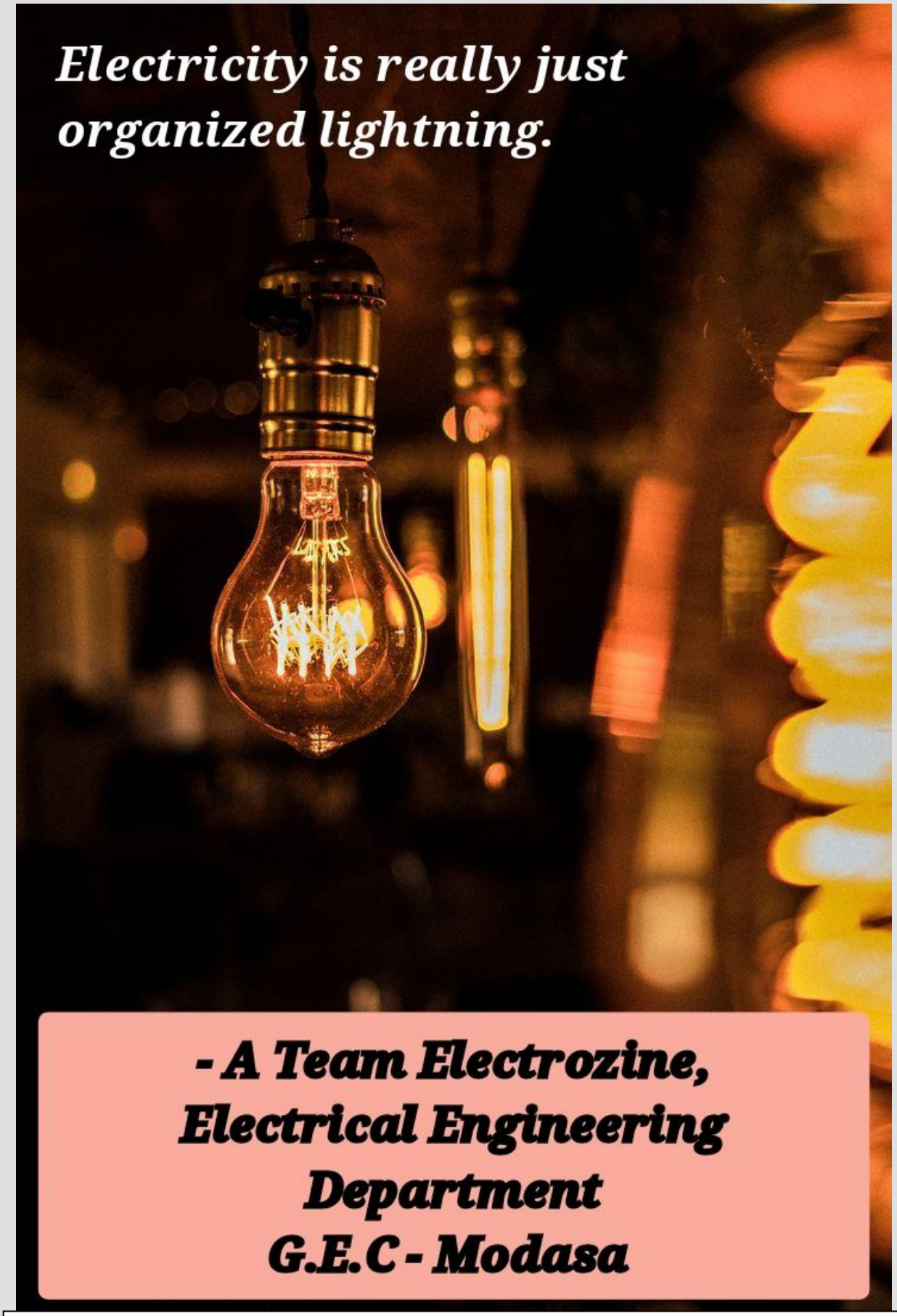
EN.NO:- 170160109106(8th semester)
Full name:- Soni Miteshkumar Bharatkumar.



Name:- Parmar Jaydeep Dhirubhai
Sem :- 6th sem B
Enrollment no :- 190163109018



NAME :- BAMBHANIYA JAYESHBHAI GOVINDBHAI
ENROLLMENT NO :- 190163109001
SEMESTER :- 6



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