# ELECTRI.CT

"where ideas flow without resistance"

## 9th EDITION
## AUGUST-2023

# CONTENTS



# Vision

- To foster learning environment for electrical engineering education having high technical skills, ethical values and overall global competence.


# Mission

- Better employability, startups and entrepreneurship.
- A professional career with essential technical and managerial skills.
- Collaboration with industry through Research & Innovation.
- Other avenues for higher education.
- Adapting to change in technology and apply the same for the benefit of society at large.

# Principal's Desk

## Empowering Engineers, Illuminating Futures

Dear Readers,

It is a pleasure to address the L. D. College of Engineering community on Independence Day. Our institution marks 75 years of fostering creativity, innovation, and national progress this year. Our journey since 1948 shows our Institution's enthusiasm, tenacity, and quality. We impart an education that instills social responsibility and technological proficiency.

The Electrical Engineering Department, a cornerstone of L. D. College of Engineering, has led the way in promoting cutting-edge research, innovation, and hands-on learning. Our electrical engineering students and teachers have changed lives and industries. Independence Day celebrates the freedom of the thinking and exploration that drives our department.

The vision of, "Empowering Engineers, Illuminating Futures," matches our goal. Engineers can solve problems and shape the future. We must use our skills to build a sustainable, inclusive, and technologically advanced society.

I extend my heartfelt gratitude to the faculty, students, staff, alumni, and all those who have contributed to the growth and success of our institution. Your unwavering support has been the driving force behind our achievements, and I am confident that together, we will continue to make strides towards a brighter future.

As we raise our flags in honor of our nation's independence, let us also raise our aspirations, aiming higher and reaching farther. Happy 75th Independence Day.

Jay Hind !!!

**Major Dr. C.S. Sanghvi, Principal (i/c)**

# Former Principal's Desk

"Progress is impossible without change, and those who cannot change their minds cannot change anything."
- **George Bernard Shaw**

**Dr. R. K. Gajjar**

This is the spirit we have been fostering in our campus. In continuation with the celebrations for 75 years of our institute, we collectively celebrated the phenomenal innovation and research work being done by our faculty. This year, on our foundation day - 20th June, we felicitated our faculty members who have been contributing wholeheartedly towards research and innovation in the presence of our Hon. Commissioner of Technical Education Shri Bancha Nidhi Pani Sir. The faculty not only enrich our publications and patents tally, but also nurture the same spirit amongst the students. That is how an entire ecosystem has come up on the campus where every new idea is encouraged and mentored.

We celebrated the International Yoga Day on 21st June with great fervour and enthusiasm.

The INDIA TODAY Rankings for Engineering Colleges saw us achieve the 1st place as College with Best Value for money and 5th place in the West region overall.

The new batch of 2023 has arrived on campus bringing a whiff of fresh air along with them. There is always something so invigorating about welcoming students on campus on the orientation day. Brilliant young minds ready to take on the world, excited yet nervous, looking up to the institute to build their future!

Team LDCE, with its faculty, staff and students - are forever committed to realize the vision of LDCE. The departmental magazine - 'ELECTRI.CT - where ideas flow without resistance', gives the students an opportunity to exhibit their talent, teamwork, exchange knowledge and information and of course interact with the illustrious alumni of the department. This platform in its own way contributes to achieving our centennial plan.

I extend my warm wishes to the department and hope they keep marching forward tirelessly towards excellence.

**Former Principal of LDCE**

**Dr. R. K. Gajjar (Currently Hon. Vice Chancellor of GTU)**

# HOD's Talk

**Dear Readers,**

I am glad to present to you the 9th edition of ELECTRI.CT.

**Dr Ketan Badgujar**

Recently we have completed the yearlong Platinum Jubilee of Institute as well as the department, and we have newer aspirations and commitments.

Let me give you few good news first!!! The department has started a new PG course on Electric Vehicle Technology from this year. We already have started Honors and Minor course on EV in UG last year.

Another good news is that: This year we had the best placement until now. More than 117 students got placed and counting more from our department.

Our student Kirtan Vora secured admission in IIT Kharagpur to pursue higher studies. Further, recently we have received generous donation from 1994 batch through which we could install Interactive smart boards in three classrooms.

Ms. Shikha Gupta donated funds for Switchgear laboratory. Department appreciates the gesture by the alumni. The retired senior professors also came forward to help department in all possible manners.

These gestures have renewed our strength to do more hard work. We also had IEI student chapter workshop for the students. I thank all the faculty members, alumni and students for supporting the department whole heartedly.

I appreciate the student editorial team and the faculty mentors Prof. Nupur Sinha and Prof. Vihang Dholakia for their efforts.

Best wishes

**Dr. Ketan Badgujar**

# Faculty's Speak

## “My life is full of positives and negatives. I am an ELECTRICAL ENGINEER.”

Happy Independence Day!

We are glad to present the 9th edition of our department magazine “Electri.CT - where ideas flow without resistance”.

The last two issues gave you glimpses of the 75th anniversary celebrations of the college. This year on the Foundation Day - 20th June, faculty members who are doing very good work in the areas of research, innovation and mentoring start ups were felicitated in the presence of our Hon. Commissioner for Technical Education. Dr. K. A. Bhatt, Dr. J. K. Chavda, Prof. M. R. Vasavda and Prof. V. M. Dholakiya received a certificate of appreciation for their efforts.

At the onset of the new term, we welcomed the newly admitted first year students on behalf of the Electrical Department Family. This time our students of the 2nd semester conducted the orientation program as all the senior students were engaged with university exams. Last year, same time they were attending the orientation as freshers and this year they were conducting the event with great dignity and confidence.

We are also delighted to share that in such a short time the 1st semester students have started participating in the activities of the department. You may kindly notice that our student team comprises of some of the 1st semester students. Also, few 1st semester students have contributed articles to the magazine.

Kudos to you boys and girls! We wished our graduating batch of 2023 the very best for a happy and bright future while participating in KAIZEN - our annual open house where students, faculty and industry experts interact to strengthen the industry institute linkage.

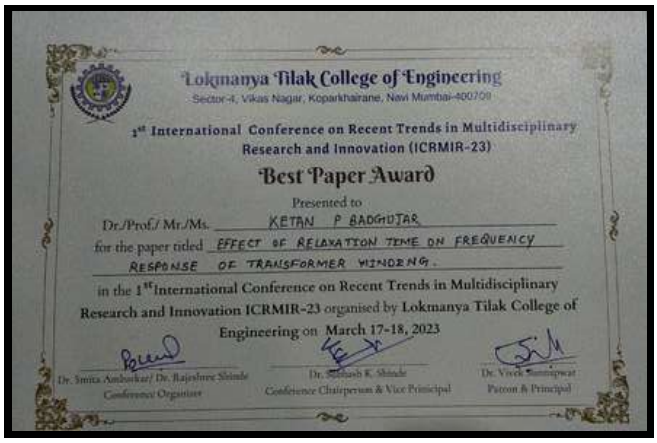
Our alumni have generously contributed in upgrading our infrastructure. As a result we have smart-boards in two classrooms and one in conference room. Alumni have also been helping with repairing and maintaining our lab equipment.

We always strive to make our newsletters more than just newsletters by being informative and using them as a platform to showcase the multifaceted talent of our students and faculty. Having said that, we are open to any ideas that will help us improve our newsletter. We would like to thank all the students and faculty who have contributed to the newsletter. We appreciate the student editorial team who have done a commendable job. We hope that you will enjoy reading this issue. Once again, Team Electri.CT values your contribution and looks forward to your continuous support in the coming issues.

Happy Reading!

# Faculty Achievement

## • Dr. K. P. Badgujar


Lokmanya Tilak College of Engineering
Sector-4, Vikas Nagar, Koparkhairane, Navi Mumbai-400709

1st International Conference on Recent Trends in Multidisciplinary Research and Innovation (ICRMIR-23)

Best Paper Award

Presented to

Dr./Prof./ Mr./Ms. KETAN P BADGUJAR

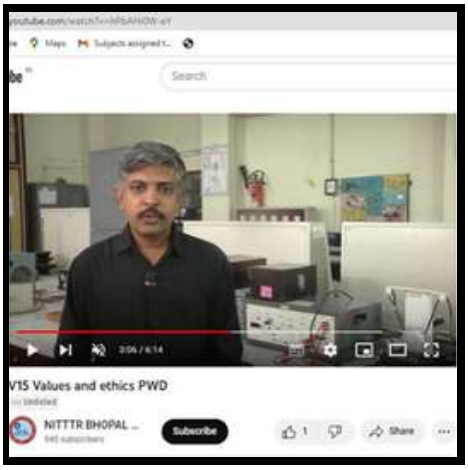
for the paper titled EFFECT OF RELAXATION TIME ON FREQUENCY RESPONSE OF TRANSFORMER WINDING.

in the 1st International Conference on Recent Trends in Multidisciplinary Research and Innovation ICRMIR-23 organised by Lokmanya Tilak College of Engineering on March 17-18, 2023

Dr. Smita Ambekar/ Dr. Rajashree Shinde, Conference Organizer | Dr. Sudesh K. Shinde, Conference Chairperson & Vice Principal | Dr. Vivek Sunnapwar, Patron & Principal

Dr. K.P. Badgujar received the "Best Paper Award" for his research paper titled "Effect of Relaxation Time on Frequency Response of Transformer Winding" presented at the 1st International Conference on Recent Trends in Multidisciplinary Research and Innovation (ICRMIR-23) organized by Lokmanya Tilak College of Engineering, Navi Mumbai during 17-18 March 2023.

## • Dr. K. A. Bhatt




The video of Dr K. A. Bhatt, Assistant Professor, EED has been included in video lecture no. -15 on teaching "Values" in MOOC titled "Professional Ethics"

## • Dr. D. P. Maheshwari

Dr D.P. Maheshwari and Dr B. J. Shah achieved Topper Position out of a total 1010 number of candidates on 05/04/2023 in a MOOC Course of IIT Madras titled "Electrical Vehicle-1" conducted through NPTEL.

## • Prof. M. R. Vasavda

The patent filed by Prof. Mihir Vasavada along with students Jay Shah, Dipang Patel, Ratnam Shah and Shreyas Patel and titled “An Off-Board Li-ion & LIFO4 Battery Charger with Variable Charging Rate and Variable Charging Voltage” has been Published by IP India on 12/05/2023.

# Faculty Achievement

## • Ummeed

Ummeed: On January 12, 2023, a kite donation campaign was held under the theme "Let's Fly Happiness," where kites, 'maanja,' and chikki were distributed to underprivileged children.

## • Keynotes on Climate change

Professor Vihang Dholakiya delivered an informative keynote address on climate change at KCG on March 28, 2023.

## • Robofest 3.0

On 11th July 2023, Professor Mihir Vasavda and two students: Jatin and Niraj participated in the ROBOFEST Gujarat 3.0 organised by Department of Science and Technology, Government of Gujarat.

## • Felicitation of Faculty

During Foundation Day Celebration on 20/06/2023 in the august presence of Shree Banchhanidi Pani (IAS), Commissioner of Technical Education Department, Gandhinagar, following faculty were felicitated: Dr. K.A. Bhatt and Dr. J.K. Chavda for the Research Publication; Prof. M.R. Vasavada for Patent Publication. Prof V.M. Dholakiya for Mentoring student-led startup received a Certificate of Achievement

# Faculty Achievement

- ## Launch of new courses

Minor Course on "Electric Vehicle" in UG was launched at Electrical Engineering Department. The Department of Electrical Engineering received approval from AICTE to commence Post-Graduate Course with Specialization in Electric Vehicles from the academic year 2023-24.

- ## Dr. K. A. Bhatt

A research grant of Rs. 1.966 Lakh has been sanctioned by the Directorate of Technical Education, Gandhinagar on 23/02/2023 under the scheme of Research Promotion under Technical Education-STEM for the research proposal titled “Improvement of Lifecycle of Transformer and Induction Motor using Point on Wave (POW) switching at low voltage level” submitted by Dr K.A. Bhatt, Asst. Prof. EED.

# Increasing power density & efficiency using GaN

## What is gallium nitride (GaN)?

Gallium nitride (GaN) is a semiconductor with a wide bandgap that allows for higher power density and efficiency than standard silicon metal-oxide-semiconductor field-effect transistors (MOSFETs) and insulated gate bipolar transistors (IGBTs). GaN processes electricity more effectively than silicon-only solutions, lowering power loss in power converters by 80% and using fewer cooling components. GaN allows you to construct smaller, lighter systems by putting more power into fewer places.

## 3 reasons GaN is changing power management

Gallium nitride is increasingly replacing silicon in applications that require higher power density and energy efficiency. Many data centres rely on an increasingly popular semiconductor technology that can improve energy efficiency and power density, which is critical to our always-on connectivity.

Gallium nitride, also known as GaN, is a wide-bandgap semiconductor material used in a growing number of high-voltage applications that require power supplies with higher power density, higher switching frequencies, better thermal management, and smaller sizes. These applications, in addition to data centres, include HVAC systems, telecom power supply, solar inverters, and power supplies that charge notebook computers.

Silicon has been the foundation of semiconductor power-management components for more than 60 years, converting alternating current (AC) to direct current (DC) and converting DC voltage inputs to meet the needs of everything from mobile phones to industrial robots. While components have been polished and optimised, silicon has now caught up with physics. Silicon cannot currently operate at the frequencies required to offer greater power without increasing in size.

As a result, during the last decade, many circuit designers have turned to GaN to pack more power into smaller places. Here are three reasons why many designers are attracted to this technology's potential for future innovations:

### Reason 1: GaN will be around for a long time.

GaN is a relatively new semiconductor material in comparison to silicon, although it has been under research for a number of years and its reliability is well known. Some companies' GaN chips have passed reliability testing after more than 40 million hours. And its efficacy in demanding applications such as data centres is undeniable.

As the amount of data required by consumers and businesses for applications such as artificial intelligence, cloud computing, and industrial automation

grows, the demand for data centres grows globally. GaN is a key technology that enables more efficient server power supplies, allowing data centres to come online while not excessively increasing energy consumption.

**Reason 2: System-level designs using GaN provide cost savings.**

In chip-to-chip comparisons, GaN is now more expensive than silicon, but the advantages of lower system costs, higher efficiency, and higher power density make up for this price difference. For instance, a power management system based on GaN can save energy expenses by as much as 58 crores of rupees over the course of ten years with an efficiency increase of as little as 0.8% in a 100-megawatt data centre. A small city would need around this energy annually.

GaN technology allows for some topologies and architectures that operate at a higher frequency and can reduce bill-of-material costs while also allowing the engineer to select more compact options for other design elements. GaN can also give engineers the freedom to optimise their power designs using a topology that is not possible with silicon chips.

**Reason 3: Integration improves performance and ease of use.**

A specialised gate driver is required for a GaN FET, which might add time and design work. However, some companies have made GaN designs simpler by including a gate driver and a number of security measures in the device. The driver is integrated to help with performance improvement, improved power density, and faster switching, which increases efficiency and shrinks the size of the entire system. Integration provides a significant performance gain and makes designing with GaN more simpler, allowing designers to get the most out of the technology.

**Performance benefits**

For instance, several manufacturers of modular residential air conditioning units have used GaN in their designs to increase power supply efficiency by up to 5%. Saving money can be had by increasing productivity by 5%. It's a good thing that GaN devices make it possible.

**Dr. K. B. Kela**
**Associate Professor**
**Electrical Department**

# Student Achievement

- ## 12th CONVOCATION :

Mr Pragnesh Prajapati received Gold Medal for securing first position in PDDC in Electrical Engineering 2022 by GTU during the 12th Convocation.

- ## GATE TOPPERS :

Qualifiers of the GATE 2023: Nilesh Chauhan (AIR-704, Score-589), Kirtan Vora (AIR-1775, Score-475), Jaydeep Purohit(AIR-3069, Score-396)

- ## XITIJ 2022 :

Tanay Trivedi secured the position of
(1) 2nd runner-up in mimicry at the inter-zonal level
(2) 2nd runner-up in Duha-Chhand at the zonal level
(3) 2nd runner-up in mimicry at the zonal level in Xitij 2022, a Youth Festival organized by GTU.

Tanay Trivedi (PG-EE-FY), Manan Trivedi, Krish Sadhu, Prashant Nanwal, Ehsas Mansuri, Parth Nagar and Raiyani Aaryan all of UG-EE-FY participated in Short Film Competition organized by AMA.

# Student Achievement

- Dhruv Chaudhary, Om Bhatt and Khyati Bodar attended a workshop on CAVS from 1st March to 3rd March at AMA.

- Kirtan secured admission to the M. Tech programme in Control Systems at IIT Kharagpur on 10/06/2023.

- Team Robocon of LDCE consisting of Manswini Joshi - Team captain (6th sem. Electrical), Jatin Khankhal – Team vice-captain (6th sem. Electrical), Ankit Vala (4th sem - Electrical), Sameer Bhatti (4th sem. Electrical) won Best Design Award and a cash prize of Rs. 10,000/-.

- Khyati Bodar secured first rank and is selected at the zonal level which was held at AIT(Ahmedabad Institute of Technology). Now she will play at interzonal level. which will be held at Neotech University Vadodara. Khyati Bodar has been selected consecutively for the last 2 years. Both years she came first at the zone level and second at the interzonal level. Then she played at the national level which was her first time at the AIU (All India University) women's tournament which was held at AURO University, Surat. Next was the AIU University Women's Tournament which was held at IES University Bhopal.
- This event is organized by AIT (Ahmedabad Institute of Technology) Chess Competition 2023 for GTU Ahmedabad Zone-1 Girls on 7 Aug 23. We are the first runner up.In this tournament participants from various institutes and universities showcased their tactical skills and mental skills in the complex game of chess and among them we were selected at the first rank. Now we will go to play interzonal which will be organized by Neotech University, Varodara. In which we will make our 100% try to all players of our team was selected in AIU.
- We represent LDCE in zone level tournament at Ahmedabad and now we are going to represent LDCE in interzonal tournament at Varodara.

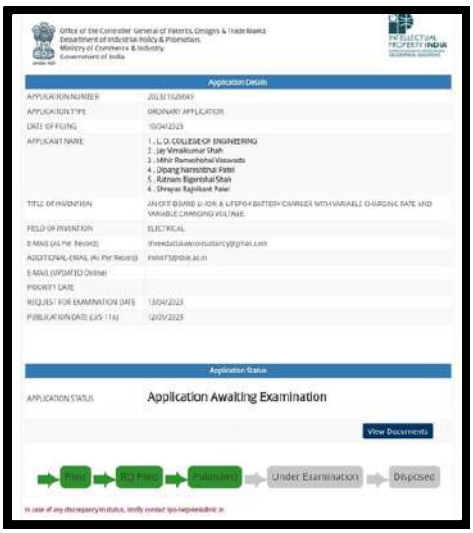
# Student Achievement

## CELER

Three graduating students from EED, LD College of Engineering: Ratnam Shah, Jay Shah, and Shreyas Patel—formed the "Celer" team and, with faculty guidance, built an electric bike with a self-made battery charger and motor controller.

This project was funded by SSIP LDCE, administered by the Government of Gujarat. The funding was used in designing and building a battery charger for electric vehicles as well as a BLDC motor controller.

This charger can charge a battery far more quickly than a standard charger, whilst also reducing energy waste. Also, Start-up Team "Celer" won the prestigious Innovate to Impact (i2i) 2023 award at the 12th GTU innovation Council Sankul awards 2023.It has also published apatent




Team Members:
Jay Shah (8th Sem EE),
Ratnam Shah (8th Sem EE),
Shreyas Patel (8th Sem EE),
Dipang Patel (Automobile 2020)

Team Mentor:- Prof Mihir R Vasavada

# Industrial Visit

## Visit at National Accredited Testing Lab, UGVCL, Sabarmati, Ahmedabad by faculty members of Electrical Engineering Department

Electrical Engineering Department planned to upgrade Measurement & Testing Lab as well as Power System Lab. A visit was planned to National Board Accredited Energy meter testing Laboratory of Uttar-Gujarat Vij Company Ltd., Sabarmati, Ahmedabad on 14/02/2023 at 11 AM. It is a High Tech Meter Testing Lab, .

All the faculty members were briefed about the need and importance of the high-tech energy-meter testing lab by Additional Chief Engineer Sh. R. D. Zala and Executive Engineer Sh. B. K. Patel.

In the lab, there are three energy meter testing set panels with the accuracy class of 0.05, 0.02, and 0.008 %, respectively. All the panels are made in Germany. Sh. A. N. Divan, Junior Engineer, UGVCL discussed the testing process and the amount of effort required to get accreditation for the said laboratory.

Later, question-answer session was conducted. Sh. A. N. Diwan answered all the questions raised by our faculty members. The faculty met Smt. S. A. Chhabaria, Additional Chief engineer, UGVCL. She is alumni of L.D.C.E.

# Industrial Visit

- ## Mundra Visit :

A total of 76 students of the 6th Semester & 4 faculty members of the Electrical Engineering Department visited Adani Industries on 22nd & 23rd February 2023: Industrial visit at Adani Port, Adani Power, Adani Wilmar, Adani west coast Port at Mundra under Project Udaan by Adani foundation.

- ## VEER Electronics Visit :


A total of, 65 students and 4 faculty members from the Electrical Engineering Department visited VEER Electronics.

# Industrial Visit

- ## Visit to Transformers & Rectifiers

An Industrial visit to Transformers & Rectifiers Ltd., Ahmedabad was arranged on 20/04/2023 and 21/04/2023.

- ## Celer

Prof. Sudeep Anand, Associate Professor, Department of Electrical Engineering, IIT Mumbai, on 20/4/2023, interacted with one of the students' groups: "Celer", pursuing SSIP based project. He also gave his valuable input and praised the efforts of students in their work and hardware setup. The faculty mentor of this group, Prof. Mihir Vasavada was also present during the discussions.

# Events

## • PANEL DISCUSSION

IEI Student Chapter, Department of Electrical Engineering, LDCE hosted a panel discussion under the auspices of the G20.It had three main topics of discussion:
1) Electric Vehicles: Opportunity and falls,
2) Social Media: Pros and Cons, and
3)Economic Development versus Mental Health.


IEI સ્ટુડન્ટ ચેપ્ટર દ્વારા વિવિધ મુદ્દા પર સામૂહિક ચર્ચા

એલ.ડી. કૉલેજ ઑફ એન્જિનિયરિંગના ઈલેક્ટ્રિક વિભાગમાં જી૨૦ અંતર્ગત, આઈઈઆઈ સ્ટુડન્ટ ચેપ્ટર દ્વારા વિવિધ મુદ્દા પર સામૂહિક ચર્ચાનું આયોજન કરવામા આવેલ હતું, જેમાં ઈલેક્ટ્રિક વિહિકલ્સ-તકો અને મુશ્કેલીઓ, સોશિયલ મિડિયા- ગુણ અને દોષ, આર્થિક ઉન્નતિ કે માનસિક સુખાકારી વિષય પર ઊંડાણપૂર્વક ચર્ચા કરાઈ.

## • ARDUINO WORKSHOP

IEI Students Chapter at Electrical Engineering Department organized a workshop-'Real Time Application of Arduino' on 5th May 2023 in which the Head of the Department, Prof. (Dr.) Ketan P. Badgujar and many other faculty members were present. The senior students led the session to ensure that their junior pupils gained adequate knowledge of the subject. Five different Arduino controller projects were displayed, and the students were allowed to come up with additional solutions on their own. The workshop was coordinated by Prof. (Dr.) Kunal A. Bhatt, Assistant Professor of Electrical Department. Bhatt and Abhay Gosai, Student Coordinator, IEI Student Chapter, EED, LDCE.

# Events

## • PLACEMENT AWARENESS SESSION

A Placement Awareness session was conducted on 08/05/2023 at the Electrical Engineering Department by the final year students of the department for pre-final year students, where the former shared their experience regarding placement drive and guided the latter to be placement-ready.

## • KAIZEN-2K23

The event KAIZEN – 2K23, was organized for two days: 09/05/2023 & 10/05/2023 by the Electrical Engineering Department with great enthusiasm from all faculty members and students under the leadership of the HOD, Dr Ketan P. Badgujar and Prof. J.R. Iyer. Six parallel sessions were conducted at different venues. Well-known experts from the industry came to guide and assess the student's work. A total of three students were ranked as best at the department level among a total of 161 students who had participated. Each jury member took a keen interest and discussed every internship and project in detail.

## • OPEN HOUSE PROJECT EXHIBITION

An Open House Project Exhibition cum Showcase was organized at Electrical Engineering Department on 24/05/2023 as a new experiment and initiative to encourage and improve the projects developed by students under the subject of Design Engineering, Semester-6.

# Events

- ## NSS: BLOOD DONATION CAMP

There is a popular saying that "A single pint can save three lives, a single gesture can create a million smiles." NSS is to serve the country so it works both the ways. Recently the volunteers of NSS LDCE participated at a blood donation camp at Rajbhavan.
Thus, social work an epitome of all virtues was once again found flying high in the students of L.D. College of Engineering.

- ## COMPONENT DONATION

Prof. B.J. Dave Sir, Ex Principal, LDCE and Prof. of EE Department LDCE, donated Analog and Digital IC, Printers, CPUs, Monitor and Electronics components to our Department.

- # ORIENTATION PROGRAM

The LDCE hosted an orientation day for the class of 2023–27 on July 12, 2023. The highly competent LDCE students Niket Vaishnav, Dharmik Khodifad, Archie Rathod, and Het Sikotara made sure that the registration counter ran smoothly. The anchors, Manan Trivedi and Shubhangi Shukla, read poems at the beginning of the orientation before giving a presentation about life at LDCE. Both of these anchors were excellent public speakers who engaged the audience and kept them watching the entire show.


**Orientation Programme Class of 2023-27**

The freshman then listened to remarks from EE department alumni. The student anchor informed the audience of the faculties' and alumini's magnificent accomplishments. Drashti Vaghani, Krish Sadhu, and Kalpesh Prajapati made up the skilled technical team that produced these movies, presentations, and animations.

Faculty, students, and staff cooperation was essential to the success of this orientation event. Seniors Shanti Makwana, Hardik Bhasotiya, Parth Parmar, Om Sathwara, Parthiv Rajguru, and Ehsaas Mansuri volunteered for the program. Rishab Virani and Manhas Sipai were the coordinators of the programme .

# TREE PLANTATION DRIVE

Professors Hemant Raval, Vijay Prajapati, Kalpesh Kela, Jatin Modi, Bhavin Shah, Kunal Bhatt and students from the NSS, EE department under the guidance of Hemant Raval sir got their hands muddy in a plantation drive organized by the department on August 1st, 2023. Every student must help plant and cultivate trees and plants to protect the sustainability and attractiveness of our beautiful green campus.

# EXPERT SESSION

- An Expert lecture was conducted by Mrs Hema on the topic "Recent Trends In Industrial Switchgear" on 24th March 2023 under the aegis of the IEI Student's Chapter, Department of Electrical Engineering, LDCE, Ahmedabad.


- An Expert Talk by Dr Meeta Matnani, Electrical Consultant on "Inverter Technology" was arranged by Dr C.D. Upadhyay on 02/05/2023.

- An Interaction and Inspiring session on How to Crack Personal Interview by Shree Rohan Garg, an alumnus of IIM Kolkata, was organized for pre-final year students of the department on 18/04/2023.

- EED organized online Expert Lectures on "Current and Future Research in Power Electronics & Opportunities for Joining the Research Group at IIT Bombay" by Dr Sudeep Aanand, Associate Professor of IIT Bombay on 20th April 2023.

# BOOK DONATION

- Shri B.B. Shah (Alumni of LDCE & Engineer, GWSSB) and Paresh Choksi (Engineer, GWSSB) donated books to our Department Library.

- Professor C.D. Upadhyay sir supplied technical field-related books to the department library on February 20, 2023.

- Dhruv Bhatt, an LDCE alumnus, donated numerous useful technical books to the library on June 9, 2023. This kind of alumni gesture is really appreciated.

- We all know the phenomenal impact of reading books And if they are handy then the miracle is said to have happened. So in LDCE we have our separate electrical departmental library. Once again our library got priceless contribution from final year student.

# Placement Details

| L.D. COLLEGE OF ENGINEERING-BATCH 2022<br>Placement Status of Batch 2021-22 Electrical Department(On Campus) | | |
|---|---|---|
| Sr No | Name Of Employer | Number Of students Recruited |
| 1 | ADANI GROUP | 26 |
| 2 | TCS | 10 |
| 3 | AARTI IND. | 7 |
| 4 | RELIANCE | 7 |
| 5 | MATTER | 6 |
| 6 | TORRENT POWER | 4 |
| 7 | ADANI WILLMAR | 3 |
| 8 | HITACHI | 3 |
| 9 | PI INDUSTRIES | 3 |
| 10 | TCL Cables | 3 |
| 11 | TORRENT | 3 |
| 12 | UPL | 3 |
| 13 | ACCENTURE | 2 |
| 14 | GNFC | 2 |
| 15 | IMEG | 2 |
| 16 | MEDITAB | 2 |
| 17 | SCALADGE | 2 |
| 18 | WORLEY | 2 |
| 19 | TCE | 2 |
| 20 | TORRENT - AMGEN | 2 |
| 21 | ACADEMOR | 1 |
| 22 | ARVIND | 1 |
| 23 | ATUL | 1 |
| 24 | DEEPAK GROUP | 1 |
| 25 | GIPCL | 1 |
| 26 | GFL | 1 |
| 27 | GODREJ | 1 |
| 28 | LTTS | 1 |
| 29 | MANTRA SOFTECH | 1 |
| 30 | MAXXIS RUBBER | 1 |
| 31 | MG MOTOR | 1 |
| 32 | PLANET SPARK | 1 |
| 33 | SYSTEM PROTECTION | 1 |
| 34 | SYSTRA | 1 |
| Total Companies Visited = 34 | | |
| Total Studentes Placed = 108 | | |

# Toppers

## Semester 1

Raval Madhav Kashyap
SPI: 9.24 (220280109117)

Tandel Dheerkumar Amarnath
SPI: 9.24 (220280109137)

Vaghani Darshitkumar Mukeshbhai
SPI: 8.88 (220280109144)

## Semester 3

Vaja Dharmik Vijaybhai
SPI: 9.78 (210280109031)

Pandit Dipnarayan Surendrabhai
SPI: 9.70 (220283109020)

Shah Urmi Ashishbhai
SPI: 9.61 (210280109097)

## Semester 5

KO. PA. Kiran Rameshbhai
SPI: 8.87 (200280109136)

Rayrikar Shashwat Rakesh
SPI: 8.74 (200280109079)

Mansiya Wasim Mahammadrizwan
SPI: 8.74 (210280109505)

Soni Vedant Ravindrabhai
SPI: 8.57 (200280109003)

## Semester 7

Bhatt Varun Yashvant
SPI: 9.13 (190280109012)

Desai Kushal Anand
SPI: 9.13 (190280109034)

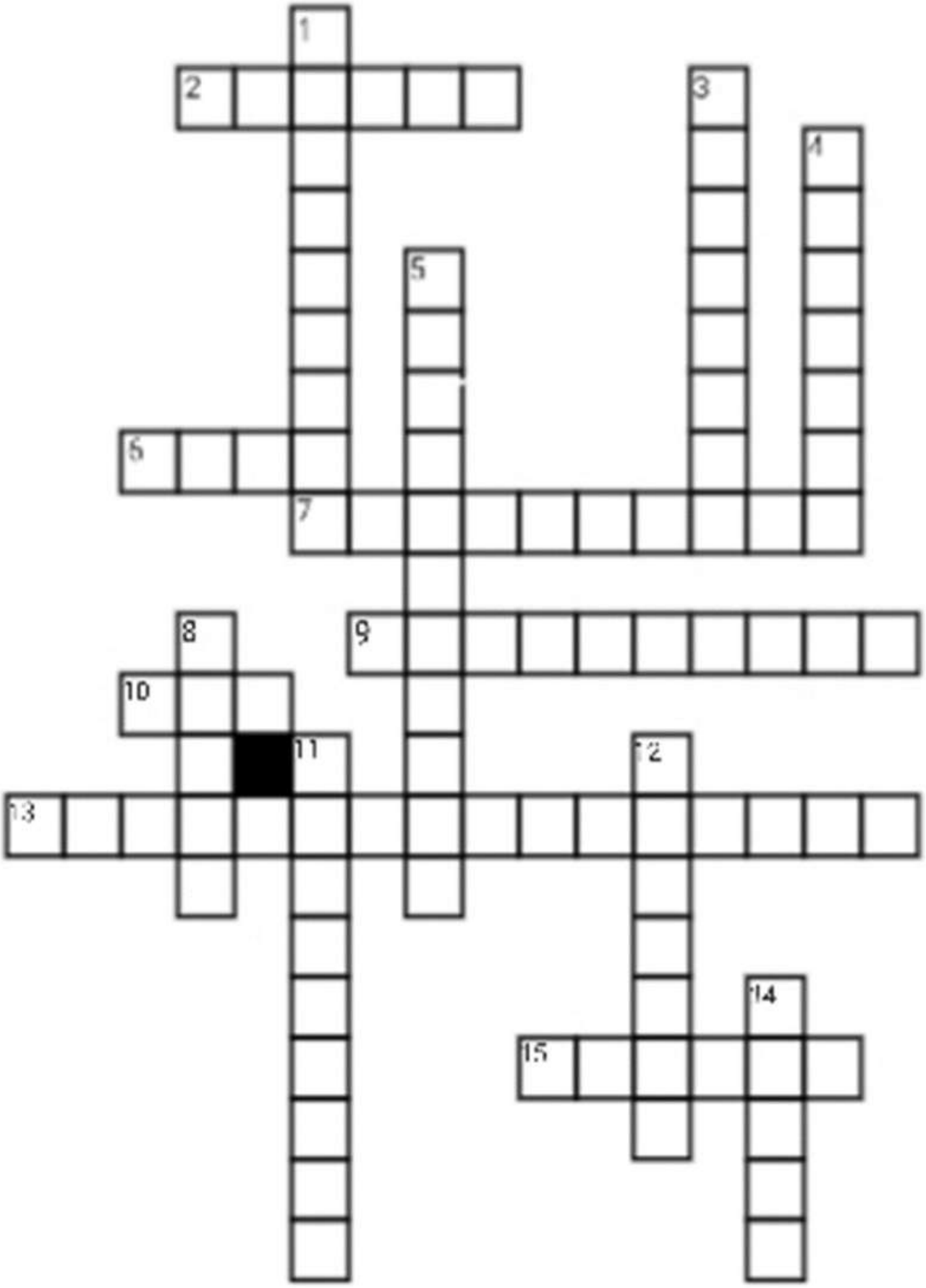
Aparnathi Mayurgar Vinodgar
SPI: 9.13 (190280109003)

Chavada Pratik Prafulbhai
SPI: 9.08 (190280109028)

Gajera Bhaumik Dineshbhai
SPI: 9.08 (190280109039)

Chaudhary Gautamikumari Dahyabhai
SPI: 9.04 (190280109018)

# Games



# Games

## Down:

1) Electrical element which stores energy
3)A method of charging in which two Bodies are charged by rubbing
4)Another term for potential difference
5) can convert AC at low voltage to high voltage and vice versa
8)SI unit of self inductance
11)Converts AC to DC
12)An elemental semiconductor
14)Converts mechanical energy into electrical energy

## Across:

2) the fundamental qauntity of electricity
6) electric field inside a uniformly charged thin spherical shell
7) opposes flow of current
9) materials which allow current to flow easily
10) semiconductor element which emits light when current flow through it
13) type of electricity which uses water for power generation
15) a positively charged particle

**Answers:-**

**ACROSS**
2) CHARGE
6) ZERO
7) RESISTANCE
9) CONDUCTORS
10) LED
13) HYDROELECTRICITY
15) PROTON

**DOWN**
1) CAPACITOR
3) FRICTION
4) VOLTAGE
5) TRANSFORMER
8) HENRY
11) RECTIFIER
12) SILICON
14) MOTOR

# Art Corner

**Kaliya Kesar**
**Semester:-1**

**Mistry Anjali**
**Semester:-1**

**Mistry Anjali**
**Semester:-1**

**Vaishnav Niket**
**220280109147**

**Krish Sadhu**
**220280109118**

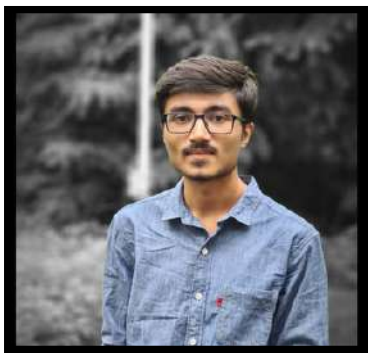
**Jaimeen Mavdiya**
**Semester:-1**

**Solanki Vardhman**
**Semester:-1**

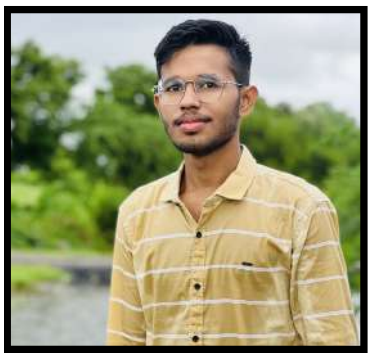
**Chaudhari Meet**
**Semester:-1**

**Chaudhari Meet**
**Semester:-1**

# Builders of ELECTRI.CT



Yash Raval
(Editor in Chief)
(210280109029)



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(210280109097)


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(210280109017)

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(Sem-1)

Niraj Valani
(Fact Checker)
(Sem-1)

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(Sem-1)


# ELECTRICAL DEPARTMENT

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