



"Highest Placement & Academic Excellence Leader in Central India Award - 2019" Awarded by Shri Kamal Nath ji, Hon'ble Cheif Minister of M.P.



राज्यपाल मध्यप्रदेश भोपाल -४६२०५२



# श्रीमती आनंदीबेन पटेल

"कभी हार मत मानो। यह दुनिया का सबसे आसान कॉप-आउट है।

एक लक्ष्य निर्धारित करें और इसे प्राप्त करने तक न छोड़ें।

जब आप इसे प्राप्त कर लें, तो एक और लक्ष्य निर्धारित करें,
और तब तक न छोड़ें जब तक आप इसे प्राप्त न कर लें। कभी न छोड़ें। "
मै टेक्नोक्रेट इंस्टीट्यूशन ऑफ टेक्नोलॉजी के समस्त लोगों को ढेर सारी
शुभकामनाएं देता हूँ। समाचार पत्र महाविद्यालय में हो रहे सभी गुणवत्तापूर्ण
शिक्षण और अनुसंधान की घटनाओं और उपलब्धियों का प्रमाण है,

यह एक सराहनीय प्रयास है जो गुणवत्ता को कॉलम में लाएगा और
घटनाओं को प्रदर्शित करेगा कॉलेज अपनी नवोदित प्रतिभाओं को
वास्तविक दुनिया का सामना करने में सक्षम बनाने के लिए उन्हें

एक नया रास्ता और रवैया देने पर जोर दे रहा है।

मैं तहे दिल से बधाई और प्रोत्साहन देता हूं

उनके उभर के आने के प्रयास को

शुभकामनाएं!

- श्रीमती आनंदीबेन पटेल





## **VICE CHANCELLOR'S MESSAGE**

I am happy to know that the technocrats Institute of technology it's Newsletter, that will showcase the events and happening of the magnificent students. The college has developed and developing creative forums and the coordinated efforts of the students and faculty will also bring the necessary connect

and bonding. I am sure that the newsletter will become a must-read chronicle on

happenings around us. I congratulate editorial team of faculty and students for their

initiative and wish them success. I look

forward to reading about the various activities, achievements and articles on contemporary

legal issues in the newsletter. Congratulations to the editorial team and I wish them luck.

**Prof. Sunil Kumar** 



### **CHAIRPERSON'S MESSAGE**

"AN INVESTMENT IN KNOWLEDGE PAYS THE BEST INTEREST."

The college magazine is a valuable collection of the creativity and contributions of the college, which provides insights into the college's life and evolution over time. It holds a special place in the hearts of students, who often cherish and keep it as a memento of their college years. It is delightful to see that the hard work and dedication of the editorial board in producing the "SHIKHAR -20" have been highly appreciated.

Our world is rapidly advancing in technology, and we must utilize the digital medium to its full potential for knowledge. Our educational institution aims to instil in student's human values, concern for others' welfare, commitment to truth and justice, and academic excellence.

We strive to produce responsible citizens and diligent professionals who are dedicated to serving humanity. Technocrats Institute of Technology (Excellence) is committed to achieving this vision through various activities that help students discover their hidden talents.

We take pride in our role in facilitating the education of the next generation, and we hope to continue extending our helping hand. We wish our students all the best in their pursuit of excellence and success.

Chairperson



### VICE CHAIRMAN'S MESSAGE

"THE BEST WAY TO PREDICT YOUR FUTURE IS TO CREATE IT."

Shikhar has consistently demonstrated its effectiveness by identifying aspiring authors with talent and assisting in developing their abilities, inspiring them to showcase their creativity, and igniting their desire to read and create more.

Simply said, it emphasises creativity, innovation, and vision rather than hard news. It enables the pupils to develop their reporting and writing abilities. Our current media-focused culture is helpful in comprehending these ideas. I must stress that networking and observation are essential both now and after

graduation, so make errors while you still have the opportunity to grow from

them.

I strongly encourage you, as I always do, to prioritize your safety and make informed decisions. Take the time to read enriching books and venture out to explore the world around you. Seek to understand the unique perspectives and experiences of others, and let us not forget the valuable lesson that kindness and open-mindedness can lead us farther than rash judgments based on biases.

ALL Wonderful WISHES! THE BEST TO YOU!

Vice Chairman



### **MANAGING DIRECTOR'S MESSAGE**

"ONE DAY OR DAY ONE ITS YOUR CHOICE!!"

"I AM THRILLED TO HEAR THAT OUR BELOVED INSTITUTION, TECHNOCRATS INSTITUTE OF TECHNOLOGY(EXCELLENCE), IS ORGANIZING A NEW EDITION OF SHIKHAR-20."

TECHNOCRATS INSTITUTE OF TECHNOLOGY (EXCELLENCE) is run by experts committed to provide excellent educational opportunities. Studying at TECHNOCRATS INSTITUTE OF TECHNOLOGY (EXCELLENCE) has a significant impact in the carrier of those students who wished to increase their knowledge, prospects and an all-round development of their personality. Today I am pleased to see young students thronging in for admission with hopes of building their career.

Our Institution aims to provide comprehensive, professional and ultra-modern technical guidance in Test Preparation, English Language, Computer Trainings. We are confident that your time with us will be enjoyable and equally rewarding with the new skills and confidence gained here.

I look forward to welcoming you at TECHNOCRATS INSTITUTE OF TECHNOLOGY (EXCELLENCE).

**Managing Director** 





### **DIRECTOR'S MESSAGE**

"CHANGE IS THE END RESULT OF ALL TRUE LEARNING."

I am honoured and delighted to present our yearly publication, "SHIKHAR-20", which has been made possible through the collaboration of our dedicated students and staff. This is a momentous achievement that we have accomplished in a relatively short period of time. Despite facing several challenges, including the fluctuating enthusiasm of our students, we have successfully produced the magazine.

TECHNOCRATS INSTITUTE OF TECHNOLOGY (EXCELLENCE) response to "Growth in every sphere of activity" which is visible through the excellent academic performance of our students and corporate acceptance displayed by pan India reputed organization.

Dream and achieve Big at TECHNOCRATS INSTITUTE OF TECHNOLOGY (EXCELLENCE) by building our modern society. We want TECHNOCRATS INSTITUTE OF TECHNOLOGY (EXCELLENCE) to be the dream of every child who wants to make the world a better place.

Prof. Shashi Jain



### ADDITIONAL DIRECTOR'S MESSAGE

Dear Students and Faculty Members,

At Technocrats Institute of technology, Excellence, we are dedicated to achieving excellence in technical, management, and pharmacy education and research. We hold ourselves to the highest standards of quality, innovation, and visibility to assess the success and leadership of our programs.

Our ultimate goal is to become the top choice for students, faculty, and industries in every discipline of engineering, management, and pharmacy. We aspire to attain global leadership in human development and excellence in education.

Our approach to professional education is holistic, integrating innovative thinking, application of knowledge, professional ethics, and social responsibility.

Finally, I would like to express my gratitude to our faculty members for their tireless efforts and dedication, and to our students for their enthusiasm and commitment to their studies. Together, we can achieve great things and create a better future for ourselves and for the world.

**Prof. Ramakant Sahoo** 





## **CHIEF EDITOR'S MESSAGE**

Good leaders create a vision, articulate a vision and passionately owns a vision and turn it into a reality"

I being the chief editor, make a promise to the college that through my determination, perseverance and hard work, would undertake any task entrusted to me by the college authorities and fulfill it in the best possible way.

Coming to the college magazine, I expect full cooperation from my fellow students and peers. New ideas, new sections in the issue of TIT-E TODAY are always welcome by the Editorial Board. The editorial board is looking forward to make this magazine a vehicle for students to express their innermost thoughts.

I congratulate all the students whose research papers are published in this magazine and express my sincere thanks to their mentors and referees.

Hebert Spencer said-

"The great aim of education is not knowledge, but action." And this is what we preach.

Rashmi Kaushik Chief Editor





## STUDENT CHIEF EDITOR'S MESSAGE

It gives us immense joy and satisfaction to finally re-introduce our very own college magazine "SHIKHAR". Just like the gods and the asuras churned the ocean of milk to extract the nectar, we have tried to churn out creativity from this mess of science. Alot of effort has gone into the making of this issue.

We hope you enjoy reading the magazine. The best thing about this issue is that it represents the creative side of Technocrats Institute of Technolgy (Excellence) students to a fair degree-something that we think we all need to reconnect with. Amidst the busy schedule of a 4-month semester, with 3-exams, surprise quizzes and all those assignments and problem sheets that make you want to bang your head on the wall, we tend to lose track of all the other simpler things that we are capable of, things that we could have been proud of, that can bring one satisfaction. So this time we have made an attempt to bring out the talent concealed within our student community. This issue includes articles, poems, anecdotes, art-works, a host of other things and also a parody. We hope you enjoy reading this issue as much as we have enjoyed making it.

Shurti Agrawal Chief Editor Student Editorial Board

As student editors of our annual UNITED INDIA college magazine this year we came across an overwhelming response from the students who through their write - ups reflected on our theme this vear unified India.

# FEDERATION BELIFE"

Given the current scenario, it is no surprise that the theme of Shikhar this year is "Unified India - federation of beliefs". We are today in the midst of a strange global crisis where a virus has challenged our life itself as well as its structures. In its wake, the pandemic has disrupted normal life as we know it at all levels. Outward restrictions on movement etc. have led to isolation and lent an urgency to the need to look within both in terms of our physical spaces and our sense of ourselves. Concomitantly, we have a greater sense and appreciation of community and the huge impact it has on us.

Within months, we have had to reassess our priorities and even our values. Where on the one hand we have battled fear and alienation, on the other we have also risen against prejudice and divisiveness. Whether digitally or otherwise, we have reached out to, and received, help and support from others. We have found strength in our relationships with our near and dear ones, and adopted strangers, solely on the basis of humanity. Closer home, teachers and students first connected digitally, then bonded and became a group and a community. Apart from traditional pedagogic concerns, we - teachers and students learnt to speak out and voice our anxieties as well as provide comfort. More importantly, we learnt to listen, not just to the words and the message of what was being said, but also to that which was left unsaid.

Empathy, much-needed in these uncertain times, grew and expanded our hearts. This edition of "SHIKHAR" has offered to you in the same vein. Written in different moods

and exploring different spaces, these "tales" reflect the myriad insights of the heart

and mind that students have felt and lived. Our students have given expression to

experiences they negotiated without a blueprint.

**EDITIORIAL BOARD** 



## **Editorial Board**

#### Advisory Board:

- · Prof. Shashi Jain
- · Prof. Ramakant Sahoo
- · Prof. Ravindra Gautam

#### Chief Editor:

· Prof. Rashmi Kaushik

#### **Editors:**

Prof.Avadesh Shakaya

#### Designer:

· Mr. Almas Khan

## **Student Editorial Board:**

#### Chief Editor

·Shruti Agrawal

#### **Editors:**

- · Abhishesh kushwaha
- · Anirudh Singh Tiwari
- Easha Bhaghel
- · Parth Yadav
- Vivek Katariya
- Anupama Mishra
- · Bhumika Naika
- Deepesh Solanki
- Kishan Kumar
- · Naitik Parmar



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## **Department Of**

## **Computer Science & Engineering**

"THE ROOTS OF EDUCATION ARE BITTER, BUT THE FRUIT IS SWEET."

Welcome to the Department of Computer Engineering, where we strive to combine top-notch education with valuable service to the industry. Our ultimate vision is to become a leading and innovative department, while our main goal is to equip our students with both theoretical and practical experiences that will enable them to serve the diverse needs of society. We aim to nurture our students to become exceptional software professionals or innovative entrepreneurs in their own right, with the potential to leave their mark on both the national and international stage.

Our faculty members possess a broad range of expertise and are fully committed to helping our students succeed. We strongly believe in our ability to achieve our goals while upholding human values, as well as fostering self-reliance, confidence, and unwavering commitment. As such, we have no doubt that our students will showcase a high level of professional competence in their respective fields. We wish our students all the best in all their future endeavours.

CSE (HOD)
TIT (Excellence)



## **Department of Computer Science & Engineering**

#### Vision of the Department

To produce technically and ethically competent, socially responsible and innovative Computer Science & Engineering professionals through quality education, who can contribute in techno and socio-economic development of the nation as a whole and region in particular.

#### Mission of the Department

M1: To create an academic ambience for achieving academic excellence by imparting in depth domain knowledge to the students through effective teaching learning, conceptual and practical exposure with latest tools and technologies.

M2: To provide an environment & opportunity for students to utilize their potential and technical skills required for overall development through collaborative and professional activities.

M3: To inculcate innovative research skills, promote professional ethics & entrepreneurship skills amongst the students to cater the needs of the Society.

## CSE Glances



## DAZZLING STARS

Academic Year 2020- 2024

#### Final Year



Vidhi Lokhande Topper



Shurti Verma 2<sup>nd</sup> Rank



Aditya ku. Dubey 3<sup>rd</sup> Rank

### Third Year



Hirdesh Baghel



Ayushi Vamne



Ankit Raj 3<sup>rd</sup> Rank

#### **Second Year**



Vaibhav Thakre



Nehali Sujoriya



First Year





Anushka Geete 2<sup>nd</sup> Rank





#### **Change Amid Pandemic**

"Some people don't like change but you need to embrace change if the alternative is disaster"

.It was in the month of January waking up on cold with occasional blue skies and sunshine. Well, I'd say it's a month of new beginnings. As usual the time strikes 8 and we opened the news channel and got to know about a new virus caused catastrophe in China. It was not serious until we got a news of that unusual virus in India, the first case. Though it was in Kerala long away but we got scared to death



On March 24, our honourable Prime Minister called for a complete lockdown of the entire nation for 21 days in an effort to contain the COVID-19 pandemic I still get chilled by those phrases stated - "मेरे प्यारे भाइयो, बहनों और मित्रो आज रात्री 9 बजे से समस्त देश में लॉकडाउन जारी किया गया हैं "

The COVID-19 pandemic has had far reaching consequences on the physical and mental health of individuals as well as the health of the economies across the globe. Quarantine rule, social distancing, early rules about masks and vaccination these word doesn't had any influence in our daily life but as said - ' changes begins at the end of your comfort zone', and so we also did but some or the other way we lacked due to our fear of closures as COVID-19 cases rose like panic buying, problem faced by migrants but we know that slowly and steadily wins the race and so our unity certified that a change is hard at first, messy in the middle but gorgeous at the end.

The lockdown was a bitter experience but wasn't actually that much bitter after all. I also did many good things that made me content and others happy. It's always how you face the adversities thrown at you. It is rather a matter of attitude than anything else.

Vidhi Lokhande CSE, VIII SEM



#### INDIA'S UNIFYING FIGURE: THE IRON MAN

Sardar Vallabhbhai Patel, also known as the Iron Man of India, was a statesman and one of the founding fathers of the Republic of India. Patel played a key role in India's struggle for independence from British rule and is regarded as the architect of India's unification. He is an example of how one person's vision and hard work can bring a diverse nation together.

Patel was born on October 31, 1875, in Nadiad, a small village in the present-day state of Gujarat. He studied law in England and was called to the bar at the age of 22. After returning to India, he began to practice law in Ahmadabad and quickly gained a reputation as a skilled and successful lawyer.

. Patel soon became the secretary of the Gujarat chapter of the India National Congress (INC). He began to work on a grassroots campaign to make farmers aware of the atrocities of British government and appealed to them to refuse the payment of taxes in Kheda, Gujarat. During Gandhi's Non-Cooperation movement, Patel took to wearing only khadi clothes and condemned the British way of life. He also collected large sums of money for the Satyagraha movement. In 1922, 1924 and 1927, he was elected as the municipal president of Ahmedabad. In 1928, when the people of Bardoli town reeled under the dual burdens of a hefty tax and famine, Patel organised a massive movement and participated in negotiations with the British government, leading some British officials to tender their resignations. Therefore, the people of Bardoli conferred on him the title of Sardar (leader).

In 1930, during Gandhi's Dandi Salt March, Patel was arrested but the government's action only further intensified the protests. After being released from jail along with Gandhi, Patel was elevated to the post of the INC interim president. In 1932, after the failed Round Table Conference in London, Gandhi and Patel were again arrested and lodged at the Yeravda Central Jail in Pune. By that time, they had struck a strong camaraderie.

Anushka Geete CSE, II SEM



#### It's Time For Class!

In the blink of an eve Where did it go? Click the link to join In the chats now they flow. Oh, wake up! It's your name These classes got my energy drained Dark circles they gifted me And headaches persisted in me A wish arouses in my mind To refrain from it all To press leave after all End the call and Sleep with peace after all. But my unflinching quest to learn Didn't let me leave Holding the laptop Eyes wide open I didn't sleep Hit the press button. Calculated in speed The class was of maths after all In the blink of an eye, things change To evaluate the profit, Super, Normal Or a loss...

Huh! Laptop battery died I missed my attendance again!

> Shruti Agrawal CSE, II SEM



## **Department Of**

## **Civil Engineering**

## "EDUCATION'S PURPOSE IS TO REPLACE AN EMPTY MIND WITH OPEN ONE."

Civil Engineering has traditionally played a crucial role in improving society's infrastructure by effectively utilizing natural resources. The field encompasses various sub-disciplines, such as Construction Technologies, Foundation Systems Design and Development, Geotechnical Engineering, Transportation and Traffic Engineering, Municipal and Sanitary Services, Surveying, GIS and Remote Sensing, and Hydraulics and Water Resources Engineering.

The department is equipped with several laboratories, such as Structure, Concrete Testing, Soil Mechanics, Highway Engineering, Experimental Stress Analysis, Computational Mechanics, Education Technology, Environmental Engineering, and Hydraulics laboratories. Students engage in laboratory experiments, Computer-Aided Analysis, Design, and Drawing, as well as tutorial classes to build their confidence. The department regularly invites renowned people from the field and industry to deliver special lectures and discussions.

**CE (HOD)**TIT (Excellence)



## **Department of Civil Engineering**

#### Vision of the Department

To become a "centre of excellence" in the field of Electronics and Communication Engineering by transforming the students into competent professionals with high ethical values and fulfilling societal needs.

#### Mission of the Department

- M.1: To create an academic ambience for achieving academic excellence and producing competent graduates through effective teaching learning process.
- M.2: To provide exposure of modern tools and cutting edge technologies in the field of Electronics and Communication Engineering.
- M.3: To develop adequate and appropriate facilities and provide environment to stimulate multidisciplinary interaction.
- M.4: To enhance employability by inculcating problem solving abilities, team spirit, leadership qualities and professional ethics.

## CE Glances





## DAZZLING STARS

Academic Year 2020-2024

#### Final Year







Third Year



Aryan Gupta Topper

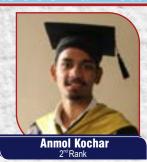


Sourabh Chouhan 2<sup>nd</sup> Rank



**Second Year** 







#### <u>First Year</u>









#### बदलता भारत

कहा जाता सोने की चिड़िया जिसकी संस्कृति उसकी जान थी। विकसित नहीं विकासशील ही सही पर ईमानदारी जिसकी मान थी। मानती हूँ शिक्षा और विज्ञान से यह धरती अनजान रही, पर कार्यं कुशलता और एकता सदा ही इसकी प्राण रही। बदलता भारत धर्म, जाति, ऊँच-नीच पर जब भी पड़ी एकता भारी है, इतिहास है रहा गवाह अंग्रेजी सरकार भी हमसे हारी है। पर पता नहीं गाँधी के सपनों के भारत को क्या हुआ, खुद के विषयों को छोड़ मीडिया पाकि स्तान से घिरा हुआ। कर्तव्यों को भूलकर लोग अधिकारों की बातें करते हैं, हिटलर के जाने के बाद नेता खुद को हिटलर पार्ट- 2 समझते हैं। शर्मसार ख़बरों को छिपाकर रिपोर्टर पाकिस्तान को ख़बरदार करते हैं, सरकार पर टिप्पणी करने पर लोग देशद्रोही समझते हैं। जिस खाई को पाटना था उसे मीडिया और चौड़ा करती है, पाकिस्तानको मुद्दा बनाकर भारत के नंगों को दरकिनार रखती है। दुख होता है देखकर, देश की जैसी हालत है, दो-चार सच्चे लोगों की जहाँ न कोई कीमत है। रिश्वत और बेईमानी जैसे संविधान में लिखित नियम हैं, यमराजकी कोई जरूरत नहीं, आदमी ही यहाँ प्रत्यक्ष यम है। उठिए अब भी इस क्षण सोचिए, देश है आपका और आप इस देश के। धर्म, जाति से ऊपर उठकर हम रहें बिना द्वेष के, इंसानियत धर्म हो हमारा, न रहे ईमान बेच के, ताकि बने भारत वैसा ही जैसा गए गाँधी छोड़ के

Anmol Kochar CE, IV SEM



#### HOPE

Hope is a flame that flickers bright, Even in the darkest night. It's a ray of sunshine after rain, A promise that we'll rise again. Hope is a whisper in the ear, A voice that banishes all fear. It's a beacon shining through the mist, A force that cannot be dismissed. Hope is a seed that's planted deep, A dream that we can always keep. It's a hand that reaches out to guide, A constant presence by our side. Hope is a song that's always sung, A melody that's never done. It's a feeling that can't be contained, A source of strength that's never drained. So, hold on tight to hope each day, And let it guide you on your way. For in the end, it's hope that will prevail, Ajay Kumar Verma CE. II SEM

#### EARTHQUAKE ENGINEERING

1. "Earthquake Engineering: Designing Buildings to Withstand Natural Disasters" by Victoria Woolaston, Engineering & Technology Magazine (2018).

This article provides an overview of earthquake engineering, including the methods used to design buildings that can withstand seismic activity.

2. "The Science of Earthquake Engineering" by Brian Handwerk, National Geographic (2019)

This article explores the science of earthquake engineering, including the latest research into how earthquakes occur and how they can be predicted. It also discusses some of the most advanced techniques used to design earthquakeresistant structures and highlights some of the challenges that engineers face when designing for seismic activity.

3. "What is Earthquake Engineering?" by Robert B. Olshansky, Earthquake Engineering Research Institute (2016)

This article provides a comprehensive overview of earthquake engineering, including the history of the field, the methods used to design earthquake-resistant structures, and the challenges facing engineers in this field. It also discusses some of the latest research into seismic activity and how it is changing the way that earthquake engineers approach their work.

4. "Designing Buildings to Withstand Earthquakes" by Michael D. Lemonick, Scientific American (2014)

This article explores some of the latest research into earthquake engineering, including the use of advanced materials and computer simulations to design structures that can withstand seismic activity. It also discusses some of the challenges facing engineers in this field, including the need to balance safety with cost and aesthetics.

Anmol Kochar CE, IV SEM



## **Department Of**

## **Electronics and Communication Engineering**

The Department of Electronics and Communication Engineering has a vision to become a leading centre of excellence in higher learning and research. The department aims to transform students into good human beings and competent professionals.

The department encourages technical co-curricular and extracurricular activities of the students, such as participation in paper presentations, workshops, seminars, quizzes, technical competitions, cultural activities, and awareness camps. This year, the department conducted workshops on Networking, VLSI Technology, Industrial Automation, and Android Development. The students also visited the ISRO research centre, Bhopal, as part of their industrial visit, and a blood donation camp was also organized.

The department instils qualities in students that make them not only good engineers but also good human beings. The department takes pride in its highly placed alumni all over the globe. Each year, a large number of students qualify for the GATE exam with high percentile. The department has a Quality Standardization Policy in force to ensure that students receive quality technical education in a harmonious and respectful environment to respond to rapidly changing social and economic environments.

ECE (HOD)
TIT (Excellence)



## DAZZLING STARS

Academic Year 2020- 2023

#### Final Year



Arti Parmar 2<sup>nd</sup> Rank



Third Year











**Second Year** 









First Year

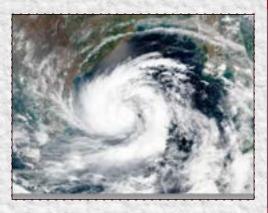






#### TROPICAL CYCLONE - "AMPHAN" THE HOLOCAUST

Sometimes it takes a natural disaster to reveal a social disaster which takes away a lot than what it matters for. These situations are like a wakeup call for humanity. We didn't even overcome the life taking infectious virus so called COVID-19 rather faced a new upcoming natural challenge "Cyclone Amphan"



On 20 May 2020, Cyclone Amphan cut a swathe through the northern part of the Indian state of Odisha, before bearing down on the state of West Bengal, with a wind speed of 185 kilometres per hour. It then moved north-northeast, further weakening into a Cyclonic Storm and lay centred over Bangladesh on 21 May 2020, about 270 kilometres north-northeast of the city of Kolkata in West Bengal.

The Super Cyclonic storm Amphan (pronounced as Um-Pun) was a deadly tropical cyclone which caused widespread damage in the coastal districts of Odisha and West Bengal in India and Bangladesh. West Bengal, the epicentre of the cyclone's landfall, saw the most widespread damage from Amphan. The storm was considered the strongest to hit the region in over a decade. At least 86 people died in West Bengal; most of the fatalities were due to electrocution or the collapse of homes.

5G networks promise to be a game-changer for wireless communication, delivering faster speeds, lower latency, and greater network capacity. With the potential to enable new applications such as smart cities and autonomous vehicles, the possibilities are endless.

Priyanka Shukla EC, IV SEM

### बचपन



वोदिनभी कितने अच्छे थे हमतो बच्चे ही अच्छे थे। नाकिसी के खोने का डर नाकिसी की फिकर।।

वो कागज की कश्ती बनाना वो मिट्टी में खेलना। ना रोने की वजह ना हंसने का बहाना।।

नानी के घर जाकार खातिरदारी करवाना रो-रोकर बड़ों से अपनी बात मनवाना। कहीं भी सोकर खुद को सुबह बिस्तर पर पाना इसीलिये तो बचपन ही था खुशियों का खज़ाना।।

हाथों में रेतकी तरह सब फिसल गया वह वक्त भी कितना सुहाना था जो निकल गया। मंजिलको ढूंढते कहीं खो गये हम ना जाने कब इतने बड़े हो गये हम।। वो दिन भी कितने अच्छे थे हम तो बच्चे ही अच्छे थे।

Ankit Yadav EC, IV SEM

## Apocalypse Of New Age



Stillness persists Restlessness in the mist Where birds never chirped I heard them chirp today, from far away These turbid skies turned pellucid today! Inhabited in our homes We are left to talk With dear ones Of our own. The world seems to be in -pause With only talk Of some apocalypse of new age, Deserting people away, From each other's space! Restricting dialogues To righteous monologues. With no monasteries near me With such silence abounding me,

I feel like I'm a sage.

Pradeep Shukla EC, IV SEM

## आत्मनिर्भर भारतः स्वावलंबन का अभियान

एक सोच जो कहानी बनेगी एक धुन जो रवानी बनेगी । आत्मनिर्भर जब होगा भारत तो सबकी जिंदगानी बनेगी ।।

आत्मनिर्भर भारत है एक सोच , जिसने जगाया सब में जोश । अब हमें अपना कर्तव्य निभाना हैं , इस देश को आत्मनिर्भर बनाना हैं ।।

उच्च गुणवत्ता का सामान देश में बनाना हैं। शुद्ध स्वदेशी वस्तु को ज्यादा से ज्यादा अपनाना हैं। अर्थव्यवस्था में सबको भागीदार बनाना हैं। हम सबको स्वावलंबभी भारत बनाना हैं।।

इस अभियान को देंगे भरपूर योग दान , भारत की आत्मनिर्भरता ही होगी पहचान ।

चलो चलें समाज में जागरूकता फैलाए हम, मिल- जुल कर स्वदेशी को ही अपनाए हम आओ मिलकर आत्मनिर्भर भारत बनाएं हम

> Khushboo Jhadav ECE, VIII SEM



## **Department Of**

## **Mechanical Engineering**

"Once it was constructional, then it was logical, it was sinusoidal but forever it was mechanical"

In light of the rapid changes happening in our country, economic development has become a top priority. It is crucial to prepare individuals who possess an unwavering dedication to social service and are equipped to manage the needs of society.

Mechanical engineering, the oldest branch of engineering, is often referred to as the "mother" branch due to its foundational nature. What makes it particularly appealing is its broad and diverse application base, offering a wide range of job opportunities.

Mechanical engineers are now required to have skills in financial and marketing aspects of product development, as well as people and resource management. Overall, mechanical engineering provides students with a stable and exciting career path.

ME (HOD)
TIT (Excellence)



## **Department of Mechanical Engineering**

#### Vision of the Department

To develop technically competent, intellectually adept and socially responsible mechanical engineering graduates possessing research aptitude and global competency who can contribute in technological and socioeconomic development of the nation.

#### Mission of the Department

- M.1: To create an academic ambience for achieving academic excellence by imparting in-depth domain knowledge to the students through effective teaching learning and practical exposure for latest tools and technologies.
- M.2: To provide an environment and opportunity for the students to carry out innovative solutions of technical issues through research and also to promote them for higher studies.
- M.3: To develop entrepreneurship skills amongst students so as to become ethical and socially responsible entrepreneurs capable to fulfil the needs of society considering global challenges.

## ME Glances



## DAZZLING STARS

Academic Year 2020- 2023

#### Final Year





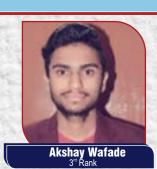








Anmol Vyas 2<sup>nd</sup> Rank



#### **Second Year**







#### First Year

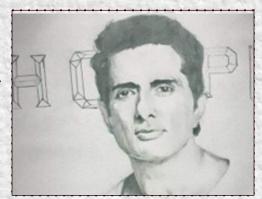






#### Sonu Sood (The pandemic hero): -

The year, 2020 needs no introduction neither dose Sonu Sood. When the year kept throwing challenges at us, he inspired us to face them with kindness and compassion. The second wave of coronavirus has caused havoc in the country with states going under lockdown. The pandemic has taken lakhs of lives and many are still struggling to grasp the breath as they battle the Covid-19.



Actor Sonu Sood, who is considered a "Messiah", has done a lot for the needy people during the time of crisis. The work that stood out was the 'Ghar Bhejo' campaign to send migrants home and bring stranded Indian students back home.

During the 2020 lockdowns, Sonu Sood had become a beacon of hope for immigrants stuck in Mumbai and other cities in India. Through his efforts lakhs of people stuck in transit, were able to get back home safely to their villages. Procuring medical certificates was another herculean task. Covidnegative reports were mandatory for interstate travellers, and Sood had to coordinate with doctors, too. People close to him said that the 47-year-old worked for 20-22 hours a day to get the first set of buses moving. Even in 2021, Sonu Sood and his team continued to help those in need in Mumbai, with the actor often meeting people under his residential building and helping out with both financial as well as medical aid.

Deepak Dhakad ME, II SEM



### **Unwelcomed Guest**

Unwelcome guest from far you came
Our lives have changed it feels so
strange
We knew somehow, we have to
pause
Realize that living is worthy cause.
Unwelcome guest from far you came
I want to scream, don't take us all
We have some hope to carry on
We'll hug again from dusk till dawn.
Unwelcome guest we'll fly again
We trust our wings, we have
offspring
We'll guench our thirst in mountain

We'll quench our thirst in mountain springs

No more goodbyes, we'll live again.

Sarthak Kumar ME, IV SEM



## **Department Of**

## **Electrical Engineering**

As the Head of the Electronic Department, I would like to welcome you all to this exciting field of study. Electronics is a constantly evolving field that plays a vital role in our lives, from the devices we use every day to the complex systems that power our world.

Our department is committed to providing you with the knowledge, skills, and tools you need to succeed in this field. Our faculty members are highly experienced and dedicated to helping you achieve your goals. We offer a wide range of courses that cover everything from the basics of electronics to advanced topics such as microprocessors, control systems, and communication systems.

We also provide state-of-the-art facilities and resources to enhance your learning experience. Our labs are equipped with the latest technologies, and our research facilities are constantly pushing the boundaries of what's possible in electronics.

I encourage you to take advantage of all that our department has to offer, including opportunities for research, internships, and professional development. With hard work and dedication, you can make a real impact in this field and contribute to the advancement of society.

I look forward to seeing your achievements and wish you all the best in your studies.

**EE (HOD)**TIT (Excellence)



## **Department of Electrical Engineering**

#### Vision of the Department

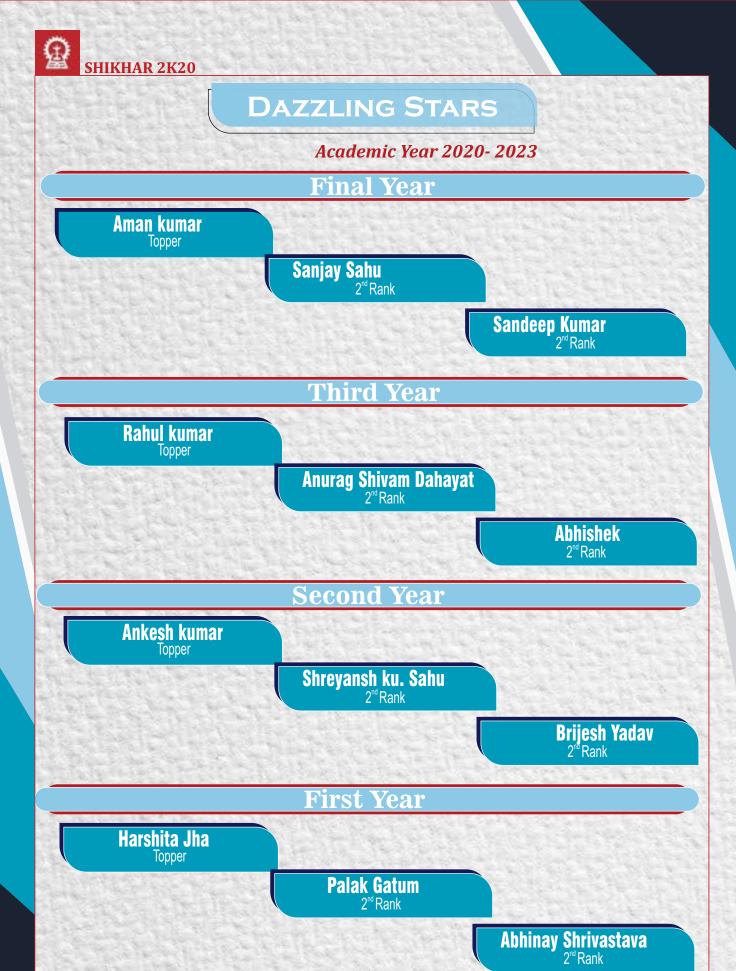
To impart quality education in various fields of engineering, technology & management and to develop the institute into a centre of academic excellence.

#### Mission of the Department

To mould the students into competent technocrats to become professionally skilled, intellectually adept, and socially responsible, to contribute to the society through quality teaching and providing the conducive learning environment.

## EE Glances







#### **Power Analysis Side Channel Attacks**

#### Introduction:

In modern-day cryptography, side-channel attacks are a real threat to security. Side-channel attacks are techniques that can extract secret keys from a cryptographic device without using traditional brute-force methods. In this article, we will discuss one of the most common types of side-channel attacks - power analysis side-channel attacks.

Power Analysis Side-Channel Attacks:

Power Analysis side-channel attacks are a type of side-channel attack that utilizes power consumption measurements to extract information from a cryptographic device. These attacks are based on the fact that cryptographic operations consume varying amounts of power, depending on the data being processed. Power analysis attacks can be categorized into two types: differential power analysis (DPA) and simple power analysis (SPA).

#### Conclusion:

Power Analysis Side-Channel Attacks are a real threat to modern-day cryptography. Attackers can use power consumption measurements to extract secret keys from cryptographic devices. These attacks can be prevented by implementing countermeasures, such as randomizing power consumption, implementing masking techniques, and implementing noise reduction techniques. Understanding the threat of power analysis attacks is essential to protect against them.

Jay Sahu EE, II SEM



#### **ELECTRONIC REVOLUTION**

The digital age has taken flight, A world of screens and electronic might. From devices that we never set down, To circuits that hum without a sound. The world has changed, that much is true, As electronic waves continue to renew. Each passing moment, each passing night, We surge ahead with electronic might. At our fingertips, we hold such power, Connected in countless ways, hour by hour. Information zips at the speed of light, And we can chat with anyone, day or night. The electronic revolution has come so far, But there's more to explore, more yet to unbar. As we progress into this digital age, We ponder the possibilities on the electronic stage. So, let's welcome this new era with open hearts, And let the electronic revolution play its part. For with each gadget and each shiny new toy, We're one step closer to a world filled with joy.

> Harshita Jha EE, II SEM



#### SUBSTATION AUTOMATION

Substation automation system, or shorten SAS, is not a new term, its been in use for the last 30 years. However, substation automation as a technology has rapidly evolved in the last 10 years and nowadays represents a highly advanced system capable of controlling every single process of a power substation.

In a few years, the next generation of substations will begin to massively appear in many countries worldwide. At that time, the station bus will connect the IEDs that are used for protection, control, and monitoring with the devices that are located at the station level, and the process bus will connect the bay units with the devices that are located in the switchyard.

In addition, because it will be based on IEC 61850 architecture, conventional wiring will be done away with, and binary and analogue signals will be delivered and received via the communications interface. In addition, the technologies of sensor and traditional instruments transformers are going to coexist in new installations, as well as in an increasing number of secondary retrofit or extension installations. This is going to be the case for both types of installations.

In conclusion, the utilization of would be expanded in order to facilitate communication inside substations as well as between those substations and the control centre.

**Brijesh Yadav** EE, IV SEM

#### THEIR LOVE LASTS TILL ETERNITY



The year 2020 has been cruel to the showbiz world, as some of the noted celebrities bid this world goodbye and left for their heavenly abode. The absence of these legendary stars has created a void that can never be filled. **Bollywood actor Sushant** Singh Rajput was found dead in his Mumbai residence on June 14. He was humble, down-toearth who always went out of his way to make people smile and feel loved. He had no air about being a celebrity and would treat everyone with equal love and compassion.



Legendary Bengali actor
Soumitra Chatterjee
breathed his last on
November 15 after a
prolonged battle with
Covid related
complications. He was 85.
Soumitra Chatterjee was
an Indian film actor, playdirector, playwright,
writer, thespian and poet.
He is regarded as one of
the greatest and most
influential actors in the
history of Indian cinema.

#### THEIR LOVE LASTS TILL ETERNITY



Irrfan's greatest qualities were that he was patient and persistent. He always wanted to be challenged. Khan was diagnosed with neuroendocrine cancer in March 2018, and died on 29 April 2020, at 53 years old, from a colon infection caused by the disease. He was exceptional in each and every role he played. He brought realism and liveliness to the character he portrayed so much so that you couldn't see Irrfan.



Veteran Congress leader and former President Pranab Mukherjee passed away on August 31 at the age of 84. He died due to post Covid complications. In his long career as a

minister, he handled everything from finance to commerce, defence, and external affairs, and was also deputy chairman of the Planning Commission.

He became the 13th President of India in 2012.



## **WORDS FOR SUCCESS**





Dr. Shashi Jain

**Prof. Rachna Kamble** 

Remember that you are capable of achieving greatness. Stay focused on your goals, work hard, and never give up. Success is not always easy, but it is always worth it. Believe in yourself and let your passion drive you to greatness.



Education encompasses more than just acquiring knowledge; it involves developing oneself into a responsible member of society who makes positive contributions. As educators, we have a crucial responsibility to not only impart information, but also to motivate and enable our students to become catalysts of change in the world.

Dr. Adarsh Sachdeva

**Prof. Priya Patel** 



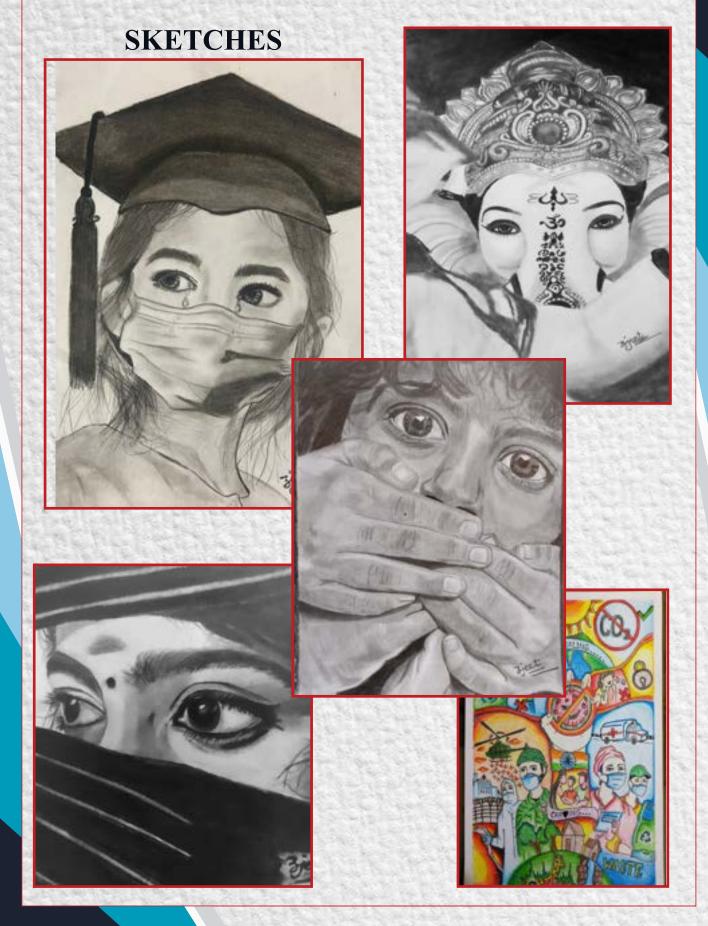
Believe in yourself and your abilities. You have the potential to achieve greatness and make a positive impact on the world. Embrace challenges as opportunities to learn and grow. With hard work, dedication, and a positive attitude, you can accomplish anything you set your mind to.

The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.

Prof. K.K. Patel



ØI am utterly elated to know that the college magazine is again going to get published very soon, this indeed will provide a wonderful platform to the students to express their innovative thoughts.







"Highest Placement & Academic Excellence Leader in Central India Award - 2019"

Awarded by **Shri Kamal Nath ji**, Hon'ble Cheif Minister of M.P. 4th April 2019

"Highest Placement & Best Engineering Institute In Central India 2019"

Awarded by Shri Kamal Nath ji, Hon'ble Cheif Minister of M.P.







"Highest Placement & Excellence in MP Award- 2019"

Awarded by **Shri Kamal Nath ji**, Hon'ble Cheif Minister of M.P.







# **TECHNOCRATS**

**INSTITUTE OF TECHNOLOGY (Excellence)** 

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