We VollTE Volume 1 Issue 1 THE REFLECTION OF ELECTRICAL ENGINEERING DEPARTMENT



Magazine of Electrical Engineering Department

TABLE OF CONTENTS

EXPLORING THE ELECTRICAL DEPARTMENT

A message from Editorial Board	03
Department at a glance	04
Vision and mission	05
Faculty of Electrical Engineering Department	06



THE ARTISTIC COLLECTION

Test Your Knowledge	14
Some Random facts that will blow up your mind	15
Why me Sanskriti se Samridh Desh:Bharat	15
	16

THE ARTISTIC COLLECTION

Some interesting facts about Electrical Engineering Mental Health Awareness	10 11
Who Am I	13
Some words for motivation	13



A MESSAGE FROM EDITORIAL BOARD

January is the perfect time for fresh starts. It is during this month that you get a clean slate for everything. This month presents an opportunity to leave all your mistakes behind. Now, you can say that those blunders took place 'last year.' And that means they happened ages ago. Take the clean slate and begin with life anew, be it personal or professional. We the Students of Electrical Engineering department of Rajkiya Engineering College, Ambedkar Nagar inspired from this month have taken a small step towards a new beginning with this magazine "We VolTE" which not only reflects our Electrical Engineering Department but also help the students showcase their talents.

A college is not just a building rather than that it is a place which behold a lot of stories, lessons learnt, some random experience (good or bad). It is also one of the only place which allows us to make mistakes and learn from it. It is the last stage where the teachers or faculty members help us in improving ourselves. The journey of life never ends but the college is the last stage after which we step into the real world. The college is the place where we are taught the good as well as the bad side of this world. The teachers like a pillar stand ahead of us and help us be a better version of ourselves after we leave the college. We are really greatful towards our college Rajkiya Engineering College, Ambedkar Nagar who gave us this wonderful opportunity to present this magazine to all of you.

The journey of this magazine was not an easy one but with help of Electrical engineering department faculty members (Especially Dr. Mohammed Aslam Husain sir) and also with cooperation of the students of our department we henceforth bring the product of our brain storming in front of you all. This magazine not only showcases the beauty of our department but also gives an opportunity to the students of Electrical Engineering to bring forward their talents to others .

A special thanks to the students who helped us complete this magazine by contributing to it. We are thankful to all other students too for their support in any way possible. The words spoken or written can not describe the help our teachers did in this journey. They gaves us direction as well pointed out our mistakes and even gave best possible solution for it. We are very grateful to everyone for their help and support as their is no chance this magazine would be complete without your help.

A small thanks to you all also for reading our magazine and we sincerely hope that you all enjoy our work and even thank you for joining us in this journey of "We VoLTE".



Faculty co-ordinator and Editor: Dr. Mohammed Aslam Husain

Main Students Editors: Swati Sinha, Harsh Nigam,

Amandeep Singh

Supporting team: Ravikant, Avneesh Jaiswal

Department at a glance

ELECTRICAL ENGINEERING DEPARTMENT



Conversi System Lab





















Electrical Workshop Lab



Instrumentation Lab



Electrical Measurement Lab



Electric Drives Lab



Microprocessor La



Network Lab



Dawar Flactronics Lab



Power System Lab



Renewable Energy Lab



Electronics Lab

VISION AND MISSION OF ELECTRICAL ENGINEERING DEPARTMENT

Vision of Electrical Engineering department

To impart knowledge in Electrical Engineering by upbringing globally competent engineers, innovators and entrepreneurs instilled with the human values and professional ethics.



Mission of Electrical Engineering

Department

- To offer good quality education & research in Electrical Engineering.
- To provide the knowledge base and consultancy services to the rural and weaker section of the society for their upliftment and well-being.
- To bridge the gap between industry and academia by framing curricula and syllabi based on industrial and societal needs.

THE LIST OF

Faculty of Electrical Engineering department



Name: Dr. S. P. Singh

Designation: Associate Professor (Regular) Qualifications: B.E., M.Tech. (MNNIT Allahabad), Ph. D. (MNNIT Allahabad) Area of Interest: Power Electronics & Drives, Power Quality, Power Electronics Converters

to

Renewable Energy , Control Techniques in Power Electronics Applications

E-mail: drspsingh@recabn.ac.in (Official)



Name: Dr. Mohammed Aslam Husain Designation: Assistant Professor (Regular) Qualifications: Ph.D.(AMU), M.Tech.(AMU),

B.Tech (AMU)

Area of Interest : Electrical Machines;

Renewable Power Generation; Electrical Drives;

PV-Maximum Power Point Trackers E-mail : mahusain@recabn.ac.in (Official)



Name: Mr. Vikas Patel

Designation: Assistant Professor (Regular)
Qualifications: M.Tech (MMMUT Gorakhpur), Ph.D.

(Pursuing)

Area of Interest: Power Electronics, Electrical

Machine, Renewable Energy.

E-mail: vikaspatel@recabn.ac.in (Official)



Name: Dr. Puneet Joshi

Designation: Assistant Professor (Regular) & HOD Qualifications: M.Tech. (G.B. Pant University), Ph.D.

(G.B. Pant University)

Area of Interest: Power Electronics, Power Systems, Application of Soft Computing and Optimization Technique in Electrical

Engineering, Control Theory

E-mail: drpuneetj@recabn.ac.in (Official)



Name: Dr. Sanjay Agrawal
Designation: Assistant Professor (Regular)
Qualifications: Ph.D (MNNIT Allahabad),
M.Tech(NIT Hamirpur), B.Tech (UCER Allahabad)
Area of Interest: Power System Protection,
Health Monitoring, Renewable Energy, Smart

E-mail: sanjay@recabn.ac.in (Official)



Name: Dr. Yudhishthir Pandey
Designation: Assistant Professor (Regular)
Qualifications: B.E., M.Tech (IIT Delhi), Ph.D.
(Jamia Millia Islamia New Delhi)
Area of Interest: Power System, Power
Elecronics
E-mail: yudhishthir@recabn.ac.in (Official)



Name : Mr. Lokesh Kumar Yadav Designation : Assistant Professor (Regular) Qualifications : M.Tech (NIT Patna), Ph.D. (Pursuing)

(IIT BHU)

Area of Interest: Power system stability, Mathematical modelling of power system network, FACTS Devices, Optimization Techniques, Control system analysis.

E-mail: lokeshky@recabn.ac.in (Official)



Name: Dr. Arif Iqbal

Designation : Assistant Professor (Regular)
Qualifications : Ph.D. (IIT Roorkee), M.Tech. (Power

System & Drives), from AMU Aligarh, B.

Tech. (Electrical Engineering), from AMU Aligarh Area of Interest: Multiphase machines, Variablespeed drives, Renewable power generation,

Power electronics

E-mail: arif.iqbal@recabn.ac.in (Official)

Name: Mr. Sonu Kumar

Designation : Assistant Professor (Regular) Qualifications : B.Tech, M.Tech (NIT Hamirpur)

Email: sonu@recabn.ac.in (Official)





Name: Mr. Piyush Patel

Designation: Assistant Professor (Contractual)

Qualifications: B.Tech (SRMCEM Lucknow), M.Tech (MMMUT

Gorakhpur)

Area of Interest: Power Electronics, Basic Signal & System,

Machine

E-mail: piyush2020ee@gmail.com

Name: Mona Rani

Designation: Assistant Professor (Contractual)

Qualifications: B.Tech (REC Ambedkar Nagar), M.Tech (NIT

Hamirpur)

Area of Interest: Power Electronics, Power System, Control

System

E-mail: yadavmona1024@gmail.com



PRESENTING

THE WORKS OF ARTISTS AND CREATORS OF ELECTRICAL ENGINEERING DEPARTMENT

WE VOLTE CREATIVE COLLECTION

A place where talent lies

Some gems of Electrical Engineering department showing their artistic talent in this magazine



 What is something that Electrical Engineers know but other's don't?
 "V won't kill you. I will."

Sangeeta Nishad 2nd year

Some interesting facts about Electrical Engineering

- 1. The knowledge you'll gain studying Electrical engineering is applicable to fields outside engineering e.g Finance
- 2. Electrical engineering is not just Power; it has more subfields.
- 3. It is the largest of all engineering disciplines.
- 4. Electrical engineering allows you to delve into virtually any sector Medicine, Robotics, satellite communications, etc.
- 5. Megger is the name of a company. (Many people term measuring of Insulation resistance as Megger)
- 6.Test before Touch. This is a mantra that every electrical engineer should remember. You need to check that there is no voltage before touching any live part. It may have been fed from a different source.
- 7. System earthing and body earthing are different.
- 8. In electrical cables, size of the core determines the amount of current it can carry and the thickness of Insulation determines the voltage level it can work at.
- 9. Nowadays, domestic fan regulators do not work on potential divider concept and there is no power loss if you operate the fan at lower/higher speeds.
- 10. 230V, that we measure is the rms value and the actual peak AC voltage is $\sqrt{2}$ * 230V.
- 11. Zero watt bulbs available in the market are not actually rated for zero watt. Their ratings vary from 5W to 20W.
- 12. Two most famous figures such as Raghuram Rajan (Governor of RBI) and Rowen Atkinson (popularly known as Mr. Bean)are electrical engineers.

MENTAL HEALTH AWARENESS

WRITTEN BY
SHAGUN SINGH

66 Mental health is not a destination, but a process. It's about how you drive, it not were you're going

- Noam Shpancer

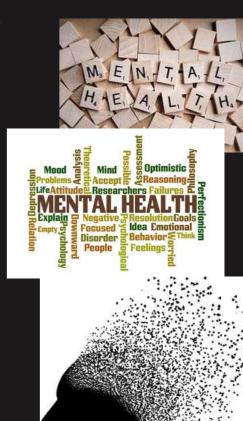
Mental health awareness is an important issue that we must all be aware of. Mental health is a state of well-being which include our emotional, psychological, and social wellbeing. Mental health awareness is an effort to reduce the stigma associated with mental illness, to provide resources and support to those suffering from mental illness, and to raise awareness of mental health issues. It is important to learn about the signs and symptoms of mental health conditions in order to identify those who may need help. Mental health awareness campaigns can help educate the public on the importance of taking care of their mental health and provide resources for those struggling with their mental health. By increasing awareness, we can create an environment where those suffering from mental illness feel less isolated and more supported.

Some of the mental health issues

Faced in today's world are:

Mental health issues can be any number of complex issues that can affect a person's emotional and psychological well-being. These issues can include depression, anxiety, post-traumatic stress disorder, bipolar disorder, schizophrenia, and substance abuse. Many individuals living with a mental illness may struggle to understand their condition, cope with the symptoms, and seek treatment. Mental health issues can lead to social isolation, decreased performance in the workplace or school setting, and even suicidal thoughts or behaviors. It is important to recognize the signs and symptoms of mental health issues and to seek help if needed. Providers of mental health services range from therapists and counselors to psychiatrists and psychologists who can help individuals manage their symptoms, develop coping skills, and lead healthier lives.

Mental health issues are becoming increasingly more prevalent in today's world, with a wide range of conditions affecting people from all walks of life. Stress, anxiety, depression, and bipolar disorder are all commonly diagnosed conditions that can have a significant impact on mental health. Additionally, many individuals suffer from conditions such as addiction, PTSD, OCD, and eating disorders. All of these conditions can have an immense effect on an individual's quality of life and overall wellbeing. By understanding the signs and symptoms of these conditions, individuals can work to prevent or lessen their mental health issues. Furthermore, seeking help from mental health professionals can aid in properly diagnosing and treating mental health issues. Ultimately, it is important to recognize that mental health issues are real and should be taken seriously in order to ensure a healthy and fulfilling life.



Mental health issues can manifest in a variety of ways, with common symptoms including a decrease in energy, frequent feelings of sadness, feelings of worthlessness, hopelessness, and guilt, difficulty concentrating, changes in appetite, difficulty sleeping or sleeping too much, difficulty controlling emotions and/or thoughts, loss of interest in activities previously enjoyed, and an increase in irritability. Other signs may include an increase or decrease in risk-taking behaviors, withdrawing from social situations or activities, difficulty managing relationships, avoiding or isolating oneself, and engaging in self-destructive activities. Mental health issues are unique for each individual, and the severity and types of symptoms can vary greatly. It is important to seek help if symptoms become severe or if they start to interfere with daily life.

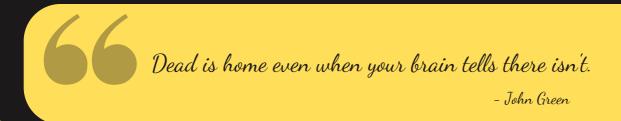
Medical aid for mental health issues:

Mental health issues are a growing concern in today's society and can be caused by a variety of factors, such as stress, trauma, depression, anxiety, and substance abuse. While there is no one-size-fits-all solution to these issues, there are a number of options that can be explored to help individuals cope with and manage their mental health. These solutions can include lifestyle changes such as exercising regularly, developing healthy eating habits, and engaging in mindfulness activities and relaxation techniques. Additionally, counseling or therapy can be beneficial in helping individuals gain insight and understanding into their mental health challenges, as well as providing support and practical strategies for improving one's mental health. Finally, medication can be prescribed as a short-term solution in some cases, but should only be done so with the guidance of a mental health professional. Mental health is an incredibly complex area and it is important to recognize that there is no single solution for everyone. However, with the right support system, lifestyle changes, and professional guidance, individuals can gain the tools they need to manage their mental health issues.

Mental health issues can be debilitating, and medical aid is essential for those suffering from them. Medical aid for mental health issues can include a wide range of treatments and services, such as inpatient and outpatient services, counseling and therapy, medications, and other forms of support. Access to medical care is critical for individuals suffering from mental health issues, as it can provide the necessary resources and attention they need to cope with their condition. In addition, access to medical aid for mental health issues can help reduce the stigma associated with mental illness and provide individuals with a sense of empowerment to take control of their mental wellbeing. Additionally, medical aid for mental health issues can create a safe space for individuals to discuss their concerns and receive support from a qualified professional who can help them find the best plan of action for their individual circumstances.

Conclusion

Mental health awareness is an important part of our overall wellbeing. It is important to be aware of the signs and symptoms of mental health issues, to be able to seek help when needed, and to know that it is never too late to ask for help. Mental health awareness can be achieved through education, promoting self-care, and providing support for those struggling with mental health issues. As a society, we need to reduce the stigma around mental health issues, create an environment that is comfortable for people to talk about their mental health, and provide resources for those in need. Mental health awareness is essential for anyone who has experienced a mental health issue or knows someone who has, or is simply looking to help create a safe and healthy world for everyone.



Spirituality is all about understanding the real truth. When we ask the question' who am I'?

First answer which comes to our mind is name, religion, occupation, gender, age etc. and yes this is not who you are. Who is this observer which is perceiving this beautiful world with 5 senses? Does this I exist without 5 senses? What is consciousness? Is I only a thought or an illusion or a deeply rooted belief? Is ego and I are same? What separates me and universe? Is observed and observer are same? Are thinker and thought same? what is nothingness? Is everything and nothing are same? Answers to all these questions do exist. Spirituality is all about finding those answers.

But the path of spirituality is not full of joy and ease on the contrary a person has to go through unimaginable and unbearable difficulties.

"आध्यात्म एक महान मृत्यु की तैयारी है।"

If we put that in simple words, spirituality is preparation for a great death and only those who want to rise above from these worldly predicaments should enter in it.

If one is not aware of spiritual dimensions of existence then one is not aware of oneself and in effect is disconnected from the reality. Real knowledge manifests when one is able to distinguish between spirit and matter. The beginning of knowledge is to know the difference between oneself and body.

The spirit is our conscious-self so we should consider ourselves different from our body. If we attach ourselves with the body then there is no question of spirituality.

Never mix spirituality with mysticism both are different things. Mystic experiences generally occur during meditation or sadhana, they are just experiences which come and go. Don't stick with those, stick with which is constant that doesn't change, understand that.

Some powerful quotes for life

Anonymous writer

- 1. "Some lessons have to be experienced before they can be understood."
- 2. "The correct lesson to learn from surprises is that the world is surprising."
- "Every job looks easy when you are not the one doing it."
- "In much of your talking thinking is half murdered."
- 5. "Habits are double-edged sword. They can work for you or against you."
- "The greatest truths in life are usually the most unpleasant to hear."
- 7. "Pain, in all of its forms, is our body's most effective means of spurring action."
- "Much of your pain is self-chosen."
- "There are many things in life that we think are true because we desperately want them to be true."
- 10. "Don't just sit there. Do something. The answers will follow."

Test Your Knowledge

- What can kill with only a thimble worth, yet is around you at all times?
- Why did the action potential cross the optic chiasm?
- The more you take, the more you leave behind what am I?
- A word I know, 6 letter it contains, remove one letter and 12 remains. What am I?
- What falls but never break? What breaks but never falls?
- Spelled forwards I'm what you do every day, spelled backward I'm something you hate. What am I?
- There are 50 bikes, each with a tank that holds enough gas to go 100 km. Using these 50 bikes, what is the maximum distance that you can go?
- If you had 5,623 participants in a tournament, how many games would need to be played to determine the winner?
- I can't go left, I can't go right. I am forever stuck in a building over three stories high. What am I?
- What never asks questions but is often answered?
- The red house is on the white street, and the blue house is on the red street. Where is the white house?
- I am a three digit number. My second digit is four times more than my third digit. My first digit is seven less than my second digit. What Am I?
- There are months with 30 days and others with 31 days. How many months have 28 days?
- You have a piece of paper that is 1mm thick. How many times would you need to fold the piece of paper in half for it to be high enough to reach the moon?



Some random facts that will blow up your mind

-Talea Ansar

- Our genome contains up to 145 genes mutated from bacteria, fungi, other single-celled organisms, and viruses.
- Holes in pen lids can save your life- The pen caps have holes to prevent suffocation if swallowed.
- There are several names for the cardboard sleeve that covers the coffee cup. Other names for the coffee sleeve include coffee clutch, coffee cosy, java jacket, and paper zarf.
- Bar code scanners read the white space between the black lines rather than the black lines themselves.
- Salt was once used as currency, where the English term "salary" comes from.
- Salt was so valuable to the ancient Romans that it was used as currency. Soldiers were paid in salt, which was also used for trading.
- Wearing headphones for an hour multiplies the bacteria in your ear by 700.
- Cough syrup is 5 times more effective than pineapple juice. It also protects against the common cold and flu.
- The Immortal Jellyfish known scientifically as Turritopsis dohrnii is now officially known as the only immortal creature.
- The Earth's speed as it orbits the sun is not a fixed rate. No matter how constant it may seem to us mortals, it's actually slowing over time. The length of a day will become 25 hours... in about 175 million years.
- Polar bears may be known as being so white they can hide in snow but the truth is they aren't white at all. Their skin is black and the hairs in their fur are hollow and clear. So why do they look white? Light hits their fur and is trapped inside the hollow part of the hair, causing a reaction called luminescence. In addition, salt particles stick to the bears' fur and act as light-scattering particles.

Why Me?

If you have to ask Why me?
When you're feeling really blue,
When the world has turned against you
And you don't know what to do,
When it pours colossal raindrops
And the road's a winding mess,
And you're feeling more confused
Than you ever could express,

When the saddened sun won't shine, When the stars will not align, When you'd rather be Inside your bed, The covers pulled Above your head, When life is something That you dread And you have to ask Why me? . . .

Then when the world seems right and true, When rain has left a gentle dew, When you feel happy being you, Please ask yourself *Why me?* then, too.

"Octopi" is not the plural of octopus

Hang around a know-it-all long enough and eventually, you will hear someone corrected when they try to talk about more than one octopus. Many people think the right plural form is "octopi" but based on the Greek roots, it technically should be "octopodes." No one says that, however, so grammarians have settled on "octopuses" as the correct pluralization of octopus.

A cloud can weigh around a million pounds

Your childhood dreams of floating on a weightless cloud may not withstand this science fact: The average cumulus cloud can weigh up to a million pounds, according to the USGS. That's about as heavy as the world's largest jet when it's completely full of cargo and passengers. Learn more about clouds and why they're so heavy by familiarizing yourself with these facts about rain.

English is a funny language

An oxymoron is usually defined as a phrase in which two words of contradictory meaning are brought together:-

- 1) Clearly misunderstood
- 3) Exact Estimate
- 5) Small Crowd
- 7) Pretty Ugly 9) Only Choice

- 2) Act naturally
- 4) Found Missing
- 6) Fully empty
- 8) Seriously Funny
- 10) Original Copies

And the Mother of all.....

11) Happily Married

संस्कृति से समृद्ध देश: भारत

- अभय कुमार तिवारी

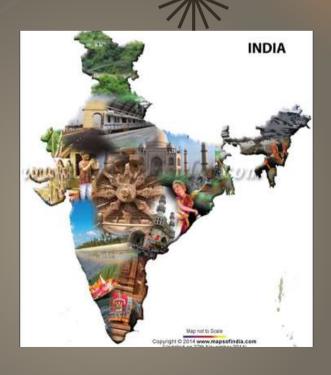
भारतीय संस्कृति विश्व की पुरातनम् संस्कृतियों में से एक है भारत में भिन्न-भिन्न धर्मों का अनुसरण करने वाले लोग रहते हैं जिनकी संस्कृतियां भिन्न भिन्न है |

"संस्कृति अर्थात हमारी वास्तविक पुंजी जो कुछ हम समाज, रीति–रिवाजों, अपने ग्रंथों, धार्मिक पुस्तकों एवं अपने पूर्वजों से सीखते हैं।"

भारत की राष्ट्रीय भाषा हिंदी है परंतु देश के विभिन्न राज्यों और केंद्रशासित प्रदेशों में लगभग 22 आधिकारिक भाषा और 400 दूसरी भाषाएं प्रतिदिन बोली जाती हैं।

भारत में विभिन्न धर्मों के लोग हिंदू, मुस्लिम, सिख, ईसाई आदि धर्मों के लोग रहते हैं जो अपने अपने पर्वों को अपनी अपनी संस्कृति के अनुसार मनाते हैं जैसे दीपावली, हिंदू धर्म के लोग त्रेतायुग में भगवान राम के 14 वर्ष के वनवास का पूर्ण करके लौटने की खुशी में मनाते हैं वहीं दूसरी ओर जैन धर्म के लोग, जैन धर्म के संस्थापक महावीर जैन के वार्ड दिवस के रूप में हर्षोल्लास से मनाते हैं।





उपर्युक्त "अनेकता में एकता" का उदाहरण है। भारत में भिन्न-भिन्न प्रकार के लोग हैं जिनकी वेशभूषा, खानपान, रहन-सहन आदि भिन्न है। यह उसी प्रकार है जिस प्रकार हाथ की पांचों उंगलियां है जो अलग-अलग हैं परंतु मिल जाए तो मुट्ठी बन जाती हैं जो कि अकेले किसी भी उंगली की तुलना में बहुत मजबूत होती है।

ठीक उसी प्रकार भारत की भिन्न-भिन्न संस्कृति मिलकर भारतीय संस्कृति बनती हैं जो विश्व की अन्य संस्कृति के लिए प्रेरणा का स्रोत है।

> हिंद देश के निवासी, सभी जन एक हैं। रंग रुप वेश भूषा, चाहे अनेक है।