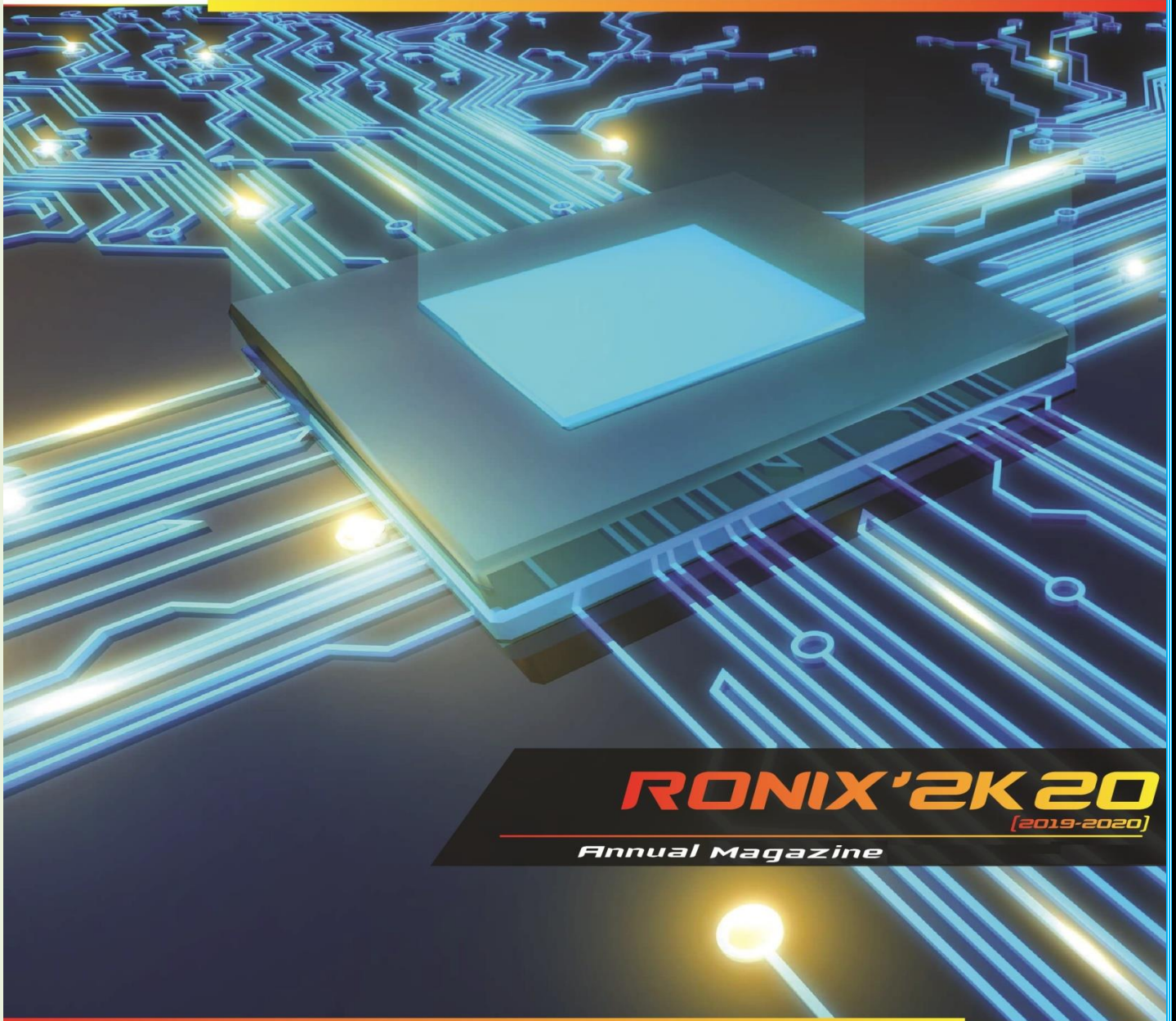




# ROHINI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE and Affiliated to Anna University, (An ISO Certified Institution)



**RONIX'2K20**  
[2019-2020]

Annual Magazine



## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

This magazine is designed by the Department of Electronics and Communication Engineering for developing and cultivating the students in literary and study habits.

# **RONIX 2K20**

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### **Address:**

**ROHINI College of Engineering & Technology**  
Near Anjugramam Junction, Kanyakumari Main Road,  
Palkulam, Kanyakumari - 629 401  
Tamilnadu, India.

**Phone: 04652 - 266665**  
**Email: admin@rcet.org.in**  
**Website: www.rcet.org.in**

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## MESSAGES

From the Desk of the Chairman, RCET



“Learning gives creativity, creativity leads to thinking, thinking provides knowledge, knowledge makes you great” - **Dr.A.P.J.Abdul Kalam.**

These words by - Dr.A.P.J.Abdul Kalam perfectly describe our aim at Rohini College of Engineering and Technology. Our aim is to teach students to LEARN, not just STUDY. Hence, we strive to travel beyond the boundaries of mere books.

I can proudly say that Rohini College of Engineering and Technology is the most modern and sophisticated multidisciplinary institution, imparting quality education and providing a wide and varied arena for the staff and students to showcase their academic and extracurricular talents.

RCET has made a tremendous progress in all areas crossing several milestones within a very short span of time. I feel happy to know that the students and faculty of ECE department of RCET bringing out the technical magazine RONIX 2k20.

The role of a department magazine is therefore vital in promoting what an institution offers. It brings out into the open things hitherto unrevealed. It brings to light the names of the unsung heroes and their mighty deeds.

I am proud to say that once our students step in RCET, they step out with self- confidence and knowledge to face all future endeavors with full conviction. Fly in the plane of Ambition, Land in the Airport of Success, the luck is yours the wish is mine. May your future always shine. Good Luck.

Cordially,

**Shri.K.NEELA MARTHANDAN**

**Chairman Rohini Groups.**



PRINCIPAL's MESSAGE

Dear All,

“All thinks are within you”

Good to see an another magazine RONIX 2k20 from the department of electronics and Communication Engineering.

I honor the peoples those who put hard work to complete the magazine for the successful publication.

I greet the Students for their great efforts and contribution in RONIX 2k20. Education does not happen just within the four walls of a classroom, but without too – in the corridors, the playgrounds and every corner of the campus.

I extend my wishes to the diligent Faculties, the backbone of this magazine who spent their time and expertise to make the students believe in themselves.

Best Wishes,

Dr. R. RAJESH, M.E., Ph.D.

Principal

Rohini College of Engineering & Technology Palkulam,

Kanyakumari. Dear All,



**HOD's MESSAGE**

Dear All,

Welcome to the Department of Electronics and Communication Engineering at ROHINI COLLEGE OF ENGINEERING AND TECHNOLOGY, KANYAKUMARI.

We started our journey in the year of 2009. The primary focus of our department is to impart technical knowledge to students, promote their problem solving and innovative skills in the growing technologies. We have a long history in educating young minds, conducting innovative research, and offering professional services to local and overseas communities.

Our Department provides healthy environment to students and faculties to carry out inter department collaborative research in area like VLSI Design, internet of things, robotics, etc. Faculty members have excellent academic credentials and are highly regarded. Students are also given opportunities to involve in IEEE Student chapter activities, which help students gain confidence and become skilled engineering professionals. Students are provided internship facility in organizations like BSNL, DRDO, and ECIL etc. The department conducts various workshops, expert talks and additional training programs on recent trends in Electronics and Communication Engineering in collaboration with industries for the benefit of faculty and students. The student projects are conducted in- house with the guidance of department faculty and industrial trainers.

Our college website provides an overview of the academic programs, research activities of our department, research facilities, profiles of faculty members, and details of student activities. Many of our graduates now occupy senior positions in the industry and community.

Each year, we also invite various departmental speakers, academicians and practitioners in a variety of forums, in addition to the numerous and unparalleled public events. With all these inputs one can find our students very hardworking, practical-oriented and highly skilled to work in any environment. We are encouraged to see many industries coming back to our department, which reinforces our belief in the effectiveness of our students and their suitability to the dynamic corporate world.

Best Wishes,

**Dr.S.MOHANALAKSHMI, M.E., Ph.D.**  
**HOD / Electronics and Communication Engineering /RCET**

FROM THE DESK OF EDITOR



The Creative minds of the Electronics and Communication department of Rohini College of Engineering and Technology have come together to present what they have always wanted to and we congratulate every student who has given their contribution.

They can't be appreciated enough and we can't explain how difficult it was to compile all their accomplishments into a single magazine. We take pride in showing you of how our very own Rohini students have imaginations which spread across the horizons.

We would like to thank the Management and all the staffs who have supported the '*RONIX 2K20*' initiative and for having trust in the Editorial board by giving us full freedom to choose the contents and design for our magazine. The magazine should serve as a pillar of motivation for every other student who is yet to emerge as an Achiever and to carry the legacy of *RONIX 2K20*. The students who follow in the next academic years, we advise you to do the same. Go Mad, B.E. productive but at the same time B.E. creative!

Best Wishes,

Mr. BENESH SELVA NESAN, AP/ECE

Associate Editor

## INSTITUTE VISION

To be an academic institute of continuous excellence towards education, research in rural regime, and provide service to nation in terms of nurturing potentially higher social, ethical and engineering companion graduands.

## INSTITUTE MISSION

- To foster and promote technically competent graduands by imparting the state of art engineering education in rural regime.
- To enunciate research assisted scientific learning by dissemination of knowledge towards science, agriculture, industry and national security.

### DEPARTMENT VISION

To promote Ethical and Innovative Electronics and communication Engineers through excellence in teaching, training and research so as to contribute to the advancement of the rural society and mankind.



### DEPARTMENT MISSION

- To impart high quality technical education and exposure to recent trends in the industry, to ensure that the students are moulded into competent Electronics and communication engineers.
- To inculcate research capabilities and exemplary professional conduct to lead and to use technology in agriculture, industry and national security for the progress of our country.

 A large, faint watermark of a circular seal is visible in the background. The seal contains the text 'OUR MISSION' in a bold, blue, sans-serif font. The seal itself is a circular emblem with intricate details, likely a university or institutional logo.
 

OUR  
MISSION





**Rohini College of Engineering and Technology**- a temple of learning, is an ISO certified institution was founded by the great Industrialist and Philanthropist, Shri. K.Neela Marthandan. The main objective of our college is to advance the knowledge base of the engineering professions and to influence the future directions of engineering education and practice.

**RCET** - Best Engineering College in Nagercoil, Kanyakumari District. We believe not only in educating the students, but also in grooming characters, with moral and ethical values to build the nation. Since the beginning, the college has been providing world-class facilities & infrastructure in education and learning. The emphasis is on transformational leadership rather than directional leadership. We aim to establish new trends, introduce innovative training methodologies, and thus guide students towards the road to success.

## ABOUT DEPARTMENT

The primary objective of the department is to impart quality education and to deepen the knowledge and skills of the students in the basic concepts and theories in various areas of Electronics and Communication Engineering.

### *SCOPE*

Electronics is now part of our everyday life, from the mobile phones to televisions, computers and even the high-end advanced satellites that are helping us to lead a smooth life. Ever since the evolution of technology, Electronics and Communication has become an essential discipline which is required by all the industries. Hence, Electronics and Communication engineering is one of the most sought after branches by students. Electronics and Communication Engineering has also penetrated into other areas like healthcare, instrumentation, automation, remote sensing, signal processing etc.

So students pursuing electronics and communication engineering have a lot of scope in varied industries. Taking the educational scope and career choices into consideration, here are the popular areas of study in the field of Electronics and Communication.

- Internet of Things
- Robotics
- Mechatronics
- Embedded System
- Digital Image Processing
- Artificial Intelligence and Machine Learning
- 5G Technology

### PEOS

#### **PEO 1-**

Lead a successful career by applying the scientific and engineering fundamentals to formulate and solve the real life problems.

#### **PEO 2**

Practice the ethics of their profession, consistent with a sense of social responsibility and aptitude for innovations as they work individually and in multi-disciplinary teams.

#### **PEO 3**

Be receptive to recent technologies so as to excel in industry and accomplish professional competence through lifelong learning such as advanced degrees and other professional activities.

## MOBILE PHONE EVOLUTION

*Magical portable technology become an essential part of our life. From the rise of SMS to anywhere, anytime Internet connectivity to mobile photography, cell phones have been the catalyst for cultural and technological changes over the past 41 years...*

### *Radio Common Carrier (RCC) :*

*It was introduced at '60s in a precellular system. Seems like an radio it could transmit voice communication through a push- to-talk system.*



### *Brick Phone :*

*It was introduced in early of '80s... Appearance will be like an hands of bankers on Wall Street!. Brick phone had an LED screen and boasted 30 minutes of talk time with eight hours of standby.*



### *Clam shell :*

*It was introduced in 1989. Front, with the Micro TAC. Micro TAC had a red LED display and a standard 12-button keypad, plus a menu of options including a calculator, hands-free operation, keypad tones.*



## Candy bar :

Nokia was the forefront of this type device. The shape of mobile size is named a mobile as candy bar...



## Elites :

It's found in 90's period of evolution for mobile industry...



## Satellite phone :

The first mobile phone which can make call from essential anywhere in the world...



## Nokia series :

Nokia series 6000 ... Nowadays everyone know that type of mobile ... Because of snake game series ...



## 2014 mobile features:

In June 2014, Amazon got in on the cell phone game with the Fire phone. It comes with pretty innovative features, including a better camera and free photo storage in the cloud, 3D features.

## In future mobilephones :

The Future Touchscreen phones are getting lighter, wider, and more powerful...



By,  
M.Aziha  
II Yr, ECE 'A'

## CONSUMER ELECTRONICS SHOW

➤ In United States, the event typically hosts presentations of new products and technologies in the consumer electronics industry.

➤ first CES was held in June 1967 in New York City .

➤ It had served as the main event for exhibiting consumer electronics. The event had 17,500 attenders and over 100 exhibitors .

➤ From 1978 -1994, CES was held twice each year once in January and another in June in Chicago.

➤ Jan CES is named as winter consumer electronics show .

➤ And June is known as summer consumer electronics show .

➤ The winter show was successfully held in Las Vegas in 1995 as planned. since the summer Chicago shows were beginning.

➤ Microsoft demonstrated preview version of windows media center edition at CES 2002 .

➤ In Jan 2004 Blu-ray group held the first US Press conference to promote the Blu-ray disc format.

➤ In 2006 exhibition " Hillcrest " lab won's the " Best Innovational" award in video accessories category for software and hardware that allows a television to controlled with natural gestures.

➤ In 2011 exhibition many tablets were introduced such as MOTOROLA XOOM, tablets wining best of shows in



*android honeycomb .*

- *Many 4G phones were also unveiled at show including LG, Samsung, HTC .*
- *3D TV'S Also introduced in this year 2011 Samsung announced the plasma 3D HD TV series named as D8000 and LG introduced LED 3D TV of Infinium Nano series .*
- *Finally the recent CES was held at 7th Jan 2020 – 10th Jan 2020 ... it was 53rd CES.*
- *Automotive becomes a major part of CES with focus on innovation in electric vehicles , telematics , autonomous .*
- *Hyundai and Uber announced a joint initiative at CES 2020 to develop 100 % electrically - powered flying taxi that will feature vertical take-off landing and four passengers capacity at 180 mph .*



By,

*M.Aziha*

*II Yr, ECE 'A'*

## **ROBOTICS**

Robotics is the branch of technology that deals with the design, construction, operation, and application of robots, as well as computer systems for their control, sensory feedback, and information processing. The word 'Robotics' was derived from the word Robot which was introduced to the public by a writer Karel Capek. These technologies deal with automated machines that can take the place of humans in dangerous environments or manufacturing processes, or resemble humans in appearance, behaviour and cognition. Robots appeared only in the second half of the 20<sup>th</sup> century. Today Robotics is a rapidly growing field. Robots serve various practical domestical, commercial and military jobs. Many Robots do jobs that are hazardous to people such as defusing bombs, mines and exploring ship wrecks. Robots can take on any form but some are made to resemble humans in appearance. Such robots attempt to replicate walking, lifting, speech, cognition, or any other human activity. Many of today's robots are inspired by nature, contributing to the field of bio-inspired robotics. Robotics is a branch of engineering that involves the conception, design, manufacture, and operation of robots.



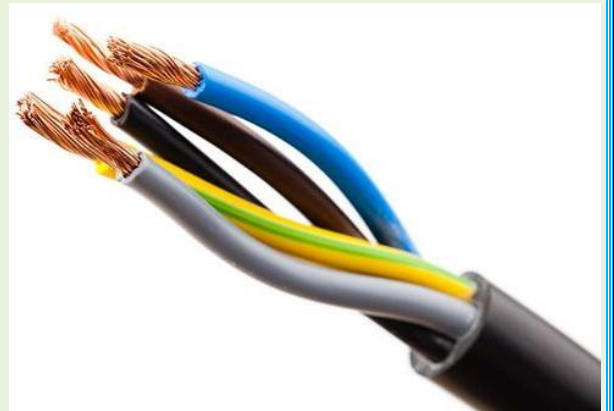
By,  
B.Adlin Mahiba  
II Yr, ECE 'A'

## THE HISTORY OF WIRES

In ancient times, the jeweler which were worn by the people were designed by the group of wire like designation. They also cut some metal sheet and roll them to the shape of small tube like structure and inserted pearl and beads into it and made it as a new model of jeweler. This strip drawing technique was in use in Egypt in the 2<sup>nd</sup> dynasty. From the middle of the 2<sup>nd</sup> millennium BC, the gold wires are twisted and worn. Later this ended with the creation of wires. Square and hexagonal wires were possibly made using a swaging technique. Swaging means forging of an item. It is usually a cold working process.



Twisted square section wires are a very common filigree decoration in early Etruscan jeweler. In about the middle of the 2<sup>nd</sup> millennium BC, a new category of decorative tubes were introduced. Wire was drawn in England from the medieval period. The wire was used to make wool cards and pins. The first wire mill in Great Britain was established at Tintern in about 1568 by the founder works. Despite the existence of mills, the drawing of wire down to fine sizes continued to be done manually and that same wire is used by all of us in our daily life.



-N.K.Priyankaa,

II ECE-B, RCET.

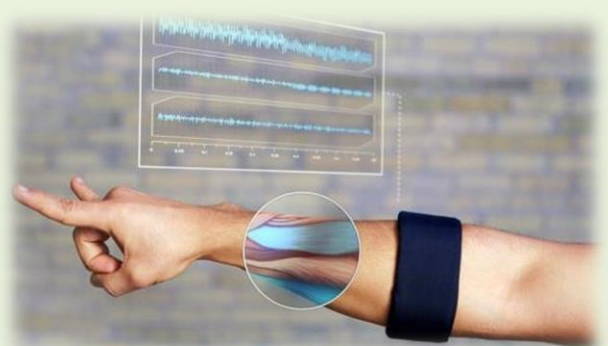


## MYO-GESTURE CONTROL

This armband is loaded with sensors that can pick up on the electrical activity in your muscles, allowing you to control your electronics wirelessly via Bluetooth. The Myo is sure to be the next generation of gesture control. The device will work with Windows and Mac OS, with iOS and Android support soon to follow. The device is available for a price of \$150. If this band is successful, it could mean the end of gesture-recognition. The Myo armband is a \$199 gesture control wearable from Thalmic Labs that's all about changing the way we interact with the world. You wear it on your forearm and a series of motion and muscle sensors are able to track movement in a really sophisticated way.

It's been available for people to tinker with for a few years now. But we are only now beginning to see how Myo can really make a difference away from controlling presentation slides and replacing your computer mouse.

Myo even has its own Market app store making it easier to bring the gesture controller closer to the things you use every day. Here, we've picked out the more eye grabbing examples of the innovative wearable being put to good use.



## FLEXIBLE, FAST-CHARGING BATTERIES

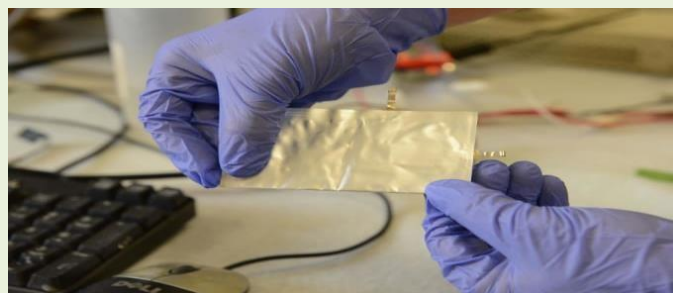
Next to hyper-fast ground transportation, flexible batteries may seem trivial. But when the batteries that power our gadgets are freed from current technological restrictions, anything might be possible.

Here's one example: Scientists published an article about their work on a flexible aluminium-ion battery that looks like a pouch-flask you'd try to sneak into Coachella. But it can charge a phone in one minute, lasts 70 times longer than a traditional smartphone battery, and fits in any kind of gadget you can think of thanks to its malleable shape. Oh, and Elon Musk is working on this problem, too—naturally.

Aluminium-ion batteries are a class of rechargeable battery in which aluminium ions provide energy by flowing from the negative electrode of the battery, the anode, to the positive electrode, the cathode. When recharging, aluminium ions return to the anode.

Aluminium-ion batteries are conceptually similar to lithium-ion batteries, but possess an aluminium anode instead of a lithium anode. While the theoretical voltage for aluminium-ion batteries is lower than lithium-ion batteries, 2.65 V and 4 V respectively, the theoretical energy density potential for aluminium-ion batteries is 1060 Wh/kg in comparison to lithium-ion's 406 Wh/kg limit. The large difference in energy density potential is due to the fact that aluminium ions have three valence electrons while lithium ions only have one. Aluminium is also more abundant than lithium, lowering material costs.

Aluminium-ion batteries have a relatively short shelf life. The combination of heat, rate of charge, and cycling can dramatically decrease energy capacity. When metal ion batteries are fully discharged, they can no longer be recharged. Ionic electrolyte materials are expensive. Like most batteries, they have a far lower energy density than gasoline.



## GENERAL SCIENCE

- What is the life span of RBC? 120
- The number of ribs in human body is 24
- What is the lifespan of WBC? 2-15 Days
- Which is the largest cell in human body? Nerve Cell
- What is the "Physical Phase of Life called? Protoplasm
- Which is called as the "Master gland"? Pituitary gland
- Hormones are produced by Endocrine gland
- Which is the largest blood vessel in body? Aorta
- Which carries pure blood? Pulmonary artery
- Water loss happen through expiration is 400ml
- What is the strongest muscle in human body? The Masseter

BY,

NIVETHA C. M

II ECE B

## STUDENT PARTICIPATIONS

Sl. No .	Name of Student	Name of Organizer	Date	Symposium/ Workshop/Conference	Level	Event
1.	Rajiv S	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Treasure Hunt / Quiz / Connetion
2.	Shanmuga Sundaram R	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Treasure Hunt / Quiz / Connetion
3.	Dinesh V	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	JAM / Connection / Quiz
4.	Haresh R	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	JAM / Photography / Quiz
5.	Akesh T A	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	JAM / Photography / Quiz
6.	Harish Kumar V	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	JAM / Photography / Quiz
7.	Rajesh	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Treasure Hunt / Quiz / Connetion
8.	Nandhini S C	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Quiz
9.	Muthu Revathi M	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Quiz
10.	Mofil Franga S	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Quiz
11.	Blessing M	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	JAM / Photography / Quiz
12.	Vinesh V	Loyola Institute of Technology	8/27/2019	SANDEZA 2K19/ Symposium	National	Treasure Hunt / Quiz / Connetion

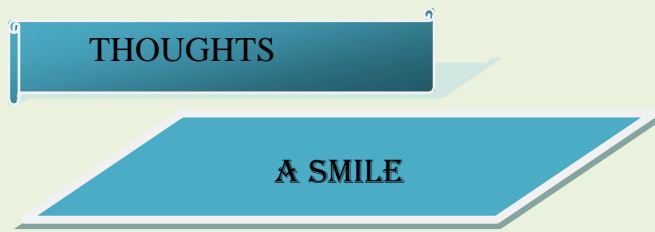
		& Science				
13.	Thangaraj J	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Treasure Hunt / Quiz / Connetion
14.	Nandhini S C	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation
15.	Harish Kumar V	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation
16.	Aziha M	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation
17.	Adlin mahiba B	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation
18.	Bernisha V	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation

## STUDENT ACHIEVEMENTS

Sl No	Name of Student	Name of Organizer	Date	Symposium/ Workshop/Conference	Level	Event	Prize
	Aziha M	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation	Second
	Adlin mahiba B	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation	Second
	Bernisha V	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation	Second
	Nandhini S C	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation	First
	Harish Kumar V	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Paper presentation	Second
	Vinesh V	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Quiz	First
	Thangaraj J	Loyola Institute of Technology & Science	8/27/2019	SANDEZA 2K19/ Symposium	National	Quiz	First
	Adlin mahiba B	TamilNadu Skill Development Corporation	23-01-2020 to 31.01.2020	District Skills Competition 2020	National	Electronics Skill Category	winner
	Aziha M	TamilNadu Skill Development Corporation	23-01-2020 to 31.01.2020	District Skills Competition 2020	National	Electronics Skill Category	winner

## FACTS ABOUT INDIA

- **Around 100 million years ago, India was an island.**
- India's name is derived from the —Indus river.
- Indus Valley Civilisation is the world's oldest civilisation.
- India has been the largest troop contributor to the United Nations Peacekeeping Missions since its inception.
- India has the world's third largest active army, after China and USA.
- The Tirupati Balaji temple and the Kashi Vishwanath, both receive more visitors than the Vatican City and Mecca combined.
- In a village called Shani Shingnapur in Maharashtra, people have been living in houses with no doors for generations. This is because they believe that whoever steals anything from this place will incur the wrath of Shani God and will have to pay for his/her sins very dearly. There is no police station in this village either.
- Magnetic Hill is a gravity hill located near Leh in Ladakh, India. The hill is alleged to have magnetic properties strong enough to pull cars uphill and force passing aircraft to increase their altitude in order to escape magnetic interference.
- Chess was invented in India.
- Buttons were invented in India. Yes, your shirt's buttons.
- Martial Arts were first created in India.
- The world's biggest family lives in India. One man, 39 wives and 94 children.
- India is the world's largest importer of arms.
- But India has never invaded or attacked a country.



- A smile costs nothing, but gives much- It takes but a moment, but the memory of it usually lasts forever.
- None are so rich that can get along without it- And none are so poor but that can be made rich by it.
- It enriches those who receive, without making poor those who give- It creates sunshine in the home, Fosters good will in business, And is the best antidote for trouble- And yet it cannot be begged, borrowed, or stolen, for it is of no value Unless it is given away.
  - Some people are too busy to give you a smile- Give them one of yours - For the good Lord knows that no one needs a smile so badly as he or she who has no more smiles left to give.

## WASTE MANAGEMENT

Dust plays a dominant role in cement industry. It mostly affects the worker health such as silicosis (lung cancer) and heart attack. Hence it leads to decrease the efficiency of the machine. Our aim is to sense the dust in the Grinding sector and settle it by spraying the chemicals (Ion carboxylic foam) in the atmosphere. During cement production 1.4% of total production has been wasted in the form of dust. It affects the worker health and efficiency of the machine. In Cement manufacturing during grinding process more dust are produced by the machines, it leads to tremendous health issues (Silicosis, Heart attack) and decreasing the efficiency of the product as well as machine. We came to know that 46,000 peoples were died by silicosis due to the inhale of tiny particles of silica. By the emission of dust, it leads to damage the expensive machines that results in decrease its efficiency and also worker's health are at risk. The intensity of dust is also measured by Dust Sensor. Based on sensed value, the chemical quantity is decided by the controller. Then chemical is sprayed in atmosphere using sprayer.



## நெகிழ்ச்சியான 3 உண்மை நிகழ்வுகள்

### நிகழ்வு 1:

ஒரு ரயில் பயணத்தின் போது 24 வயது மதிக்கத்தக்க ஒரு இளைஞன் ரயில் ஜன்னல் வழியே பார்த்து கத்தினான். "அப்பா இங்கே பாருங்கள்: மரங்கள் எல்லாம் நமக்கு பின்னால் ஓடுகின்றன என்று!" அவனருகில் இருந்த அவனது அப்பா சிரித்துக்கொண்டார். ஆனால் அவர்கள் அருகில் இருந்த இளம் தம்பதியினர் அவனைப் பார்த்து பரிதாப பட்டுக்கொண்டனர். மறுபடியும் அந்த வாலிபன் கத்தினான். "அப்பா மேலே பாருங்கள்: மேகங்கள் நம்மோடு வருகின்றன"; என்றான். இதைக்கேட்டு தாங்க முடியாத தம்பதியினர் இளைஞனின் தந்தையிடம்: "நீங்கள் ஏன் உங்கள் மகனை ஒரு நல்ல டாக்டரிடம் காட்டக் கூடாது என்றனர்". அதற்கு அந்த வயதான அப்பா சிரித்துக் கொண்டே சொன்னார். "நாங்கள் இப்போது டாக்டரிடம் இருந்துதான் வந்து கொண்டிருக்கிறோம் என்று". என் மகன் பிறவிக் குருடு. இன்றைக்கு தான் அவனுக்கு பார்வை கிடைத்தது என்றார்."

அன்பு நண்பர்களே!!!

உண்மையில் ஒவ்வொரு மனிதனுக்கும் ஒரு கதை உண்டு. மற்றவரை தீர்மானிக்க நினைத்தால் நாம் உண்மையை இழந்துவிடலாம். சில நேரங்களில் உண்மை நம்மை ஆச்சிரிய பட வைக்கலாம். உருவத்தை பார்த்து யாரும் யாரையும் எடைபோட வேண்டாம்.

### நிகழ்வு 2:

ஒரு அழகான சிறுமி தன் கைகளில் இரண்டு ஆப்பிள் வைத்திருந்தாள். அங்கு வந்த அவளின் தாய், நீ இரண்டு ஆப்பிள் வைத்திருக்கிறாயே ஒன்று எனக்கு கொடு என்றாள். தன் தாயை ஒரு வினாடி பார்த்த அந்த சிறுமி, பின் உடனே ஒரு ஆப்பிளை கடித்து விட்டாள். பின் உடனே இரண்டாவது ஆப்பிளையும் கடித்து விட்டாள். தாயின் முகத்தில் இருந்த சிரிப்பு உறைந்து போனது. தன் ஏமாற்றத்தை வெளிப்படுத்த முடியாமல் தவித்தாள். உடனே அந்த சிறுமி, தாயிடம் சொன்னாள். அம்மா இந்த ஆப்பிள் தான் இனிப்பாக இருக்கு நீ எடுத்துக்க என்றாள்.

அன்பு நண்பர்களே!!!

நீங்கள் யாராக வேண்டுமானாலும் இருக்கலாம், எவ்வளவு அனுபவமும் இருக்கலாம், அறிவு வீஸ்தீரமாகவும் இருக்கலாம்: ஆனால் ஒருவரை பற்றி கணிப்பதை சற்று தள்ளிப்போட்டு கணிக்கவும். அடுத்தவருக்கு போதுமான அளவு இடைவெளி கொடுத்து அவரை அறியவும். நீங்கள் அவரை பற்றிக்கொண்ட கண்ணோட்டம் தவறாகவும் இருக்கலாம். எதையும் மேலோட்டமாக பார்த்து கணிக்காமல், அவசரப்படாமல் ஆழ யோசித்து கணியுங்கள்; மனக்கணக்கு தவறலாம். ஆனால் மனிதரை பற்றிய கணக்கு தவறக்கூடாது.

### நிகழ்வு 3:

செட்டிநாட்டு வீதியொன்றில் கீரை விற்றுக்கொண்டு செல்கிறாள் அப்போது தன் வீட்டுவாசலில் மகனோடு அமர்ந்திருந்த ஒரு தாய், கீரை வாங்க அவளை கூப்பிடுகிறாள். "ஒரு கட்டு கீரை என்ன விலை?" என்று அந்த தாய் வினவ அதற்கு அந்த கீரை விற்கும் பெண் "ஐந்து ரூபாய்" என்று கூறினார். ஐந்து ரூபாயா??? மூன்று ரூபாய் தான் தருவேன். மூன்று ரூபாய் என்று சொல்லி நாலு கட்டு கொடுத்திட்டு போ" என்று கீரை விலை கேட்ட அந்தப் தாய் கூறினாள். அதற்கு கீரை விற்கும் பெண் "இல்லம்மா வராதும்மா" என்றாள். அதெல்லாம் முடியாது. மூன்று ரூபாய் தான் பேரம் பேசுகிறாள் அந்த தாய். பேரத்திற்கு ஒத்துக்கொள்ளாத அந்த பெண் கூடையை எடுத்துக்கொண்டு சிறிது தூரம் சென்றுவிட்டு திரும்பி வந்து அந்த தாயிடம் கூறினாள் அம்மா "மேல ஒரு ரூபாய் போட்டு கொடுங்கம்மா" என்கிறாள்" அதற்கும் "முடியவே முடியாது. கட்டுக்கு மூன்று ரூபாய்தான். தருவேன்" என்று பிடிவாதம் பிடித்தாள் அந்த தாய்.

பின்னர் கீரைக்காரி சிறிது யோசனைக்கு பிறகு "சரிம்மா உன் விருப்பம்" என்று கூறிவிட்டு நாலு கட்டு கீரையை கொடுத்துவிட்டு பன்னிரண்டு ரூபாயை வாங்கி கொண்டு கூடையை தூக்கி தலையில்வைக்க போகும் போது கீழே சரிந்தாள். உடனே அந்த தாய் "என்னடியம்மா காலை ஏதும் சாப்பிடவில்லையா? என்று கேட்க" இல்லம்மா போய்தான் கஞ்சி காய்ச்சணும் என்று கீரைக்காரி கூற; "சரி இரு இதோ வருகிறேன்." என்று கூறிவிட்டு வீட்டுக்குள் சென்ற அந்த தாய், திரும்பும் போது ஒரு தட்டில் ஆறு இட்லியும், சட்னியோடு வந்தாள். " இதை சாப்பிட்டு விட்டு போ" என்று கீரைக்காரியிடம் கொடுத்தாள். இவை எல்லாவற்றையும் பார்த்துக் கொண்டிருந்த அந்த தாயினுடைய மகன். "ஏம்மா ஐந்து ரூபாய்க்கு பேரம் பேசினிங்க. ஆனால் ஒரு இட்லி ஐந்து ரூபாய்னு வைத்துக்கொண்டால் கூட ஆறு இட்லிக்கு முப்பது ரூபாய் வருதும்மா? என்று மகன் கேட்கஅதற்கு அந்த தாய், "வியாபாரத்துல தர்மம் பார்க்க கூடாது. தர்மத்துல வியாபாரம் பார்க்க கூடாதுப்பா" என்று மகனிடம் கூறினாள்.

**இது தான் உண்மையில் மனித நேயம்!!!**

இவண்,

**S.V.நிவேதிதா**

## POEMS

## kioePiu Nrkg;Nghk;

Nkfk; gpse;J tUk; Jspia Nkfk; tuNtw;fpwJ!

ntapy; Fiwf;f tUk; Jspia fjputd; tuNtw;fpwJ!

fhw;iw xJf;fp tUk; Jspia fhw;Wk; tuNtw;fpwJ!

jd; kPJ tPo;e;J Mwha; XLk; mj;Jspia epyKk; tuNtw;fpwJ!

Mdhy; ekf;fhf tUk; Jspia ehk;

tuNtw;gJk; ,y;iy Nrkg;gJk; ,y;iy ...

N. K. PRIYANKAA

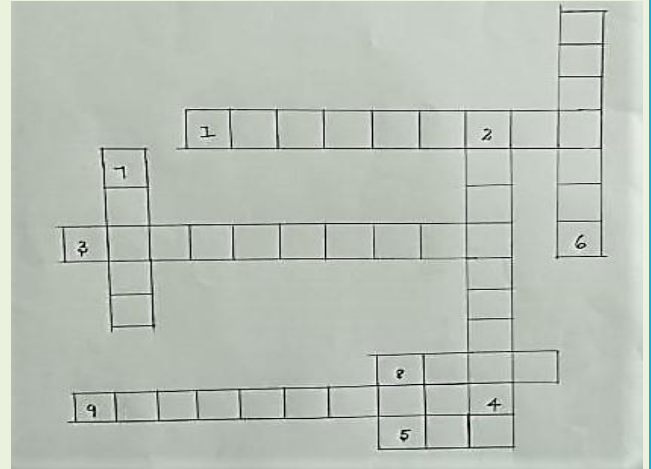
II ECE-B, RCET.

## QUOTES

***With Castles in Our Minds,  
With Our Words paired in Water,  
With Our Conversations waving in the Air,  
We call it a Fictional Fairy Tale !  
But, It's an Unnecessary Underwater Optical Wired  
Communication and 4G Wireless LTE Conversation, To be  
precise, A Total Waste of Spectrum and time !***

***By,  
M.Aziha  
II Yr , ECE 'A'***

## PUZZLE



### LEFT -RIGHT

1. Which electronics material opposes the movement of free electrons?

3. Which semiconductor device used to amplify and switch electronic signals and electric power?

5. Which is light sensitive resistor? 8. Which bus is bidirectional?

9. Which instrument is used for measuring electric potential difference between two points in an electric circuit?

### TOP -BOTTOM

2. Which resistive component that is designed to be temperature sensitive?

4. The logic gate that will have high as its output when any one of its input is high?

7. Which digit does the colour orange denote on a resistor colour band?

### BOTTOM -TOP

6. The practical use of binary weighted digital to analog convertor is limited to

### ANSWERS

1. Insulator
2. Thermistor
3. Transistor
4. OR
5. LDR
6. Four bit
7. Three
8. data
9. Voltmeter

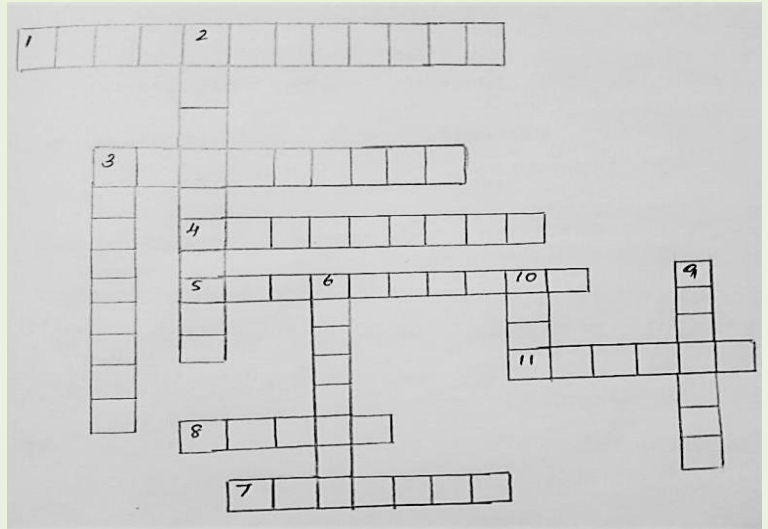
by,

Dhanusha.T

2<sup>nd</sup> year, ECE-A.

**Across:**

1. A connection that should not be there
3. Electricity can flow through
4. Does not conduct electricity
5. Temperature changes its resistance
7. Measured in amps
8. The unit of potential difference and emf
11. Turn a circuit on or off with this

**Down:**

2. This component is able to switch or amplify
3. This component stores electric charge
6. This component reduces the flow of electricity
9. A source of power

**Answers:**

1. Short circuit
2. Transistor
3. Conductor (Across) 3. Capacitor (Down)
4. Insulator
5. Thermistor
6. Resistor
7. Current
8. Volts
9. Battery
10. Ohms
11. Switch

by,  
G. Babitha  
ECE-A, II Year

## **ELECTRONIC QUIZ**

1. Rectifier circuit used to convert which of the following voltages
  - Ac to Dc
  - Dc to Ac
2. which of the following does not appear in transistor configuration
  - Field
  - Base
3. Semiconductor device where no impurities is added is termed as
  - Extrinsic semiconductor
  - Intrinsic semiconductor
4. For a N type semiconductor which of the following is doping material
  - Pentavalent material
  - Trivalent material
5. One that is based on on forward biased PN junction is
  - Photo diode
  - LED
6. The diode characteristics curve is a plot between
  - Current and time
  - Voltage and time
7. photo diode is used for the detection of
  - No light
  - Visible and invisible light
8. The simple diode can be used as
  - Rectifier
  - Modulator
9. least doped region of a transistor is
  - Collector
  - Base
10. Gate that is called as invertor is
  - OR
  - NOT

### **Answers**

1. Ac to Dc
2. Field
3. Intrinsic semiconductor
4. Pentavalent
5. LED
6. Voltage and current
7. Visible and invisible light
8. Rectifier
9. Base
10. NOT

## QUIZ ABOUT ELECTRONICS

1. **The gate having output 1 only when of its input is 1 is called**
  - OR
  - NOT
  - AND
2. *The input resistance of op-amp is*
  - Very low
  - Zero
  - Very high
3. *The device named as a transistor has*
  - Emitter and collector equally doped
  - Emitter heavily doped
  - Collector heavily doped
4. *The colour of the light emitted diode depends on*
  - Its forward bias
  - Its reverse bias
  - Semiconductor material
5. *Gate that is also known as inverter is called*
  - AND
  - NOT
6. *In half wave rectification, during negative cycle of the wave the diode is*
  - Forward biased
  - Reversed biased
  - Potential barrier
7. *In a PNP transistor the n-region as compared to the p- region is*
  - Same
  - Larger
  - smaller
8. *Function of photovoltaic cell is reverse of*
  - Photo diode
  - LED
  - Transistor
9. *In a transistor, the emitter current is*
  - Less than the collector
  - Equal to the collector
  - Greater than the collector

10. Two inputs A and B of NAND Gate have 0 output, if

- A is 1
- Both are zero
- Both are 1

11. In UPS system which of the following device is used to converting DC voltage to AC output voltage

- Cyclo-converter
- Invertor
- Rectifier

12. Majority charge carriers in case of n-type semiconductor are

- Electrons
- Neutrons
- Protons

#### Answers

- |                           |                            |
|---------------------------|----------------------------|
| 1. OR                     | 7. Smaller                 |
| 2. Very high              | 8. LED                     |
| 3. Emitter heavily doped  | 9. Less than the collector |
| 4. Semiconductor material | 10. Both are 1             |
| 5. NOT                    | 11. Invertor               |
| 6. Reversed bias          | 12. Electrons              |

by,  
L.Archana  
2<sup>nd</sup> year ECE-A.



## ELECTRONICS QUIZ

1. *Power loss in an electrical circuits can take place in*
  - A. *Inductance only*
  - B. *Capacitance only*
  - C. *Resistance only*
  - D. *Inductances and resistance.*
  
2. *In germanium when atoms are held together by the sharing of valence electrons*
  - A. *Each shared atom leaves hole*
  - B. *Valence electrons are free to move from the nucleus*
  - C. *They form reversible covalent bonds*
  - D. *They form irreversible covalent bonds.*
  
3. *At room temperature resistivity of pure silicon is expressed as*
  - A. *230 ohms-cm*
  - B. *2300 ohms-cm* C.*23000 ohms-cm*
  - D. *230000 ohms-cm.*
  
4. *The depletion region in one which has*
  - A. *Immobile charges*
  - B. *Mobile charges*
  - C. *Atoms*
  - D. *molecules.*
  
5. *Boltzmann diode equation has*
  - A. *voltage and temperature characteristics of a junction*
  - B. *voltage and current characteristics of a junction*
  - C. *Current and temperature characteristics of a junction*
  - D. *Resistance and temperature characteristics of a junction.*
  
6. *The forbidden in germanium at 0°k is*
  - A. *0.785 eV*
  - B. *1.21 eV*
  - C. *1.00 eV*
  - D. *0.01 eV*

**7. The transistor was invented at bell laboratories in 1947 by**

- A. John Bardeen**
- B. Walter Brattain**
- C. William Shockley**
- D. All the above.**

**8. In a PIN diode the intrinsic layer sandwiched between the heavily doped P and N layers is**

- A. Heavily doped**
- B. Lightly doped**
- C. Very lightly doped**
- D. Moderately doped.**

**9. As compared to PNP transistor NPN transistor are preferred due to**

- A. Economical**
- B. Simple operating mechanism**
- C. Consumes less bias voltage**
- D. Better high frequency.**

**10. Conduction modulation is exhibited by**

- A. Transistor**
- B. Diode**
- C. JFET**
- D. Tunnel diode**

**ANSWER**

**1.C, 2.D, 3.C, 4.B, 5.A, 6.A, 7.D, 8.C, 9.D, 10.C.**

**by,**  
**C.Jenilda**  
**ECE-A, II year**

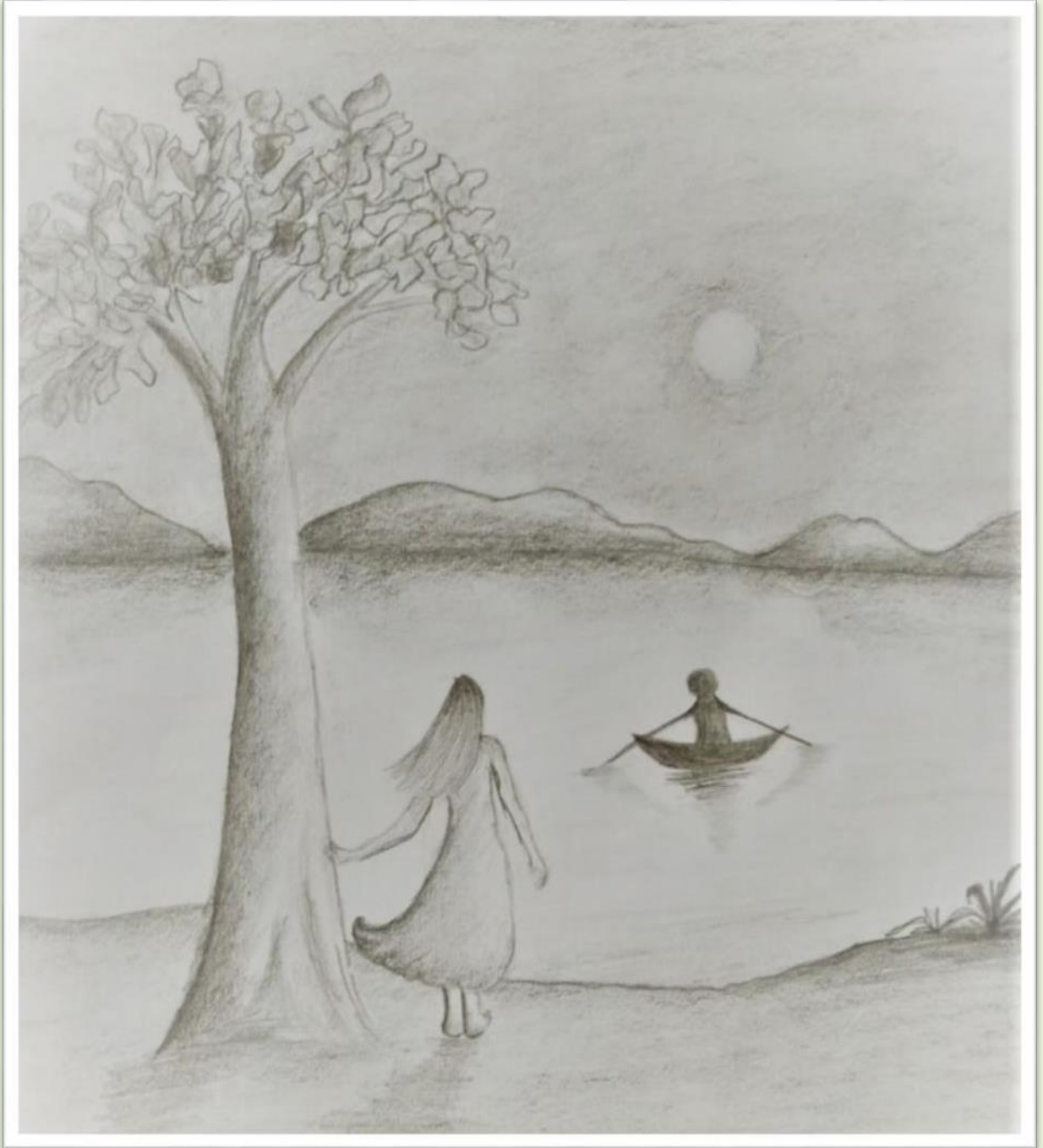
VISUAL TREAT



*By,*

*B.Jenisha*

*II Yr ,ECE 'A'*



*By,*  
*M.Abisha*  
*II yr, ECE 'A'*



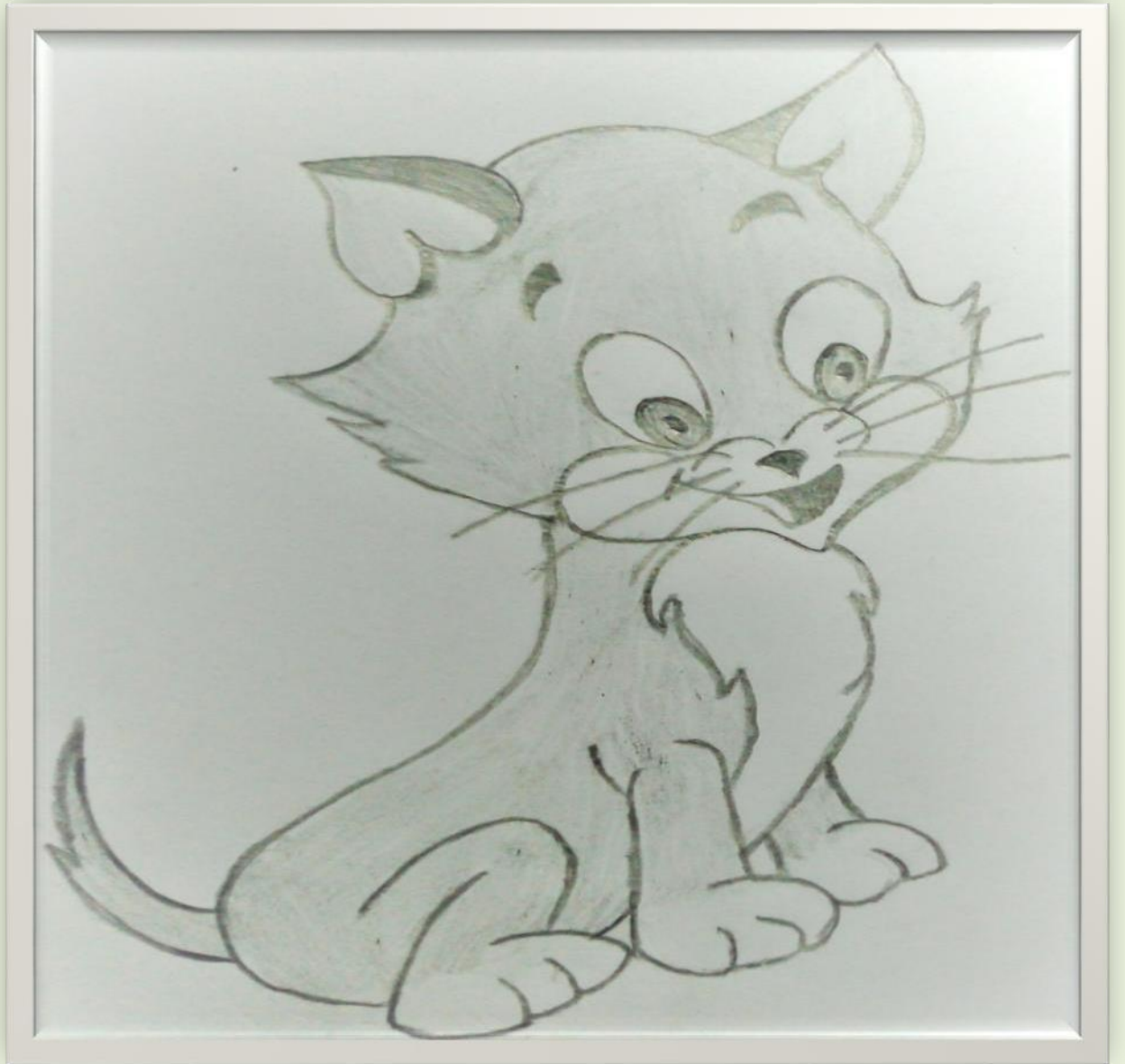
*By,  
M.Aziha  
II Yr, ECE 'A'*



*By,*  
*T.Archana*  
*II Yr, ECE 'A'*

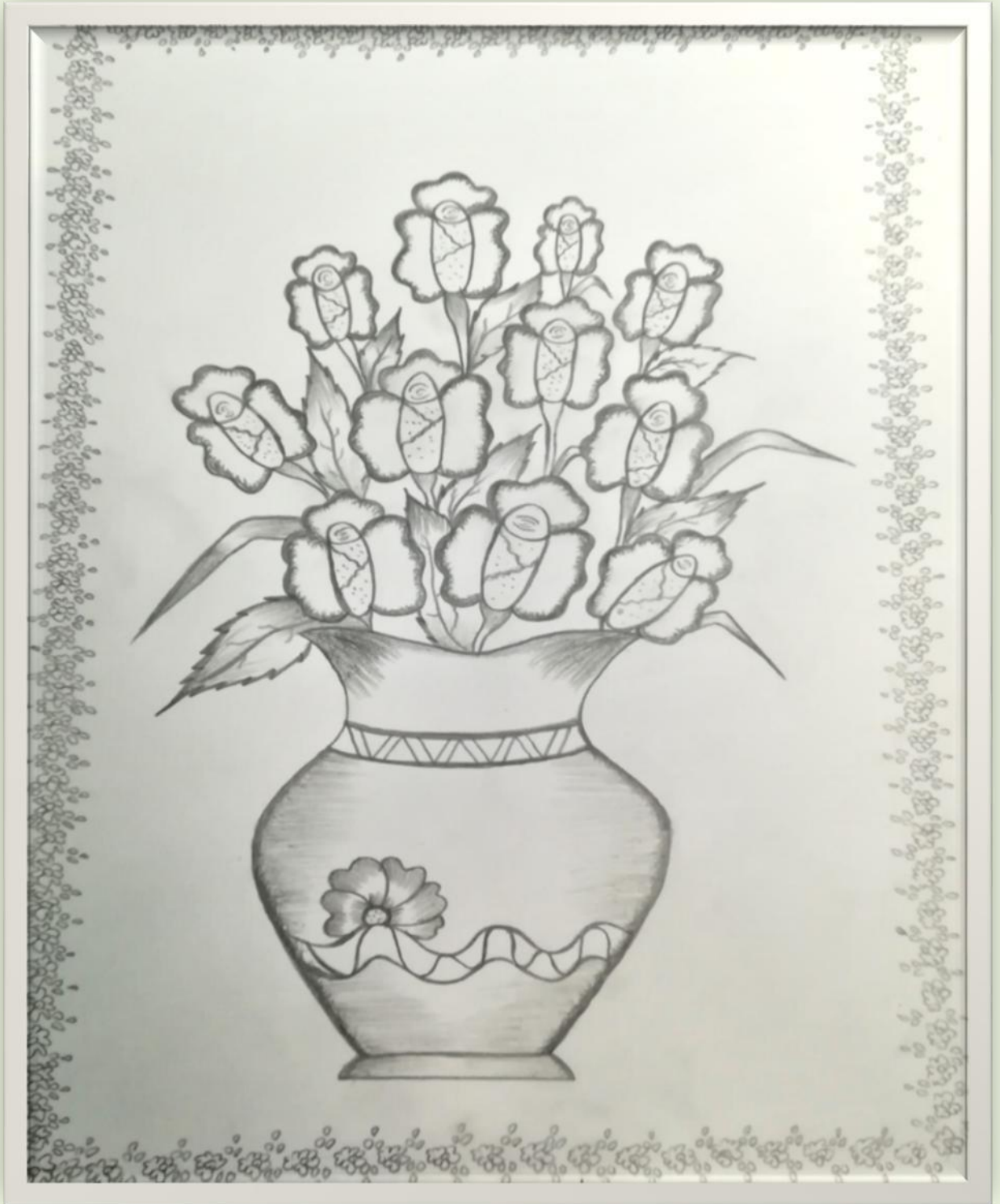


By,  
T.Jenifer  
II Yr , ECE 'A'

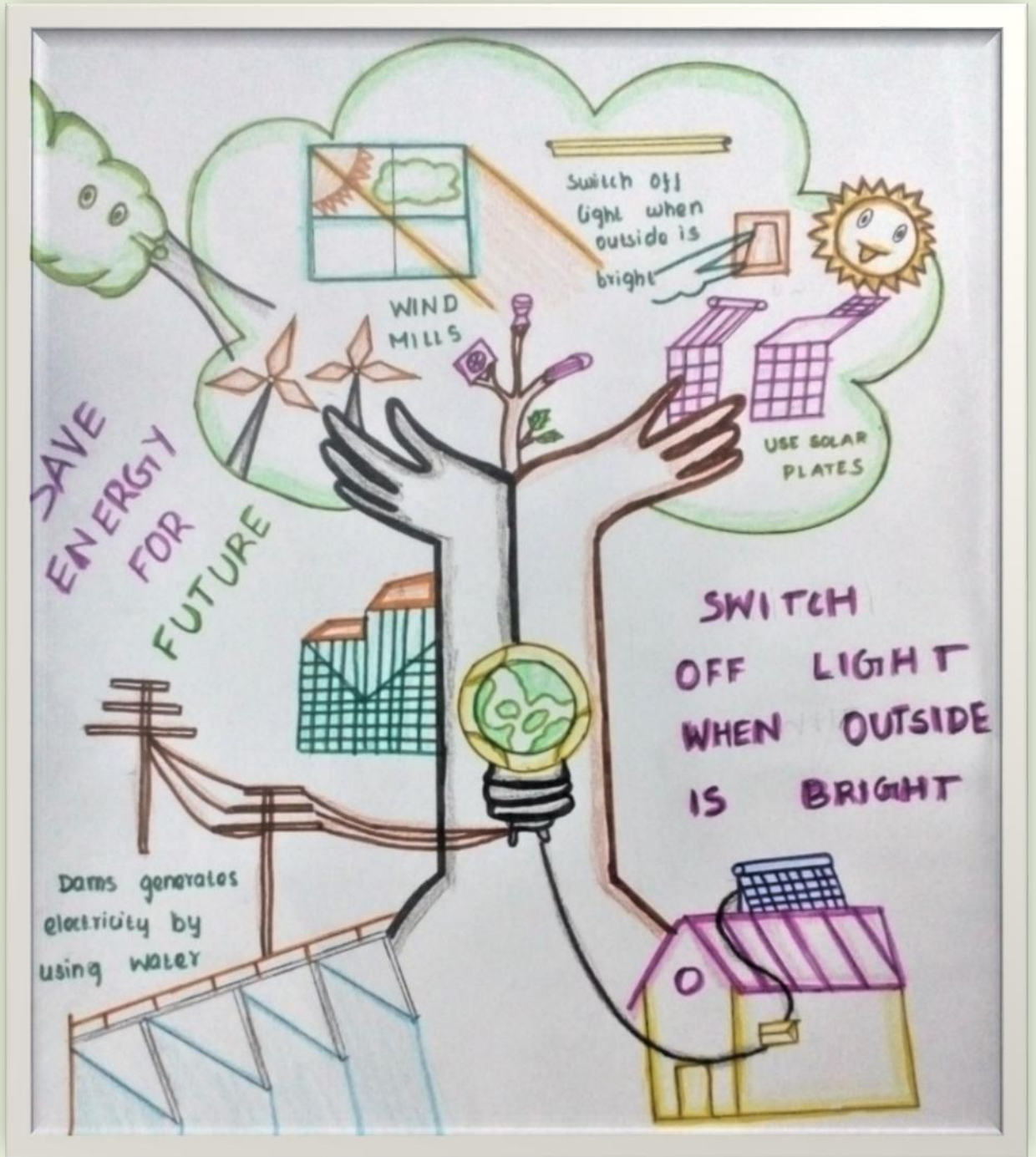


*By,*  
*G.Babitha*  
*II Yr, ECE 'A'*

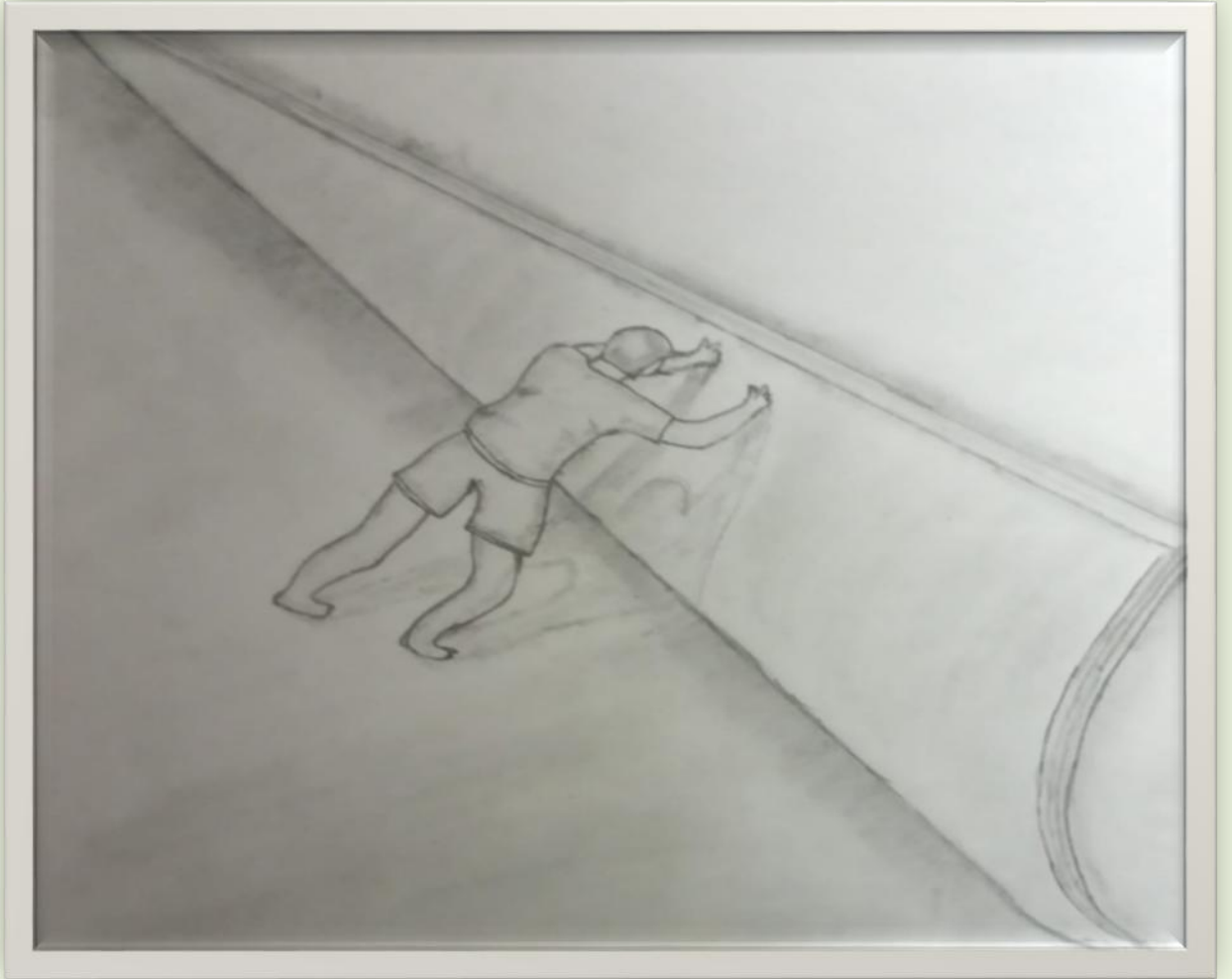




*By,*  
*K.Abinaya*  
*II Yr, ECE 'A'*



By,  
V. Bernisha  
II Yr, ECE 'A'



*By,*  
*Arunsuviya Gold.M*  
*II Yr, ECE 'A'*



*BY*  
*S.V NIVEDHITHA II ECE*

## GALLERY



*RONIX 2K20- Symposium*