

# **NATIONAL ENGINEERING COLLEGE**

(An Autonomous Institution - Affiliated to Anna University Chennai)

K.R.Nagar, Kovilpatti-628 503.





# Department of SCIENCE and HUMANITIES















Volume - 5

Issue - 1



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Director's Message

Principal's Message

**HOD's Message** 

**Poetry Rain** 

Essay Road

**Science and Technology** 

**Drawing Arts** 

**Articles Spectrum** 

Program; sequence

**Photo Gallery** 

# **EDITORIAL BOARD MESSAGE**

Providing ample opportunities in engineering education is one of the most fundamental obligations we owe to our students because in NEC we are driven by the belief that every student deserves a high quality education. Nurturing creativity and inspiring innovation are two of the key elements of a successful education and our department newsletter is the perfect amalgamation of both. It gives us great pleasure to bring you the first issue of the NEWSLETTER for the academic year 2019-2020 of our DEPARTMENT OF SCIENCE AND HUMANITIES. The name and fame of an institute depends on the caliber and achievements of the students and teachers. The role of a teacher is to be a facilitator in nurturing the skills and talents of students. This issue of the newsletter serves as a platform to exhibit the literary skills, creative and innovative ideas of the students.

It provides an intersection of great challenge and great opportunity for the students to review their efforts and to analyze their achievements in academics and career development. Technology is evolving at a dizzying rate and our classrooms may not be designed to keep pace with it. There may be a lot wrong in the style of education but the pages of the NEWSLETTER tell the tale of all that have been a part of what is right about the education they get in NEC. We would like to place on record our gratitude and heartfelt thanks to all those who have contributed to make this effort a success. We profusely thank the management for giving support and encouragement and a free hand in this endeavour. We are thankful to all the student authors who have contributed articles for this newsletter. We truly hope that the pages that follow will make an interesting read.

## From Director's Desk

It gives me immense pleasure to share a few words about the newsletter of Science and Humanities Department. The objective of the newsletter is to share information, activities & achievements of Science and



**Dr.S.Shanmugavel Director** 

**Humanities Department. To a large** extent, newsletter has really been helpful to improve the artistic quality and the habit of reading among the NECians, so that they can make a meaningful contribution towards the development of society. This been golden has opportunity for the students to sharpen their creative talents. The Newsletter has always been a successful attempt in bringing out the best of our young technocrats. I congratulate the effort taken by the Department of Science and Humanities for the publication of the newsletter.

# From Principal's Desk

I am very glad to welcome you all to this newsletter, refined way of exhibiting the talents of the students.

NEC campus is always known for its perfection that it has got in all the activities and it has become a technological and intellectual hub of highly

Dr.K.Kalidasa Murugavel
Principal

talented students. Newsletter is always motivational for factor the creative innovative mindset of the students. The role of newsletter is highly significant in showcasing and promoting the talents of the students. The very purpose of this institute is to bring out the potentiality of each student and provide them proper guidance so that their potentials can be highly made use of building them as engineers, being capable of meeting any kind of challenge.

I feel proud to convey my best wishes to the versatile students' crew behind this meritorious effort.

# From HOD's Desk

It is my pleasure to congratulate the students and the faculty members of Science and Humanities Department for the publication of this newsletter Newsletter will always highlight and focus on the activities being carried out in the department, the academic achievements of both



Dr.M.A.NEELAKANTAN
HOD(S&H)

faculty members and students as well as the innovations occurring in the department. The newsletter has got its relevance and importance in this technological era that it will create a platform for both faculty members and students to share their creativity and their innovative ideas. It will be helpful for their overall and individual development. I always believe that one must find the meaning of his life in his daily work. One can give his best only when he realizes that it is not just a work, but something more than that which is going to improve many lives.

# GOD'S GREATEST GIFT,

God's greatest gift Certainly it's my mother If I'll be with her Never do I bother Life, a bed full of roses, In the womb of my mother's Nine months rented with care, My mom's blood I did share Rolling like a living bubble, I gave her so much trouble. My entry into this earth, Filled her with much mirth What a invisible connection

Subikshaa. S IT – B 1st year



TREAT PEOPLE EQUALLY

Treat yourself by attitude

Not by aptitude

Treat your friend by

affection

Not by attraction

Treat your parent by love

Not by lakhs

Treat your college by achievements

Not by advertisements

Treat your student by research

Not by results

Treat your child by goals

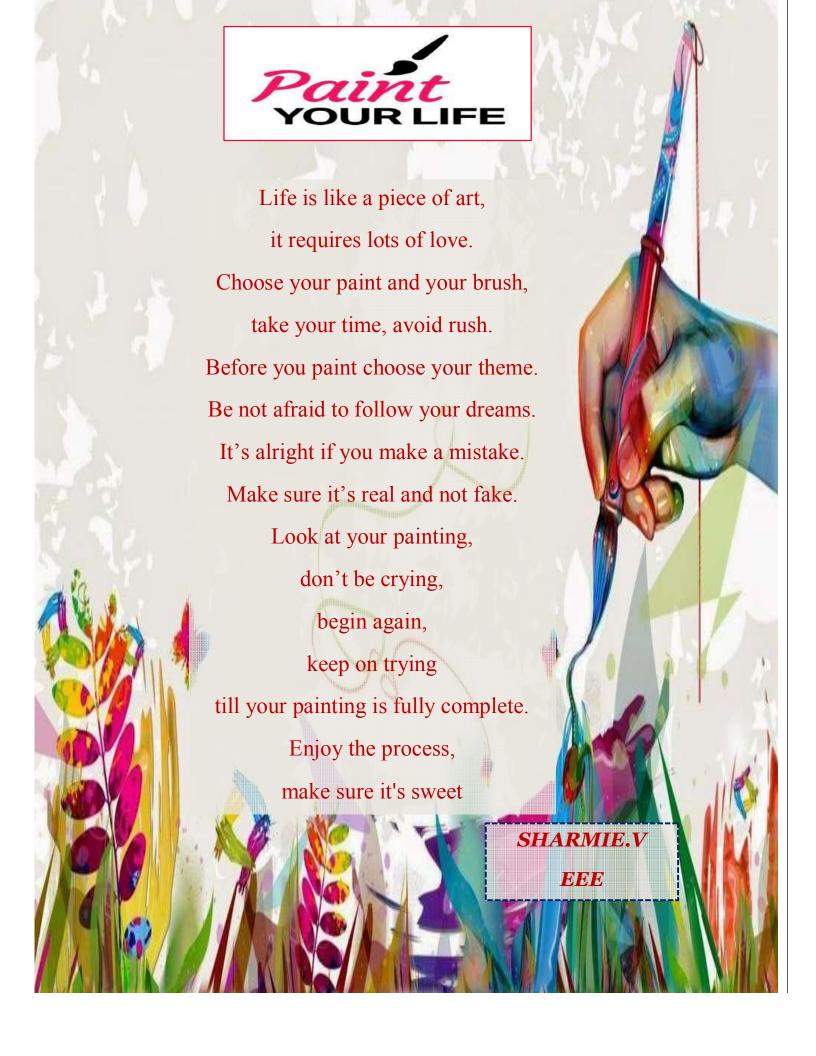
Not by grades

Treat your people by care

Not by caste

S.DHARANI it









### **NEC 'IAN' THOUGHTS ABOUTNEC.**



#### **INTRODUCTION – ICON OF KOVILPATTI:**

#### **COLLEGE MOTTO:**

"Work hard in silence

National Engineering College being the topmost position in developing the young generation students and also being the major backbone of the students achievements. They develop future engineers and make them shine in their life.



 $\top$ 

### FRIENDLY ATMOSPHERE:

"Friendly Atmosphere is a fine place which is worth living for"

NEC provides friendly atmosphere between students as well as teachers. Teachers are very affectionate and maintains friendly interaction with students.

### EXTRAORDINARY SAFE AND PURE DRINKING WATER

"Water is a fine source which is worth drinking for"

NEC provides hygienic and safe drinking water for students. The water looks pure and very tasteful to drink. It's been more sufficient for the students.



"The first step toward success is taken when you refuse to be a captive of the environment in which you first find yourself."

Mark Caine

### **EXPERIENCED FACULTY MEMBERS:**

"Teachers teaches from the heart which is worth gaining for"

NEC teachers are very supportive in giving guidance for students in many aspects. They teach from heart and not from book. They are our second mothers.



### **EXCELLENCE IN ACADEMIC:**

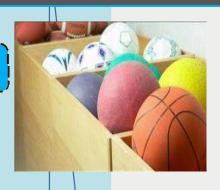
"Academic is a fine knowledge which is worth learning for"

NEC holds the best position for academics. Effective Coaching for students to train their mind to think and to execute their knowledge towards their studies.

### **OUTSTANDING IN NON-ACADEMIC:**

"Non-Academic is a fine goal which is worth achieving for"

NEC gives the best training for non-academics. Efficient trained teachers are there to motivate students talent and their effort for the target in sports.





### **INNOVATIVE ACHIEVERS:**

"Students are a great artist which is worth praising for"

NEC students are born to achieve something special which they pursue in their dream. Students fix a goal and create a record and make their college proud.

### HI-FI CANTEEN & CAFETARIA:

"Cantéen and Café are a fine restaurant which is worth eating for'

NEC provides clean and healthy eatables in canteen and café. They maintain and preserve foods in a hygienic way. Taste of food feels like mother's preparation.



"Your work is discover your world and then with all your heart give yourself to it."

### MARVELLOUS HOSTEL AND FREE HOSPITALITY

"Hostel feels like a second home which is worth staying for"

NEC not only provides good education but also gives us comfortable place for staying. They also provide free medical service for students when they feel sick.





### **EXEMPLARY TRANSPORT FACILITIES:**

"Transport facilities are safe which is worth travelling for"

NEC provides good transport facilities for students so that they will reach safe to their places and it is best for remote areas, so they don't need to catch out-bus.

### **APPLAUDABLE ONE - NO RAGGING:**

"No Ragging is a praisable one which is worth appreciating for"

NEC safeguard each and every student in a careful way in every aspects. Senior students treat their juniors as their own siblings and also give them equal rights.





### **SPLENDIFEROUS CULTURALS:**

"Culturals gives great entertainment which is worth watching for"

NEC recognize students talent and their performance in a perfect way. Culturals being celebrated in a grand manner and gives enthusiasm for students.

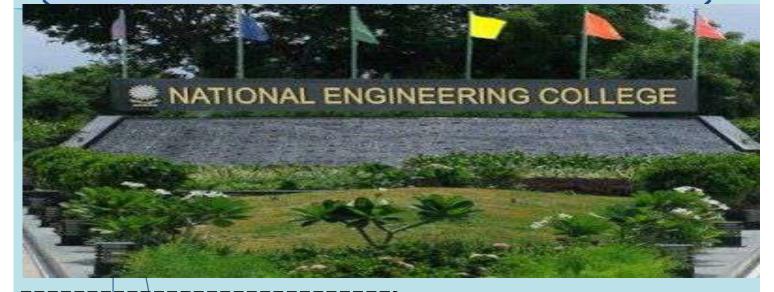
### 100% GUARANTEED PLACEMENTS:

"Companies gives high salary which is worth placing for"

NEC students get placed each and every year with high salary package and make their college proud which also inspires their juniors to become placed soon.



The function of education is to teach one to think intensively and to think critically?"
-Martin Luther King, Jr.



### **SALUTING THE MANAGEMENTS:**

"Management runs finest college which is worth saluting for"

NEC Management runs a best and a leading autonomous institution in Kovilpatti. Management will redress the grievances an act according to it.



### **CONCLUSION – ROLE MODEL OF OTHER COLLEGES:**

"Getting placed in an aimed institution Is not easy like the lightning of lamp It's like lightning our precious soul "

NEC is a landmark of Tuticorin district .It's been a splendid college comparing to all other colleges. Students are coming here from various districts as well as states to make their dream job come true in a real life and they achieve it.

### REAL SCENARIO OF AN NEC 'LAN' - AFTER GETTING PLACED:

"Students not only wipe their parents loan but also wipe parents tears"

## N- NOURISHING

E- EDUCATING

**C-CREATING** 

SO, I AM VERY MUCH GLAD TO BE A PART OF NEC'IAN'.
DHARANI. S

IT

## **ROCKET MAN – Dr.K.Sivan**



### INTRODUCTION

Sivan, former director of Vikram Sarabhai Space centre, also known as "Rocket Man" because of his tireless effort and contribution in the development of cryogenic engines for Indian space program. Let us see his growth in detail from the farmers so to the ISRO top scientist. Kailasavadivoo Sivan who was born on April 14, 1957, is the secretary of space department and Chairman of space Commission and Indian Space Research Organisation.

### HIS MAJOR ROLES

He joined ISRO in 1982 in polar satellite launch vehicle(PSLV) project in which he contributed towards mission planning, mission design, mission integration and mission analysis. He developed a strategy which enables rocket launch on any day, under varied weather and wind conditions. Sivan has not had a very easy tenure and success has come with failures, disappointments and controversies. His first flight after becoming the chairman was a failure, as the heat shield of the satellite failed to open, trapping it within. He was the chief mission architect for successful launch of 104 satellites in a single mission of PSLV

"Life will bring you pain all by itself. Your responsibility is to create joy."

- Milton Erickson

### HIS EARLY LIFE

He was from a very ordinary family. His father was a farmer. Sivan was the first graduate in his family. He studied in government schools in Tarakkanvilai which is his native village. Later he graduated from ST Hindu College in nagercoil. Then, he graduated from Madras Institute of Technology aeronautical engineering 1980 and completed Master of Engineering in aerospace engineering from IISc Bangalore in the year 1982. He pursued his Phd in aerospace engineering from IIT Bombay in the year 2007.

### AWARD AND HONOURS

- Shri Hari Om Ashram Perit Dr.Vikram Sarabhai
   Research Award in the year 1999
- ISRO Merit Award in the year 2007
- Dr.Biren Roy Space Science pr Design Award in the year 2011
- Distinguished Alumnus Award from MIT in the year 2013
- ISRO Award for outstanding achievements in 2016
- Distinguished Alumnus Award from IIT Bombay
- Doctor of science from selected universities



### **CONCLUSION**

Coming from an ordinary family, he reached heights and made a mark of him in ISRO. Now, he is the role model for many poor children with thirst for studying. He has made this accomplishments and achievements only through his hard work, perseverance, courage and many days of sleepless work.

Karthika A (1911073) I year ECE

Happiness is when what you think, what you say, and what you do are in harmony.

- Mahatma Gandhi



### **Student's Opinion:**

All these facilities are available in online for the students to study in online but this type of learning importance gives only knowledge about the course and the content but not to the interaction among teachers and students. The among practical knowledge students will become low. Every student has to face the internet facility problem, students those who are coming from urban areas have the facility to come online anytime when the faculty member asks to come but the students coming from rural areas can't be able to come in online for the concerned time given by the faculty members.

> "Do not be embarrassed by your failures, learn from them and start again."

> > - RICHARD BRANSON

# ONLINE CLASS CAN BE THE FUTURE OF EDUCATION?

### INTRODUCTION

Our Government announced covid-19 as pandemic of the year 2020 in the month of March 2020. All the educational institutions were closed and ordered their students to go their home town. After the viral spread of corona the government announced lockdown for 15 days and they extended till April 30, next extended till May 31 and now July 31. In this period of lockdown the education of whole students become a question mark. In this kind of situation our country education council members had taken a decision regarding this. They have made a decision that teachers/professors can take classes in online for the students until the end of lockdown.



### **Evolution of online classes:**

This online class education system originated in 2010. The education institutions offers good education in their colleges and universities. Even though some students lack some facilities like transport, money, etc., to go their respective institution for studying their respective courses. To reduce these types of problems some professors started to take videos about their courses and posted it in online for the availability of students. After this a student can study whenever wants to study. A student can see the videos and learn it in online. This mode of education reached the students successively. Later many organizations/online institutions took over this like NPTEL, coursera, udemy, took over this and made videos with lecturers about the respective courses. Many students started to learn about the courses from their home. Students those who finished their under graduate course in a institution, can continue his/her post graduate course through online by seeing the course videos. The course videos made by the lecturers those who are highly qualified in the course and content of the course. When a course is offered by an online institution, it was finished by a student successfully the institution provides a e-certificate by appreciating the student's performance in the respective course. Some institutions conducting exams for the courses and providing e-certificate by the student's performance in exam conducted by the institution.



## **Education through online organizations:**

There are many online organizations to take online classes for all standards. They also charge considerable amount of fees for the respective course which can't be affordable for the students. These online organizations teach students only about the course not general knowledge. It can't give knowledge about the world, discipline. It can't develop the communication skills of students and can't give the real environment for the students to study.



### **Conclusion:**

Now we are studying most of our courses in online if this continues it can become the future education system of our nation. Although it has some disadvantages but giving good education in online. It can exist even after the colleges are reopened.

Gokul Karthick P (1912057) I year CSE

"Follow effective actions with quiet reflection. From the quiet reflection will come even more effective action."

– PETER DRUCKER



Understanding nature should be a part of everyone's life. In today's time, most people spend most of their time in watching television and in the internet. Mostly he spend his time inside the house. The most significant disease in the world today is provoking mental stress.

Nature has the power to remove many diseases from the body. Greenery reduces stress and provides peace of mind. So if you have a high workload most of the time and you are surrounded by physiological stress, enjoy nature to calm your mind.

A man should never hurt nature. Today man realizes that nature has to be according to him, which is the biggest mistake. We, human beings, live in harmony with our nature and should not bring about some change in it.

Nature is our great friend because we live on this planet, and all of its parts look naturally. By nature, we get water to drink, clean, animals, trees, plants, good food, and houses to live in so that man can live a good and useful life.

We need to keep it clean to prevent the destruction of the environment and nature. Nature is a lovable gift from GOD. Nature is gorgeous, many important forces give us happiness and healthy life.

There are some major transformational forces in nature that control our mood and behavior. Nature is essential for healthy life. Therefore, we must keep it clean and safe for future generations. We should not cut down trees and forest. We have to keep it intact. We must not pollute the oceans and rivers to save the ozone layer safe and all our lives.

By simplifying, we must control the problems of the greenhouse effect, global warming and soon.

To make our nature pleasant, we must always work hard to keep it safe so that all life on earth can be saved. Finally, we can say nature is our FATHER and MOTHER and the breathing of our life. I hope you like this Essay on NATURE. So,

"SAVE THE NATURE, SAVE THE PEOPLE, SAVE THE EARTH"

SARAN S (1910094)
I year MECH

"You have to learn the rules of the game.

And then you have to play better than anyone else." - Albert Einstein

# LIFE IS A MEANS TO EXPRESS, NOT TO IMPRESS

We present ourselves to the world as how we want to be seen. Not as how we are. If somebody asked me to describe life in one word; I would say," discovering" because life is just a clue which lets us make many discoveries and express ourselves.

Nowadays people are striving to be the centre of attention and they are engaged in a monotonous routine of impressing others. By impressing other I mean,"Being like an exhibitor". Most of the people do is go around and flaunting about their lives. But what is the point of getting into such a limelight, at the end of the day when you do not know who you truly are or in which all ways you can express yourself.



The biased view of the world is that people are obligated to accept the society which is filled with ople who wake up in the morning to impress others and not to accept the society in which people want to lay out their lives with ideas and good virtues to make a better world.

Friends, let me give you an example of present days social media. We really appreciate it when several people like or comment on our posts, photos etc. And this kind of action makes us post various other things. Why do we do this? Yes in one way it is to impress others and this form of validation of likes and comments gives us happiness and a sense of pride. On contrary, will you like it if nobody responded to your posts and comments? Apparently you will not like it. This is the prevailing mindset of each and everyone of us today.

People are too busy in doing things that will bring them popularity and fame. At some point of our lives, we will happen to repent over the times when we were too occupied in impressing others. The world is changing; but never believe that a few caring people can change the world. Impression is monetary; but knowing yourself and having the ability to express yourself in what you believe, and working for a favourable cause is more important.

So my friends," work for a cause, not for applause. Live live to express, not to impress. Don't strive to make your presence noticed, just make your absence felt". - Unknown

SUBITSHA A (1911106) I year ECE

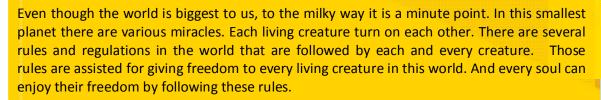
"Doing the best at this moment puts you in the best place for the next moment."

-Oprah Winfrey

# Pacifying mind is the eternal feast



## Introduction



Don't ever try to hurt others Remember it's a boomerang of yours.

## **Abundant creation**

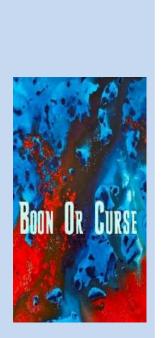
The magnificent, eyes grabbing creations in the earth as mind blowing water bodies, varieties of animals, trees plants and goes on, they have equal proportion to live in this world. The other delightful creation to the world is humans. Humans itself a creation but tends to create a lot. They do lot of works and themselves kept a name like engineers, doctors, soldiers, teachers, and so on and doing their duties.

Awesome nature With cute creature.

## **Boon and curse:**

No more moon without sun.

Boon and curse both play a major role in the earth. In one side the human creature going on diminishing. In other side some creatures are securing lives, they are struggling to secure, but the hard truth is, securing is harder than destroying. Some souls are selfish in their way but some generous souls are making ways for others. The world is one but the happenings are always in pairs just opposite of each other. No more goodness without wickedness.



## Things to think

# Humans is not only a creator They are also a destroyer.

Needs should be in limit if it got increased than the restriction its just a savage, when needs goes on increasing the action of humans became wilder. If it is under control anything can be done. Self control is the best solution for every problem. Some people are ready to do anything for others but forgetting about themselves. Self love is also an important one in this world. Nothing can be done without knowing about themselves. If it is known the essential of every living thing can be felt by them, which can avoid artificial solutions like tablets and more. The solution is always within you.

### **Conclusion**



The trending world is the innovation world, it has no conclusion its go on upgrading and human life becoming very simple. "Everything happens for a reason". If this reminds in every mind then the pain will become less and the life will become easier.

Avoid the threat Always remember human souls

NITHU ANISHKA. N

EEE-1913037

# Interesting facts

# 1.Babíes have around 100 more bones than adults:

Babies have about 300 bones with cartilage between many of them. This extra flexibity helps them pass through the birth canal and also allow for rapid growth. With age, many of the bones fuse, leaving 206 bones that makes up an average adult skeleton.

# 2.The Eiffel Tower can be 15 cm taller during the summer:

When a substance is heated up, its particles move more and take it up a larger volume. This is known as thermal expansion. Conversely, a drop in temperature causes it to contract again. The mercury level inside the thermometer, for example, rises and falls as the mercury volume changes with the ambient temperature. This effect is most dramatic in gases but occurs in liquids and soils such as irons too. For this reason, large structures such as bridges are built with expansion joint which allows them some leeway to expand and contract without causing any damage.

# 3.20% of Earth's oxygen is produced by the Amazon rainforest:

Our atmosphere is made up of roughly 78 percent of nitrogen and 21 percent oxygen, with various other gases present in small amounts. The vast majority of living organisms need oxygen to survive, converting it into carbon dioxide when they breathe. Thankfully plants continually replenish our planet's oxygen level through photosynthesis. During this process carbon dioxide and water is converted into energy, releasing oxygen as the byproduct. Covering 5.5 million square kilometres, the Amazon rain forest cycles a significant proportion of the earth's oxygen, absorbing large quantities of carbon dioxide at the same time.

"Be miserable. Or motivate yourself. Whatever has to be done, it's always your choice."

# 4. Venus is the only planet to spin clockwise:

Our Solar System started off as a swirling cloud of dust and gas which eventually collapsed into a spinning disc with the Sun at its centre. Because of this common origin, all the planets move around the Sun in the same direction and on roughly the same plane. They also spin in the same direction (counter clockwise if observed from 'above') – except Uranus and Venus. Uranus spins on its side, while Venus defiantly spins in the complete opposite direction. The most likely cause of these planetary oddballs is gigantic asteroids which knocked them off course in the distant past.

# 5. Earth is The Giant Magnet:

Earth's inner core is a sphere of solid iron, surrounded by liquid iron. Variations in temperature and density create currents in this iron, which in turn produce electrical currents. Lined up by the Earth's spin, these currents combine to create a magnetic field, used by compass needles worldwide.

# 6. Some metals are so reactive that they explode on contact with water

There are certain metals – including Potassium, Sodium, Lithium, Rubidium and Caesium – that are so reactive that they oxidise (or tarnish) instantly when exposed to air. They can even produce explosions when dropped in water! All elements strive to be chemically stable – in other words, to have a full outer electron shell. To achieve this, metals tend to shed electrons. The alkali metals have only one electron on their outer shell, making them ultra-keen to pass on this unwanted passenger to another element via bonding. As a result they form compounds with other elements so readily that they don't exist independently in nature.

The only person who is educated is the one who has learned how to learn ...and change."

-Carl Rogers

# 7. A teaspoonful of neutron star would weigh 6 billion tons

A neutron star is the remnants of a massive star that has run out of fuel. The dying star explodes in a supernova while its core collapses itself due to gravity, forming a super-dense neutron star. Astronomers measure the mind-bogglingly large masses of stars or galaxies in solar masses, with one solar mass equal to the Sun's mass (that is, 2 x 1030 kilograms/4.4 x 1030 pounds). Typical neutron stars have a mass of up to three solar masses, which is crammed into a sphere with a radius of approximately ten kilometres (6.2 miles) – resulting in some of the densest matter in the known universe.

# 8.Chalk is made from trillions of microscopic plankton fossils

Tiny single-celled algae called Coccolithophores lived in Earth's oceans for 200 million years. Unlike any other marine plant, they surround themselves with minuscule plates of calcite (coccoliths). Just under 100 million years ago, conditions were just right for coccolithophores to accumulate in a thick layer coating ocean floors in white ooze. As further sediment built up on top, the pressure compressed the coccoliths to form rock, creating chalk deposits such as the white cliffs of Dover. Coccolithophores are just one of many prehistoric species that have been immortalised in fossil form, but how do we know how old they are? Over time, rock forms in horizontal layers, leaving older rocks at the bottom and younger rocks near the top. By studying the type of rock in which a fossil is found palaeontologists can roughly guess its age. Carbon dating estimates a fossil's age more precisely, based on the rate of decay of radioactive elements such as carbon-14.

"Success comes in cans; failure in can'ts." -Zíg Zíglar

# 9.Stomach acid is strong enough to dissolve stainless steel

Your stomach digests food, thanks to highly corrosive hydrochloric acid with a pH of 2 to 3. This acid also attacks your stomach lining, which protects itself by secreting an alkali known as bicarbonate solution. The lining still needs to be replaced continually, and it entirely renews itself every four day 10. A flea can accelerate faster than the Space Shuttle

A jumping flea reaches dizzying heights of about eight centimetres (three inches) in a millisecond. Acceleration is the change in speed of an object over time, often measured in g/s, with one 'g' equal to the acceleration caused by gravity on Earth (9.8 metres/32.2 feet per square second). Fleas experience 100 g, while the Space Shuttle peaked at around 5 g. The flea's secret is a stretchy rubber-like protein which allows it to store and release energy like a spring.

11.Polar bears are nearly undetectable by infrared cameras

Thermal cameras detect the heat lost by a subject as infrared, but polar bears are experts at conserving heat. The bears keep warm due to a thick layer of blubber under the skin. Adding to this they have a dense fur coat and they can endure the chilliest Arctic day.

12.It takes 8 minutes, 19 seconds for light to travel from the Sun to the Earth

In space, light travels at 300,000 kilometres (186,000 miles) per second. Even at this breakneck speed, covering the 150 million odd kilometres (93 million miles) between us and the Sun takes considerable time. And eight minutes is still very little compared to the five and a half hours it takes for the Sun's light to reach Pluto.

K.KARTHICKSARAN (1912069)

I Year CSE

### **Cyber security**

### What is cyber security???

Cyber security refers to the practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access. Cyber security is also referred to as information technology security.

### **BRANCHES OF CYBER SECURITY:**

There are many branches in cyber security, for Example:

- Network security
- Application security
- Endpoint security
- Data security
- Identity management
- Mobile security

#### What is data??

- Data is nothing but the stored personal information in a form of pictures, docs, videos etc.
- Every one mind set is that keeping their own data safe and secure from a unknown person

### Who steals your data???

Skilled computer programmers who exploit the information of others using their technical skills are called "Hackers".

- But not only Hackers are reason for data theft!!!
- Even some of the unknown and suspicious links and malwares can exploit the data.

#### Way to secure data???

- To make our data to be protected from exploiting there are simple tips that can be followed by every common man in day to day life practice.
- But in certain cases of network to be secured there are some Cyber Crime professionals to protect them.
- These professionals are known as "CERTIFIED ETHICAL HACKERS".

### WHAT IS VULNERABILITY???

• vulnerability is nothing but a loop hole which can be exploited by an unknown, such as an attacker, to perform unauthorized actions within a computer system.



# Random facts

# 1. OLYMPIA , A SPORTIVE AND RELIGIOUS CITY:

In Greece, the Olympic Games were an occasion to celebrate the might of Zeus, the King of Gods. Before every sporting event, sacrifices were carried out in his honour in the religious centre of the city of Olympia. If an athlete was caught cheating, he had to pay a fine in the form of raising statues of the God!

# 2. WARRIOR WOMEN OF ANTIQUITY:

According to Greek legend, the Amazons were the daughters of Ares, the God of War. It is said that these warrior women raised only their daughters, killing or crippling the sons. Excellent horsewomen and experts in archery, they were believed to have formed a nation of only women.

# 3.THE ALPHABET'S LONG ROAD:

The first alphabet appeared around 1500 BCE in present-day Syria. It consisted of 30 characters and was written from right to left. Four centuries later, scribes of Byblos (in modern-day Lebanon) simplified it to 22 signs, which were only consonants. Around 800 BCE, it was the Greeks who added vowels to the alphabet.

# 4.TWO SEASONS IN THE GALLIC YEAR:

This Gallic calendar was engraved on a bronze plate. The Gauls were in the habit of dividing the year into two phases, by following the cycle of seasons. The first from November to April corresponded to the 'dark phase' and the second from May to October, to the bright phase.

# T. Vení 1916044 I Year Cívíl

### A NEW PLATFORM FOR DATA SECURITY

Attackers, confronted by security technologies that prevent memory corruption, like Code Integrity (CI) and Control Flow Guard (CFG), are expectedly shifting their techniques towards data corruption. Attackers use data corruption techniques to target system security policy, escalate privileges, tamper with security attestation, modify "initialize once" data structures, among others.

Kernel Data Protection (KDP) is a new technology that prevents data corruption attacks by protecting parts of the Windows kernel and drivers through virtualization-based security (VBS). KDP is a set of APIs that provide the ability to mark some kernel memory as read-only, preventing attackers from ever modifying protected memory. For example, we've seen attackers use signed but vulnerable drivers to attack policy data structures and install a malicious, unsigned driver. KDP mitigates such attacks by ensuring that policy data structures cannot be tampered with.

The concept of protecting kernel memory as read-only has valuable applications for the Windows kernel, inbox components, security products, and even third-party drivers like anti-cheat and digital rights management (DRM) software. On top of the important security and tamper protection applications of this technology, other benefits include:

- 1)Performance improvements KDP lessens the burden on attestation components, which would no longer need to periodically verify data variables that have been write-protected
- 2)Reliability improvements KDP makes it easier to diagnose memory corruption bugs that don't necessarily represent security vulnerabilities
- 3)Providing an incentive for driver developers and vendors to improve compatibility with virtualization-based security, improving adoption of these technologies in the ecosystem

### **Kernel Data Protection: An overview**

In VBS environments, the normal NT kernel runs in a virtualized environment called VTL0, while the secure kernel runs in a more secure and isolated environment called VTL1. More details on VBS and the secure kernel are available on Channel 9 here and here. KDP is intended to protect drivers and software running in the Windows kernel (i.e., the OS code itself) against data-driven attacks. It is implemented in two parts:

- 1) Static KDP enables software running in kernel mode to statically protect a section of its own image from being tampered with from any other entity in VTL0.
- 2) Dynamic KDP helps kernel-mode software to allocate and release read-only memory from a "secure pool". The memory returned from the pool can be initialized only once.

L.JAGATHISH I Year B.E. EEE 1913005 If the two unprotected pieces of same type of metal touch in the space they will bond permanently



This incredible fact is also known as Cold welding. Cold Welding or contact welding is a solid state welding process in which metal joining takes place without fusion/heating at the interface of the two parts to be welded. Cold welding was first recognized as a general material phenomenon in the 1940s.

The principle which governs the process is Atomic diffusion that is the random movement of atoms inside a solid. So atoms diffuses as both ends are similar, atoms do not know which is their side so it diffuses. These surfaces may be bare metals, or inorganically or organically coated metals and their alloys. Once the two surfaces are in contact they begin to merge.

This cold welding happens only in space because space is full of vacuum at very low temperature (2.7 Kelvin) and cold welding fuses the two metal pieces. This does not happen on earth because there is air and water separating the pieces. This barrier prevents metals from sticking to each other. The most common application of cold welding is single crystal gold nano wires fuse to each other in seconds using no heat just a cold welding technique. Cold welding is mainly used with aluminum, copper, silver, silver alloys and gold.

Prathickkumar G (1913039) I Near IT

"If you're going through hell, keep going." - Winston Churchill

# NOTHING IS SECURE INTRODUCTION:

Ethical hacking is an emerging tool used by most of the organizations for testing network security. The security risk and vulnerabilities in a network can be recognized with the help of ethical hacking.

# WHAT IS HACKING?

Hacking is identifying and exploiting weaknesses in computer systems or computer networks. It is classified into two types,

- ETHICAL HACKING
- UNETHICAL HACKING

Unethical is simply compared to a thief who steals wealth. Here we are going to talk about Ethical hacking, which is used for good, i.e., we take permission from the owner of the organisation and provide them security from the loopholes and misconfigurations in a website.

Whole web works on the principle of information exchange like username, password, account balance etc. All are digitally stored information nowadays. This digitally stored information is protected by the ethical hackers from the unethical hackers who are always there to misuse it for their own pleasure.

## WHO ARE ETHICAL HACKERS?

Ethical hackers are hired by organizations to look into the vulnerabilities of their systems and networks and develop solutions to prevent data breaches. Consider it a high-tech permutation of the old saying "It takes a thief to catch a thief." Before we get into this we must know the Indian Cyber Law as a security expert.

## INDIAN CYBER LAW:

Testing a website for a good purpose but without owner's permission is considered as unethical hacking and the owner have the rights to file a case against them.

There are 13 chapters and 90 sections in cyber law, for now the above mentioned law is the important thing to do with us.

## HOW DO HACKERS HACK?

They collect all the information about the website or about the target and use this information to find weak points in the system through which they make their entry and try to stay inside the system. Finally when their work is done they clear all the tracks so that nobody can trace them.

# TOOLS USED FOR HACKING:

There are some common tools used by the hackers,

- Nmap
- Dirbuster
- Burpsuite
- Nikto
- Metasploit
- SQL map
- WPseku

# ROLES AND RESPONSIBILITIES OF ETHICAL HACKERS:

Ethical Hackers have to observe positive pointers in order to operate hacking legally. A good hacker knows his or her accountability and adheres to all the moral guidelines. Here are the most vital guidelines of Ethical Hacking:

- •An ethical hacker should seek authorization from the employer who owns the system.
- Hackers should attain whole approval before performing any security assessment on the system or network.
- Determine the scope of their evaluation and recognise their format to the organization.
- Report any security breaches and vulnerabilities discovered in the machine or network.

- •Keep their discoveries confidential. As their motive is to impervious the machine or network, ethical hackers should agree and respect their non-disclosure agreement.
- Erase all traces of the hack after checking the machine for any vulnerability.

# BENEFITS OF ETHICAL HACKING:

Learning moral hacking includes analyzing the mindset and techniques of black hat hackers and testers to examine how to identify and correct vulnerabilities inside networks. Studying ethical hacking can be applied by using security professionals across industries and in a multitude of sectors. This sphere consists of community defender, hazard management, and great assurance tester.

Getting an ethical hacking training or certifications can advantage those who are seeking a new role in the protection realm or those looking to display skills and be fantastic to their organization.

## CONCLUSION

In today's world, cyber security has turned out to be a trending and interesting subject amongst many businesses. The function of moral hackers has become increasingly essential across all sectors. According to media and people the phrase hacking denotes "misuse and collapse" of computers. They describe it as unfair technique of solving a problem. In the view of moral hackers the word hacking refers to creative.

S. Keerthivasan ECE

The only person who is educated is the one who has learned how to learn ...and change."

-Carl Rogers

## **Evident Facts**

1.An individual blood cell takes about 60 seconds to make a complete circuit of the body.

2.When Helium is cooled to almost absolute zero, it becomes a liquid with surprising properties: It flows against gravity and will start running up and over the lip of a glass container.

3.In an entire lifetime, the average person walks the equivalent of five times around the world.

5.The acid in our stomach is strong enough to dissolve stainless steel.

6.A new state of matter exists (alongside with solid, liquid and gaseous states) and it is known as time crystals.

7.The worlds' smallest fidget spinner is 100 microns wide.

8.A single solar flare can release the equivalent energy of millions of 100-megaton atomic.

9.The liquid boils and freezes simultaneously at 'Triple Point' which is the temperature and pressure at which three phases of a substance co-exist in equilibrium.

10. The desire to lie in bed all day is called clinomania.

11. The world's largest jelly fish "The Lion Mane" is longer than a blue whale.

# PRIYADHARSHINI G I Year CSE

"We become what we think about most of the time, and that's the strangest secret."

- Earl Nightingale

## **FUTURE TRANSPORTATION**

This Futuristic Transport has no wheels but it will be going to become the fastest transport all over the world, because it will be a floating pod which races along inside giant low-pressure tubes, either above or below ground. There will be no traffic, no weather The earth quake won't harm the passengers. There will be no need of huge energy so that we can will be faster than trains, safer than cars and less damaging to the environment than aircrafts and creating an Eco- friendly environment in future. It will be an autonomous transport. It will reign the

idea about that transport?



Any guess in your mind? If your guess is "HYPERLOOP", then you are right.

futuristic world. Could you imagine how our world is developing? Do you have any

This credit goes to Elon Musk (CEO of Space X and Co-founder & CEO of Tesla) who has popularized, developed and redesigned the concept of Hyperloop in 2012. Hyperloop will be the 5<sup>th</sup> mode of transportation. The Hyperloop is nothing but a Maglev train enclosed in a tube in which there is very little air pressure and hence almost no air resistance. The working principle is same as that of a maglev train i.e. the train is levitated and propelled forward using powerful electromagnets. It has two major parts one is capsule or pod and another one is tube. The capsule will go into the tube at high speed with low air pressure so that a pod may travel free of air resistance and friction. Hyperloop can be used as passengers transport as well as cargo. The speed of hyperloop will be 1223km/h (approximately equal to the speed of sound). It will be using solar energy which means self-powering. In 2016, Hyperloop was first executed in Nevada in US by creating a 3km prototype and the result was positive.

"You can teach a student a lesson for a day; but if you can teach him to learn by creating curiosity, he will continue the learning process as long as he lives."—Clay P. Bedford

In 2017, Los Angeles-based Company "Virgin Hyperloop One" announced a proposal in association with some consultants to evaluate the construction of five Hyperloop Transportation projects in India. They are

- Delhi to Mumbai (Via Jaipur and Indoor)(1317 km, 55mins) by DGW Hyperloop
- ♦ Mumbai to Chennai (Via Bengaluru)(1012km, 50mins) by DGW Hyperloop
- ♦ Bengaluru to Chennai (334km, 20mins) by AECOM
- ♦ Bengaluru to Thiruvananthapuram (736 km, 41mins) by LUX Hyperloop
- ♦ Bengaluru to Chennai (334km, 20mins) by Infi-Alpha



India's Hyperloop dream moved one step closer to reality with the Maharashtra government on the Virgin Hyperloop-DP World (VHO-DPW) consortium as the original project proponent of the proposed Hyperloop track between Mumbai and Pune. Maharashtra will create the first Hyperloop transportation system in the world, the makers claim.

The responsibility of the project was handed over to the Pune Metropolitan Development Authority (PMRDA). The authority said the Hyperloop project would be implemented in two phases – a test track of 11.4 km on a corridor from Gahunje to Ozarde and, if the test phase would be successful, a 117.5-km final track would be built in the second phase.

The Hyperloop connectivity between Pune and Mumbai would be significant as 15 crores passenger trips between the two cities were expected every year. Moreover, the system was also likely to reduce the emission of greenhouse gases by 86,000 tones over a span of 30 years. "Coffee won't slide even at 600 mph" said by the Ismaeel Babur, Senior civil engineer, Virgin Hyperloop One. That much smooth and comfort level will be there in pod but this project is now stopped due to corona virus .Don't worry, soon it will be started. Hyperloop will be a champion of future logistics scenario.

We are going to travel at the speed equal to the sound. Be ready to travel in Hyperloop!!!

IDA HOPE P
I year ECE

## SCIENCE FACTS

- **❖It takes** a photon up to 40,000 years to travel from the core of the sun to its surface, but only 8 minutes to travel the rest of the way to Earth.
- \* If Betelgeuse exploded, transitioning from the red supergiant stage to supernova, it would light our sky continuously for two months. It could happen anytime within a couple of thousand years.
- **Lasers can get trapped in a waterfall.**
- \*A single solar flare can release the equivalent energy of millions of 100 megaton atomic bombs.
- **❖There is evidence** that some animals, like sea turtles and salmon, have the ability to sense the Earth's magnetic field and use this sense for navigation.
- \*As a gas, oxygen is odourless and colourless. In its liquid and solid forms, however, it looks pale blue.
- ❖ Helium can work against gravity, it can flow without friction. It can climb up and over the sides of a glass. It can leak through molecule-think cracks in a container. If it starts flowing like a fountain, it will never stop.
- ❖If you took out all the empty space in our atoms, the human race could fit in the volume of a sugar cube.
- ❖It takes 8 minutes, 19 seconds for light to travel from the Sun to the Earth.
- ❖There is enough DNA in an average person's body to stretch from the Sun to Pluto and back for 17 times.

"It is impossible for a man to learn what he thinks he already knows."

-Epictetus

- **❖**At over 2,000 kilometres long, The Great Barrier Reef is the largest living structure on Earth.
- ❖ Pugs' cute little flat faces are the result of a genetic mutation. Their features have been strongly linked to a gene variant called SMOC₂.
- ❖ The Earth appears to have a whole new underground continent called Zealandia. The discovery itself isn't new – some geologists have been arguing its existence for many years. However, in 2017 a team of scientists concluded Zealandia fulfils all the requirements to be considered as a drowned continent.
- ❖For the first time in human history, gene-editing has been performed to fix a mutation for an inherited disease in embryos. Using a powerful tool called Crispr-Cas9, scientists successfully altered the DNA in defective embryos so they were no longer programmed to develop congenital heart failure.
- ❖The world's smallest fidget spinner is 100 microns wide. It is smaller than the width of a human hair and is barely visible to the naked eye.
- \*Humans accidentally created a protective bubble around Earth. Decades of use of very low frequency (VLF) radio communications have resulted in an artificial cocoon that could help to protect the planet from solar flares and radiation particles.

Vinothini M (1913016) I Year ECE

## **SPACE TECHNOLOGY**

### What is meant by space technology?

Space technology is a technology developed by space science or the aerospace industry for use in spaceflight, satellites, or space exploration. Space technology includes spacecraft, satellites, space stations, and support infrastructure, equipment, and procedures and space warfare.

### SPACE:

It is a boundless 3D extent in which the object and events have the relative position and direction. It is a zone that lies beyond the Earths atmosphere it occurs about 100 km above the planet where there is no appreciable air to breathe or to scatter light.

### **HUBBLE SPACE TELESCOPE (HST):**

- It was invented by Edwin Hubble in 1920's.
- It was launched in 1990.
- HST is a very big space telescope.
- Hubble was created with a need to capture high-resolution images of the universe.
- It is capable of collecting plenty of light thereby letting us to see fainter objects too.

### History:

Though the HST launched in 1990, it was funded in 1970 and supposed to be launched in 1980 but due to the budget problem it got launched in 1990. After the launch of the telescope, the first fewer images it returned were not the sharper as desired and the best image quality was lower than expected. Initially, considering the cost of telescope and the output, it was called as "white elephant". After the error was identified and made some corrections by using the sophisticated image processing techniques.

### **CURIOSITY ROVER**

- t is the most powerful robot ever to set wheel upon the Martian rigolith.
- It was launched from Cape Canaveral on 2011.
- Landed on Aeolis Palus inside Gale on Mars on 2012.
- It helps to determine whether Mars could ever have support for life.
- To determining the role of water and to study the climate and geology of Mars.

### **History:**

The Mars science laboratory and its rover centerpiece, Curiosity, is the most ambitious Mars mission yet flown by NASA. It was landed with a primary mission to find out if mars is suitable for life. Another

objective is to learn more about the Red Planet's environment. The mission results will also help prepare for human exploration. To contribute to these goals, MSL has eight main scientific objectives.

### KEPLER SPACE CRAFT

- It was named after the astronomer Johannes Kepler
- It was launched on march 2009 into an earth trailing heliocentric orbit.
- To discover the Earth sized planet orbiting other stars.
- Only planets whose orbits are seen edge-on from Earth can be detected.
- It spends 9 years in space.

### **History:**

It was launched by NASA on 2009. Afrer 9 years of operation, the telescope's reaction control system fuel was depleted, and NASA announced its retirement on Oct.30,2018. It was designed to survey a portion of Earth's region of the Milky way to discover Earth size exoplanets. Kepler's sole scientific instrument is a photometer that monitored the brightness of approximately 150,000 main sequence stars in a fixexd field of view.

### PRESENT SPACE TECHNOLOGY:

- Weather forecasting.
- Remote sensing.
- GPS system.
- Satellite television.
- Long-distance communication systems.

### **FUTURE SPACE TECHNOLOGY:**

- Robotic space craft.
- Human space flight.
- Telescopic exploration.
- Antimatter powered rocket.
- Laser & microwave powered rocket.
- Sun powered rocket.

NITHYA G

I year - CSE

1912018

# AMAZING FACTS

□Archerfish can recognize people's faces according to researchers from Oxford University. Their accuracy is more than 80%.
☐Human lungs have the same surface area as a
tennis court.  □A flea accelerates faster than a space shuttle. Its jumps 3.14 inches per millisecond. A flea's acceleration is 50 times faster than that of a
spaceship.  When a baby is born, he or she has only one cup of blood in his/her body and one in every 2000 babies
is born with a tooth or teeth.  One of the most slippery substances in the world is the lubricant in your knees.
☐The biggest living organism in the world is Armillaria which grows in Malheur (Oregon, U.S.) Its size is more than 2,174 acres and its ages around
2,400 years.  □Babies have around 100 more bones than adults.  □Chalk is made from trillions of microscopic plankton fossils.

"You don't have to see the whole staircase, just take the first step."

- Martin Luther King, Jr.

stainless steel.
□Hummingbirds are the only birds able to fly backward.
□The Stegosaurus dinosaur measured up to 30 feet long but had a brain in size of a walnut.
□Armadillos, opossum and sloths spend about 80 percent of their lives in sleeping.
□Ninety minutes of sweating can temporarily shrink the brain as much as one year of aging.
□A person may dream 15000 times a year on an average.
□Opiorphin is a painkiller which is present in our saliva which is six times more powerful than morphine.
□Chemist Glenn Seaborg who could write his address in chemical elements. He would write Sg, Lr, Bk, Cf, Am. Lr stands for Lawrencium which is named after the Lawrence Berkeley National Laboratory. Bk stands for Berkelium which is named after the city of Berkeley; Cf stands for Californium which is named after the state of California and Am stands for Americium which is named after America.  Suga Príya X (1915054)
I Year IT

## WIRELESS CHARGING

## **Inventor of wireless power transmission:**

The great scientist, Nikola Tesla dreamed of creating a way to supply power to the world without stringing wires across the globe. Between 1888 and 1906, Nikola Tesla spent most of his time and fortune on a series of projects to develop the transmission of electrical power without wires.

## Working of wireless charging:

The basic principle behind the wireless charging is electromagnetic induction or inductive charging.

Wireless charging isn't magic, you still need a wire.

The difference is that the wire is connected to a charging base instead of your device, so you can just drop your device onto the charger and things get to work without hooking anything up to your phone. Inductive charging uses two specially designed electromagnetic coils to create a magnetic field between two devices.

A copper coil which connected the alternative power supply creates an oscillating magnetic field that can travel wirelessly, and a second coil converts the floating field back into energy again. The two coils form transformer, or a device that transfers energy between two circuits. The coil in the device is also connected to the battery charging circuit and your battery is charged using the energy induced by the magnetic field.

### What's inside a WIRELESS CHARGER

- 1. LED charging indicator light
- Non-slip pad surface
- 3. 7.5W transmitter coil
- 4. Fanless design for quiet operation
- 5. Wireless charging chipset controls the flow of electricity
- 6. Thermal protection sensor can dial back power for safer operation
- Foreign object detection circuit to prevent conductive materials from receiving power from the charger



The main wireless standard is Qi (pronounced as "Chee"). Qi is a standard that has been developed by the Wireless Power Consortium (WPC) for inductive charging over distances of up to 40mm. Qi chargers has been adopted by many companies. But the energy consumption of the wireless charging is 50% higher than the wired charging.

## **Chargers and E-waste:**

Last year over 50 million of E-waste is calculated around the world. Among these 300,000 tons of E-waste just from the in-box chargers, these includes the chargers for phones, laptops, tablets. And only 6.5 tons of E-waste is recycled. The rest ended up in household rubbish, mixed with organic leftovers and plastic. And then here comes the over the air wireless charging technology which can charge up to 3 to 4 phones at the same time and thus extremely reduces the E-waste with the newer technology.

RAHUL R EEE

"The successful man is the one who finds out what is the matter with his business

# Substantial Facts

✓ If you place a pinhead sized piece of the sun on the earth you would die from standing within 145km (90 miles) from it.

✓ If a human being's DNA was uncoiled, it would stretch ten billion miles, from earth to Pluto and back.

✓ Fire spreads uphill quicker than downhill, which is because temperature

considerably affects the rate of combustion.

✓ Human brain tissue is not dense. It's very fragile, soft and squishy similar to consistency of soft loft or gelatin.

✓ Energy can be transformed from one form to another. In lightening, electric potential energy transforms into light, heat and sound energy.

✓ Dendrochronology is the science of calculating a tree's age by its rings.

✓ Apple, potatoes and onions have the same taste, to test this eat them with your nose closed.

✓ Twenty five percent of the body's cholesterol resides within the brain. Cholesterol is an integral part of every brain cell, without adequate cholesterol, brain cells die.

✓ Each neuron can transmit 1000 nerve impulses per second and make as many as thousand of synaptic contacts with other neurons.

✓ Approximately 5 million tons of oil produced in the world each year ends up in the ocean.

In 2.3 billion years it will be too hot for lives to exist on earth

# G. Vasukí (1913019) I Year EEE

"Take time to deliberate; but when the time for action arrives, stop thinking and go in."

- Napoleon Bonaparte

## Prominent Facts

- 1) Venus is the only planet in the solar system that rotates clockwise direction. All the other planets rotate in anti-clockwise direction.
- 2) The wind on Neptune is so fast that it breaks the sound barrier.
- 3) On Venus, it snows metal and rains sulphuric acid.
- 4) Space smells like a combination of hot metal, fuel and barbecued meat.
- 5) Rain water contains vitamin B12.
- 6) A teaspoon full of neutron star would weigh 6 Billion tons.
- 7) The world's largest jelly fish "The Lion Mane" is longer than a blue whale
- 8) You cannot cry on space because your tears will not fall.
- 9) J and Q are the only two letters that did not appear in the periodic table.
- 10) One inch of rain is equal to 10 inches of snow.
- 11) NASA scientists have discovered stars that are cool enough to touch.
- 12) There are some parts in Antarctica that had no rain for last two million years.
- 13) Your cars airbags are packed with salt sodium azide which is very toxic
- 14) Squirrels will adopt other squirrels baby if they are abandoned.

Karthiga A (1911073) I Year ECE

"If people did not do silly things, nothing intelligent would ever get done."

- Ludwig Wittgenstein

## TREMENDOUS FACTS

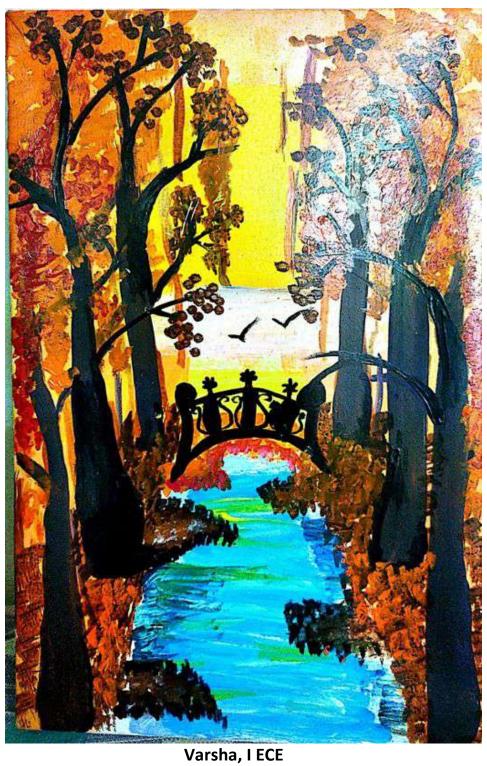
- 1. Your brain generates about 25 watts of power while you are awake.
- 2. Right-handed people live an average of nine years longer than left-handed ones.
- 3. The entire world's population could fit inside Los Angeles.
- 4. 220 million tons of old computers and other technological hardware are trashed in the United States each year.
- 5.. An egg looks like a crazy jellyfish underwater.
- 6. A single solar flare can release the equivalent energy of millions of 100-megaton atomic bombs.
- 7. The average human body carries ten times more bacterial cells than human cells.
- 8. Octopuses have three hearts, nine brains, and blue blood.
- 9. An individual blood cell takes about 60 seconds to make a complete circuit of the body.
- 10. The known universe is made up of 50,000,000,000 galaxies.
- 11. Hawaii moves 7.5cm closer to Alaska every year.
- 12. In 2.3 billion years it will be too hot for life to exist on Earth.
- 13. Polar bears are nearly undetectable by infrared cameras.
- 14. It takes 8 minutes, 19 seconds for light to travel from the Sun to the Earth.
- 15. If you took out all the empty space in our atoms, the human race could fit in the volume of a sugar cube.
- 16. The Earth is a giant magnet.
- 17. A flea can accelerate faster than the Space Shuttle.

Stephen A (1913014) I Year EEE

"The successful warrior is the average man, with laser-like focus."

- Bruce Lee

## **Paintings**





Al Haseena, I CSE



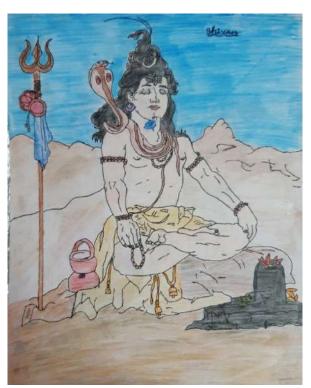


Anuraga, I EEE



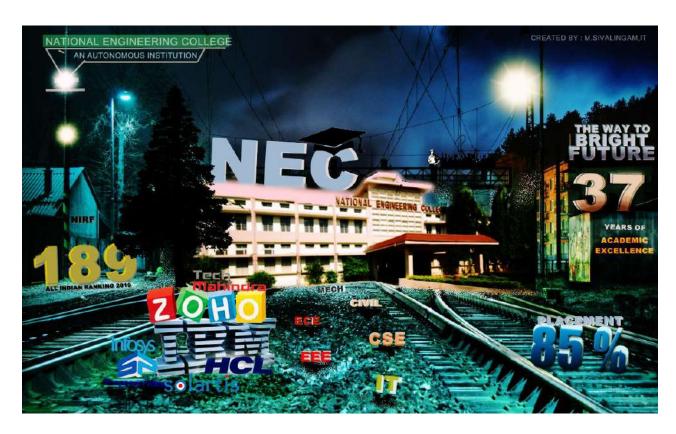


Bhubaneswari, I CSE





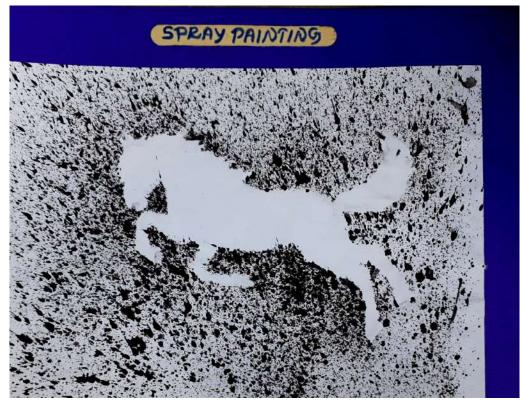
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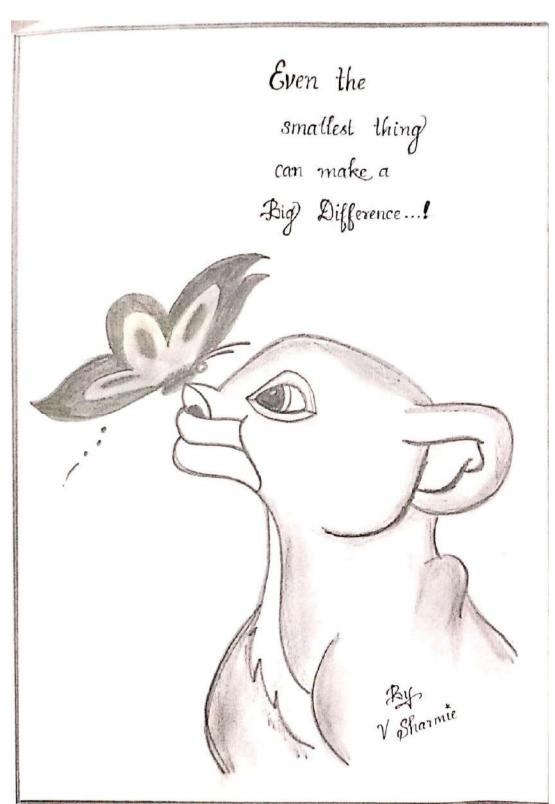


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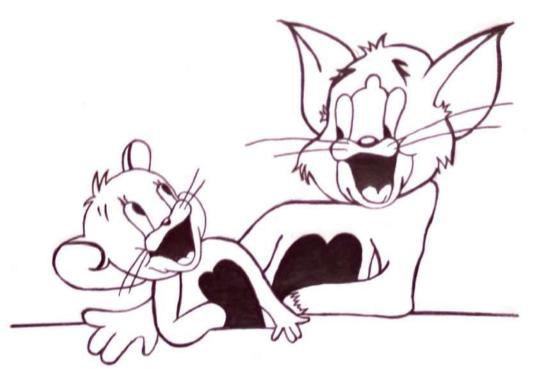




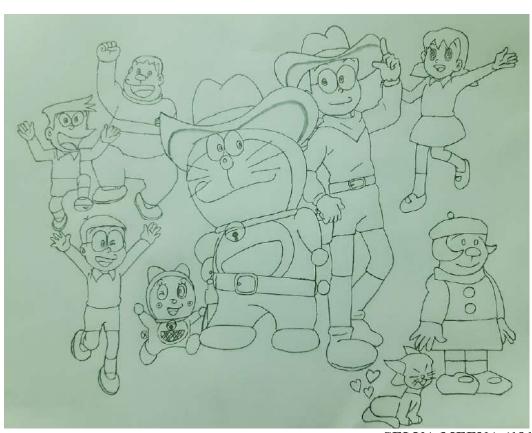
S.KEERTHIVASAN
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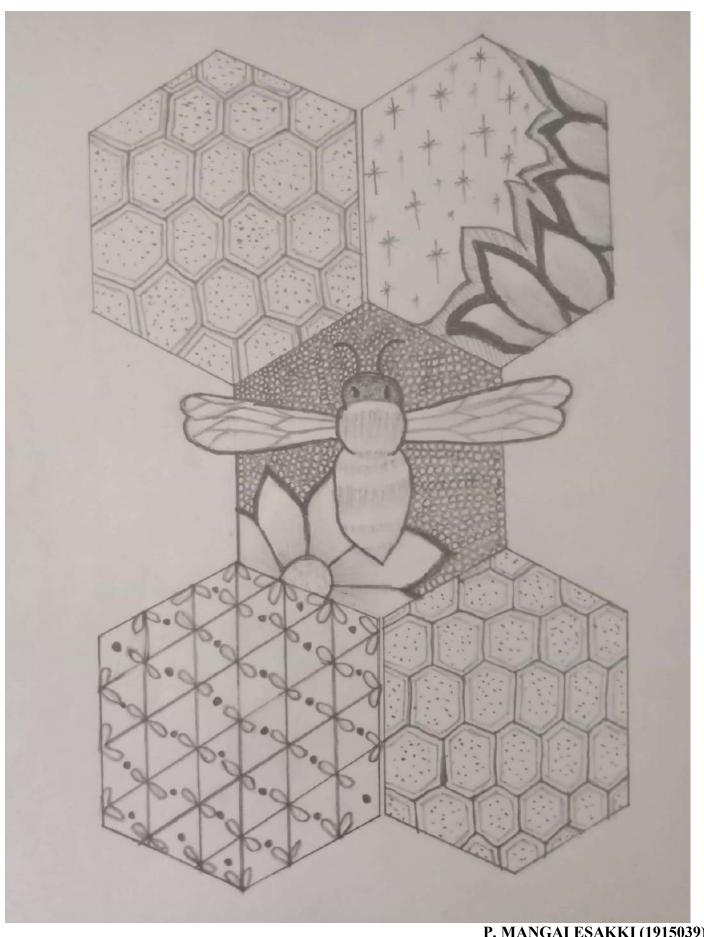
V. SHARMIE (1913042) I<sup>st</sup> YEAR – EEE



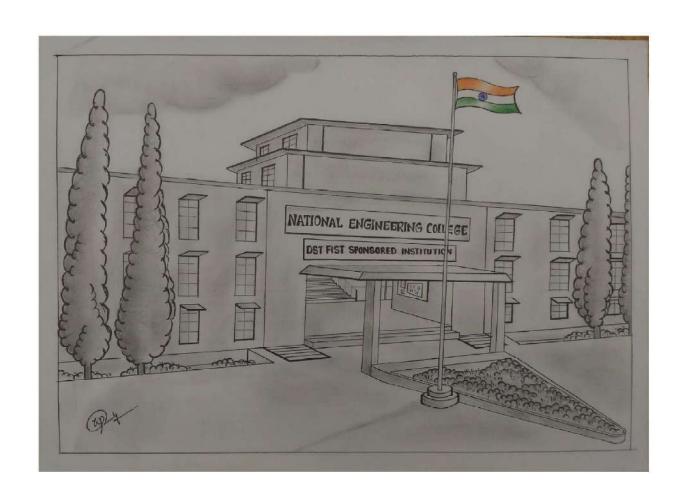
R. AMBIGESWARI (1912052) I<sup>st</sup> YEAR – CSE



SELVA MEENA (1916019) I<sup>st</sup> YEAR – CIVIL



P. MANGAI ESAKKI (1915039) I<sup>st</sup> YEAR – IT



W. PRADEEP RAJADURAI (1915012) I<sup>st</sup> YEAR - IT

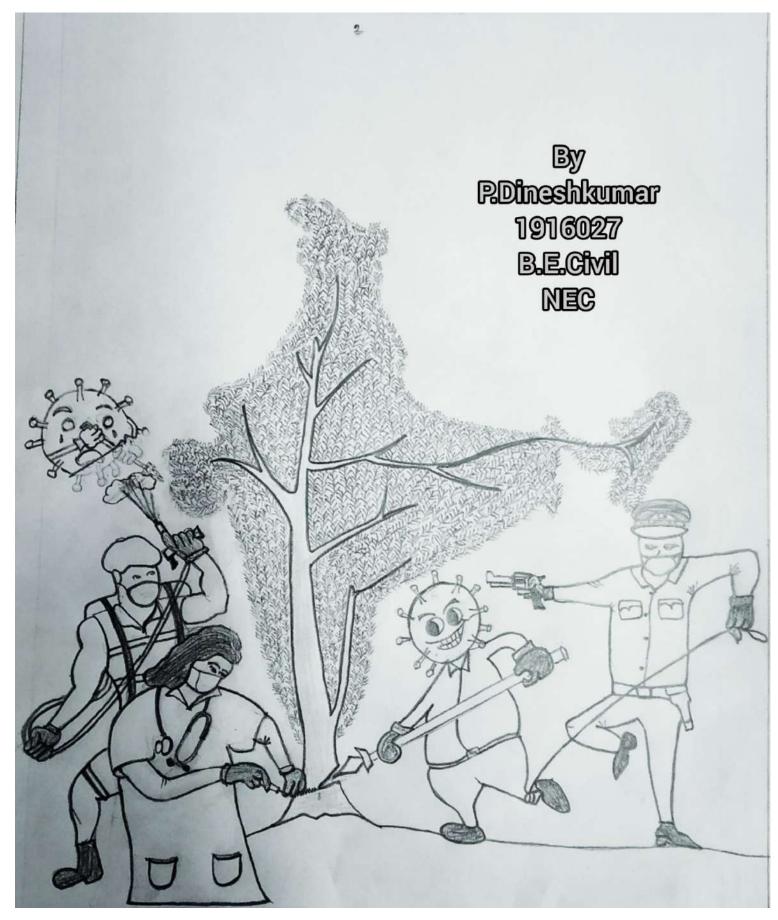


P. AKSHAYA (1913027)

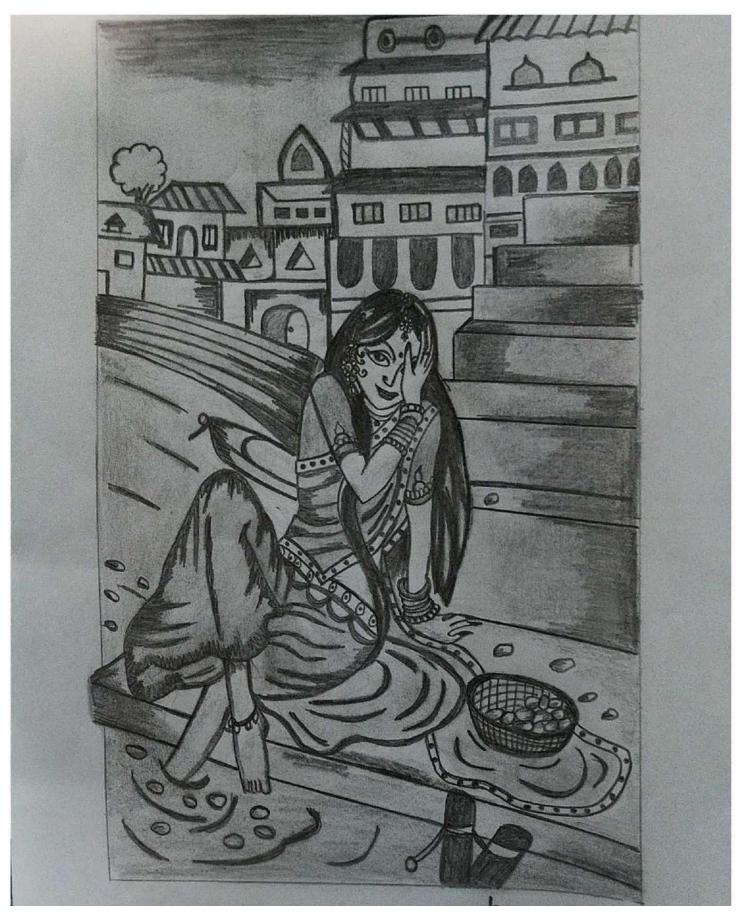
I<sup>st</sup> YEAR - EEE



M. JAYASRI (1911068) I<sup>st</sup> YEAR - ECE



P. DINESH KUMAR (1916027) I<sup>st</sup> YEAR - CIVIL



P. AKSHAYA(1913027) I<sup>st</sup> YEAR - EEE



J. ANURAGA (1913001) I<sup>st</sup> YEAR - EEE



P. SERENA SEFRANICA (1912025) I<sup>st</sup> YEAR - CSE



S. SWETHA (1912031)

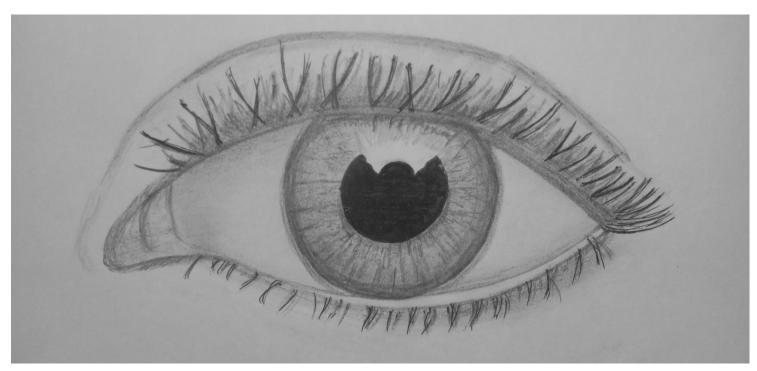
I<sup>st</sup> YEAR - CSE



M. SHIVRAM KUMAR (1913025) I<sup>st</sup> YEAR - EEE



M. AATHI RAJA (1910047) I<sup>st</sup> YEAR - MECH



L. MUTHU SUBATHRA (1911090) I<sup>st</sup> YEAR - ECE



J. JEY SHREE LAKSHMI (1913032) I<sup>st</sup> YEAR - EEE



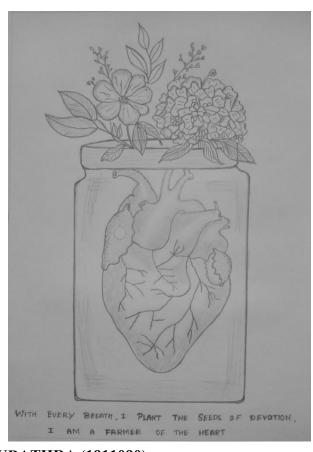
S. TARUN SUNDAR (1910025) I<sup>st</sup> YEAR - MECH



J. ANURAGA (1913001) I<sup>st</sup> YEAR – EEE



S. SHANMUGA KUMAR (1910021) I<sup>st</sup> YEAR - MECH



L. MUTHU SUBATHRA (1911090) I<sup>st</sup> YEAR - ECE



A. MOHANA INDHU PRIYA (1913035) I<sup>st</sup> YEAR - EEE



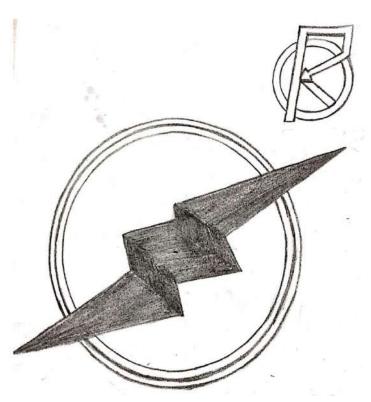
G. KAVIYA (1911077) I<sup>st</sup> YEAR - ECE



P. BOOPATHIRAJA (1910052) I<sup>st</sup> YEAR - MECH



S.B. SARANYA (1911100) I<sup>st</sup> YEAR - ECE



M. RAJA DURAI (1916036) I<sup>st</sup> YEAR - CIVIL



P. KAVISH GOLDEN (1912071) I<sup>st</sup> YEAR - CSE



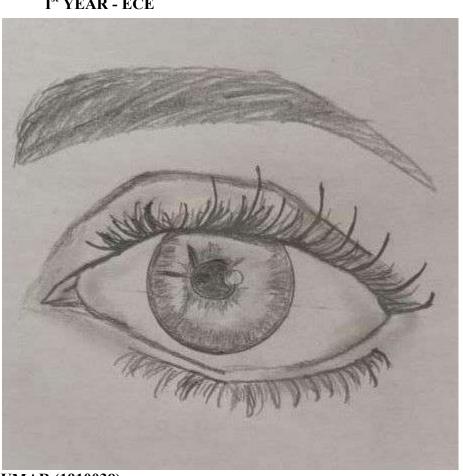
P. SERENA SEFRANICA (1912025) I<sup>st</sup> YEAR - CSE



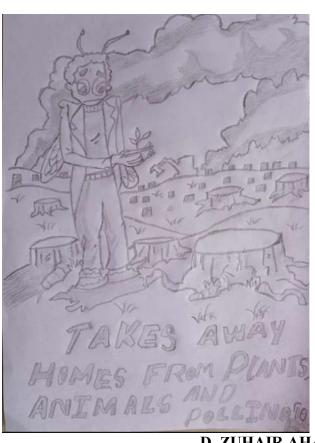
P. MUTHU LAKSHMI (1911089) I<sup>st</sup> YEAR - ECE



L. MUTHU SUBATHRA (1911090) I<sup>st</sup> YEAR - ECE



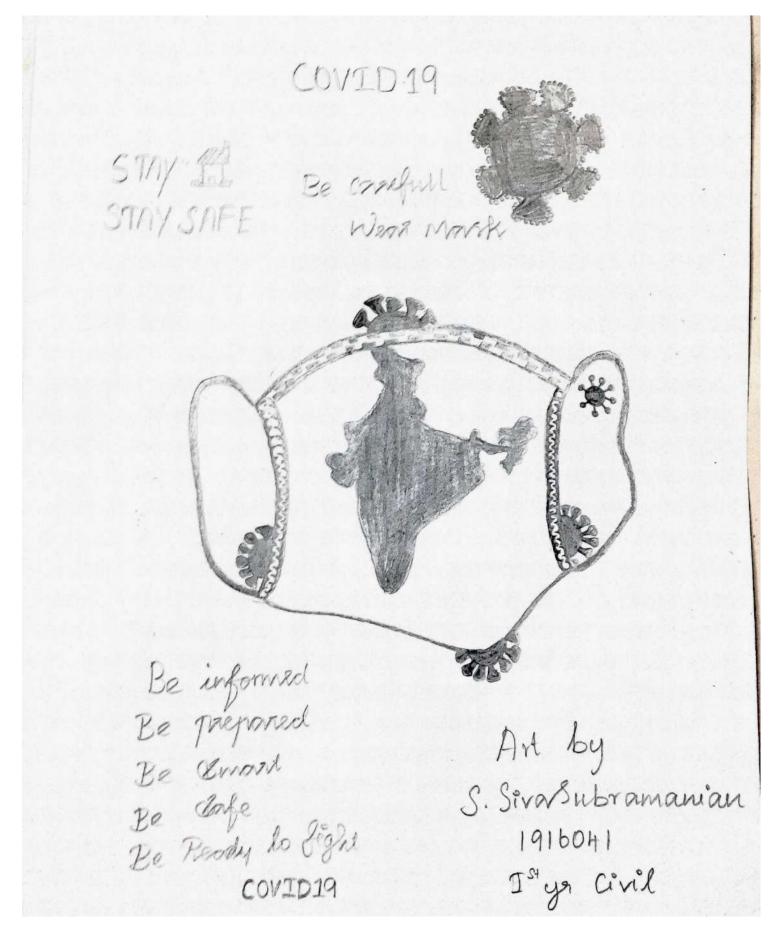
N. HARISH KUMAR (1910038) I<sup>st</sup> YEAR - MECH



D. ZUHAIR AHAMMED (1916045) I<sup>st</sup> YEAR - CIVIL



N. NITHU ANISHKA (1913037) I<sup>st</sup> YEAR - EEE



S. SIVASUBRAMANIAN (1916041) I<sup>st</sup> YEAR – CIVIL



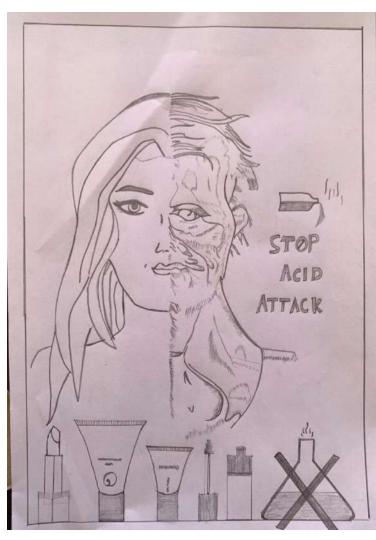
M. SUBASHINI (1911046) I<sup>st</sup> YEAR –ECE



T.N. RAGUL (1912021) I<sup>st</sup> YEAR –CSE



M. SUBASHINI (1911046) I<sup>st</sup> YEAR –ECE



S. ABI SWETHA (1911002) I<sup>st</sup> YEAR –ECE

### STUDENT'S ROLE MODEL "HOD SIR"

#### RESPECTED "Dr. M.A.NEELAKANTAN" SIR.

#### "HE IS AN ICON OF NEC"

HOD Sir being a good personality and doing a good service for the past years. He suits correct for the position of Dean, Research and Development Professor of Chemistry and Head Department of Science and Humanities, NEC.

STUDENT'S CARE TAKER: "HE IS A BRIDGE BUILDER OF NEC"

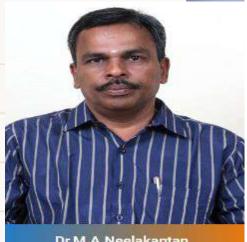
He always cares about student's grades, their activities and helps to encourage them in various aspects. He speaks calm and gives special respect for everyone.



He motivates students to achieve in each and every fields which they like. He always asks our queries and difficulties and he will take steps according to it.

IDEALISTIC MAN: "HE IS A PRIDE LEGEND OF NEC"

He is an example for everyone who believes that all will always turn out right in the world. He cherishes noble principles and inspires us to achieve our goal.





# • AFFECTIONATE CHARACTER: "HE IS A PRECIOUS PEARL OF NEC"

He won't show his anger towards anyone. He treats everyone equally without seeing partiality. He treats all with kindness. He is very affectionate to students.

#### • AMBITIOUS PERSON: "HE IS A GOLDEN GEM OF NEC"

He advises us to set goals and trains our mind to think and execute. He has a clearly defined strategy and a target that he effectively communicates it.

#### COURTEOUS PERSONALITY: "HE IS A BACK BONE OF NEC"

His courtesy is not just showing manners, but also demonstrating empathy and respect for others. He considers the feelings of others. He is liked by all students.

#### • "HE IS A KING MAKER OF NEC"

He is a kingmaker who published two books. He is a supportive personality. None of them makes complaint on him. He is such a gift for students who thinks everyone is a precious student. We admire him a lot.

> S.DHARANI I year IT

#### A MAN WHO BECAME BILLIONAIRE AT THE AGE OF 65



A very inspiring history which is all about noter giving up attitude and this late bloomer who won millions of heart, which I bet at the end of story will move your heart too.

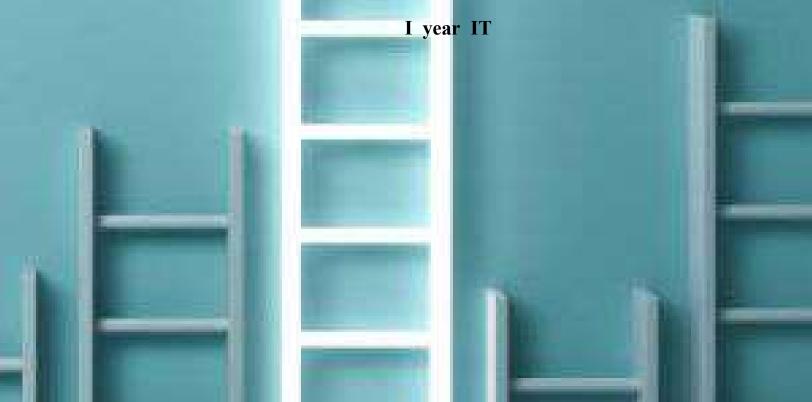
When he was only six his father died and his life changed drastically. While his mother use to work to feed the family. He takes care of his younger brother and his sister at home. When his mother remarried, he had the worst relation with his stepfather. At the age of 13 he quit his school, soon after he left home by himself.

He falsified his birth date and volunteered for the U.S Army at the age of 15.He served a full term and ended his service in Cuba. After, he worked as a conductor for street car company and as a blacksmith's helper in the workshops. When he was of 18 he got married and at age 19 he became father, he lost his baby son from infected tonsils and left with his two more daughters. At age 20 his wife Josephine left him taken the children back to her parents home. And he became an insurance sales agent ant failed again. He also applied for law school and was rejected. After a while, he began to

practice law in little rock, which he did for three years, earning enough in fees for his family to move with him, his legal career ended after a courtroom brawl with his own client, and for unknown reason he did not even finish the law courses.

After that he became a cook and a dish washer at a small cafe and took retirement at the age of 65. He received only a check of \$105 as part of his pension. After so many failure he decided to commit suicide. He sat under the tree writing his will but instead he wrote what he would have accomplished with his life. There was much more that he had not done. There was one thing he could do better that anything he knew "HOW TO COOK". He borrowed some money against his check, bought and fried up some chicken. He went to door to door to sell this to his neighbours. And now he is the founder of Kentucky Fried Chicken(KFC), which is one of the famous fast food restaurant in United States. Yes, this late bloomer is COLONEL HARLAND SANDERS, owner of KFC was able to be billionaire after his 65 th birthday.

**MUTHULAKSHMI A (1915041)** 





Take 12 complete months. Clean them carefully of all bitterness, hate and envy. Cut each month into 28, 30, 31 different pieces, but do not cook them all at the same time. Prepare one day at a time with the following ingredients a pinch of patience, a pinch of faith. A pinch of courage and a pinch of work. Add to each day one scoop of prayer, one scoop of meditation and one scoop of application. Season it with one tea spoon of good spirit, a pinch of happiness, a little action and a good measure of humour. Place everything in a vessel of love. Cook well on fire of radiant happiness. Garnish with smile and serve abundantly.

SHARMIE V (1913042)
I YEAR EEE

# Effectual Quotes

- "The way to get started is to quit talking and begin doing." Walt Disney
- "Don't let yesterday take up too much of today." Will Rogers
- "It's Not Whether You Get Knocked down, It's Whether You Get Up." Vince Lombardi
- "It does not matter how slowly you go as long as you do not stop." Confucius
- "We must embrace pain and burn it as fuel for our journey." Kenji Miyazawa
- "Believe you can and you're halfway there." Theodore Roosevelt
- "You are so much more than what you are going through." John Tew
- "Difficult roads always lead to beautiful destinations." Zig Ziglar
- "Goals may give focus, but dreams give power." John Maxwell
- "Success means doing the best we can with what we have. Success is the doing, not the
  getting; in the trying, not the triumph. Success is a personal standard, reaching for the
  highest that is in us, becoming all that we can be." Zig Ziglar
- "Success is not the key to happiness. Happiness is the key to success. If you love what you are doing, you will be successful." – Herman Cain
- "Victory is sweetest when you've known defeat." Malcolm S. Forbes
- "Love many things, for therein lies the true strength, and whosoever loves much performs
  much, and can accomplish much, and what is done in love is done well." Vincent Van Gogh.
- "Don't let what you cannot do interfere with what you can do." John R. Wooden
- "Never limit yourself because of others' limited imagination; never limit others because of your own limited imagination." – Mae Jemison
- · "Start where you are. Use what you have. Do what you can." Arthur Ashe
- "To see what is right and not do it is a lack of courage." Confucius
- "One of the lessons that I grew up with was to always stay true to yourself and never let what somebody else says distract you fro. Your goals." – Michelle Obama
- · "Today's accomplishments were yesterday's impossibilities." Robert H. Schuller
- "You don't have to be great to start, but you have to be great." Zig Ziglar

Abinaya N I Year Civil (1916001)

# RIDDLES

- 1. What question can you never answer yes to?
- 2. What can you break, even if you never pick it up or touch it?
- 3. What is always in front of you but can't be seen?
- 4.A man dies of old age on his 25 birthday. How is this possible?

# Guess The Country!

1. 
$$2 + R + 9 =$$

# P. SHEBA BATTISTA (1916039) I Year CIVIL



'he best revenge is massive success." - Frank Sínatra

# ANSWERS

### RIDDLES:

- 1. Are you asleep yet?
- 2. A promise.
- 3. The future.
- 4. He was born on February 29.

# Guess The Country!

- 1. Turkey
- 2. China
- 3. Iceland
- 4. Oman
- 5. Qatar
- 6. Japan
- 7. Germany
- 8. Portugal
- 9. Libya
- 10. Ukraine

#### ஹைக்கூகவிதைகள்

க. விடுமுறையே வேண்டாம் பள்ளிக்கூடம் போகிறோம் மதியஉணவு.

உ. ஆசிரியர்களற்ற பள்ளிக்கூடம்கலகலப்பாயிருக்கிறதுபள்ளிப்பேருந்தினுள்.

ந. ஆறிலும் சாவு நூறிலும் சாவுஆனது ஆகட்டும் அஞ்சாது போஅரசாங்க ஆஸ்பத்திரிக்கு.

ச. இலையை எங்கே போட எதிரெதிராய் எதிர்பார்ப்புடன் நாயும் மனிதனும்

டு. சாலைப்பேருந்து நின்றே பயணிக்கின்றன மரங்கள்

> கூ. ஆபிஸ் முடிந்து அம்மா வந்தாள் உயிர்ப்பித்தது பதினெட்டு மாதபொம்மை

எ. திரையரங்கின் உள்ளேயும் மழை வெளியேயும் மழை ஓடிக்கொண்டிருந்தது பழையபடம்

> அ. காகிதமும்மின்கடத்தியா? சுர்'என்றுசுட்டதே மின்சாரக்கட்டணம்!

கூ. உடன்வந்து இடைநடுவில்பிரிந்தாயே அறுந்தசெருப்பு

> கo. தொட்டியில் வாய்வைத்த மாடு குடித்ததும் காணாமல் போகிறது நீரில் கிடந்த நிலா

GANESHKUMAR S

I year ECE

### **Importance of English - Communication**

English is the language of science, aviation, computers, diplomacy, and tourism. It's the language of international communication, the media and the internet. English may not be the most spoken language in the world, but it is the official language of 53 countries and spoken by around 400 million people across the globe. Learning English is important as it enables us to communicate easily with our fellow global citizens. English is the dominant business language and it has become almost a necessity for people to speak English if they are to enter a global workforce as many international companies expect employees to be fluent in English. Learning English is important as it gives us access to over half the content on the internet.

English communication is a skill that can be perfected only through constant practice and continuous exposure to the language. English plays a crucial role in communication and is no doubt that it is the foremost and most important tool of communication all over the world. First and foremost, learning English can help you pursue and obtain more career opportunities. Individually everybody should strive hard to acquire good communication skill which is the most important prerequisite to excel in one's career. Everyone will commit mistake including the native speakers. Without error no true learning can take place. Since language learning is a slow and continuous process errors are inevitable. Although learning English can be challenging and time – consuming, we can see that it is also very valuable to learn and can create many opportunities!

S. THANGAM,
Assistant Professor,
Department of Science and Humanities,
National Engineering College.



### **CHOCOLATE WAR**

In a village, there lived two brothers MUNCH and PERK. In the same village there lived a bad man named CADBURY. Seeing their unity, he became jealous and tried to kill PERK. On knowing this MUNCH gave a CRUNCH. CADBURY felt insulted and got help from MILKYBAR. MUNCH got help from LACTO KING. The supporters of CADBURY were LIMCA, PEPSI and COKE. The supporters of MUNCH were SPRITE, FANTA and MIRANDA. A war was fought between them. Thousands of ALPHENLIBE were killed in battle of NESTLE CLASSIC. At last MUNCH defeated CADBURY and conquered LIMCA, PEPSI and COKE. Finally, they both agreed to sign the treaty of PARLE-G at MOUNTAIN **DEW** in 50-50.

> SHARMIE V EEE

# Rousing Quotes

- There is nothing called "PROBLEM"; Its just absence of an idea to find the SOLUTION
- When people don't give you importance then don't feel rejected,
   because sometimes people consider gold as brass
- Every story has three aspects yours, theirs and truth. Do not judge too quickly.
- People save good memories in pendrive and bad memories in mind;
   Just change the location, life will automatically change
- Nobody can go back and start a new beginning, but anyone can start today and make a new ending
- Sometimes when you are in a dark place, you think you have been buried, but actually you are been planted
- Give the world a reason to remember your NAME
- The two most important days in your life are the day you are born and the day you find why you are born
- A lonely day is God's way of saying that he wants to spend some quality time with you

A.KARTHIKA, I Year ECE (1911073)

# Factual Quiz

- 1.Which country will issue a commemorative coin (the Royal Mint) to mark 150th birth anniversary of Mahatma Candhi?
- Name the noted saxophone exponent from Mangalore who passed away on October 11.
- 3. The informal summit between Chinese president Xi Jinping and Prime Minister Narendra Modi happened over the weekend in which historic town of Tamil Nadu?
- 4. The first e-waste clinic of India will be set up in which city?
- 5. This year's first Comic Con India was held over the weekend in which city?
- Name the Polish writer who has just been awarded the Nobel Prize in Literature for 2018
- 7.One more on the Nobel The one for chemistry went to three scientist for developing what kind of batteries?
- 8. Women from which country attended a FIFA soccer game for the first time in decades?
- 9. Can you name the Netherlands' athlete who has won an unprecedented World Championship double gold in 1,500 mt and 10000 mt?
- 10. The Sri Lankan cricket team has swept the T20 series 3-0 against which host country?

ANSWERS: 1. The UK .2. Kadri Gopalnath. 3. Mamallapuram. 4. Bhopal .5. Hyderabad .
6. Olga Tokarczuk .7. lithium ion .8. Iran .9. Sifan Hassan. 10. Pakistan

## **HAIKU**

#### LIFE

"Life is little, Our heads sad Redeemed and wasting time, Think it, Use it happily".



#### **BUTTERFLY**

"Butterflies are cool and colourful,

In the big green forest,

That's why they fly high".



### **PAST**

"I walk in the park,

The park is very windy

I lost my old hat with bitter memories too".



J JUHI SAFFAR
I year IT

# THE ELEPHANT ROPE

As a man was passing the elephants, he suddenly stopped, confused by the fact that these huge creatures were being held by only a small rope tied to their front leg. No chains, no cages. It was obvious that the elephants could, at anytime, break away from their bonds but for some reason, they did not.

He saw a trainer nearby and asked why these animals just stood there and made no attempt to get away. "Well," trainer said, "when they are very young and much smaller we use the same size rope to tie them and, at that age, it's enough to hold them. As they grow up, they are conditioned to believe they cannot break away. They believe the rope can still hold them, so they never try to break free." The man was amazed. These animals could at any time break free from their bonds but because they believed they couldn't, they were stuck right where they were.

Like the elephants, how many of us go through life hanging onto a belief that we cannot do something, simply because we failed at it once before?

FAILURE IS PART OF LEARNING; WE SHOULD NEVER GIVE UP THE STRUGGLE IN LIFE.



ANTO ROSARIO S (1915028) I year it

Difficulties in your life do not come to destroy you, but to help you realize your hidden potential and power, let difficulties know that you too are difficulties

- A P.J. Abdulkalam

### RIDDLES



I have keys but do not lock. I have space but have no room. You can enter but not come in what am I?

ANS: Keyboard

I am biggest alphabet, as I contain the most water in the world. Who am I?

ANS: Sea

I'm not alive but I have five fingers. Who am I?

ANS: A Glove

I live above a star but never burn. I have 11 neighbours but they never turn my initials. My initials are p, q, r and sometimes s. Who am I?

ANS: Number 7 on phone keypad

What do the cookie and computer have in common?

**ANS: Both have Chips** 

What do you call a nurse that treats websites?

ANS: Urologist

What is the difference C and C++?

ANS: C - C ++ = 0

How many 7's are between 0 and 100?

ANS: 20

(7, 17, 27, 37, 47, 57, 67, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 87, 97)

**R.Ishwarya** (1915006)

### HAPPINESS IS YOUR CHOICE

There was a boy, whose family was very wealthy. One day his father took him on a trip to the country, where he aimed to show his son, how poor people live. So, they arrived to a farm of a very poor family, as he considered. They spent there several days. On their return, the father asked his son, did he like the trip.



"Oh,it was great dad", the boy replied. "Did you notice how poor people live?", father asked. "Yeah, I did", said the boy. The father asked his son to tell in more details about his impressions from their trip. The boy said, "Well, we have only one dog, and they have four of them. In our garden there is a pool, while they have a river that has no end. We have got expensive laterns, but they have stars above their heads at night. We have the patio, and they have the whole horizon. We have only a small piece of land, while they have the endless fields. We buy foods, but they grow it. We have high fence for protection of our property, and they do not need it, as their friends protect them".

The father was stunned. He could not say a word. Then the boy added,"Thank you dad for letting me see how poor we are".

THE TRUE WEALTH AS WELL AS HAPPINESS IS NOT MEASURED BY MATERIALTHINGS.LOVE, FRIENDSHIP AND FREEDOM ARE FAR MORE VALUABLE.

KARTHIKA A(1911073) I Year Ece

# **Enchanting Quotes**

- "You are braver than you believe, stronger than you seem, and smarter than you think."
- "Just believe in yourself. Even if you don't, pretend that you do and, at somepoint, you will."
- "No one is perfect-that's while pencil's have erasers. We all are perfectly imperfect."
- "Winning doesn't always means being first. Winning means you're doing better than you've done before."
- "Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time."
- "If you don't value your time, neither will others. Stop giving away your time and talents-start charging for it."
- "If you can't explain it simply, you don't understand it will enough."
- . "Your problem isn't the problem. Your reaction is the problem."
- "Life is not about finding yourself. Life is about creating yourself."
- "The man who has confidence in himself gains the confidence of others."
- "You should never regret anything in life. If it's good, it's wonderful. If it's bad it's experience"
- "Life is like riding a bicycle. To keep your balance, you must keep moving.

MUTHU SUBATHRA I year ECE (1911090)

# அப்பா



I year EEE

#### A LIFE OF AN ORDINARY WOMEN

The day was started with pleasant air cool breeze that was blowing over all area. A cute little girl was born with dazzling smile. Her parents named James and Caroline kissed her cheeks with lots of happiness. Her father was lorry driver and her mother were housewife but the salary of James was too less so her mother decided to do a job. she made some dinner and sold in the evening.

The baby girl was named as Claire she was the first baby girl in the family and also, she had three siblings one sister and two brothers. Claire was such beautiful and intelligent pretty girl and also, she loved her father to the core of the heart. She was always ranked first in her schoolings. In std 10<sup>th</sup> she scored first in the school and in the higher studies she took first group in the girl's school which is less in fees. She was allotted as the School pupil leader.

Also, she was good in academics as well as other activities. After her school ends up in the evening, she works with her mom to enrich her family situation. She was aimed to become a nurse but due to her financial circumstance of her family she dropped her schoolings and went to the job. She worked as a sales women in a bookshop for less salary. She all the way walk to the bookshop and home. She stands form morning to night in the shop. After few years, she married to a driver named as William. Then she continued her job because her husband works only seasonally and also, for her studies of her siblings.

She gave birth to a girl baby named her as Jessica. While working in the bookshop, she makes her siblings to finish they're higher secondary education and made them to lead their own life and also working in the shop she has stands for a day so she got some nervous disorder in her leg. Some idea from her relatives decided her to buy a house with the help of a bank loan. Meanwhile her father was passed away and she was very depressed. To avoid the memory of her dad which make her more disturbed the whole family quit from the area, and decided to live in other area. She joined in the builders to lead her life and to help her mother.

She helped her mother to make all her siblings to married and lead the life with their partners. After 10 years she gave birth to baby boy named as Noah. After all these she still working in that builders for her children studies. She faces more struggles and shame to grow up her children and they should reach a better life in future and also, they should not feel worst in the future. Every girl who are uneducated and born in a poor family lead sacrificial life. Most of the women nowadays are achieving in their field with the help of their parents or by their partners. But women's like Claire and more can't achieve in their life as they wish because of her family situationsetc... for more reasons. They sacrifice everything in life and they feel happy in making everyone happy. This is the life of an ordinary women

MANGAI ESSAKI P (1915039)-I YEAR IT

# **Awakening Quotes**

- The purpose of our lives is to be happy.
- The best time for new beginning is now.
- When life gives you a hundred reasons to cry show life that you have a thousand reasons to smile.
- Life isn't about finding yourself; Life is about creating yourself.
- The greatest gift you can receive is another day of life.
- You don't have to be great to start but you have to start to be great.
- It is not the length of life but depth of life.
- The struggle you are in today is developing the strength you need for tomorrow.
- Before you can see the light you have to deal with the darkness.
- One day or day one it's your decision.

A.Saranya I Year IT (1915048)

# Perplexing Riddles

- 1. I am something people love or hate. I change people appearances and thoughts. If a person takes care of them self I will go up even higher. To some people I will fool them. To others I am a mystery. Some people might want to try and hide me but I will show. No matter how hard people try I will Never go down. Who am I?
- 2. I'm in black color, my size varies, I'm stuck at the bottom, yet I can easily disappear. I'm alive during sun, but not in rain, I do no harm to anyone. Who am I?
- 3. I have a neck but no head, have two arms and no hands? Who am I?
- 4. Can you write down eight eights so that they add up to one thousand?
- 5. It can't be seen, can't be felt, can't be heard, and can't be smelt. It lies behind stars and under hills and empty holes it fills. It comes first and follows after, Ends life, and kills laughter. What is it?
- 6. What English word retains the same pronunciation, even after you take away four of its five letters?
- 7. It is a 5 letter word if you take away first letter it is something you get from sun, if you remove second letter you will get something to eat, if you remove third letter you get a word you use in pointing at and if you remove the fourth letter you get something to drink. What is it?
- 8. It belongs to you, but other people use it more than you do. What is it?
- 9. What disappears as soon as you say its name?
- 10. Most people need it, some ask for it, some give it But almost nobody takes it, what is it?

Answers: 1. Age. 2. Shadow! 3. A shirt. 4. 888 + 88 + 8 + 8 + 8 = 1000. 5. The dark.
6. Queue . 7. Wheat .8. Your name .9. Silence .10. ADVICE.

T.PAVITHRA, I Year ECE (1911094.)

### HAIKU

#### THE WORLD OF DEW

The world of dew,

And within every dewdrop

The world of struggle.



#### THE UNIVERSE

In the universe,
Lies the energy and strength
To make dreams happen.



RAMYA.S

I year IT

### **OVER THE WINTRY**

Over the wintry

Forest, winds howl in rage

With no leaves to blow.



#### **CLIMBING HIGHER**

A master of nothing

Leaving the low places behind

Heading for higher ground.



# WHICH ONE ARE YOU?

Once upon a time, a kind hearted girl complaints to her father that her life was miserable and that she didn't know how she was going to make it. She was tired of fighting and struggling all the time it seemed just as one problem was solved, another one soon followed.

Her father, a chief, took her to the kitchen. He filled three pots with water and placed each on a high fire. Once the three pots began to boil, he placed potatoes in one pot, eggs in the second pot, and ground coffee beans in the third pot. He then let them sit and boil, without saying a word to his daughter. The daughter, moaned and impatiently waited, wondering what he was doing.

After twenty minutes he turned of the burners. He took the potatoes out of the pot and placed them in a bowl. He pulled the eggs out and placed them in the bowl. He then ladled the coffee out and placed it in a cup. Turning to his daughter he asked,"Daughter, what do you see?"

"Potatoes, eggs, and coffee", she hastily replied. "Look closer", he said, "and touch potatoes".

IN LIFE ALSO, THINGS HAPPEN AROUND US, THINGS HAPPEN TO US, BUT THE ONLY THING THAT TRULY MATTERS IS WHAT HAPPEN WITHIN US.

She did and noted that they were soft. He then asked her to taken egg and break it. After pulling off the shell, she observed the hard-boiled egg. Finally, he asked her to sip the coffee. Its rich aroma brought a smile to her face. "Father, what does this mean?", she asked. He then explained that the potatoes, the eggs and the coffee beans had each faced the same adversity-the boiling water. However, each one reacted differently.

The potato went in strong, hard and unrelenting but in boiling water, it became soft and weak. The egg was fragile, with the thin outer shell protecting its liquid interior until it was put in the boiling water. Then the inside of the egg became hard.

However, the ground coffee beans were unique. After they were exposed to the boiling water, they changed the water and created something new.

"Which are you?", he asked his daughter. "When adversity knocks on your door, how do you respond? Are you a potato, an egg, or a coffee bean?".



MUTHU SUBATHRA L (1911090) LYEAR ECE

# Refreshing Quotes

- "Failure is the opportunity to begin again more intelligently."
- "Success is the sum of small efforts, repeated day in and day out."
- "The beautiful think about learning is that no one can take it away from you."
- "Education is the passport to the future, for tomorrow belongs to those who prepare for it today."
- "Education is the most powerful weapon you can use to change the world."
- "Learning is never done without errors and defeat."
- "You are braver than you believe stronger than you seem and smarter than you think."
- "Push yourself, because no one else is going to do it for you
- "Sometimes we are tested not to show our weakeness, but to discover our strengths."
- "Work hard in silence, Let success make the Noise."

P.MALA DEVI I Year IT (1915008)

### **CROSSWORD PUZZLE**

							100		
		1	2		3		4		
	5							6	
7			8						
9		10				11			
					12				
13				14					
			15						
16							17		
	18								

### ACROSS:

- 5. Things are just bad for me
- 7.Complacent
- 8. Patty of shredded seafood and mashed potato
- 9.Cooldude
- 11.I beg your pardon
- 13. softly radiant
- 14. Stage being under arrest
- 16. Salmon-like fish that also migrates from salt to fresh water
- 17.champagne, say?
- 18. showing it in cat like ability?

### DOWN:

- 1.Vitality
- 2.full of food
- 3. from Swansea, say?
- 4. Momentary loss of consciousness
- 5. Moving seed of a Mexican shrub containing larva of a moth
- 6.13
- 10. Lack
- 12.Refuse container
- 15. Cubicle
- 17. Secret departure by moonlight?

#### **ANSWERS**

						_							
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MANGAI ESSAKKI P

(1915028)

I YEAR IT



உறவை வளர்க்க உணர்வு வேண்டும்
அவ்வுணர்வை பகில ஓர் நண்பன் போதும்
சோகம் எனும் காட்டில் தொலையும் போது
வரைபடமாய் நின்று வெளிவரச் செய்வான்
நட்பு என்பது அதிகாலை குளிர்ப் பனித்துளி போல்
பார்க்கப் பார்க்க அழகே! ரசிக்க ரசிக்கச் சுகமே!
நல்ல நண்பன் ஓர் நல்ல தூண்
என்றும் நம்மை உயர்த்தியே வைப்பான்
நாங்கள், கடலும் அலையும் போல் இணைந்தே இருப்போம்
அன்பால் என்றும் பிணைந்தே இருப்போம்



### - S.Nithish Babu I year ECE





நாம் வெற்றி பெரும் நேரத்தை விட–நாம் மகிழ்ச்சியுடனும் நம்பிக்கையுடனும் வாழும் நேரமே நாம்பெறும் பெரிய வெற்றி...!!

N.ARUN
I year ECE

## **VALUE**

A popular speaker started off a seminar by holding up a \$20 bill. A crowd of 200 had gathered to hear him speak. He asked, "Who would like this \$20 bill?"200 hands went up.He said, "I am going to give this \$20 to one of you but first, let me do this." He crumpled the bill up.He then asked, "Who still wants it?"All 200 hands were still raised."Well," he replied, "What if I do this?" Then he dropped the bill on the ground and stomped on it with his shoes.He picked it up, and showed it to the crowd. The bill was all crumpled and dirty."Now who still wants it?"

All the hands still went up. "My friends, I have just showed you a very important lesson. No matter what I did to the money, you still wanted it because it did not decrease in value. It was still worth \$20. Many times in our lives, life crumples us and grinds us into the dirt. We make bad decisions or deal with poor circumstances. We feel worthless. But no matter what has happened or what will happen, you will never lose your value. You are special – Don't ever forget it!



# RIDDLES

1.A girl meets a lion and unicorn in the forest. The lion lies every Monday, Tuesday and Wednesday and the other days he speaks the truth. The unicorn lies on Thursdays, Fridays and Saturdays, and the other days of the week he speaks the truth. "Yesterday I was lying," the lion told the girl. "So was I," said the unicorn. What day is it?

2.You're at a fork in the road in which one direction leads to the City of Lies (where everyone always lies) and the other to the City of Truth (where everyone always tells the truth). There's a person at the fork who lives in one of the cities, but you're not sure which one. What question could you ask the person to find out which road leads to the City of Truth?

3. Susan and Lisa decided to play tennis against each other. They bet \$1 on each game they played. Susan won three bets and Lisa won \$5. How many games did they play?

4.Three men are lined up behind each other. The tallest man is in the back and can see the heads of the two in front of him; the middle man can see the one man in front of him; the man in front can't see anyone. They are blindfolded and hats are placed on their heads, picked from three black hats and two white hats. The extra two hats are hidden and the blindfolds removed. The tallest man is asked if he knows what colour hat he's wearing; he doesn't. The middle man is asked if he knows; he doesn't. But the man in front, who can't see anyone, says he knows. How does he know, and what colour hat is he wearing.

5.There are three bags, each containing two marbles. Bag A contains two white marbles, Bag B contains two black marbles, and Bag C contains one white marble and one black marble. You pick a random bag and take out one marble, which is white. What is the probability that the remaining marble from the same bag is also white?

6.A teacher writes six words on a board: "cat dog has max dim tag." She gives three students, Albert, Bernard and Cheryl each a piece of paper with one letter from one of the words. Then she asks, "Albert, do you know the word?" Albert immediately replies yes. She asks, "Bernard, do you know the word?" He thinks for a moment and replies yes. Then she asks Cheryl the same question. She thinks and then replies yes. What is the word?

7.This famous river crossing problem is known as the "bridge and torch" puzzle. Four people are crossing a bridge at night, so they all need a torch—but they just have one that only lasts 15 minutes. Alice can cross in one minute, Ben in two minutes, Cindy in five minutes and Don in eight minutes. No more than two people can cross at a time; and when two cross, they have to go at the slower person's pace. How do they get across in 15 minutes?

# ANSWERS

- **1.**Thursday. The only day they both tell the truth is Sunday; but today can't be Sunday because the lion also tells the truth on Saturday (yesterday). Going day by day, the only day one of them is lying and one of them is telling the truth with those two statements is Thursday.
- **2."**Which direction do you live?" Someone from the City of Lies will lie and point to the City of Truth; someone from the City of Truth would tell the truth and also point to the City of Truth.
- **3**.Eleven. Because Lisa lost three games to Susan, she had lost \$3 (\$1 per game). So, she had to win back that \$3 with three more games, then win another five games to win \$5.
- **4**.Black. The man in front knew he and the middle man aren't both wearing white hats or the man in the back would have known he had a black hat (since there are only two white hats). The man in front also knows the middle man didn't see him with a white hat because if he did, based on the tallest man's answer, the middle man would have known he himself was wearing a black hat. So, the man in front knows his hat must be black.
- **5.**2 out of 3. You know you don't have Bag B. But because Bag A has two white marbles, you could have picked either marble; if you think of it as four marbles in total from Bags A and C, three white and one black, you'll have a greater chance of picking another white marble.
- **6**.Dog. Albert knows right away because he has one of the unique letters that only appear once in all the words: c o h s x i. So, we know the word is not "tag." All of these unique letters appear in different words, except for "h" and "s" in "has," and Bernard can figure out what the word is from the unique letters that are left: t, g, h, s. This eliminates "max" and "dim." Cheryl can then narrow it down the same way. Because there is only one unique letter left, the letter "d," the word must be "dog."
- **7.** Alice and Ben cross first in two minutes, and Alice crosses back alone with the torch in one minute. Then the two slowest people, Cindy and Don, cross in eight minutes. Ben returns in two minutes, and Alice and Ben return in two minutes. They just made it in 15 minutes exactly.

Vinothini M (1913016) I year EEE

# **HAIKU**

#### **THE LAST**

Fading In And Out

The Dragon's Eyes Glowed Fire

Until The Last Breath



Selva Meena

I year Civil



Raja Paul M

I year CSE

# **Thinking**

Day and night alone

Getting, Smart Creative

Under the Thinking

#### **REALISM**

A pandemic World

Longing for a negative,

With positive hopes



Madhumadhi I I year IT



# ON GOD'S TIME

A man walked to the top of a hill to talk to God. The man asked, "God, what's a million years to you?" and God said, "A minute." Then the man asked, "Well, what's a million dollars to you?" and God said, "A penny." Then the man asked, "God.....can I have a penny?" and God said, "Sure.....in a minute."

> ANTO ROSARIO S (1915028) I YEAR IT

Time is not measured by the passing of years but by what one does, what one feels, what one achieves.

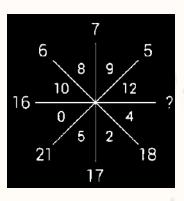
- Jawaharlal Nehru

# NUMBER PUZZLES

# Puzzle 1

$$5,3 = 28$$
 $7,6 = 55$ 
 $4,5 = 21$ 
 $3,8 = ?$ 

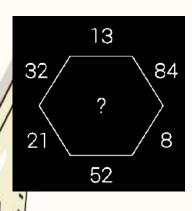
### Puzzle 2



# Puzzle 3

$$3,5 = 34$$
 $8,2 = 68$ 
 $4,6 = 52$ 
 $5,1 = ?$ 

# Puzzle 4



# Puzzle 5

## Puzzle 6

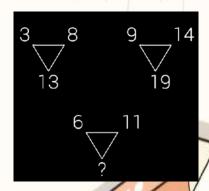
43	13	10	8
	30	3	?
		27	1
			26

# Puzzle 7

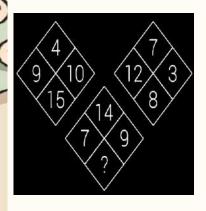
$$3,6 = 27$$
 $5,2 = 17$ 
 $4,1 = 9$ 
 $2,7 = ?$ 

## Puzzle 8

# Puzzle 9



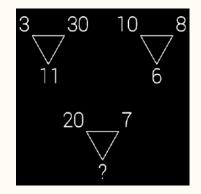
### Puzzle 10



# Puzzle 11

$$9, 16 = 7$$
 $4, 36 = 8$ 
 $121, 81 = 20$ 
 $25, 49 = ?$ 

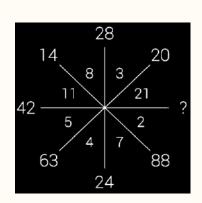
## Puzzle 12



### Puzzle 13

$$7,3 = 32$$
 $10,6 = 77$ 
 $8,2 = 27$ 
 $5,7 = ?$ 

### Puzzle 14



### Puzzle 15

6			
7	5		
11	3	?	
20	2	4	10

### Puzzle 16

### Puzzle 17

### Puzzle 18

$$2,3,9 = 161$$
 $4,2,5 = 375$ 
 $1,4,6 = 54$ 
 $7,8,1 = ?$ 

### **ANSWERS**

3. 26 6. 2 9. 16 12. 09 15. 07

 1. 17
 4. 4
 7. 23
 10. 2
 13. 48
 16. 42

 2. 10
 5. 4
 8. 81
 11. 12
 14. O55
 17. 23

18. 619

BHARATHI C 1915003 I YEAR IT

# SHAKE OFF YOUR PROBLEMS

A man's favorite donkey falls into a deep precipice. He can't pull it out no matter how hard he tries. He therefore decides to bury it alive.

Soil is poured onto the donkey from above. The feels the load, shakes it off, and steps on it. More soil is poured.

It shakes it off and steps up. The more the load was poured, the higher it rose. By noon, the donkey was grazing into green pastures.

After much shaking off (of problems) and stepping up (learning from them), one will graze in GREEN PASTURES.





உன் உயிரையும் பொருட்படுத்தாமல் சென்றாய், கோட்டில் முட்புதர் அரணாய் நிற்கின்றாய், பலர் சங்கதி காக்க உன் சங்கதி மறந்தாய், உன்னை கண்டு அணுவும் கர்வம் கொண்டது! அதனால் தான் உன்னை அழிக்க உருவேடுத்ததோ... பலர் மரணத்தை காக்க அங்கு உன் மரணத்தை ஏற்றாய் - நாடே உன்னை கொண்டாடியது, பல நாட்கள் சென்றன உன் பெயரை கூறுகையில் அவன் யார்? என்றனர் அவர்களுக்கெல்லாம் நன்மை செய்து எனக்கு அநீதி இழைத்தாயே "சிவப்பு ரோஜா உடன் வருவேன்" என்று கூறி மூவர்ண கொடி போர்த்தி வந்தது ஏன்? இந்த அநீதிக்கு காரணம் என்ன....

> Perumal A (1913038) I year EEE

# The Fight for Life

It was mid-October 1847; autumn had just passed by rolling into winter. I sat in my thick, hugely oversized red coat which wrapped me up and kept me safe. The smell of the perfume, delicate but very feminine lurked beside me. My heart ached as I felt her presence in this world of loneliness, her last smiles are the only thing that kept me going yet when I sat reflecting on it, tears would roll down my face immersing myself into this greater darkness unseen or heard of. As months passed the darkness turned into fear, the fear turned into vindictive, unpredictable anger which I knew would be no good. All I knew is that I wanted to conquer what defeated her. What took her away from me!

"ANEESHA RICHARDSON COME DOWN RIGHT NOW!" a voice yelled. Then I could hear thumping outside my room as if an avalanche was coming through. "OW OW! Stop you're hurting me!" half-awake she dragged me down the stairs pulling my hair, treating me like some peasant. She mumbled to herself as she got out the heavily silken beautiful coarse red saree. I asked her whether it was a special occasion or maybe father's work had a ball to attend. She didn't respond just silence as she stripped of my clothes and draped the saree on me. The cottage we lived in was being decorated in flowers, lights beaming everywhere. I saw my father eagerly waiting for what I assume must have been someone of great importance, perhaps the man David he works for?

As the clock struck twelve just like a fairy-tale the bell rang, I rushed to the door to see who it was but the maid clenchedher teeth and angrily pulled me back into the bedroom "you foolish girl today you must do only what you're told else there will be consequences" impatiently sat I couldn't help but eavesdrop the chatter in the other room and quite rightly so as I kept hearing my name being thrown around jumping from mouth to mouth. Everything was so discombobulating even father's activities recently. His mood changed from time to time. One minute he would be so happy the next he would shout and be smashing the glassware. The maid unlocked my door "It's your time.... Just nod to everything" unsure of what was happening I stepped out holding a tray full of aromatic, masala tea. "This is my gorgeous daughter Aneesha" and a man who looked about 15 years older than me grinned at me with an endeavouring smile. My head started to spin and I felt the surrounding growing larger as I shrank into my own dark hole. I knew what was happening one's worst nightmare as they could say. My worst nightmare this couldn't have been happening not now, not ever!

The man came close to me touching my shoulder I screamed and slapped him across the face. He got mad and grabbed me by the waist I started kicking and biting almost like an untamed beast. My father held me down and cupped both my hands ,took me down to the cellar and tied my hands and legs to a chair "Consequences will be placed if you don't behave" days went past where I was starved and occasionally fed rice and beans ,barely in living conditions. I was fed up and loosing hope of ever being set free. It was any day now that I was to get married off to that man, the thought of that flooded and crying everyday my eyes looked puffy and swollen. I screamed once last time for help at the top of my lungs. I felt fatigue suddenly, everything blacked out....

There I was with her at the comfort of her shoulder which I tilted my head on. Everything felt at peace my heart didn't race anymore. I thought maybe I was in purgatory ready to be an angel. She said "I believe in you; you will win this war for me. I see the fire in your eyes. My beautiful daughter you have to keep going and chase your dream even when the going gets tough" she slowly faded away I knew my mother was right and I wanted to achieve something big for my mum and find a way so that others won't suffer the way she did. I wanted to carry on studying medicine I had 4 years yet to complete I wanted to find a cure for the disease and give others hope. I sat and wondered as to how I was going to do all of this. It seemed impossible! I had nothing except some money my mother left me and the love for my education. All odds were against me, with little hope of succeeding I decided to try and if I fail it's okay, I thought.

As the wedding day approached, I felt tense all the muscles in my body were so stiff I could barely move. In my white saree, hair nicely braided with flower garlands dangling, I walked down the aisle to whom I fret may become my husband. I felt the tears clogging up my eyes knowing my life may see its end much sooner than I thought and seemed that there was no way of escape. All I wanted was too pursue my dream career not become some women who just cooks and entertains her husband. I too had a dream like many other teenagers. The church fell quiet as the priest announced to exchange rings that was it, everything would be over. Just as I thought it was, she appeared again just outside the door like a goddess, her face was glowing "mum" I whispered.

I knew I had to escape it was now or never. The rage of my father's words "Women should behave and abide men. They are made to cook and give birth anything else shall never be accepted" made me want to prove everything wrong and take a stand. I dropped the ring and flicked my heels off. In a hypersonic speed ran out the door pushing past the guards. I sprinted as if the world was coming to an end. I could see a carriage waiting for me and my aunt screaming for me to run faster. Something ripped from inside of me with an agonizing pain and blood was everywhere I realised I'd been shot! I thought I failed and they would catch me but just as they reached out to grab me, I reached for my Aunt's arm and she pulled me in and drove off. I made it I thought! I started seeing the daylight and felt the fresh, crisp air fill my lungs, overbearing the pain. I was ready to continue what I started....

May 1851 – "Congratulating Aneesha on completion of her MD degree and successfully becoming the first person to find a cure for cancer in the Thalamus" as I walked proudly in my black gown and cap with tears of joy looking over all the hurdles I've come through to where I am today. From that moment I knew my story needed to be told to all the young girls and their parents out there that they should fight for their life and education as there is so much in this world yet to be achieved and everyone can make a difference but they will never know if they don't try.

SURIYA.S IT-A 1915017

# Flames Game

Flames Game is a relationship calculating algorithm famous between the youngsters. At the time of graduation, everyone might be heard about this and many of them tried out this secretly. Some took this as very serious also. These two youngsters(Ragul, vaidyanathan) from our college had made it simple using python!

```
TRY IT OUT:
```

```
x=[i for i in input()]
y=[i for i in input()]
for i in x:
    if i in y:
      x.remove(i)
      y.remove(i)
l=len(x)+len(y)
ls=["F","L","A","M","E","S"]
while len(ls)!=1:
   ind=(I%len(Is)-1)
    if (ind>=0):
     ri=ls[ind+1:]
     le=ls[:ind]
     ls=ri+le
else:
   Is=Is[:len(Is)-1]
print(*ls)
```

K.Vaidyanathan T.N.Ragul I year CSE

# FACULTY MEMBERS CONTRIBUTION IN PUBLICATIONS

#### **Journal Articles**

- K. Karuppasamy, Dhanasekaran Vikraman, In-Tae Hwang, Hyun-Jung Kim, A. Nichelson, Ranjith Bose, Hyun-Seok Kim, "Nonaqueous liquid electrolytes based on novel 1-ethyl-3-methylimidazolium bis (nonafluorobutane-1-sulfonyl imidate) ionic liquid for energy storage devices" *Journal of Materials Research and Technology, Volume 9, Issue 2, March–April 2020, Pages 1251-1260;* Doi no: 10.1016/j.jmrt.2019.11.052.
- K. Karuppasamy, Dhanasekaran Vikraman, Jong-Hyeok Choi, Ranjith Bose, A. Nichelson, T. Maiyalagan, Hyun-Seok Kim, "Hybrid lithium-ion capacitors based on novel1-butyl-3-methylimidazoliumbis(nonafluorobutanesulfonyl imide) (BMImBNFSI)ionic liquid electrolytes: a detailed investigation of electrochemical and cycling behaviors", *Journal of Materials Research and Technology, Volume 9, Issue 3, May–June 2020, Pages 5216-5227*; Doi no: 10.1016/j.jmrt.2020.03.048.
- **E.Ramachandran**, V.Gandin, R.Bertani, P.Sgarbossa, K.Natarajan, N.Bhuvanesh, A.Venzo, A. Zoleo, M.Mozzon, A. Dolmella, A.Albinati, C.Castellano, N.R. Conceicao, M.F.C.G. de Silva and C. Marzano. "Synthesis, characterization and biological activity of novel Cu(II) complexes of 6-methyl-2- xo-1,2-dihydroxoguinoline-3- carbaldehyde 4N-substituted thiosemicarbazones". *Molecules* (2020) 25, 1868.
- Mr.K.NandaKumar AP/Eng attended Cambridge English Annual Coordinator's Conference 2019 on "Multiple Intelligence and the Roles of a Teacher" held at Madurai on 1<sup>st</sup> November 2019.
- Dr. M.A. Neelakantan Prof. & Head, Department of S&H was invited as a Judge to evaluate the models and identify the talents among budding young scientists in South India Science Fair held from Jan 28 to Jan 31, 2020 at Chennai.
- Dr. M.A. Neelakantan Prof. & Head, Department of S&H attended Workshop on "A high impact industry -institute interaction event in India" conducted by ICT Academy at IIT Madras, Chennai on 25.02.2020.

### **Book Chapters**

• K. Karuppasamy, Vasanth Rajendiran Jothi, **A. Nichelson**, Dhanasekaran Vikraman, Waqas Hassan Tanveer, Hyun-Seok Kim, Sung-Chul Yi2, "Nanostructured transition metal sulfide/selenide anodes for high-performance sodium-ion batteries" Elsevier Publication, ISBN 978-0-12-819552-9,pg 437-464.

# Workshops / Seminar / Conference / Training attended by S&H Faculty Members

- Dr. M.A. Neelakantan Prof. & Head, Department of S&H attended Workshop on "A high impact industry -institute interaction event in India" conducted by ICT Academy at IIT Madras, Chennai on 25.02.2020.
- Dr.P.Gomathy AP(SG)/Physics attended International Conference on "Applications of Smart materials conducted by Annamalai University, Chidambaram from 05.02.2020 to 07.02.2020.
- Dr. M.A. Neelakantan Prof. & Head, Department of S&H was invited as a Judge to evaluate the models
  and identify the talents among budding young scientists in South India Science Fair held from Jan 28 to
  Jan 31, 2020 at Chennai.
- Ms.S.Geetha AP (SG)/Maths attended International Conference on "Mathematical Modeling and Computational Methods in Science and Engineering" at Alagappa University, Karaikudi, from Jan 22-24, 2020.
- Mr.M.Arul AP/Maths, attended International Conference on "Applied Mathematics and Intellectual Property Rights" at A.P.C.Mahalakshmi for Women, Thoothukudi, on Jan 20 & 21, 2020.
- Ms.M.Annapoopathi AP/Maths attended International Workshop and Conference on "Mathematical Analysis and computation" organized by Department of Mathematics, National Institute of Technology, Tiruchirapalli from Dec 02-06, 2019.

# Workshops / Seminar / Conference / Training attended by S&H Faculty Members

- Dr.V.Ramalaskhmi AP (SG) /Maths, Mr.V.Saravanapperumal AP/Chem, Mr.S.Chithiraikumar AP/Chem,
   Ms.S.Bagavathi AP/Phy, Mr.M.Arul AP/Maths, Ms.V.A.Sujitha AP/Eng, Dr.B.Annaraj AP/Chem
   attended FDS Seminar on "Education in the Internet Age" at National Engineering College at Kovilpatti
   on Nov 06, 2019.
- Mr.K.NandaKumar AP/Eng attended Cambridge English Annual Coordinator's Conference 2019 on
   "Multiple Intelligence and the Roles of a Teacher" held at Madurai on 1<sup>st</sup> November 2019.
- Ms.S.Geetha AP (SG)/Maths, attended the National Workshop on "Training of Teachers for Student Induction Programme", at Bharathiyar University, Coimbatore, on Oct 30&31, 2019.
- Dr. M.A. Neelakantan Prof. & Head, Department of S&H attended Workshop on "Quality Enhancement Measures in Higher Technical, Professional and Management Educational Institutions with special focus on NIRF INDIA Rankings 2020" at JNT University, Kukatpally, Hyderabad on October 18 &19<sup>th</sup>, 2019.
- Dr.S.D.Selvasundari, AP / (SG) (English) and Ms.S.Thangam, AP (English) attended two-day-National workshop on "Innovative Methods of English Language Teaching & Learning" (ELT&L-2019) held at PSG College of Technology, Coimbatore, on 13<sup>th</sup> and 14<sup>th</sup> September 2019.
- Ms.S.Parvathy Natarajan AP/Eng attended one day- International workshop on "Confident and credible communication training" held at Pioneer Kumarasamy College, Nagercoil, on 6<sup>th</sup> September 2019.

# PROGRAMMES FOR SCHOOL STUDENTS-NEC-QUIZ-2019



A One Day State level Quiz Competition was conducted on 22.10.2019 in our college.

It was exclusively for Higher Secondary School students. Dr.Sumanth C.Raman M.D., DCH, Renowned Quizzing expert, senior television anchor, Sports Quiz Commentator, conducted the Quiz programme. 121 Schools from various districts of Tamil Nadu participated in this program. 1st Prize was secured by Sri Jeyandra Golden Jubilee Hr.Sec.School, Tirunelveli and they received a cash award of Rs.25, 000/-, The 2nd Prize was secured by TVS Mat Hr.Sec.School, Madurai and they received the cash award of Rs.15, 000/- and the 3rd Prize was secured by SPIC Nagar Hr. Sec. School, SPIC Nagar, Thoothukudi, and they received the cash award of Rs.10, 000. Consolation Prize Rs.5000/- was awarded to 10 schools.

Will Market

# PROGRAMMES FOR SCHOOL STUDENTS-REACH YOUR CREST-2019



A Motivational Programme "Reach Your Crest" was conducted to motivate the +2 students and to score more marks in Maths, Physics, and Chemistry in public examination. This programme was conducted separately for management, matriculation and government school students on 30.11.2019 respectively. Around 562 students from 14 schools attended this programme. The Chief guest, Mr.S.Murugesan, Chief Educational Officer, Tuticorin inaugurated the programme in the presence of Mr.V.Seenivasan, District Educational Officer (I/C), Kovilpatti. Dr.M.Sundaram, PG Assistant of Chemistry, Mr.S.Avidaiappan, PG Assistant of Maths, Mr.M.Krishnasamy, PG Assistant of Physics conducted the programme.

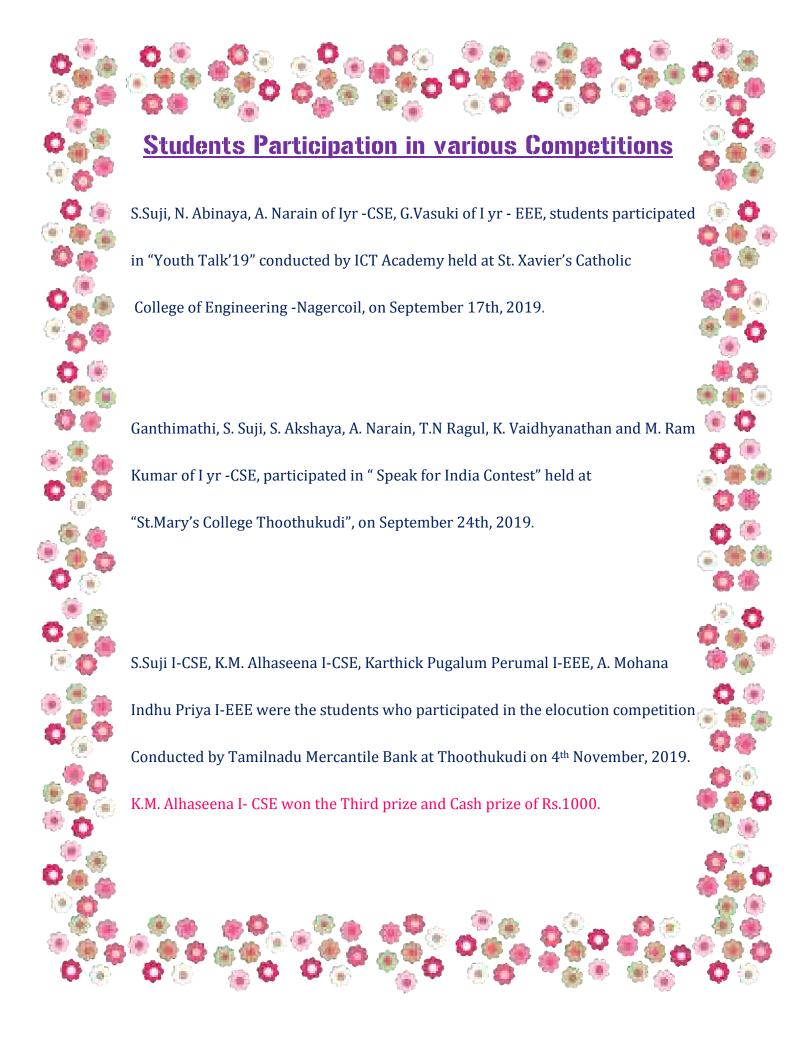
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Department of Science and Humanities organized a six days Workshop on "Youth Empowerment and Skills" for first year Engineering students. The Inaugural function was held on 20.01.2020 at 10.00 a.m. in the college premises. The function was presided over by our principal Dr.K.Kalidasa Murugavel, in the august presence of Dr.M.A.Neelakantan, HOD (S&H) during Jan 20- 25, 2020.





# **CLUB ACTIVITIES-LITERARY CLUB**

Name of the Activity	Title	Date	Participants	Winner
Poetry	Seven Days of a week	28.06.2019	All final year B.E/ B.Tech students	J. Joshua Raphael- ECE
Speech	Purpose of Life	31.07.2019	All the II year B.E / B.Tech students	M. Kirthik Roshan- II yr EEE-1 <sup>st</sup> Prize C.Anamika – II yr ECE-2 <sup>nd</sup> Prize
Poetry	What a computer might day dream about?	22.08.2019	All I year B.E / B.Tech students	N.Karthick Pugalum Perumal - I yr EEE
Designing	Teachers' Day a Greeting card	04.09.2019	All I year B.E / B.Tech students	J. JeyshreeLakshmi  – Iyr EEE
Speech	Virtues for life	31.10.2019	All II & III year B.E / B.Tech students	S. Rajanayagi III year CSE – 1 <sup>st</sup> Prize M.Kirthik Roson III year EEE – 2 <sup>nd</sup> Prize A. Ronisha Salome II year ECE – 3 <sup>rd</sup> Prize
Online Cloze Test	Online Cloze Test	18.12.2019	All final year B.E / B.Tech students	M. Meera - IV year EIE-1 <sup>st</sup> Prize V. Nivedha - IV year EEE-2 <sup>nd</sup> Prize











To develop scientific temper among our budding engineers and to inculcate the interest in scientific facts and events related to one's surroundings our Science Club organizes various programmes. Science club organized the "Zero Shadow Day" 29.08.2019 college campus. programme on at our Dr.S.Shanmugavel, Director, presided over the function in the august presence of Dr.K.Kalidasa Murugavel, Principal and Dr. M.A.Neelakantan, Head of the S&H Department. Mr.S.Muthu Kumaran, District Science Officer, District Science Centre, Tirunelveli. scientific demonstrated the facts behind phenomenon using different models. All the first year students enthusiastically attended the programme and clarified their doubts.



# CAREER DEVELOPMENT PROGRAMMES

#### **BEC ORIENTATION PROGRAMME**

BEC Orientation Programme for the I year B.E/B.Tech Degree students was conducted on 14<sup>th</sup> October 2019.Mr.Prasanna from Cambridge University Chennai, the resource person of this event gave a clear view over the BEC programme and its objective.

#### **SKILL RACK ORIENTATION PROGRAMME**

An Orientation programme on Skill Rack was conducted for I year B.E/B.Tech Students on 26/08/2019. Mr.C.Karthikeyan, Director, PEECEE Castle Software Pvt. Ltd gave a guest lecture on improving the skill set level. He gave a brief lecture in using skill rack for doing Aptitude MCQ and coding. He also explained the various resources available in skill rack portal.

#### **ALUMNI INTERACTION PROGRAMME**

Alumni Interaction for I year Computer Science and Engineering Students was organized on 12.09.2019. Mr. Muthu Kumaran Karuppaih (CSE department) (1992 Batch), Partner Deloitte Touché Tohmatsu India LLP, Bangalore presided the programme and interacted with the students. He shared with them about various job opportunities and interview techniques and how to improve communication skills. Students got clear idea about the areas on which emphasis should be given to ensure best career opportunities.

# CAREER DEVELOPMENT PROGRAMMES

#### MOTIVATIONAL &TRAINING PROGRAMMES



A Motivational Talk was given by Dr.D.Ravindran AP (SG)/Mech on the topic "Product Development" for first year B.E, and B.Tech students at National Engineering College during Nov 04 -07, 2019. He clearly explained the students about New Product Development(NPD) Process with simple examples.

Training Programme was conducted for I year CSE & IT students for the orientation towards technology learning. The resource persons were Mr. C. Somu Chockalingam, President & Co. founder of Doyensys and Mr. Madavan, Senior Grade Standard Chartered Bank on Nov 22, 2020.

Soft Skills Training programme was conducted for I year ECE students from Nov 25 to 27, 2020. The Resource Person is Ms.S.Viswa lakshmi, Adjunct Faculty, ECE Department, National Engineering College, Kovilpatti. She explained the essential soft skills for a successful career in engineering.

Interaction programme was arranged for the first year students with Mr.Keerthivasan M/S Amazon India on January 24, 2020. In this session, the students interacted with the resource person regarding the placement in IT companies

#### NPTEL ONLINE COURSE -AN OVERVIEW

Our first year students have taken part in NPTEL online courses like Technical English for Engineers, Developing Soft skills and Personality and The joy of computing Python in the duration of July-December 2019. They have attended the exam in their respective courses on 28th September and 17th December 2019 and passed out with flying colors.

#### **TOPPERS**

- Ms.A.KARTHIKA, ECE (Sec 8) (93 Marks-2% Topper in Developing Soft skills and Personality)
- Ms.A.SUBITSHA, ECE (Sec 8) (90 Marks-5% Topper in Developing Soft skills and Personality)

#### **ACHIEVEMENTS**

- > Number of registered students: 418. Among them 189 students have registered Technical English for Engineers courses, 23 students have registered The joy of computing Python and 206 students have registered Developing Soft skills and Personality.
- Number of students attended the exam: 415.
- > Number of students Passed: 359. (174- Technical English for Engineers, 8 The joy of computing Python and 177- Developing Soft skills and Personality)
- **Elite Silver (75-89%): 39 students.**
- Elite (59-74%): 198 students.
- > Successfully completed (40-59%): 120 students.

Course Name	Elite Silver	Elite	Successfully Completed	Toppers
Technical English for Engineers	14	96	64	-
The joy of computing Python	2	6	-	-
Developing Soft skills and Personality	23	96	56	2(2% & 5%

# CAPABILITY ENHANCEMENT AND CAREER DEVELOPMENT PROGRAMMES

S.No	Name of the capability enhancement programme	Date of implementation	Number of students enrolled	Institute/Company involved
1	Students Induction Programme	09.05.2019	511	NEC
2	Skill Rack Orientation Programme	26.08.2019	511	PEECEE Castle Software Pvt .Ltd
3	BEC Orientation Programme	14.10.2019	511	Cambridge University- Chennai
4	Orientation Programme "Towards Technology Learning"	22.11.2019	180	President & co. Founder Doyensys
5	Soft Skill Training Programme	25.11.2020 to 27.11.2020	120	NEC
6	Placement Training Programme	30.11.2019 to 01.12.2020	511	Placement and Training Cell, NEC
7	Oriention Programme for Code it Training	14.02.2020	180	GUVI Geek Network Private Ltd. Chennai
8	Motivational Talk on 'How to place in M/s Amazon India'	24.01.2020	200	Placement and Training Cell, NEC
9	Youth Empowerment Skills Workshop	20.01.2020 to 25.01.20230	511	Art of Living
10	Orientation Programme on 'Industry Requirements'	19.02.2020	166	NEC

# DOMAIN TRAINING FOR FACULTY MEMBERS (2019-2020)



	Date	Programme	Title	Experts
7	18.06.2019	Domain Training For English	Empowering Teachers in Life Skills Education	Dr.S.Mekala Asso.Prof/ English Dept of Humanities – NIT Tirchy
	25.06.2019	Domain Training For Physics And Chemistry	Advanced Materials and its Applications in Engineering – An interactive Session	Dr.P.Kannan ,Professor of Chemistry Anna University, Chennai, Dr.K.Siva Kumar Professor Dept of Physics ,Anna University Chennai
	26.06.2019	Domain Training For Mathematics	Applications of Mathematics in Engineering	Dr.Raju .K.George Professor in Mathematics Dean(R&D) Indian Institute of Space & Science.Tech. Tiruvandrum













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