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GEETHANJALI

INSTITUTE OF SCIENCE AND TECHNOLOGY

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Editorial Message

Hailed as the first draft of creativity and innovation, a magazine presents a social and tasteful conversation of a powerful organization, where the refined imaginative sensibilities and abilities of its young personalities go to the front. It holds mirror to the bunch exercises and activities embraced by the foundation to etch the multifaceted characters of adolescents besides being a media platform. On this earth shattering event of drawing out the magazine, we, the publication group, appreciatively recognize the unmistakable assortment of commitments made by the students and the staff.

“All progress comes beyond comfort zone”

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VISION-MISSION

Vision

To evolve as a prospective learning centre for producing quality human resources.

Mission

DM₁: Impart Technical knowledge through effective teaching-learning practices

DM₂: Provide congenial academic environment for honing technical skills

DM₃: Develop professional and entrepreneurial skills through collaborations

DM₄: Promote leadership skills along with social and ethical values

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Graduates of B.Tech in Mechanical Engineering program shall be able to

PEO1: Analyze Mechanical Engineering problems and provide sustainable solutions.

PEO2: Pursue successful professional career in industry, academia or research.

PEO3: Engage in continuous learning to keep abreast with emerging technologies with the sense of professional ethics.

PEO4: Contribute in multi-disciplinary teams through effective interpersonal skills.

Stories

1. A GLASS OF MILK

The Moral No good deed goes unrewarded.

There once was a poor boy who spent his days going door-to-door selling newspapers to pay for school. One day, as he was walking his route, he started feeling low and weak. The poor boy was starving, so he decided to ask for food when he came to the next door.

The poor boy asked for food but was denied every time, until he reached the door of a girl. He asked for a glass of water, but seeing his poor state, the girl came back with a glass of milk. The boy asked how much he owed her for the milk, but she refused payment.

Years later, the girl, who was now a grown woman, fell sick. She went from doctor to doctor, but no one was able to cure her. Finally, she went to the best doctor in town.

The doctor spent months treating her until she was finally cured. Despite her happiness, she was afraid she couldn't afford to pay the bill. But, when the hospital handed her the bill, it read, 'Paid in full, with a glass of milk.'

G. SRIKANTH (172U1A0310) , II ME

2. THE BEAR AND THE TWO FRIENDS

The Moral A true friend will always support and stand by you in any situation.

One day, two friends were walking through the forest. They knew the forest was a dangerous place and that anything could happen. So, they promised to remain close to each other in case of any danger.

All of a sudden, a big bear was approaching them. One of the friends quickly climbed a nearby tree, leaving the other friend behind.

The other friend did not know how to climb, and instead, followed common sense. He laid down on the ground and remained there, breathless, pretending to be dead.

The bear approached the friend lying on the ground. The animal started to smell his ear before slowly wandering off again because bears never touch those who are dead.

Soon, the friend who hid in the tree came down. He asked his friend, “My dear friend, what secret did the bear whisper to you?” The friend replied, “The bear simply advised me never to believe a false friend.”

N. NAGA PRASAD (182U1A0332) , I ME

3. THE BUNDLE OF STICKS

The Moral There’s strength in unity.

Once upon a time, there was an old man who lived in a village with his three sons. Although his three sons were hard workers, they quarreled all the time. The old man tried to unite them but failed.

Months passed by, and the old man became sick. He asked his sons to remain united, but they failed to listen to him. At that moment, the old man decided to teach them a lesson — to forget their differences and come together in unity.

The old man summoned his sons, then proceeded to tell them, “I will provide you with a bundle of sticks. Separate each stick, and then break each into two. The one who finishes first will be rewarded more than the others.”

And so, the sons agreed. The old man provided them with a bundle of ten sticks each, and then asked the sons to break each stick into pieces. The sons broke the sticks within minutes, then proceeded to quarrel among themselves again.

The old man said, “My dear sons, the game is not yet over. I will now give you another bundle of sticks. Only this time, you will have to break them together as a bundle, not separately.”

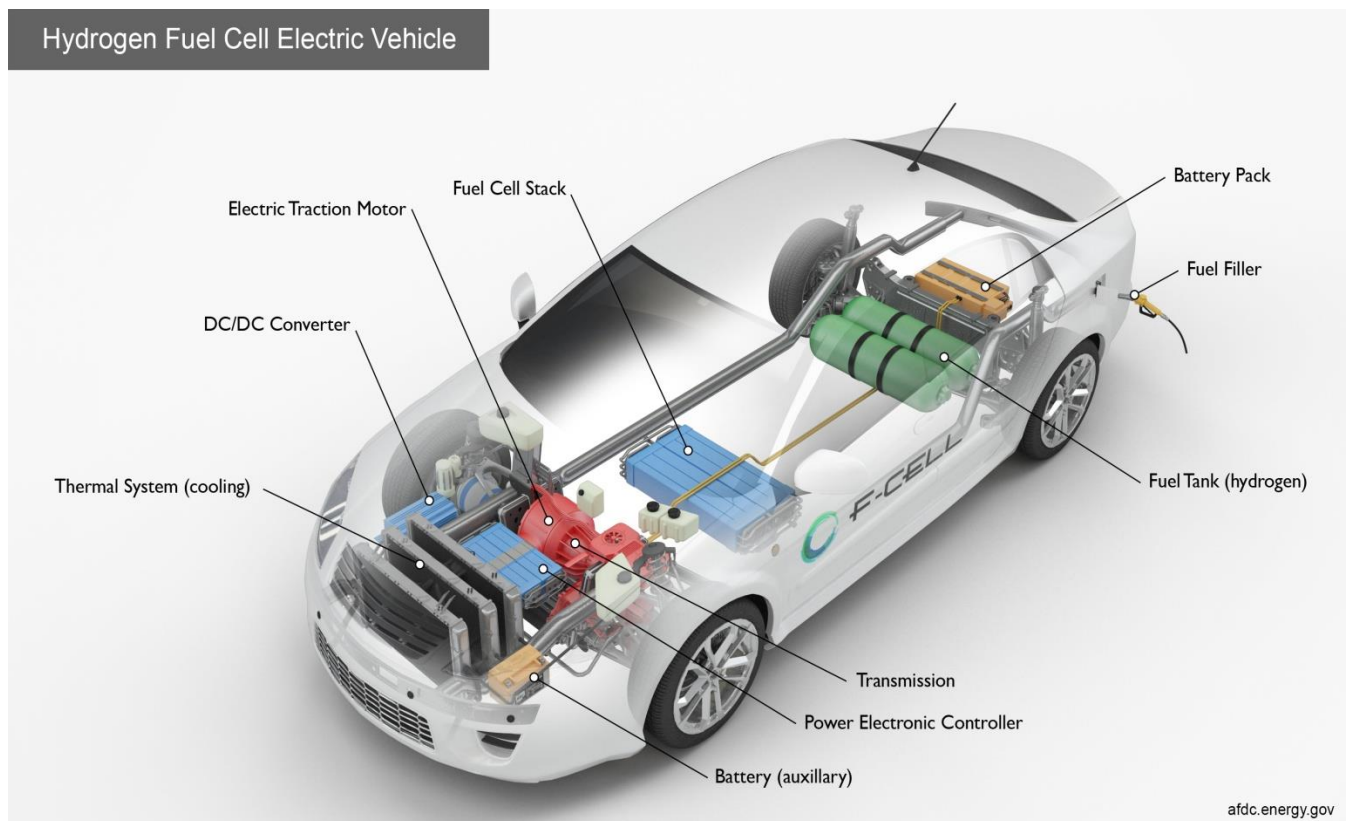
The sons readily agreed and then tried to break the bundle. Despite trying their best, they could not break the sticks. The sons told their father of their failure.

The old man said, “My dear sons, see! Breaking every single stick individually was easy for you, but breaking them in a bundle, you could not do. By staying united, nobody can harm you. If you continue to quarrel, then anyone can quickly defeat you.”

The old man continued, “I ask that you stay united.” Then, the three sons understood there’s power in unity, and promised their father they would all stay together

P. VISHNU VARDHAN(172U1A0331), II ME

THE HYDROGEN CAR TECHNOLOGY



Hydrogen cars may be a great idea in the future, but they're not economically viable right now. Hydrogen cars are not a solution right now, but they will be. Twenty years ago people said hybrid cars were not worth pursuing. Hydrogen cars drive and feel the same like a normal vehicle, even with added load as a result of hydrogen fuel tank. BMW Hydrogen 7 is another example of **hydrogen fuel cell technology**.

Hydrogen cars do however, have the potential to be better cars than Hybrid Cars in several ways so we need to compare their known characteristics. **Hydrogen cars** and fuel cells are often promoted as being potentially emission-free if they burn hydrogen, in contrast to currently more common fuels such as methane or natural gas that generate carbon dioxide. However, as mentioned above hydrogen is an energy carrier, not an energy source. Hydrogen cars cannot fly, but they can go like the wind.

Hydrogen cars also need to use batteries too. BEVs are being sold sold NOW for a fraction of the price without worrying about infrastructure. Hydrogen cars of dubious viability? Who ever could have guessed that in a million years? Hydrogen cars are complex and will require maintenance and parts long after they are driven out of the showroom and this is where all the makers get most of their money. What we really need is electric cars, they only have one moving part in the engine and require almost zero servicing.

Hydrogen cars' only emission is a nice mist of water that you could drink. Hydrogen cars still leave a foot print but not near as much as gasoline engine. Remember you still need lubricants, motor oil, synthetic oil, grease, etc. Hydrogen cars have been in magazines like "Popular Mechanics" for years, new prototype after new prototype, but to what avail? The technology is there, but it will take big business to bring hydrogen to the pump station, to put a hydrogen car on every car lot, and that is exactly what is happening.

Hydrogen cars are not nearly as efficient and the technology is not yet ready. RUF technology is ready today. Hydrogen cars are a popular environmental cure-all because they are supposed to dramatically reduce greenhouse gas emissions. A simulation for the Reason Foundation, conducted by chemical engineer William Korchinski of Advanced Industrial Modeling, attempted to estimate the decline in carbon dioxide emissions that would have resulted from switching every car in California to hydrogen fuel in 1981. Hydrogen cars are even farther away from being practical. Carbon-free hydrogen is likely to be more expensive than gasoline for a long time.

M. ARUN TEJA (172U1A0320) , II ME

“The Color of Love Marriage: Rose?”

Love at first sight : India, popularly and traditionally known as Bharat, is named after king Bharat, a legendary ruler of India, There is a beautiful love story behind his birth. It is based on the love marriage between King Dushyanta and Sakuntala. The king meets Sakuntala in a forest and lot There is love at first sight. (Sakuntala's parenta deserted her soon after her birth and she was under the care of Saint kanva in that forest.) Dushyanta expresses his desire to marry her and with her consent marries her instantly. They unite in conjugal love. The king wants to go back first and then send his people to fetch Sakuntala to his palace.. A son was born to them and he is Bharat, of course, the story takes twists and turns and finally enda happily and Bharat becomes the king.

A Variety of Marriages : The point to note in this story is instant love marriage. King Dushyanta explains to Shakuntala that there are eight types of marriages, according to Hindu scriptures. The one which is widely practiced today is Prajaapatya. Gaandharva is marriage among one category of angels viz, Gandhrvaas and it is "Love Marriage" in the sense the decision regarding marriage is taken by the adult and mature groom and bride only and not by others on their behalf. Obviously mutual love is the factor that united Sakuntala and ushyanta in Gaandh- arva Marriage.

Rukmini Kalyanam: The marriage between Lord Krishna and Rukmini is an example of another kind of marriage, viz, Rakshasa Marriage. In this type of marriage the bride is abducted by the groom and he marries her by force. The parents of Rukmini decide that their daughter should marry Sisupala, a prince of their choice. But Krishna comes and kidnaps Rukmini. The brother of Rukmini, Rukmi chases him and is defeated in war.

(The exception in the story is that Rukmini sends for Krishna as she wants to marry him. So this is a love story with abduction as a part of it.)

Swan Diplomacy : In good old days King Nala loved Damayanti and the “go between” for them was a swan. Though four gods enamored by the beauty of Damayanti, were in competition, the true love of Nala succeeded. Well. There are a number of such stories about love marriages, from days of old to the present day, in any society and Indian society is no exception to it. The difference is only in the number, frequency and percentage. They constitute only about 5% of marriages in India in spite of the mobile and Internet chatting facilities.

The Modern Indian Mind : The mental make up of a present day Indian is a lot different from what it used to be a quarter century ago. Globaliza-tion brought in keener competition and greater awareness of men and matters. Today children spend more time in school and with home work than with parents. Some are away from them in Residential Schools and Colleges in the name of better career. This definitely weakens the intim- acy and the empathy (which is like the protective ozone layer) between them. Only in the absence of this protective-loving-care the person is made to think of himself/herself.

The West : In the western societies children are cared for up to a certain age only and then they are left to live on their own. This makes one feel that he/she is an independent unit and it forms the root of love marriage, or finding a spouse by oneself. In the name of schooling, advancement and civilization, the traditional Indian mind is gradually getting alienated from its oneness with the native society and is moving more towards west and love marriage. Here one has to be cautious about infatuation, neurotic and sadistic feelings of love.

Success of Love : People believe that love marriages will be more successful as they are based on mutual liking and understanding of each other. But more importantly, the couple should be mature enough to accommo-date each other and practice patience to bring in compatibility and make love marriage successful. The irony is that it is very difficult to find out the existence of these qualities before marriage as one sees or shows only the better part of his/her personality to the loved one. So do see and find the color behind the rose to be happy ever after.

C. ASHOK (162U1A0307), III ME

Optimism - An Essence of Life

Everyone yearns for success but only some achieve it. The people who failed to achieve, are the one who took a back step when they are very near to success. Though the people are very clear about their goals and strive hard diligently to accomplish them, in the mid way they surely encounter with a debacle which was not digestible by everyone. In fact, in the way to success a failure indicates that it was not the right way to achieve the goals and help us to identify our mistakes, so that one can rectify and make sure that those mistakes should not be repeated in future. Optimism is something related to this kind of thought. It is a hope and belief that all good things will happen in future, however bad the situation may seem. One must be optimistic to accept the failure as a first step of success and then move on towards one goal with great determination.

Whereas the feeling of negativity drags the individual confidence level down and makes them passive. The people with this quality are known as pessimists, who are quite opposite to optimists. Despite of hard work, decisive, reliable, intelligent and most importantly ambitious. People with optimistic character surely crosses the final phase of self-fighting for success and achieves their goals. But it is not so easy to be an optimist. One should have enough guts to accept the situation how bad it may be and sometimes worse and goes out of control. In that situation if one can stand firm with confidence and think in a positive way, that people were very near to accomplish their task. Nothing can stop them over negative thinking to reach their goals.

There are many legendary and honorable persons in the world whose lives were entangled but never gave up and stood as role models for everyone, HELEN KELLER, a lady who was blind and deaf shown courage to achieve her goals with the support of her family and her teacher ANNE SULLIVAN. She was the first blind-deaf person to get a bachelor of Arts degree. She was the most influential person for the blind nothing stopped her from achievement because she believed in optimism, At childhood learning disability was there in ALBERT EINSTEIN who was a mathematician and physicist. THOMAS ALVA EDISON too have this learning disability same like Einstein. What would if these happen if these people think that we cannot learn anything and lose hope on future because of their disability? The two people who changed the history of mathematics and science would not be seen. We may still live in dark without Edison's invention.

M. POORNACHANDU(182U1A0326) , I ME.

Don't Underestimate the Power of “voting”

India is known to be the largest democracy in the world. Sounds good isn't it?? However, in the recent years, we have forgotten the basic principle of democracy. Although some may argue that we have the most efficient and the most robust electoral system to support the Indian democracy, the time has come to introspect and to check whether we have wrongly perceived “DEMOCRACY” to satisfy our vested interest. In today's times, democracy has made us aware of our rights and everybody, across all casts and creeds are fighting to get their democratic rights. In this aggressive fight for democracy, we have forgotten the might of democracy. The might or strength of democracy, not only lies in the “right” of every citizen but also encompasses the “duty” of every citizen to keep the democracy alive and healthy. If we have to put things in the right perspective, we have to go back to the original definition of the word “Democracy” which is a government "of the people, by the people, and for the people”. Considering this as the basic principle of democracy, are we on the right track??? The answer is “May be not” and the major reason for our deviation is that every eligible citizen of the country is not involved in the process of making the government so it is not really a government “by the people”. “Right to Vote” is the biggest right that we as citizens of India are bestowed with. However, it need not be forgotten that rights and duties go hand in hand. Therefore “VOTING” should be our biggest duty which would result into a democratic nation in its real sense.

We as Indians take pride in criticizing every government and our hatred has reached so far that we have made a notion that every government is suppressive and the entire system is corrupt to the core. For the sake of an argument, even if we assume that this observation is correct to a certain extent, if we reach to its root cause, we may find ourselves guilty for this situation because we are the ones who have elected this government. In fact, the people who have willingly stayed away from voting are the ones who should be accused for indirectly helping the misfit people to govern us. It is high time we realize that “VOTING” is no longer a right but a duty of every proud Indian citizen. We, as a country dream of being a super power by the year 2030 but it is going to be converted into reality only with a consistent, dedicated effort and contribution of every Indian. To initiate a step forward in the right direction, let's all pledge to consciously exercise our duty to vote at the time of every election whether small or big, whether local or central.

B.SRINIKETH(152U1A0302), IV ME

Poems

The Chase

Express your zeal

Until it heals, The burns caused by the

Fire in your dreams They say, every killer

Has his own special modus operandi

But sometimes even the killer kills What might be the most handy

Chasing dreams until you

Achieve them, would give you Ultimate exhaustion !

But there is no measure For the ultimate satisfaction.

Your goals might not be lucrative, But it will prove you are creative, Because,
everything that glitters is not gold And so you might leave the dreams free
From your hold just move on !!!

G. VAMSI KRISHNA (162U1A0314) ,III ME

Smile

A Smile is a sign of love A Smile is a sign of Care

A Smile tells how much to others You are important and also dear

A Smile is a sign of Cheer A Smile is a sign of Trust

A Smile shows how you can Be happy even in hard Crust A Smile is a sign of

Joy

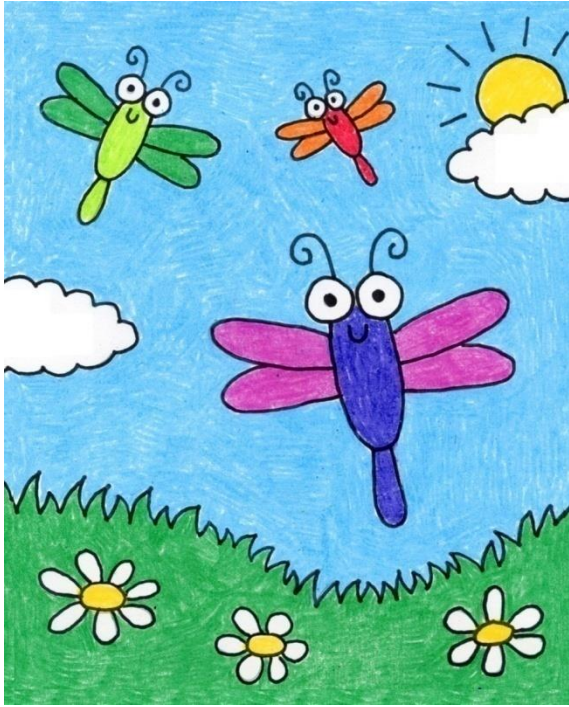
A Smile is a sign of Hope

A Smile teaches you how you can Remove the clouds of mope

For nothing but only a Smile Takes away your pain and trail And pick your
trouble's pile

And let you smile, Smile and Smile

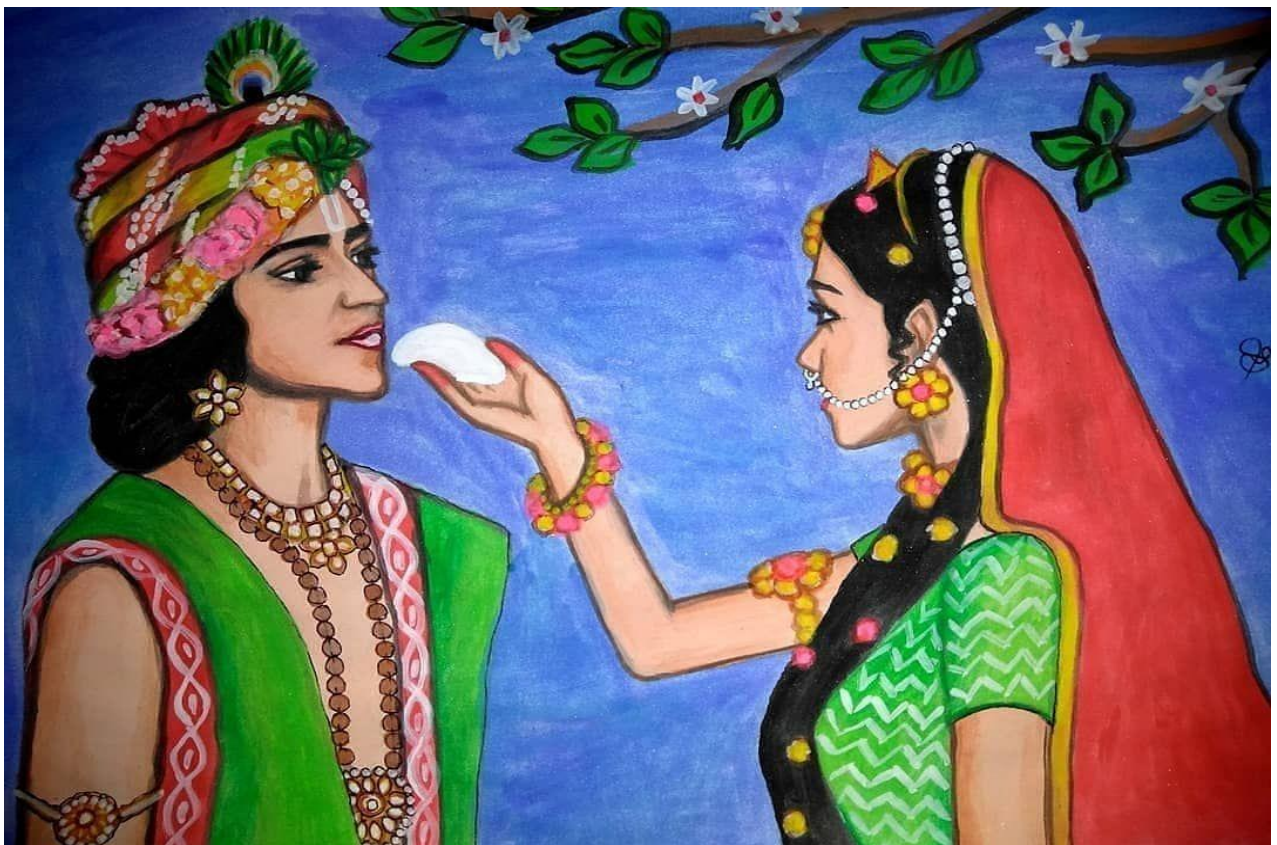
K.MURALI(182U1A0319), I ME.



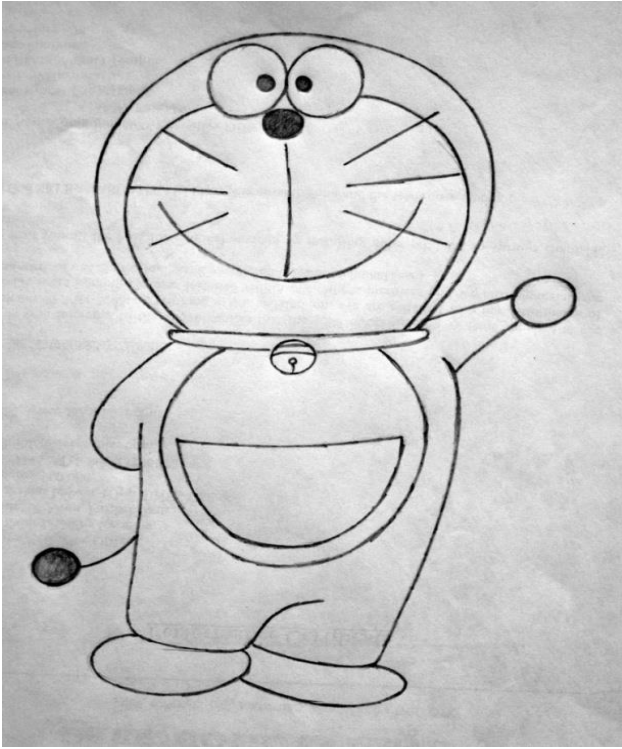
D. ZUBER(182U1A0310) , I ME.



L. CHARAN(152U1A0316), IV ME



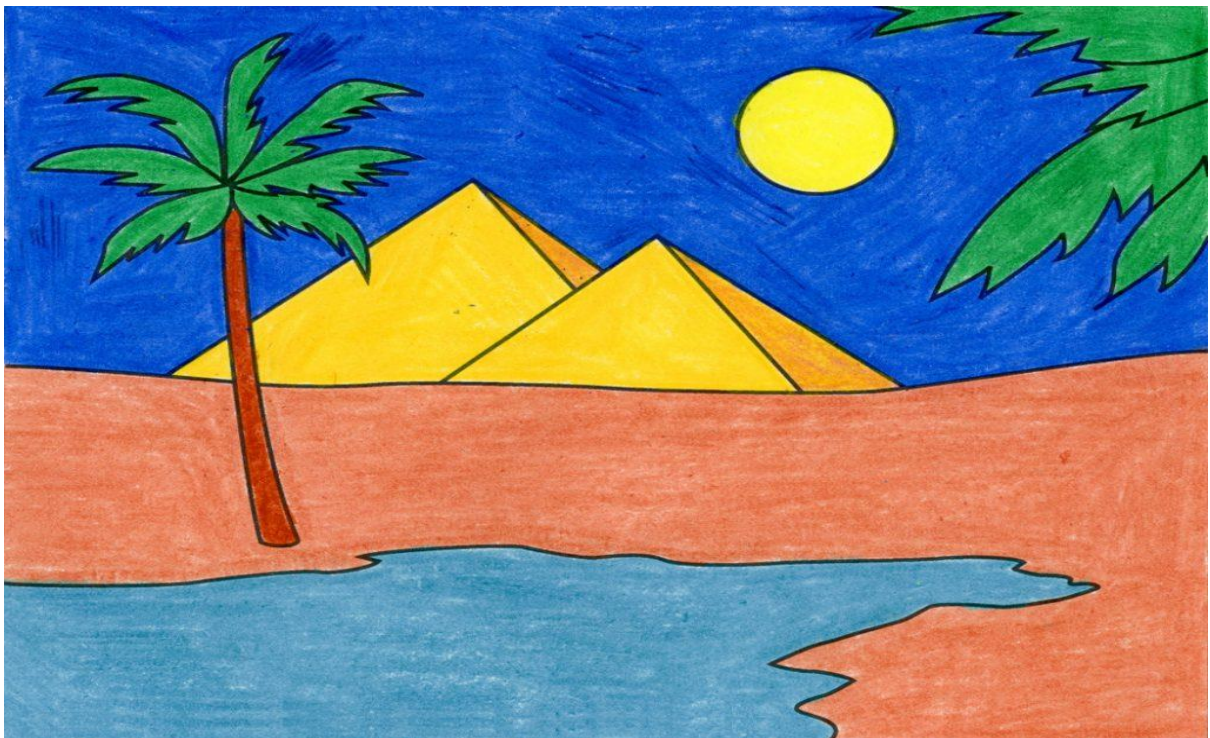
K. SARATH(162U1A0320), III ME



P. SAI KUMAR CHARI(162U1A0332), III ME



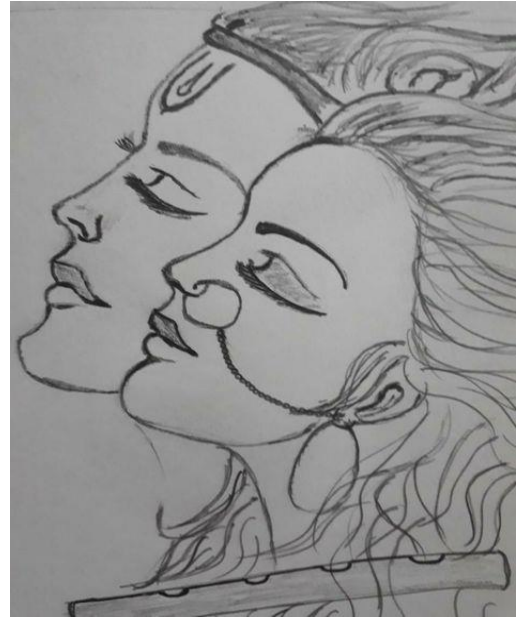
M.PAVAN KALYAN(152U1A0325), IV ME



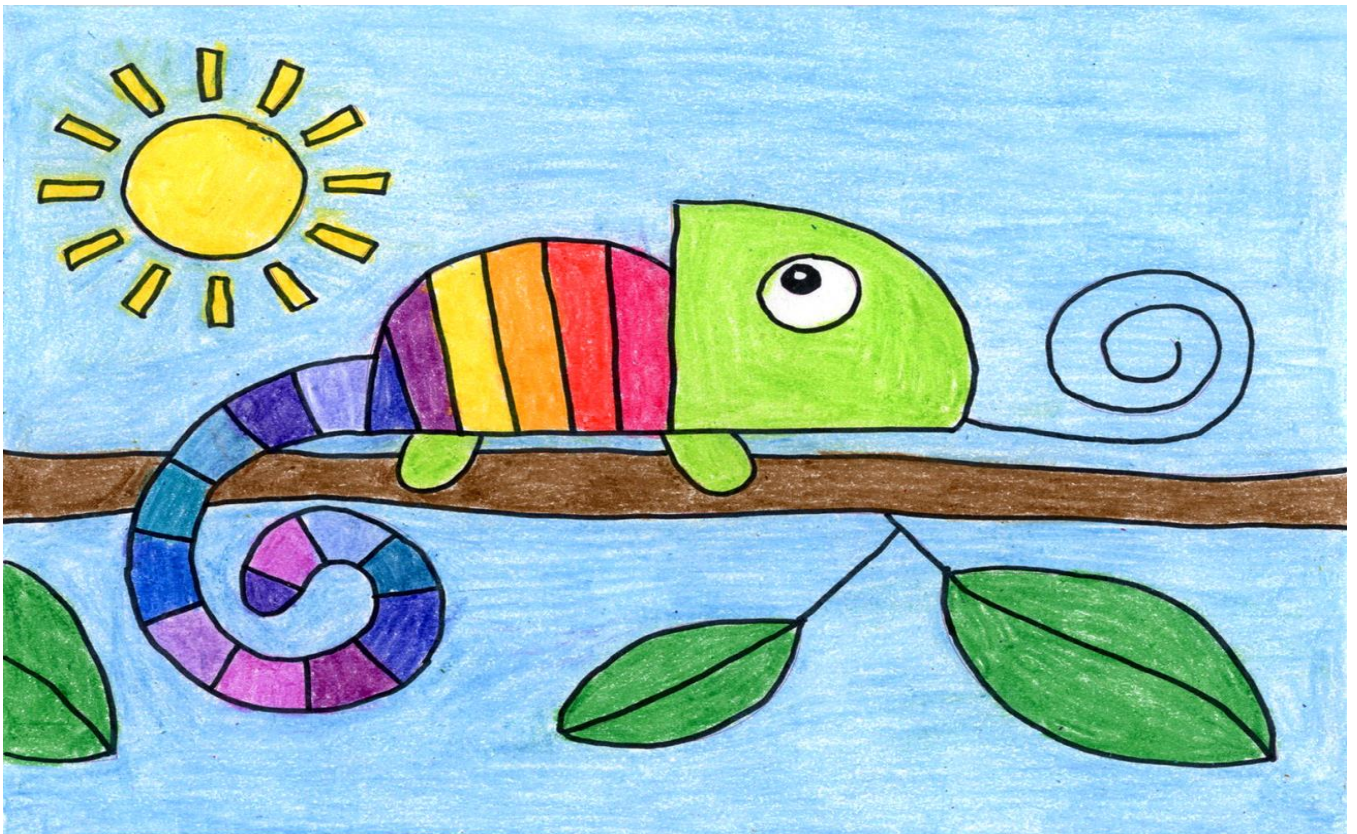
P SAI KRISHNA(152U1A0334), IV ME



SK. AAMEER(162U1A0341), III ME



S M GANI(152U1A0338) , IV ME



A. KARTHIK(182U1A0304), I ME.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

- PO1. Engineering Knowledge :** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2. Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- PO6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7 Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8 Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9 Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10 Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions
- PO11 Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12 Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES

At the time of graduation student of B. Tech in Mechanical Engineering will be able to

- PSO1: Professional Skills:** Utilize the knowledge of materials and manufacturing principles to plan, design and monitor the production operations of an Industry.
- PSO2: Design Skills:** Employ the governing laws of thermodynamics, heat transfer and refrigeration & air-conditioning to design and develop thermo-fluid system.