

# **JOSE<sup>®</sup>**

*[Joy of Study as Entertainment]*

*JIT Jaipur*

*Department of Electrical Engineering*

*[March-2016]*

*[Volume-II]*

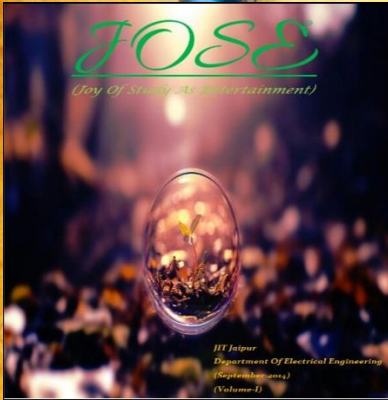


# JOSE

(Joy of Study as Entertainment)

## INTERACTION

With Volume-I



*Oh!! I just forgot that I have some great news for you all. As “JOSE”, our students of electrical department have taken an initiative to run a club which also have a same moto to improve our skills and make us better. And its name as “SPARK” club. Their efforts could see in recent Yoga Shivir.*

KNOWLEDGE REST NOT UPON TRUTH ALONE

BUT UPON ERROR ALSO

**CARL JUNG**

*Hi! Friends, we are back. Remember Me??? I am your ‘HOST’ – Ankur Tailor and today I have come back here again with my beautiful creation; “JOSE-Joy Of Study As Entertainment”.*

*I am very glad to see that you all like JOSE very much. And this is proved by seeing your participation in Volume-II and to see that you are taking interest in improving yourself and showing your creativities to all. I am also very happy to see that JOSE is exploring you all and will try better to improve it as better I can and I will always try to give you that platform that can make you better.*

*JOSE is not just a magazine, it’s a way to give you knowledge and improve your skills. It’s a step towards our better future.*

*I expect that you will like it & give your contribution to run this effort through.*

**Mr. Ankur Tailor**

(4th Year Electrical Engineering)



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*Welcome to  
2054-2*



*Let the  
Show  
Begins.....*



# Articles

## Star Eater

*Albert Einstein thought that a black hole – a collapsed star*

*So dense that even light could not escape its thrall –*

*Was too preposterous a notion to be real?*

**Einstein was wrong**



*In younger stars, nuclear fusion creates energy and a constant outward pressure that exists in balance with the inward pull of gravity caused by the star's own mass. But in the dead remnants of a massive supernova, no force opposes gravity so the star begins to collapse in upon itself.*

*Black holes are the cold remnants of former stars, so dense that no matter – not even light – is able to escape their powerful gravitational pull. While most stars end up as white dwarfs or neutron stars, black holes are the last evolutionary stage in the lifetimes of enormous stars that had been at least 10 or 15 times as massive as our own sun.*

*When giant stars reach the final stages of their lives they often detonate in cataclysms known as supernovae. Such an explosion scatters most of a star into the void of space but behind a large “cold” remnant on which fusion no longer takes place.*

*With no force to check gravity, a budding black hole shrinks to zero volume-at which point it infinitely dense .even the light from such a star is unable to escape its immense gravitational pull. The star's own light become trapped in orbit, and the dark star becomes known as black hole.*

*Black holes pull matter and even energy into themselves-but no more so then other or cosmic objects of similar mass. That means that a black hole with the mass of our own sun would not “suck” objects into it any more than our own sun dose with its own gravitational pull.*

**Mr. Vibhor Chauhan**

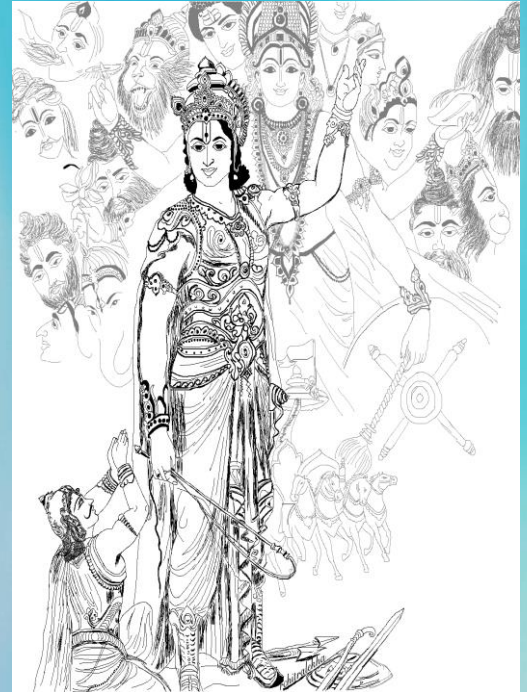
*(Head of Department – Electrical Engineering)*



## Lord Krishna

### Lord Krishna ponders about the fear that resides within us

*A man's heart is forever ruled by fear. Sometimes it's the fear of the destruction of property. Sometimes it's the fear of being insulted. Sometime its fear of separation from loved once. Therefore the existence of fear is considered to be natural by all. Have you ever thought that the situation or object that gives birth to fears that the actual cause of sorrow? No. There's no such law. And our experience tells us that being afraid doesn't relieve one of sorrow. Fear is simply the imagination of future sorrow. It has nothing to do with reality. Despite knowing that fear is nothing, but imagination is it very difficult to liberate oneself from it? Do u think about it?*



### Lord Krishna question asking 'What is truth'

*There's comes a time in everybody's life when we resolve to speak the truth but we fail to utter the truth. A fear engulfs us. Speaking about an incident or occurrence or speaking about one's own mistake is it speaking the truth? No. It's just mere retelling. Meaning just narrating an occurrence is very simple. But sometimes, even when retelling we feel afraid. A concern for the feelings of another arises in our hearts. Even the fear of causing sorrow stops the words from pouring out. Then... what is the truth? Have we ever thought about it? When, despite being fearful if somebody speak facts. That then, is the truth. In reality the truth is nothing but another name for fearlessness. And there is no time to be fearless because fearlessness is the nature of soul. In other words isn't every moment the right time to speak the truth.*

**Mr. Jitendra Sharma**

(Asst. Prof. Electrical Engineering)







# Electromagnetic Gun

## (Coil Gun)



As we know that, whenever the terrorist attacks then it's always seen that they attack suddenly and so there is a major possibility that we have less ammunitions. And here the use of this Gun comes.

This gun uses the magnetic field and so every conductor putted in it will eject as the bullet. And the advantage of this gun is that we can adjust the speed of the ejecting piece in it.

A **Coil Gun** or **Gauss Gun** is a type of projectile accelerator consisting of one or more coils used as electromagnets in the configuration of a linear motor that accelerate a ferromagnetic or conducting projectile to high velocity. In almost all coil gun configurations, the coils and the gun barrel are arranged on a common axis.

Coil guns generally consist of one or more coils arranged along a barrel, so the path of the accelerating projectile lies along the central axis of the coils. The coils are switched on and off in a precisely timed sequence, causing the projectile to be accelerated quickly along the barrel via magnetic forces. Coil guns are distinct from railguns, as the direction of acceleration in a railgun is at right angles to the central axis of the current loop formed by the conducting rails. In addition, railguns usually require the use of sliding contacts to pass a large current through the projectile or sabot but coil guns do not necessarily require sliding contacts. Whilst some simple coil gun concepts can use ferromagnetic projectiles or even permanent magnet projectiles, most designs for high velocities actually incorporate a coupled coil as part of the projectile.

Ankur

The Jose  
Mr. Ankur Tailor

(4<sup>th</sup> Year Electrical Engineering)

## VALUE OF CREATIVITY AND INNOVATION IN ENTREPRENEURSHIP

*Innovation is the tool of entrepreneurship. In addition, both innovation and entrepreneurship demand creativity. Creativity is a process by which a symbolic domain in the culture is changed.*

*Creativity is the ability to make or otherwise bring into existences something new, whether a new solution to a problem, a new method or device, or a new artistic object or form.*



*Innovation is defined as adding something new to an existing product or process. The key words are adding and existing all innovation begins with creative ideas. Creativity is the starting point for innovation. Creativity is however necessary but not sufficient condition for innovation. Innovation is the implantation of creative inspiration.*

*No entrepreneur or enterprise, however successful and big, can continue to hold a place of leadership unless it recognizes that modern business operates in a world of galloping change which creates new problems, risk and opportunities and for which they have to mobilize the enterprise's resources before changes make their impact felt. To do successfully, the entrepreneur and enterprise should know where this firm is going and how the firm will get there.*

**Sanjay Yadav**

(3<sup>rd</sup> Year Electrical Engineering)

## HOW TO BRING DISCIPLINE IN LIFE

DEAR FRIENDS, this article seeks to bring discipline to life in general. Discipline must not be restricted to a child's discipline, and becoming an adult does not make anyone a disciplinarian discipline does not indicate punishment, enforcement, or a strict environment; it is possible for anyone to be a disciple of discipline.

### Important points of good discipline:-

- Analyze yourself.
- Seek to convince yourself that you want to be disciplined for the purpose of believing in yourself.
- Chose an area in which to be more disciplined.

- Adopt a positive attitude.
- Chose to behave and act with temperance.

- Learn the basics of self-management.
- Keep yourself neat and clean.
- Use appropriate gestures.

- Realize that others may try to deter you.
- Once you learn to do something correctly, keep doing it.

**"We must all suffer one of two things: the pain of discipline or the pain of regret and disappointment."**

(Make yours regular routines as automatic as breathing.)

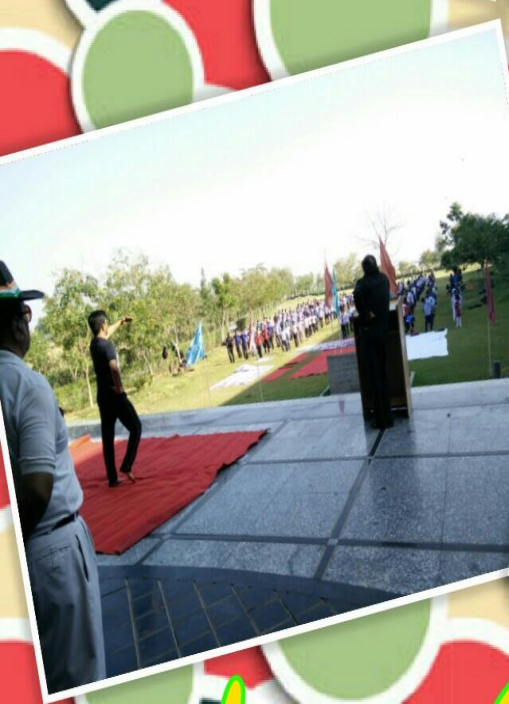
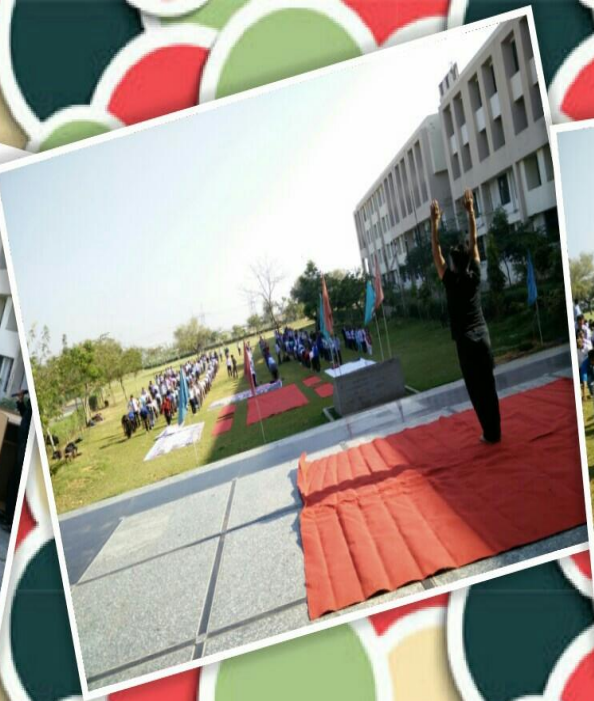
*Abhishek Sharma*

(3<sup>rd</sup> Year Electrical Engineering)

**- Jim Rohn**



# Yoga Shivir



# SUCCESS

*In present, everybody wants to be successful. So, what is real success? For a student archive degree by top college is to be success and for businessmen a lot of money is to be success. As you see every person's definition of success is different way and change with the situation and the time.*



*Success is not the key of happiness; happiness is the key of success. If you love what you are doing, you will be successful.*

*Remember*

*All of us do not have equal talent but, all of us have an equal Opportunity to develop our talents to make a successful life.*

*Don't take rest after you first victory because if you fail in second opportunity; more lips are waiting to say that first victory was just luck.*

*Winston Churchill said that "Success consists of going from failure to failure without loss of enthusiasm". Difficult doesn't mean impossible, it means you need to work harder. So try hard. Whatever you want to do, even when somebody said that it's a 'Stupid Idea' or 'it's unrealistic' even 'you're going to fail'. Don't lose your enthusiasm just because someone said anything. Do what you want to do and do what you believe is great work. This is true mean of real success and true happiness.*

**Priyanka Meena**

(3<sup>rd</sup> Year Electrical Engineering)

## First knowledge Guru

*Sadhu means who speaks on the basis of Shastra. Guru means who speaks on the basis of Shastra. They're sadhu guru Shastra. And Shastra means the statement of authorities. That is Shastra. Just like Bhagavad-Gita. It is Shastra because it is spoken by the supreme guru, Krishna. So who is guru? At the present moment so many unauthorized persons are presenting themselves as guru. But you should be very careful. Guru, Chaitanya Mahaprabhu has said, amara ajnaya guru hanata' ei desa. He says that "I order you that you become guru. And your business is to deliver this country." "This country" means wherever you are living, you can become guru and deliver them.*



*A pure devotee is neither a needy man, a man fallen into difficulty, nor an empiric philosopher who tries to approach the Divinity on the strength his own imperfect knowledge. A pure devotee receives knowledge of the Divinity from the right source -- the disciple succession of realized souls who have followed strictly the disciplinary method of devotional service under the guidance of bona fide spiritual masters. It is not possible to know the transcendental nature of the Divinity by dint of one's imperfect sense perception, but the Divinity reveals Himself to a pure devotee in proportion to the transcendental service rendered onto him.*

**Krishan Kumar Gupta**

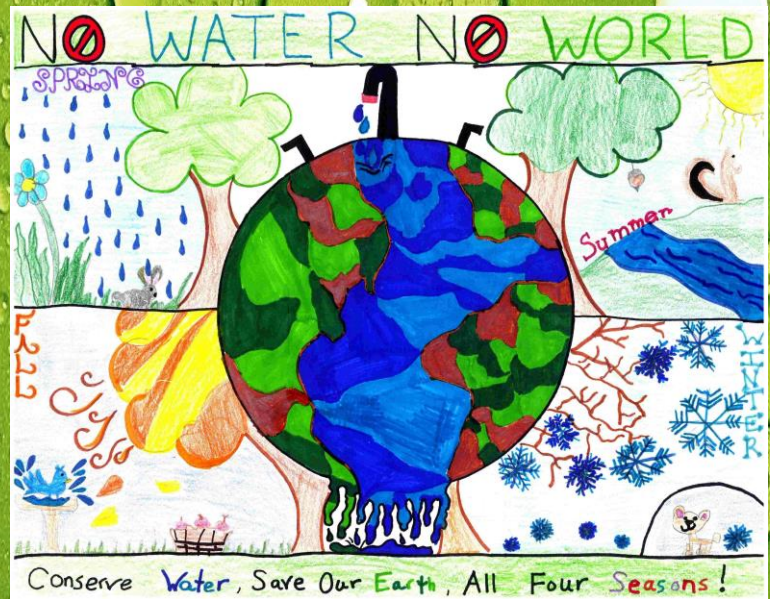
*(3<sup>rd</sup> Year Electrical Engineering)*

## The Importance of Saving Water

Water is more than just water; the existence of whole universe is dependent on water. That's why we called water is life. The primary reason is that every living element on Earth is consisting of approximately 65% to 70% of water in their body. Anyone can't think of life without water whether it is Plants, Animals, Humans, and other living things. Water is the most important resource. We require water for drinking, making foods, for cleaning our body & other household items, for constructions, paints etc. In spite of having 70% of water on earth but only 1% of water is fresh & useable and other 97% of water is salty, 2% of water is in form of ice in the glaciers & icebergs. Nowadays, human beings are destroying the environment by wasting this 1% of clean water by various ways i.e.

- Excessive use of water.
- Throwing garbage into water bodies.
- Careless use of water in their household works etc.

**NOTE:-** The more waste of water is the more we are consuming our natural resources like fossil fuels for generating electricity which requires for making clean water.



Following are the main benefits of saving water:-

- Less use of natural resources like fossil fuels for making of fresh water.
- The more water we save, it will be use by the plants & animals. This helps to maintain balance of the ecology.
- We should save water to avoid drought in the coming future.
- We should save water for its use in agriculture.

**Kapil Mittal**

(3<sup>rd</sup> Year Electrical Engineering)



# PCRA Workshop

**PCRA**  
**ENERGY CONSERVATION WORKSHOP**  
SAVE FUEL yaani SAVE MONEY  
पेट्रोल की बचत काहे पैसे की बचत  
**Petroleum Conservation Research Association**  
पेट्रोलियम संरक्षण अनुसंधान संघ (उ.के.)

Two day workshop on Energy Conservation by Petroleum Conservation Research Association (PCRA) under the aegis of Ministry of Petroleum and Natural Gas, Govt. of India, organized by U.E.E. Electrical Engineering



# GLOBAL WARMING

Global warming is the increase of Earth's average surface temperature due to greenhouse gases that collect in the atmosphere like a thickening blanket, trapping the sun's heat and causing the planet to warm up

Greenhouse gases keep heat close to the earth's surface making it livable for humans and animals. However, global warming is happening largely due to an over-emittance of these gases and fossil fuels (natural oil, gasoline, coal).

With the start of industry in the 1700's, humans began emitting more fossil fuels from coal, oil, and gas to run our cars, trucks, and factories. By driving a "smarter" car, you will not only save on gas, but help prevent global warming.

There is more carbon dioxide in the atmosphere today than at any point in the last 800,000 years.

**GLOBAL WARMING EFFECTS**

Enhanced greenhouse effect keeps more heat on Earth

This creates rising land and ocean surface temperatures or global warming

**Global warming causes**

- Stronger hurricanes and cyclones
- Desertification
- Decreases in snow cover and sea ice
- Rising sea levels (shore retreat)

Reducing our greenhouse gas emissions can have a real impact and fight the effects of global warming

Each day new greenhouse gas emissions further accelerate these physical changes

Less greenhouse gases leads to a cooler and safer Earth

Though Americans make up just 4 percent of the world's population, we produce 25 percent of the carbon dioxide pollution from fossil-fuel burning -- by far the largest share of any country.

Climate change is the single biggest environmental and humanitarian crisis of our time. The Earth's atmosphere is overloaded with heat-trapping carbon dioxide, which threatens large-scale disruptions in climate with disastrous consequences. We must act now to spur the adoption of cleaner energy sources at home and abroad.

Vikash Verma

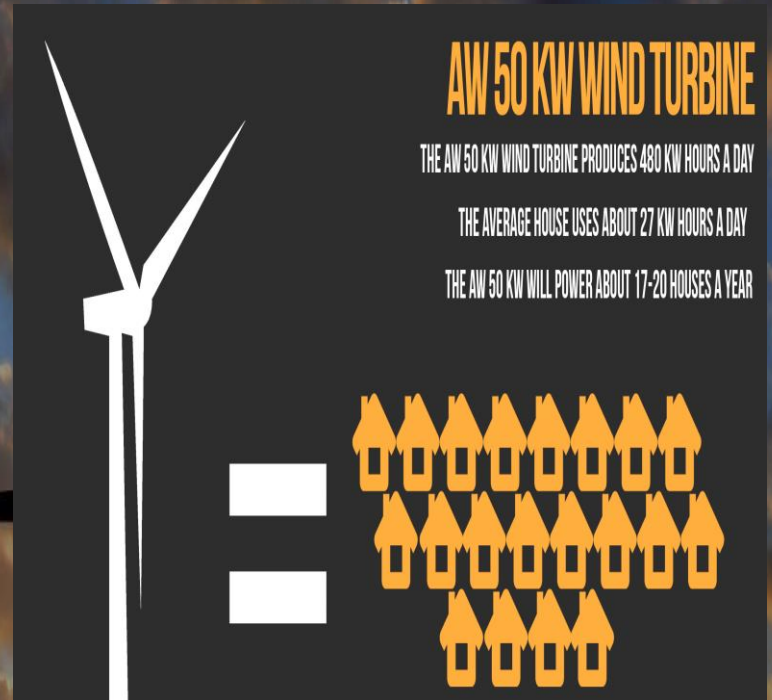
(3<sup>rd</sup> Year Electrical Engineering)

## WIND POWER

*Wind power is the use of air flow through wind turbines to mechanically power generators for electricity. Wind power, as an alternative to burning fossil fuels, is plentiful, renewable, widely distributed, clean, produces no greenhouse gas emissions during operation, and uses little land. The net effects on the environment are far less problematic than those of nonrenewable power sources.*

*Wind farms consist of many individual wind turbines which are connected to the electric power transmission network. Onshore wind is an inexpensive source of electricity, competitive with or in many places cheaper than coal or gas plants. Offshore wind is steadier and stronger than on land, and offshore farms have less visual impact, but construction and maintenance costs are considerably higher. Small onshore wind farms can feed some energy into the grid or provide electricity to isolated off-grid locations.*

*Wind power is very consistent from year to year but has significant variation over shorter time scales. It is therefore used in conjunction with other electric power sources to give a reliable supply. As the proportion of wind power in a region increases, a need to upgrade the grid, and a lowered ability to supplant conventional production can occur. Power management techniques such as having excess capacity, geographically distributed turbines, dispatch able backing sources, sufficient hydroelectric power, exporting and importing power to neighboring areas, using vehicle-to-grid strategies or reducing demand when wind production is low, can in many cases overcome these problems. In addition, weather forecasting permits the electricity network to be readied for the predictable variations in production that occur.*



**Suresh Saini**

(3<sup>rd</sup> Year Electrical Engineering)

## Swachh Bharat Abhiyan

A review of the year-long progress of the five-year Swachh Bharat Mission suggests it fail to match the high-decibel campaigning that has been the trademark of the flagship mission launched by Prime Minister Narendra Modi on October 2, 2014.



So as to put an end to open defecation and adopt better solid waste management practices, the one-year target for urban areas was to finish constructing 25 lakh individual toilets, 1 lakh community and public toilets, achieve 100 per cent collection and transportation of waste in 1,000 cities and cent per cent processing and disposal of waste in 100 cities. Only 20-25 percent of the target in terms of toilet construction has been achieved while on the garbage management front, the results are even more abysmal. Rankings released earlier show several major cities such as Mumbai, Delhi, Hyderabad, Patna, Lucknow, and Jaipur among others fare poorly on the cleanliness scale.

**Robin Singh**  
(3<sup>rd</sup> Year Electrical Engineering)

**NATIONAL SCIENCE DAY-16**  
 "Science for Nation Building"  
 Date : 26-28 February 2016

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 Government of Rajasthan  
 In Collaboration with

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*Exiting from  
JOSE-2*



# *Special Thanks*

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*(3rd Year Electrical Engineering)*

*Kapil Mittal*

*(3rd Year Electrical Engineering)*





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*If you are interested to share some views to us and want to show your creativity to all through JOSE, then you can contact us:-*

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