

## JIT Marathon

The Marathon is a longdistance running event with an official distance of 42.195 kilometers. usually run as a road race. More than 500 Marathon are held throughout the world each year.

3/11/2014 JIT, JIT organize a Marathon event for students and college faculties. Marathon program took placed at the outside of JIT campus on the road. All students, faculty the members actively participated in this event. Approx 200 students and 50 faculties run on road.

### Srajan 2015

- Blood Donation Camp & Free Medical Check up
- Plantations in JIT

Pinkcity Jaipur.

- Youth Festival (NSS Camp)
- National Level Project Competition
- National Level Tech. Fest 2015
- Kavi Sammelan & Bhajan Shandhya



Jaipur Institute of Technology, Group of Institution, is promoted by Lotus Educational Society, established in the year 2010 is a self financed education group imparting education in the disciplines of Engineering and Management Studies. It is governed by the rules and regulations of AICTE and affiliated with Rajasthan Technical University, Kota. The college is spread over 13 acres of land, a location which is peaceful and pollution free which is ideally for the student. It is located near Mahindra SEZ that is 15 kms. from the JIT offers five under graduate B.Tech. Courses (ECE, CSE, EE, CE and ME) and Four Post graduate M.

Tech. courses (Power System, Digital Communication, Computer Science and Production Engineering). The Jaipur Institute of Technology, Group of Institution, Jaipur provides numerous opportunities to its students for their development by cultural programs & technical fests. The Jaipur Institution Group is an inspiring leader in the field of education, research and healthcare.



# ISSUE November, 2014



Swachh JIT, Swasth JIT 03/11/14 JIT, As the Honorable PM Mr. Narendra Modi started a cleanliness program "Swacch bharat Swasth bharat" all over the India, Inspiring from that, A movement named "Swachh JIT swasth JIT" started at JIT today.

In this movement all the staff members and students of the college took an oath not to spread disposals, and wastage in the surrounding. To initiate this program, Director of the college, Dr. Ravi Kr. Goyal and other faculty members along with their student started by cleaning the wastage at playground and participation in the collective quest to make the campus "Swachh'





## Promotional Event "Zed Plus"

1/11/2014 JIT, Actors Mukesh Tiwari, Mona Singh and Hrishita Bhatt along with director Dr. Chandraprakash Dwivedi came at JIT, Jaipur to promote their upcoming movie "Zed Plus". In this event they met with all the students and the faculty members.

Dr. Ravi Goyal, Dr. Shalini Kulhsrestha and Dr. Alok Kumar Singh greet all the star casts of the film by giving them a flower bouquet. Zed plus - an uncommon story of a common man, is a political satire and comedy, starring Adil Hussain (best known for life of pie and enlish vinglish) and Mona Singh (known for jassi jaisi koi nahi). K K Raina, Sanjay Mishra, Kulbhushan Kharbanda are playing other important roles in this film.

The story is set in contemporary India in a small town of Rajasthan. A coalition Government, troubled by corruption and communalism, is on the verge of collapsing due to fights within the coalition partners. All the ministers are making efforts to save the Government, but still it appears that the Government will fall. In this event, the entire star cast also interacted with the students and distributed T-Shirts of "Zed Plus"

### MONTHLY **JIT** Times NEWSLETTER OF JAIPUR INSTITUTE OF TECHNOLOGY

"The new electronics independence recreates the world in the image of a global village"

## Children's Day Celebration



Education is the single biggest tool using which children can make it big in life. When children are educated, they not only move to the path of progress, but also contribute to the good of the society around them.

This Children's Day, make their dreams come true and help them become 'Shining Stars'.

15/11/2014, Jaipur Institute of Technology Organized a Children's Day on the birthday of our nation's first honorable Prime Minister Pt. Jawahar Lal Nehru, JIT celebrated in the day with a great enthusiasm. This day is observed to promote the objectives outlined in the Charter and for the welfare of children

On the occasion of Children's Day JIT organized varied artistic activities such as collage-making, poster making, face painting, best out of waste and coloring for the students etc., which helped to enhance their creative skills. Children presented various social messages and thoughts through these competitions.



## Free Medical Health Camp for students and Faculties.

JIT organized a one day free medical camp at JIT Campus. The health camp was organized with the objective of providing free medical examination / check - up. Nearly 20 members attended the gathering.

The event started with the following objectives:

- Measurement of pulse, Blood Pressure, height, weight and BMI.
- Blood sugar monitoring to screen Diabetes

A dental, hair and eye specialist also came to the campus to check students and other staff members.

On this auspicious event, Dr. Ravi Kr. Goyal said that such kind of events bring an upliftment in the environment. college Health is a major concern of any institute/industries. This health camp is a part of college's effort to the socioimprove economic status of the society.



## "If you born poor it's not your mistake, but if you die poor it's your mistake"



## **Plantation in IIT**

JIT Engineering College has organized "Tree Plantation Day" by the students. Students have stream a video on Global Warming which has shown the past history of environment problems and increased numbers of environmental problems of past and present.

Director has inspired the students and shown the future usages of Trees and Students have appreciated the speech with a great applause as it seems readiness and enthusiasm towards the saving environment.

## **National Unity Day Celebrations**

01/11/2014, JIT, The maiden National Unity Day was celebrated to commemorate Sardar Vallabhbhai Patel's 139th birth anniversary by carrying out Run for Unity among other events.

Speaking on the occasion, Dr. Ravi Kr. Goyal, the director of the JIT underlined the importance of National Unity day in the development of the country. He also added that the objective of this program is to promote the national integration and prosperity.

**Electronics & Communications** Students are visited to Jaipur Dairy (JD) plant and learn various methodologies to check the various components of the milk. EMT (Electronic Milk Tester) and working of other electronic devices used in milk testing and nutrition checking is also learned by the students. The whole automation system works on PLC/SCADA methods which are demonstrated by Mr. Rohit Bansal and Mr. Shashikant Tiwari.

Industrial

Visit for

all

**JITians** 

The department of Civil Engineering of Engineering Nagpur has organized Industrial Visit to "Bisalpur Dam", Tonk road, Jaipur" for students of seventh and fifth semester

Mr.P.K Agarwal AEN and Plant Incharge Mahesh Gurjar of Bisalpur Dam Project given brief information about the overall functioning various of departments including Pump House, Dam, Water Treatment Plant, Overall 120 students along with four faculty members Mr. Sachidanand Mehra ,Mr. Naresh Kumar, Mr. Himasnshu Singh and Mr.Rakesh Khati, visited the industry.

Electrical Department: The students of final year Electrical department of JIT College visited to 1MW, Solar Plant, Phagi where they learn about the working and construction of the solar panels. To support and to demonstrate the working Mr. Anoop Saxena and Mr. Rakesh Tiwari also visited to the plant with the students.

> second year and third year EE also visited to 220KV Kalwara along with Mr. Anoop Saxena and Mr. Umesh, Mr. Ankit Sharma, Mr. Govind Deep Sen.

The students of

Mechanical Department: They visited CIPET (Central Institute of Plastic Engineering) Industry along with Mr. Anil Sharma. They also learned various formations and in various disciplines of Design, Tooling, Processing, Testing & Inspection to the local Plastics Industries and playing a major role in the development of Plastic Industries in & around Rajasthan.

## SRINIVASA RAMANUJAN



Great Indian mathematician who self-taught and was had intellectual mathematical manipulation ability. Ramanujan was unable to pass his school examinations in India, and could only obtain a clerk's position in the city of Madras.

However, he continued to pursue his own mathematics, and sent papers to three mathematicians in England containing some of his results in 1913. While two of the three returned the letters unopened, G. Hardy recognized Ramanujan's intrinsic math ability and arranged for him to come to Cambridge.

Because of his lack of formal training, Ramanujan sometimes

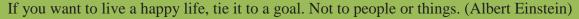
not differentiate between did formal proof and apparent truth based on intuitive or numerical evidence.

Although his intuition and computational ability allowed him to determine and state highly and unconventional original results which continued to defy proof until formal recently (Berndt 1985-1997).

Ramanujan had an intimate familiarity with numbers, and excelled especially in number theory and modular function theory. His familiarity with numbers was demonstrated by the following incident. During an illness in England, Hardy visited Ramanujan in the hospital. When G. H. Hardy remarked that he had taken taxi number, Ramanujan immediately responded that this number was actually quite remarkable: it is the smallest integer that can be represented in two ways by the of cubes: sum two 1729=13+123=93+103.

## **Knowledge Section**

1. Abdul Kalam was elected as president in which	<b>6. In what year v</b> a. 1990 b.
<b>year?</b> a.1986 b. 1992 c. 1996 d. 2002	a. 1990 D.
a.1980 0.1992 C. 1990 d. 2002	7. Which is the L
2. The 13th Prime Minister of India was	A. Japan B. A
a. Atal Bihari Vajpayee b. I.K. Gujral	
c. Dr. Manmohan Singh d. P. V. Narasimha Rao	8. The currency
3. The state which has the largest number of sugar	A. New Delhi B
mills in India is	9. In what year d
A. Bihar B. Haryana C. Punjab D. Uttar Pradesh	e e
<ul> <li>A. Bihar B. Haryana C. Punjab D. Uttar Pradesh</li> <li>4. First University in India was founded at</li> </ul>	Citizenship of In
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<b>4. First University in India was founded</b> at A. Bombay B. Chennai C. Calcutta D. Delhi	Citizenship of In a. 1982 b. 19 10. Who is curr



ANSWERS: - 1.D 2.A 3.D 4.C 5.B 6.B. 7.A 8.B 9.B 10 B

Unfortunately, Ramanujan's health deteriorated rapidly in England, due perhaps to the unfamiliar climate and food. Ramanujan was sent home to recuperate in 1919, but tragically died the next year at the very young age of 32.

### Health Tips Foods that can give vou a headache

Suffering from headaches or migraines every now then? Well, you're not alone as many people complain of such problems. Please avoid these foods to prevent headache.

- Alcoholic beverages
- Chocolates
- Coffee
- Sugar

### **5 Fruits for a glowing** skin

That fruits are the best medicine is a well-known fact.

- Banana
- Lemon
- Orange
- Papaya
- Mango

was Raiiv Gandhi assassinated? c. 1992 d. 1993 1991

Land of the Rising Sun? Australia C. China D. Taiwan

### notes are printed in

B. Nasik C. Nagpur D. Bombay

### did Sonia Gandhi receive ndia?

984 c. 1985 d. 1987

### rently (2011) the Vice President

Patil b. Mohammad Hamid Ansari gh Shekhawat d. Krishan Kant

## JOKES

10 doctors, 5 engineers aur 1 teacher helicopter ki rassi pe latke hue the.

Pilot- weight jyada hai, 1 aadmi ko rassi choddni padegi.

Teacher- "Ye Qurbani hum denge kyunki hum teacher hai! Bajao taaliyaan".

Sabhi Doctors aur Engineers taaliyaan abajaane lage!

Weight khud hi kam ho gaya!

Doctor, bano ya MORAL: engineer, GURU to aakhir GURU hi hota hai.

Tata Motors- what will you call 2nd &3rd editions of NANO Car? Ratan Tata: Sodium Nitrite & Sodium Nitrate. Because it will be NaNO2 &

NaNO3.

Interviewer: To bataiye PANI ke bina insane kaise marega?

Kaalu: Sir, PANI Nahi hoga to insaan tairega kaise? Tairega nahi to doob jayega!! Then

he"ll dead ...

Wikipedia: Enter a word.... I have pages to tell. Google: Enter a query...I have

unlimited ways to answer.

Internet without me, you both is nothing.

Computer: Without me, you all are useless.

Electricity: Keep Talking ....

A guy is travelling in a deluxe car in desert. He wants to take a bath but he has no soap and there is no water

What does he do?

He is integrate his 'd(lux)' car to get 'lux+c'. Using the lux soap he will bath in the 'c'. (c=sea) Can you murder maths more than this....

## **TECHIE-ARTICLE**

## **Body-adapted Wearable Electronics**



From Google Glass to the Fit-bit wristband, wearable technology has generated significant attention over the past year, with most existing devices helping people to better understand their personal health and fitness by monitoring exercise, heart rate, sleep patterns, and so on. The sector is shifting beyond external wearables like wristbands or clip-on devices to "body-adapted" electronics that further push the ever-shifting boundary between humans and technology. The new generation of wearables is designed to adapt to the human body's shape at the place of deployment. These wearables are typically tiny, packed with a wide range of sensors and a feedback system, and camouflaged to make their use less intrusive and more socially acceptable. These virtually invisible devices include ear buds that monitor heart rate, sensors worn under clothes to track posture, a temporary tattoo that tracks health vitals and hap tic shoe soles that communicate GPS directions through vibration alerts felt by the feet. The applications are many and varied: hap tic shoes are currently proposed for helping blind people navigate, while Google Glass has already been worn by oncologists to assist in surgery via medical records and other visual information accessed by voice commands. Ms. Priyanka Agrawal (HOD ECE&CSE)

**Brain-computer Interfaces** 

The ability to control a computer using only the power of the mind is closer than one might think. Brain-computer interfaces, where computers can read and interpret signals directly from the brain, have already achieved clinical success in allowing quadriplegics, those suffering "locked-in syndrome" or people who have had a stroke to move their own wheelchairs or even drink coffee from a cup by controlling the action of a robotic arm with their brain waves.

Recent research has focused on the possibility of using brain-computer interfaces to connect different brains together directly. Researchers at Duke University last year reported successfully connecting the brains of two mice over the Internet (into what was termed a "brain net") where mice in different countries were able to cooperate to perform simple tasks to generate a reward. Also in 2013, scientists at Harvard University reported that they were able to establish a functional link between the brains of a rat and a human with a non-invasive, computer-to-brain interface.

Ms. Alisha Goval (Lect, CSE)

### Nanowire Lithium-ion Batteries

As stores of electrical charge, batteries are critically important in many aspects of modern life. Lithium-ion batteries, which offer good energy density (energy per weight or volume), are routinely packed into mobile phones, laptops and electric cars, to name just a few common uses. However, to increase the range of electric cars to match that of petrol-powered competitors - not to mention the battery lifetime between charges of mobile phones and laptops – battery energy density needs to be improved dramatically. Batteries are typically composed of two electrodes, a positive terminal known as a cathode, and a negative terminal known as an anode, with an electrolyte in between. This electrolyte allows ions to move between the electrodes to produce current. Mr. Rahul Namawat (Lect. ECE)



**Grid-scale Electricity Storage** 



Electricity cannot be directly stored, so electrical grid managers must constantly ensure that overall demand from consumers is exactly matched by an equal amount of power fed into the grid by generating stations. Because the chemical energy in coal and gas can be stored in relatively large quantities, conventional fossilfuelled power stations offer dispatch able energy available on demand, making grid management a relatively simple task. However, fossil fuels also release greenhouse gases, causing climate change – and many countries now aim to replace carbon-based generators with a clean energy mix of renewable, nuclear or other non-fossil sources. Clean energy sources, in particular wind and solar, can be highly intermittent; instead of producing electricity when consumers and grid managers want it, they generate uncontrollable quantities only when favorable weather conditions allow. A scaled-up nuclear sector might also present challenges due to its preferred operation as always-on base load. Hence, the development of grid-scale electricity storage options has long been a "holy grail" for clean energy systems. To date, only pumped storage hydropower can claim a significant role, but it is expensive, environmentally challenging and totally dependent on favorable geography. There are signs that a range of new technologies is getting closer to cracking this challenge. Some, such as flow batteries may, in the future, be able to store liquid chemical energy in large quantities analogous to the storage of coal and gas. Mr. Vishnu Sharma (Lect. ECE)

### **Screen less Display**

torage One of the more frustrating aspects of modern communications technology is that, as devices have miniaturized, they have become more difficult to interact with - no one would type out a novel on a Smartphone, for example. The lack of space on screen-based displays provides a clear opportunity for screen less displays to fill the gap. Full-sized keyboards can already be projected onto a surface for users to interact with, without concern over whether it will fit into their pocket. Perhaps evoking memories of the early Star Wars films, holographic images can now be generated in three dimensions; in 2013, MIT's Media Lab reported a prototype inexpensive holographic color video display with the resolution of a standard TV.

"Don't compare your life to others. You have no idea what there is all about"

## **TECHIE-ARTICLE**

This list of the world's highest bridges ranks bridges by deck height. The deck height of a bridge is the maximum vertical drop distance from the bridge deck (the road, rail or other transport bed of a bridge) down to the ground or water surface beneath the bridge span. Deck height should not be confused with structural height, which measures the maximum vertical distance from the uppermost point of a bridge (e.g. top of the bridge tower) down to the lowest visible point of a bridge, where its piers emerge from the surface of the ground, foundation or water. A separate list of the world's tallest bridges ranks bridges by structural height.

The Chenab Bridge is an arch bridge under construction in India. It spans the Chenab River between Bakkal and Kauri, in Reasi district of Jammu and Kashmir. When completed, the bridge will be 1,315 m (4,314 ft) long, with a 480 m (1,570 ft) trussed arch span, 359 m (1,178 ft) above the river Chenab and a 650 m (2,130 ft) long viaduct on the Kauri side. Mr. Rohit Chauhan (HOD CIVIL)

### LED gets warmer as it dim

Is it possible for an LED to get redder as it dims?

Without swapping current between a warm LED and a cool LED?

It is, according to researchers from Philips.

They coated a cool white LED with a layer of thermally-responsive liquid crystal

When it is hot, because the LEDs is being driven hard, the coating is transparent and cool white light leaves the device uninterrupted.

When the coating is cooler, because the LED is not being driven so hard, it turns from transparent to scattering (milky).

Because the coating is now scattering, it reflects some of the cool white back into the LED's phosphor, where the phosphor gets a second chance to convert the blue content to longer wavelengths, causing the LED emit warmer white.

And there is a subtlety in the phosphor used.

It is a mixture of blue-to-yellow phosphor, and a phosphor that converts both blue and yellow to red.

This combination improves the shift to warmer whites as temperature falls, achieving the black body curve within five MacAdam ellipses between 3,200 and 4,150K.

Mr. Ankit Garg (Lect CSE)

## "The future belongs to those who prepare for it today"