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ITanium

Department of Information Technology



IMS Engineering College, Ghaziabad

NAAC Accredited with 'A' Grade & NBA Accredited branches
(BT,CSE&ME)

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A.P.J. Abdul Kalam Technical University, Lucknow

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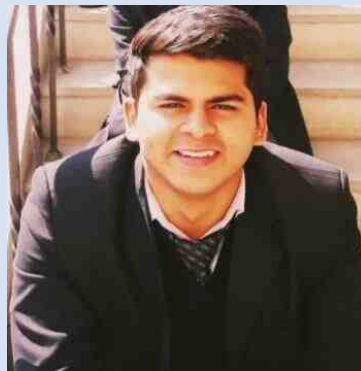


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Editor

MEET THE TEAM



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IMS ENGINEERING COLLEGE

Vision

Our vision is to impart vibrant, innovative and global education and to make IMS the world leader in terms of excellence of education, research and to serve the nation in the 21st century.

Mission

- To develop IMSEC as a centre of Excellence in Technical and Management education.
- To inculcate in its students the qualities of Leadership, Professionalism, Executive competence and corporate understanding.
- To imbibe and enhance Human Values, Ethics and Morals in our students.
- To transform students into Globally Competitive professionals.

Vision & Mission of IT Department

Vision

To impart futuristic technical education and establish a department of excellence by preparing students to apply their knowledge and varied skills as a competent technocrat to contribute towards solving complex societal problems and thus building a peaceful and prosperous nation.

Mission

M1: To impart quality engineering education so that they become enlightened individuals by getting high quality of technical education, research training, professionalism with strong ethical values.

M2: To educate students in such a way that they shape up their minds to ensure their productive careers in industry and academia.

M3: To help students excel in research and innovation that discovers new knowledge and enables new technologies and systems.

M4: To prepare students to become a perfect technocrat by inculcating creativity, team spirit, leadership & ethical competence through industry academia collaboration, continuous curricular, co-curricular and extra-curricular activities.

Department of Information Technology

Program Educational Objectives [PEO]

PEO1: Graduates of the program will be able to apply fundamental principles of engineering in problem solving and understand the role of computing in multiple disciplines.

PEO2: Graduates will learn to apply various computational techniques & tools for developing solutions & projects in real worlds.

PEO3: Be employed as Information Technology (IT) professionals beyond entry level positions or be making satisfactory progress in graduate programs.

PEO4: Demonstrate that they can function, communicate, collaborate, and continue to learn effectively as ethically and socially responsible IT professionals.

Program Specific Outcomes [PSO]

By the completion of program the students will have following program specific outcomes.

PSO1: Foundation of computer system: Ability to understand the principles and working of computer systems & information technology.

PSO2: Foundations of software development: possess professional skills and knowledge of software design process. Familiarity and practical competence with a broad range of programming language and open source platforms.

PSO3: Foundation of mathematical concepts: Ability to apply mathematical methodologies to solve computation task, model real world problem, using appropriate data structure and suitable algorithm.

PSO4: Applications of computing and research ability: Ability to use knowledge in various domains to identify research gaps and hence to provide solution to new ideas and innovations.

EDITOR'S DESK

It is with immense happiness that we place in the hands of our readers this new edition of ITanium. This magazine of IT Department, is a platform that exhibits the competency, knowledge, literary skills, innovative ideas of teachers and students.

I am thankful to all who gave their feedback on reading the inaugural issue of the E-Magazine... ..and thanks for their wishes. We express our considerable appreciation to all the authors of the articles in this magazine. These contributions have required a generous amount of time and effort. It is this willingness to share knowledge, concerns and special insights with fellow beings that has made this magazine possible. We hope you will enjoy reading the articles, and the various columns of the magazine

Thank you all !!

QUOTABLE QUOTES

"If you don't make mistakes, you're not working on hard enough problems. And that's a big mistake."

-FRANK WILCZEK

"There is a great difference between worry and concern. A worried person sees a problem, and a concerned person solves a problem."

-Harold Stephens

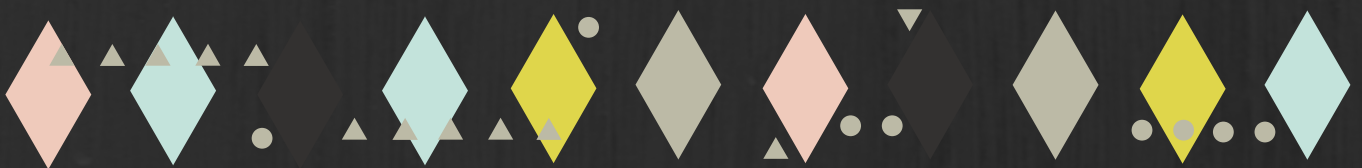




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ALUMNI SPEAKS

SIMRAN AGARWAL
2011-2015 BATCH(IT),
ACCENTURE, PUNE



"I still vividly remember my first day in IMS Engineering College. I was so excited in meeting new people. College felt like a liberation for me since I was far away from my family. It was my first time to be separated from them.

I met wonderful friends in my class of Department of IT, whom are still my best buddies even until now. I will never fail to recall how we were molded to what we are now. College is a dry run of the rest of our lives. It's a training ground on how to be successful and become good people."

MOHAMMAD DANISH IMAM

2012-2016 BATCH(IT),

SAP LABS, BANGALORE



"It would be difficult, to sum up, four years of IMSEC in just a few lines. I must say that the learning and exposure which IMSEC gives is just commendable. The faculty members of IT department always stand by you from the first day to the end of placement days. During the most crucial time of placements, the faculty and placement team provides students with a lot of preparatory sessions so that they come up with their best. I feel IMSEC is the wholesome basket for one who is looking to pursue engineering.

This magazine 'ITanium' is a perfect testimony of the initiatives that the I.T department has taken over the years of allowing students to express themselves in different areas. I wish the entire team of this magazine all the very best."

AVNI AGGARWAL
2015-2019 BATCH(IT),
TCS, GURUGRAM



“IMSEC has left lasting impressions on me. Those late night studies, hostel fun, life mantras from teachers, cultural events and the endless learning experience are unforgettable memories. The institution increased the exposure and made me confident. Everyone got abundant opportunities to prove themselves. I am thankful to my faculties of IT Department, who gave me invaluable knowledge and guidance to become what I am today.”



ARTICLES



Artificial Intelligence Trends for 2019

Deep learning theory: demystifying how neural nets work

Deep neural networks, which mimic the human brain, have demonstrated their ability to “learn” from image, audio, and text data. Yet even after being in use for more than a decade, there’s still a lot we don’t yet know about deep learning, including how neural networks learn or why they perform so well. Understanding precisely how deep learning works enables its greater development and use. For example, it can yield insights into optimal network design and architecture choices, while providing increased transparency for safety-critical or regulatory applications. Expect to see more results from the exploration of this theory applied to other types of deep neural networks and deep neural network design.

Battlefields in the age of AI

The wars of the future will rely on smart technology like never before. Drones are just the beginning. With the increasing convergence of conventional defence, surveillance, and reconnaissance with cybersecurity, the need for algorithm-based AI only expands. Cybersecurity is a real opportunity area for AI since attacks are constantly-evolving and the main challenge is new forms of malware. Prima facie, AI would have an extra edge here given its ability to operate at scale and sift through millions of incidents to identify aberrations, risks, and signals of future threats.

Machine learning will aid knowledge workers

While some are rightfully concerned that AI will put people out of work, AI technology also has the ability to aid employees, especially those in knowledge work. Today, tools like Gong, Chorus and Jog are able to record calls made by sales and customer service representatives. "This technology can coach customer-facing service workers to speak more effectively, thanks to machine-learning algorithms. Expect AI to increasingly support white-collar workers in 2019 and beyond," explains Carrie Christensen, Operations VP of Mint Solar.

Capsule Networks

Neural networks have myriad architectures. One of the most popular one in deep learning these days is known as convolutional neural networks. Now a new architecture, capsule networks, has been developed and it would outpace the convolutional neural networks (CNNs) on multiple fronts. CNNs have certain limitations that lead to lack of performance or gaps in security. Capsule Networks would allow AIs to identify general patterns with less data and be less susceptible to false results. Capsule Networks would take relative positions and orientation of an object into consideration without needing to be trained exhaustively on variations

Probabilistic programming: languages to ease model development

Probabilistic programming languages make it possible to reuse model libraries, support interactive modelling and formal verification, and provide the abstraction layer necessary to foster generic, efficient inference in universal model classes.

Probabilistic programming languages have the ability to accommodate the uncertain and incomplete information that is so common in the business domain.

Digital twin: virtual replicas beyond industrial applications

A digital twin is a virtual model used to facilitate detailed analysis and monitoring of physical or psychological systems. The concept of the digital twin originated in the industrial world where it has been used widely to analyse and monitor things like windmill farms or industrial systems. Now, using agent-based modelling (computational models for simulating the actions and interactions of autonomous agents) and system dynamics (a computer-aided approach to policy analysis and design), digital twins are being applied to nonphysical objects and processes, including predicting customer behaviour. Digital twins can help spur the development and broader adopting of the internet of things (IoT), providing a way to predictively diagnosis and maintain IoT systems.

Content will be created using AI

Brands like USA Today, CBS and Hearst are already using AI technology to generate content. For example, Wibbitz offers a software-as-a-service (SaaS) platform that allows publishers to turn written content into video content through AI video production. Publishers used to spend hours, if not days, creating content for their websites or for social media. Tools like Wibbitz are now helping publishers create compelling videos in minutes. Similar to Wibbitz, the Associated Press is using a tool called Wordsmith,

created by Automated Insights, to apply natural-language generation in order to create news stories based on earnings data. In 2019, readers can expect to see more media companies adopt natural-language and video-generation technologies.

AI enabled chips

Artificial intelligence heavily banks on specialized processors completing the CPU. Even the highly-advanced CPU may not improve the speed of training an AI model. When inferencing, the model requires extra hardware to do complex mathematical computations to make tasks faster like facial recognition and object detection. In the year 2019, chip manufacturers like NVIDIA, Intel, ARM, AMD, and Qualcomm will ship specialized chips capable of making the execution of AI-enabled applications much faster.

Data Storytelling

Data storytelling is a methodology for communicating information, tailored to a specific audience, with a compelling narrative. It is the last ten feet of your data analysis and arguably the most important aspect. Tableau is one of the best data storytelling software. The need for more data storytellers is only going to increase in the future. With the shift towards more self-service capabilities in analytics and business intelligence, the pool of people generating insights will expand beyond just analysts and data scientists.

Article By: Mr. Shardul Singh Chauhan
Assistant Professor, IT Department

Tokyo 2020 To Use Robots For A More Efficient And Accessible Olympics



Toyota's AI vehicles will collect athletics equipment

With just one year to go before the 2020 Tokyo Olympic Games opens its doors, it's probable that most people won't be thinking about technology.

For the world's leading athletes, the sole focus will be on qualification and the dream of winning a medal at the sporting showcase. And for spectators, the main concern will be finding accommodation and tickets for their chosen discipline.

As for Tokyo's residents, the main issue will be the influx of so many visitors into what is already a congested city.

Robot Olympics

But it is already possible to see what the technological legacy of Tokyo 2020 to the sports industry will be. AI-powered athlete tracking, cloud-based broadcasting, and 5G are but three innovations set to shine in Japan, but it is robotics that might be the most obvious advance.

Toyota, one of the International Olympic Committee's (IOC) official partners, plans to use robots to improve the efficiency and accessibility of the games, with AI set to play a crucial role.

Improving accessibility

Robots will also be deployed to assist those with accessibility requirements. Around 500 accessible seats will be available at dedicated areas of Olympic and Paralympic events. A Human Support Robot (HSR) will guide spectators to their seats, while a Delivery Support Robot (DSR) will bring items such as food, drinks and merchandise to them during the action.

Getting around

As might be expected from one of the world's leading car manufacturers, Toyota also plans to get athletes and officials around the Japanese capital using autonomous vehicles, while other tech firms are looking at ways of improving navigation.

In a bid to break down the language barrier, Panasonic has trialed a new color-coded travel map at Haneda airport.

It aims to show the simplest way to get to popular destinations, but visitors can also use a smartphone application that translates the text into different languages and provides directions using beacon-like technology.

Autonomous mobility scooters could take passengers that require assistance to their gate, using lasers to detect obstacles. Meanwhile, street hubs will display advertising and emergency information and provide public Wi-Fi networks.

182,000 Indians clean sewers largely by hand. These robots could help



To transform manholes into robo-holes, the country must seek broader social change.

The Indian government defines a "manual scavenger" as a person who physically carries human excreta. Often without safety gear—no helmets, masks, or gloves—these workers plumb the manholes of Mumbai, waist-deep in grey silt and sludge, searching for sewer-clogging debris: feces, sanitary pads, hospital refuse, plastic bags, and tree roots. With buckets full and fumes threatening to overtake them, they exit for a few moments, and then descend again. For their service, and if they are lucky, the city might pay them a monthly salary of about 14,500 rupees, or roughly \$200.

Manual scavenging is technically illegal in India, but in practice it thrives across the country. The 2011 Socioeconomic and Caste Census estimates that more than 182,000 Indians work as manual scavengers, while human rights groups peg the number at 770,000. Milind Ranade, founder Kachra Vahatuk Shramik Sangh, a Mumbai-based organization focused on addressing labor issues—especially those pertaining to waste collectors—says that manual scavenging is a caste-based profession, largely limited to the Dalit community, which is considered as the lowest echelon of the Indian society.

In some cases, “the ancient caste system still dictates a person’s occupation in India, and for Dalits, it means a life of dehumanizing work as manual scavengers,” says Ranade. Historically known as “untouchables” or outcasts, Ranade says, “even the state does not care about them.”

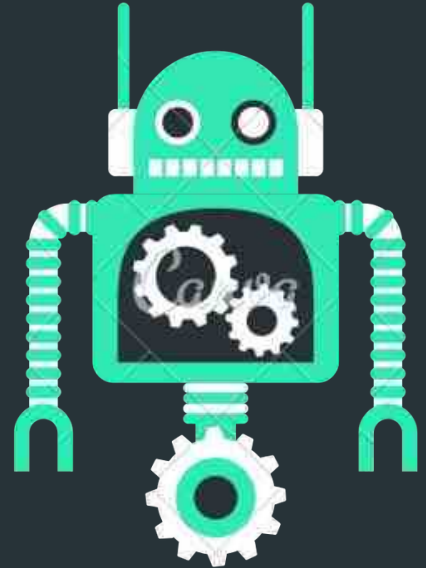
In response to such indifference, the country's Supreme Court has called on the government to step up enforcement, calling manual scavenging both uncivilized and inhuman. "Why are you not providing them masks and oxygen cylinders?" the court asked Attorney General Kottayan Katankot Venugopal on Wednesday. "In no country in the world, people are sent to gas chambers to die."

Sunil Bhosale, vice president of the Jan Jagruti Foundation—a non-governmental organization (NGO) that works to address health issues among sanitation workers in Mumbai—shares that the job also leads to chronic alcoholism and resultant illnesses. He cites the example of Mallesh Albai, a 38-year-old manual scavenger, who had been cleaning sewers on contract for six years, and died after suffering from liver enlargement, unable to afford the medical expenses.

“We can bring in technology and employ the same workers to handle the machines,” Darokar says. “No civilized society should allow such a practice. Fifth and sixth generations of Dalit families are still employed in the profession—a perfect example of how caste continues to perpetuate discrimination and ostracization in India. Technology has to become the alternative.”

Article By: Princy Garg IT2,3rd Year

MICRO BOTS



The Journal of Micro-Bio Robotics is the synergistic integration of micro- and biotechnologies with Robotics. Strong research efforts are being focussed on development of micro/nanoscale or miniature robotic systems, which are biologically inspired, integrated with biological entities, or used for biological or biomedical applications. This new journal aims to report the significant progress in these new research efforts.

The Journal of Micro-Bio Robotics, a quarterly journal, is devoted to the theory, experiments, and applications of micro- and biotechnologies and robotics.

The Journal promotes both theoretical and practical engineering research based on the analysis and synthesis from the micro level to the bio level of robotics. The journal includes survey papers, technical papers, and short papers in the field of Micro and Bio Robotics.

Potential authors are invited to submit original research articles for publication consideration. Reviews and short communications may also be considered. All submissions will be peer reviewed subject to the standards of the journal. Manuscripts based on previously published conference papers must be extended substantially. Electronic submissions must be in PDF format and should be prepared according to the journal guidelines. The submissions should be performed through the journal submission system.

"The leg just twitched a bit," recalled Miskin. "But it was the first proof of concept -- this is going to work!"

Teams at Cornell and Pennsylvania are now at work on smart versions of the robots with on-board sensors, clocks and controllers.

The current laser power source would limit the robot's control to a fingernail-width into tissue. So Miskin is thinking about new energy sources, including ultrasound and magnetic fields, that would enable these robots to make incredible journeys in the human body for missions such as drug delivery or mapping the brain.

"We found out you can inject them using a syringe and they survive -- they're still intact and functional -- which is pretty cool," he said

Lit Drops



Friendship: The Key to Vibrant Health

Fascinated, I jumped in with both feet. Through extensive research into fields from neuroscience, molecular biology, psychology, sociology and epidemiology, I learned that friendship is the virtual key to health and happiness. It starts day to day. Research shows that if you have a strong social network, you will fall asleep faster, enjoy deeper sleep and experience less daytime fatigue

(1). You will age more slowly and be much less susceptible to the flu and viruses

(2). Your teeth will be healthier.

(3). Your cuts and bruises will heal faster

(4). And you will be more optimistic, less bothered by life's hassles, less likely to engage in damaging behaviors, and less likely to suffer from debilitating stress

But the big rewards come over a lifetime.

(5) You will have significantly better cardiovascular health, a stronger immune system, and a greater chance of taking preventive health measures, and as a result you will be less likely to suffer major illness or injury

(6). And even more importantly, if you are diagnosed with a serious malady like cancer, heart disease, stroke or dementia, you will have a significantly—in fact up to four times—greater, chance of surviving

(7). Research from the University of California following over 2000 women for 10 years after a breast cancer diagnosis goes even further, showing it doesn't even matter how close you live to them or how much contact you have with them: just having friends is protective .

By : Diksha Singh ,IT-1 ,3rd Year

THE POWER OF MUSIC

Music is a one of the best things that exist in the world .music helps our daily life for refreshment and enjoyment .

Music not only help for refreshment but also it inspires someone and see him the way of success

All the inspiration of the man can be express by the music .

Because music attracts the mind and body.music help the mind for working.music can change anyone mind .for example ,if any person hear the bad music he becomes angry and whereas someone hear good music he becomes fresh and happy.

The power of music is helping the most people for money .many people are singer and artist .the whole life of them is depend upon the music .

By : Akash Khanna, IT -1 ,3rd Year

घर की याद

अपने घर से दूर भी जाना पड़ता है।
सब ऐशो आराम भुलाना पड़ता है।
जिस खाने में घर पे नखरे होते थे
शौक से अब वो खाना, खाना पड़ता
है।

दिल ज़िद करता है घर वापस जाने
की ,
अपने दिल को खुद समझाना पड़ता
है।

मंजिल पाना साहब कोई खेल
नहीं अक्सर,
खुद से भी लड़ जाना पड़ता है।

By : Rajvikram Saxena, IT -2 ,3rd Year

वो कॉलेज के दिन

कुछ बातें भूली हुई, कुछ पल बीते हुए
हर गलती का एक नया बहाना, और
फिर सबकी नज़रो में आना ।

परीक्षा के पहले पूरी रात जागना, फिर
भी पेपर देख कर अगले दिन सिर
खुजाना ।

मौका मिले तो क्लास बंक मारना,
फिर दोस्तों के साथ कैटीन जाना।

हर पल है एक नया सपना, आज जो
टूटे फिर भी है अपना ।

ये कॉलेज के दिन, इन लम्हों में
जिंदगी जी भर के जीना ।

याद करके इन पलों को, फिर जिंदगी
भर मुस्कराना ।

By : Nirmith , IT -2 ,3rd Year

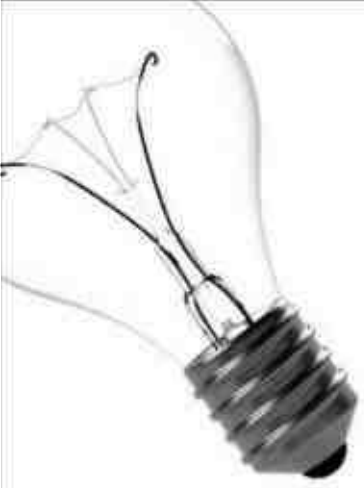
I've Learned

**Eyes swelled and logging into hell, I was
left alone while sobbing well,
Run and run, covered miles, All tiered but
no traces Of smile,
Tried my best to make it better, But in the
end it doesn't even matter.
Twists and turns, curves and bends, Life
gave me ample Of Fake Friends,
Still, a big thank you to all, You taught
me to stand after I fall.
All this confidence and all of my
attitude, To give me this you have my
gratitude.
Got stronger out Of my tears, And
nothing now makes me to fear,
No more hopes, no more desire, All
senses were put on fire,
Every emotion and every shit
burned, Living alone is something I've
learned.**

By : Rahul Gandhi, IT -2 ,2nd Year

NEWSWORTHY





Science & Technology

1. Chandrayaan 2 lunar landing: Isro loses contact with lander Vikram



Vikram, Chandrayaan 2's lander, lost contact with Indian Space Research Organisation's (Isro) mission control centre just a few minutes before it had to soft-land on the lunar surface. After that the scientists went into a huddle and Prime Minister Narendra Modi was informed by ISRO Chairman K Sivan about the loss of communication. Scenes of heightened tension among the scientists could be seen in the mission control.

2. Scientists create first portrait of a Denisovan by analysing chemical changes to DNA

Scientists have for the first time restructured Denisovans' skeletal features, using DNA methylation (chemical changes), to understand how the long lost human relative looked like, the Nature reported. A team of computational biologists at the Hebrew University of Jerusalem found Denisovans shared Neanderthal's facial features, but had a wider jaw and skull.

Until now, only bone fragments and teeth of were discovered from Siberia's Denisova Cave, which was likely occupied by the ancient humans from more than 200,000 years ago to around 50,000 years ago. Earlier this year, researchers discovered a jawbone from the Tibetan Plateau and a human like finger. However, these fossils were not large or complete enough for scientists to reconstruct their facial features.





3. Scientists may have found a way to reverse age by more than two years

It may be possible to reverse a person's biological age with a combination of drugs and growth hormones, found a research published in the journal Ageing Cell. Steve Horvath, a geneticist at the University of California, was able to reverse participants' biological, or epigenetic, clock by an average of two-and-a-half years after being treated with a combination of growth hormone and two common drugs used for diabetes medications, read the study reported in Nature. The immune system of the patients too appeared to have rejuvenated.

“I’d expected to see slowing down of the clock, but not a reversal. That felt kind of futuristic.” Horvath told Nature.



4. This new photonic chip may power 5G

The fifth generation of cellular mobile technology or 5G is expected to not just provide super high-speed data communication but also facilitate networking of people, machines and things. An array of new technological building blocks to achieve this is being developed.

An international group of scientists, including from the Indian Institute of Technology Delhi (IIT D), have developed one such key technology – a photonic chip which uses the interplay of light and sound for speedier information processing. The chip could be potentially employed in devices called phase shifters in phased-array antennas, which facilitates beaming of signals in different directions without moving.



SPORTS

1. MS Dhoni unavailable for selection until November

NEW DELHI: Mahendra Singh Dhoni will not be available for selection until November this year, according to the Mumbai Mirror.

The former India captain had previously missed the West Indies tour after taking a break of two months which also meant that he missed the ongoing home series against South Africa. The extension of the break means that he will miss out on the Vijay Hazare Trophy and the home T20I series against Bangladesh as well.



2. Liverpool maintain perfect start with hard-fought away win at Chelsea



Leaders Liverpool maintained their perfect start to the Premier League season as first-half goals from Trent Alexander-Arnold and Roberto Firmino secured a 2-1 win at Chelsea on Sunday that left them five points clear at the summit. Advertising.

It was a sixth straight league win from the start of the campaign for Juergen Klopp's European champions and extended their club-record streak to 15 in total.

3. South Africa crush India in 3rd T20I to draw series level

South Africa beat India in the 3rd T20I in Bangalore on Sunday by nine wickets and with 3.1 overs to spare. De Kock led the way in the comprehensive victory with an unbeaten 79 off 52 balls. The series ends level, with both sides having won one match each. The first match of the series was washed out in Dharamshala.



POLITICS

1. Praising Centre for Abrogation of Article 370, Amit Shah Talks of 'Gold-roofed' Homes of Kashmiris

People in Jammu and Kashmir would have had gold-roofed homes if previous governments spent all the funds released by the Centre for the restive region's development, BJP chief and Union Home Minister Amit Shah said in suburban Goregoan on Sunday.

Speaking at a rally here on the Centre's decision to abrogate provisions of Article 370, he added that the move by the Centre would bring progress to J-K. "The Indian government has spent Rs 2.27 lakh crore so far on Jammu and Kashmir since its formation. Had it gone to people, their houses would have had roofs made of gold," Shah claimed.



--You can see they're already getting discouraged. Pakistan PM comes to PoK and says 'countrymen don't go to India-Pak border'. I said it's good because if they do, they'll not be able to go back to Pakistan,-- he said at a Jan Jagran Sabha (public awareness meet) organised by the BJP in Patna.

2. No Power Will be Able to Protect : Rajnath Singh's Warning to Pak on Repeating 1965, 1971 Mistakes

Defence minister Rajnath Singh on Sunday warned Pakistan against repeating mistakes of 1965 and 1971 as he asserted that the neighbouring country ran the risk of getting "dismantled" on account of flagrant violation of human rights on its soil.

DEPARTMENT NEWS

```
lib/scientist/result.rb 1:1
# Scientist::Result
# The Scientist::Result object
#
# @attr_reader :candidates
# @attr_reader :control
# @attr_reader :experiment
# @attr_reader :observations
# @attr_reader :ignored
# @attr_reader :mismatched
# @attr_reader :observations
# Internal: Create a new result
#
# @experiment - the Experiment
# @observations - an Array of Observations
# @control - the control
#
def initialize(experiment, observations, control)
  @experiment = experiment
  @observations = observations
  @control = control
  @mismatched = false
  @ignored = false
end

def freeze
  end

# Public: the experiment's context
def context
  experiment.context
end

# Public: the name of the experiment
def experiment_name
  experiment.name
end

# Public: was the result a match?
def matched?
  end
```

PLACEMENT UPDATES...

NAME	ROLL NO.	PLACED IN
Aditi Chaudhary	1614313006	TCS
Amritanshu Dwivedi	1614313007	TCS
Anmol Rajput	1614313008	TCS
Ashirwad Vashistha	1614313016	Optimus
Ashish Kumar Jha	1614313017	To The New
Dharmveer Singh	1614313023	TCS
Dinesh Upadhyay	1614313024	TCS
Harshit Gupta	1614313028	TCS
Harshita Srivastava	1614313030	TCS
Kashish Garg	1614313033	Optimus
Lovneesh Vij	1614313036	TCS
Mayank Gupta	1614313038	TCS
Megha Batra	1614313040	TCS
Nancy Kulshrestha	1614313047	TCS, Optimus
Nitesh Kumar Verma	1614313051	TCS
Omisha Sharma	1614313053	TCS
Poornima Rai	1614313057	MobilizeOn
Prashant Brahmbhatt	1614313060	To The New
Saurav Singh	1614313071	TCS
Shivam Mittal	1614313076	TCS
Sukriti Saxena	1614313082	TCS
Surbhi Agarwal	1614313083	TCS
Swasti Jain	1614313084	TCS, Mirketa Software
Tanmay Pathak	1614313086	TCS

DEPARTMENT NEWS

TECH-NINJAS 2.0

CONVENER: Dr. Avdhesh Gupta

Congratulations!

TOPPERS OF C PROGRAMMING QUIZ HELD ON 20TH SEPTEMBER 2019



2nd year

Abhishek Sharma

76%



2nd year

Shaifali Kalra

76%



3rd year

Palak Kapoor

72%



TECH-NINJAS 2.0

3rd year



Rakhi Singh

72%

2nd year



Simran Singh

72%

2nd year



Vikash Kumar

72%

Annual Technical Fest SPARK-2019 organised jointly by Department of CSE and Department of IT on 28th September 2019. Total 26 innovative technical projects from IT Department were demonstrated in that.



Industrial visit by 2nd year students of IT & Civil department at Delhi Metro held on 24th september 2019



DUCAT organised one day Training program on Machine Learning for 2nd year IT students held on 14th september 2019



SPORTS:.. Under the Captainship of Piyush Chaudhary (B.Tech, IT , 4th Year), IMS Engineering College won Gold Medal in Zonal Level Contest of Volleyball, organised by University at VIT Group of Institution, Ghaziabad.



Online Quiz was held on 29th August for 2nd year students. 96 students participated in this Quiz. Subject of Quiz was Computer organization and architecture.

A close-up photograph of a student's hands writing in a white notebook with a red pen. The student is wearing a dark blue shirt. A clear glass jar is on the wooden desk next to the notebook. A red folder is visible under the notebook. The text "Student's Opinion" is overlaid in the center.

Student's Opinion

HOW TO SUCCEED IN YOUR STUDIES



When we start our studies, all of us already have different kinds of study skills. Our motivation springs from different sources, as does our general attitude to our studies. Nevertheless, regardless of where we are coming from, we need to take many things into consideration in our studies. Study success requires clear objectives, motivation, planning, self discipline, self confidence, good study habits and a positive attitude. Being physically fit is also helpful. Now that's quite a list!

It is relevant here to ask if motivation and the ability to make plans and set objectives are inborn traits? And what about good reading and study habits, a positive attitude and physical fitness? How self confident were we when we were born? Indeed, we must assume that we are not born with the above.

These are not inborn traits; we have learned and developed them and many others through the course of our lives.

As a student, you are given an excellent opportunity to develop not just your study skills, but also many other skills useful in life. These skills will help you to succeed in challenging tasks after graduation.

By-Ishita Roy Choudhary,IT-1 2nd year

GOAL SETTING



FOR ACHIEVING YOUR GOALS DON'T WORRY ABOUT WHAT HAVE TO BE DONE, BUT YOU NEED TO WORRY ABOUT WHAT ARE YOU DOING TODAY

First let's talk about "why it is necessary to set goals"-Because without goals your life is like that game in temple run who keeps on running but don't know where to go and why?

Goal setting not only determines your life's direction but also sets a bookmark to show you the reality about where you are now and where you need to be.

Setting your goals involves serious steps

Set SMART goals

SMART-specific, measurable, attainable, relevant, and time bound goals

Make an ACTION PLAN


This step is often missed in the process of goal setting. You get so focused on the outcome that you forget to plan all of the steps that are needed along the way. By writing out the individual steps, and then crossing each one off as you complete it, you'll realize that you are making progress towards your ultimate goal. This is especially important if your goal is big and demanding, or long-term.

Stick to it!

Remember, goal setting is an ongoing activity, not just a means to an end. Build in reminders to keep yourself on track, and make regular time-slots available to review your goals. Your end destination may remain quite similar over the long term, but the action plan you set for yourself along the way can change significantly. Make sure the relevance, value, and necessity remain high.

By-Ishika Mittal,IT-1 2nd year

IMPORTANCE OF TIME



Time management is important for students to do the study with focus. Time management is important for students to get high marks. Student's success in studies depends much on managing time efficiently. The habits and morals they acquire during college time and home will stick with them throughout the future.

Time management shapes the student's mind into the direction of discipline and sense of duty. Discipline is extremely important especially in college life to become better students. Time management is a skill that enables students to use their time productively and efficiently.

Time management is not taught as an academic subject in schools and colleges. Students have to utilize their 24 hours to become the best students and experts in the subject. The focus of learning time management skills is just to develop the habits of spending time wisely.

By- Arpit Sharma, IT-1 3rd year

EXPERIENCE WITH IT



When the coders and decoders meet, there the department of software starts, or we can say that the IT department starts from there.

The department where the faculty is all very much supportive and it's reverberation can be felt ahead in our future. It provides you a platform that would surely enhance your interpersonal skills. From being impractical to practical , you would learn to make yourself a better person with a fine line of confidence .From first year to the last year , the experience here has been commendable and gratifying.To conclude, the knowledge and self confidence here has reached pinnacles in the past few years.

By- Omisha Sharma IT-2 4th year



UPCOMING EVENTS

1. Amalthea 19

Start Date: 19th October 2019
Organiser: IIT Gandhinagar
State: Gujarat

End Date: 20th October 2019
City: Gandhinagar

DESCRIPTION:

Amalthea will be entering double digits this year. 2019 marks the tenth anniversary of the tech summit. As with any event a lot has changed over the last ten years. It has continuously evolved and got bigger and better. With lots of exciting events and big prize, Amalthea will be a platform for people to witness new technology and events around them.

2. Fluxus

Start Date: 30th January 2020
Organiser: IIT Indore
State: Madhya Pradesh

End Date: 1st February 2020
City: Indore

DESCRIPTION:

Fluxus, IIT Indore's annual techno-cultural fest has grown into Central India's biggest and most anticipated event. With shows from renowned artists like Farhan Akhtar, Sunidhi Chauhan, Shirley Setia and Amit Trivedi to up-and-coming performers like The Local Train, Fluxus has witnessed exhilarating performances from both Indian and international artists alike.

With preparations to exceed the 25,000 footfall of Fluxus '19 ongoing, expectations are that Fluxus '20 will be its biggest edition yet. I am also attaching the brochure of Fluxus'20 .

3 ZEITGEIST 2019

Start Date: 11rd October 2019

End Date: 13th October 2019

Organiser: IIT Ropar

City: Rupnagar

State: Punjab

DESCRIPTION:

Deemed as the largest Cultural Fest in Punjab-Haryana, Zeitgeist is not just another event at IIT ROPAR, it is an experience to be lived, and it will leave behind memories that you will cherish for a lifetime. A 4 day extravaganza with a plethora of events in Singing, Dancing, Dramatics, Quizzing, Fashion, Oration, Poetry, Stand-up shows as well as Fun-filled and entertaining star nights, that have previously featured the best that Bollywood has to offer, Vishal-Shekhar, Ranjit Bawa, Mohit Chauhan, Gajendra Verma, and also International sensations such as Olly Esse and Havas Guruhi, Zeitgeist has grown over the years into a showcase of spectacle, an event like no other.

4. Version Beta 2019

Start Date: 11th October 2019

End Date: 13th October 2019

Organiser: MANIT Bhopal

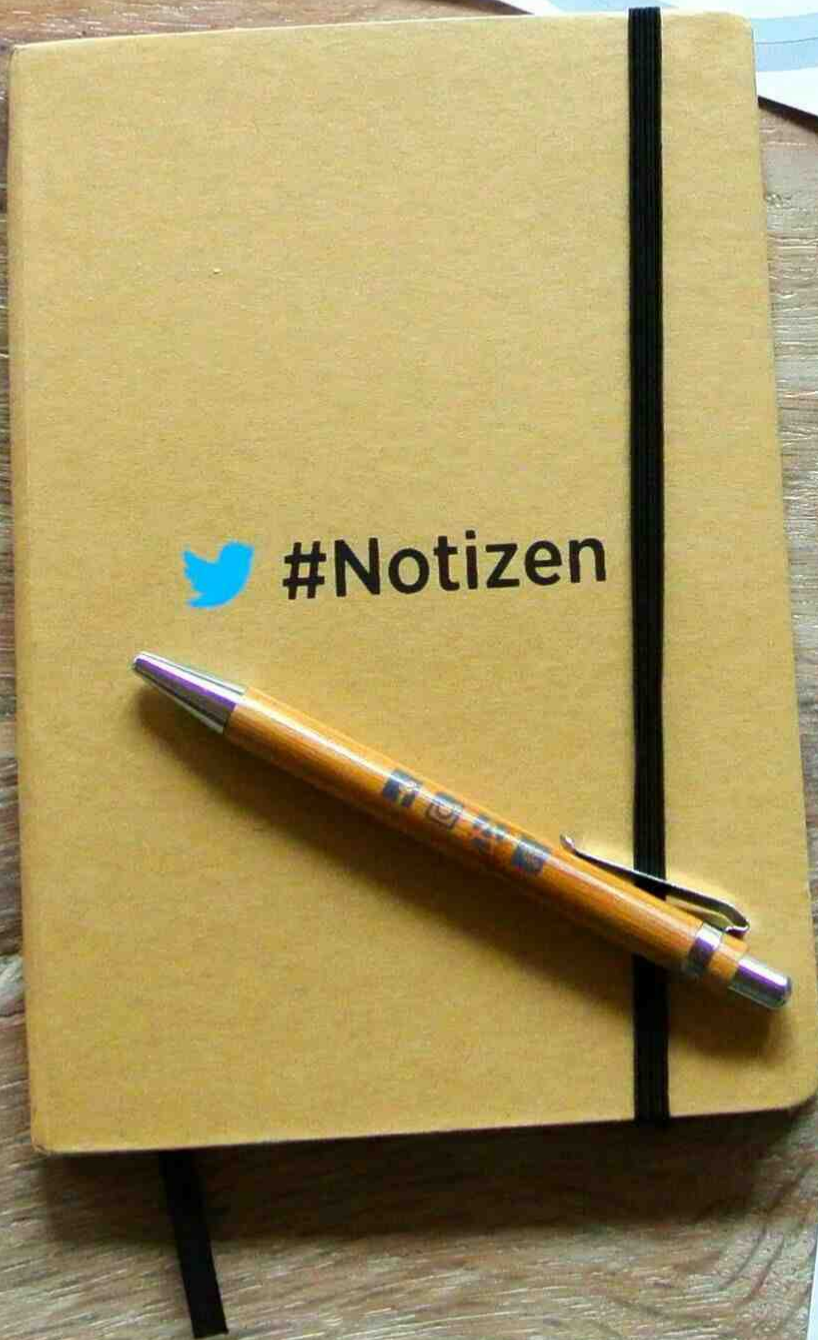
City: Bhopal

State: Madhya Pradesh

DESCRIPTION:

Version β : Possibly India's biggest hackathon in the near future. Version β stands for a cause; To eliminate rote learning from the academic lives and inculcating spirits of innovation and experimentation among the youth. Hackathons are yet to become the part of the regular norms in the fast developing nation, hence, few techenthusasts from ISTE Students' Chapter MANIT took the charge to do so. With enterprises lining up for bare talents who can innovate and create something of their own, all that the students need is a podium to showcase their talents. With a vast pool of talented individuals shortlisted by a rigorous selection procedure, Version β holds the key to overall development in the social and technical aspects of an individual.

BRAINSTORMERS

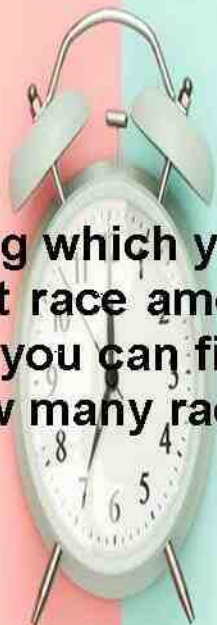


QUESTIONS

1. If you had an infinite supply of water and a 5 quart and 3 quart pails, how would you measure exactly 4 quarts? and What is the least number of steps you need
 - A) 3
 - B) 5
 - C) 6
 - D) 8
2. Which organ of the human body does Alzheimer's disease affect?
 - A) Ear
 - B) Brain
 - C) Stomach
 - D) Eye
3. For seeing objects at the surface of water from a submarine under water, the instrument used is?
 - A) Periscope
 - B) Telescope
 - C) Kaleidoscope
 - D) Spectroscope
4. First human heart transplant operation conducted by Dr. Christain Bernard on Louis Washkansky, was conducted in?
 - A) 1958
 - B) 1922
 - C) 1967
 - D) 1968
5. For which of the following disciplines is Nobel Prize awarded?
 - A) Literature, Peace and Economics
 - B) Physics and Chemistry
 - C) Physiology or Medicine
 - D) All of the above



6. Chandrayaan-2 is an Indian lunar mission that will boldly go where no country has ever gone before, says ISRO. Which region is India's space agency talking about?
- A) Unexplored lunar crater to be named after landing
 - B) The lunar north pole
 - C) The lunar south pole
 - D) Not any above
7. The Chandrayaan-2 lander is named Vikram after Vikram Sarabhai, father of the Indian space programme. What is the mission's rover called?
- A) Rajanichar
 - B) Pragyan
 - C) Sthalaja
 - D) Vikram
8. There are 25 horses among which you need to find out the fastest 3 horses. You can conduct race among at most 5 to find out their relative speed. At no point you can find out the actual speed of the horse in race. Find out how many races are required to get the top 3 horse.
- A) 8
 - B) 7
 - C) 22
 - D) 11
9. Chandrayaan-2's orbiter will be capable of communicating with the Indian deep space network at Byalalu, near Bengaluru, and the lander. It will be placed in 100x100 km lunar polar orbit. What is the orbiter's mission life?
- A) 1 year
 - B) 3 year
 - C) 7 year
 - D) 10 year
10. Three ants are sitting at the three corners of an equilateral triangle. Each ant randomly picks a direction and starts to move along the edge of the triangle. What is the probability that none of the ants collide?



- A) $\frac{1}{8}$
- B) $\frac{1}{4}$
- C) $\frac{1}{2}$
- D) $\frac{1}{16}$

11. How many times a day do the minutes and hour hand of a clock overlap?

- A) 22
- B) 24
- C) 20
- D) 21

12. Chandrayaan-2 will attempt to land in a high plain between two lunar craters. One is Manzinus C. Name the other.

- A) Simpelius N
- B) Seleucus A
- C) Clavius F
- D) Not any one

13. What is the name of chandrayaan-2's launch rocket?

- A) PSLV-XL
- B) PSLV-C35
- C) GSLV Mk-III
- D) PSLV-IV



14. A frog is at the bottom of a 30 meter well. Each day he summons enough energy for one 3 meter leap up the well. Exhausted, he then hangs there for the rest of the day. At night, while he is asleep, he slips 2 meters backwards. How many days does it take him to escape from the well?

- A) 23 days
- B) 26 days
- C) 28 days
- D) 21 days

15. Which of the following problems can be solved using recursion?

- A) Factorial of a number
- B) Nth Fibonacci number
- C) Length of a string
- D) All of the mentioned

16. Which of the following is true about return type of a functions in C?

- A) Functions can return any type
- B) Functions can return any type except array and functions
- C) Functions can return any type except array, functions and union
- D) Functions can return any type except array, functions, function pointer and union

17. What does the following C-statement declare?

```
int (*f) (int*);
```

- A) A function that takes an integer pointer as argument and returns an integer
- B) A function that takes an integer as argument and return an Integer pointer
- C) A pointer to a function that takes an integer pointer as argument and returns an integer
- D) A function that takes an integer pointer as argument and returns a function pointer

18. A Russian gangster kidnaps you. He puts two bullets in consecutive order in an empty six-rounds revolver, spins it, points it at your head and shoots. *click* you're still alive. He then asks you, "do you want me to spin it again and fire or pull the trigger again right away?" for each option, what is the probability that you'll shot?

19. You are given a cake one of its corner is broken. How will you cut the rest into two equal parts?

20. In C, what is the meaning of following function prototype with empty list

```
Void fun()  
{  
    /*....*/  
}
```

ANSWERS

1. (C)

2. (B)

3. (A)

4. (C)

5. (D)

6. (C)

7. (B)

8. (B)

9. (B)

10. (B)

11. (A)

12. (A)

13. (C)

14. (C)

15. (D)

16. (B)

17. (C)

18. $\frac{2}{6}$ or 33%

19. Slice the cake

20. Function can be called with any number of parameters of any types.



THANK YOU!!



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