

# IT UNLIMITED



# MAGAZINE



*A Bi-monthly Bonanza*

(Aug-Sep'17")

# ISSUE 66

## KONSU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE (UG)

### CYBER CREWS ASSOCIATION



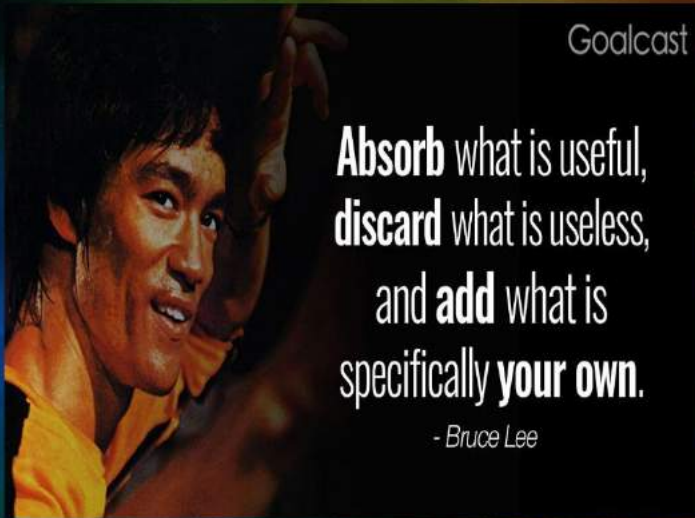
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# THOUGHTS OF THE ISSUE

# 66

## REMEMBER



## FREE ADVICE



## JUST FOR FUN



## MESSAGE

**DON'T MISTAKE  
SILENCE FOR  
WEAKNESS. SMART  
PEOPLE DON'T  
PLAN BIG MOVES  
OUT LOUD.**

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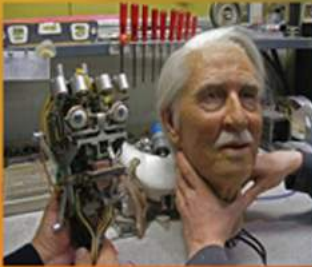
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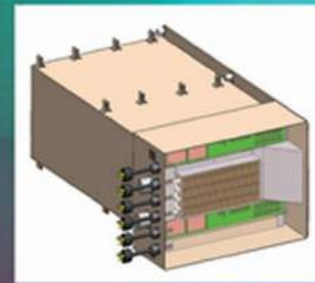
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# INTERVIEW PEDIA



## APTITUDE TEST

### Verbal Reasoning



#### PART- 14

Hi all! In this part of VR we are going to look in to the practice version of Verbal Reasoning, with some sample exercise that is solved.

#### Simple Example

*If all beaches were publicly owned, we would have to rely on government funds to maintain them. It is true that more people would have access to the ocean and beaches, but at what cost? If the beaches are not cared for adequately, soon there will be nothing left worth having access to. We should consider carefully before nationalizing more coastal property."*

Which of the following, if true, would most weaken the argument above?

- ♦ A - The public does not want additional access to beaches.
- ♦ B - The government is currently responsible for the maintenance of all public and private beaches.
- ♦ C - The public already has some access to many beaches.
- ♦ D - Other property has been nationalized in the past, with no complaints from the original owners of the property.
- ♦ E - Some privately owned beaches are not well maintained.

The correct answer is **B**. Here's why:

The evidence is that, while nationalizing will allow more people more access to beaches, it could also lead to **worse** beaches. The author points out that, access to beaches is only good if the beaches themselves are cared for adequately, and are therefore desirable.

The author's conclusion is the last sentence: We should consider carefully before nationalizing more coastal property. So, the author believes we have reason to be concerned that the beaches won't be taken care of as well as when they are privately owned. Note that nowhere is this claim supported; it is assumed.

So our choice must deny the central assumption and imply that the government would do a good job taking care of beaches. Choice two agrees with what we want, by saying that private beaches are cared for by the government. So, if the government were to nationalize those beaches, nothing changes: It should take on no new maintenance obligations, and we have little additional cause for concern about dirty beaches.

**DO YOU  
KNOW?**

A Guinness world record for the "most robots" dancing simultaneously was set this year in china with 1.069 thousand robots. The record was achieved by Chinese company WL Intelligent Technology.



**01**

## How should we answer the questions?

In a verbal reasoning test, we will usually be asked to select one of the following three possible answers:

- ♦ **True** - The statement follows logically from the information or opinions contained in the passage.
- ♦ **False** - The statement is logically false from the information or opinions contained in the passage.
- ♦ **Cannot Say** - Cannot determine whether the statement is true or false without further information.

Alternatively, the answers may follow the true, false, cannot say format, but be phrased slightly different, such as the answers below:

- Ⓧ The statement is **Definitely True**, or would be a reasonable conclusion to draw from the passage.
- Ⓧ The statement is **Definitely Untrue**, or would not be a reasonable conclusion to draw.
- Ⓧ I have **Insufficient Information** to answer either of the above with any certainty.

We should respond to each question by clicking on the answer that we think is correct. If we make a mistake or want to change an answer, just click to go back or forward, through the questions. Remember that the test is timed and keep in mind that some answers may take longer than others, depending on the question and text it relates to.

## What kind of information will be included in the test?

The text could include information about any subject, often entirely unrelated to the role or business you are applying for. Don't let that panic us through - the point of the test is not to assess the existing knowledge about a given subject. Instead, we should only use the information in each passage to work out our answer.

Even if we have studied or are familiar with a given subject, we should not use any prior knowledge when answering verbal reasoning questions. For example, if the text talks about the Second World War and we studied history and disagree with the information in the passage, we should still only answer the questions as though the information presented is correct, regardless of our own experience of the subject.

## Are verbal reasoning tests fair?

When taken under standard test conditions, verbal reasoning tests are a fair and useful way of assessing a candidate's ability to assess verbal logic. That said, there are some health based and knowledge based factors that may put some candidates at a disadvantage. Some evidence also indicates that ethnic minorities and international students whose native language is not English may be at a disadvantage because of linguistic and cultural differences.

Meet you all in the next issue.....Keep practicing!! All the best!

**Staff-Editor**

**DO YOU  
KNOW?**

The Chinese government has ordered telecommunication firms to completely block access to Virtual Private Network (VPN) social networking sites Facebook , Twitter and Instagram had been banned.



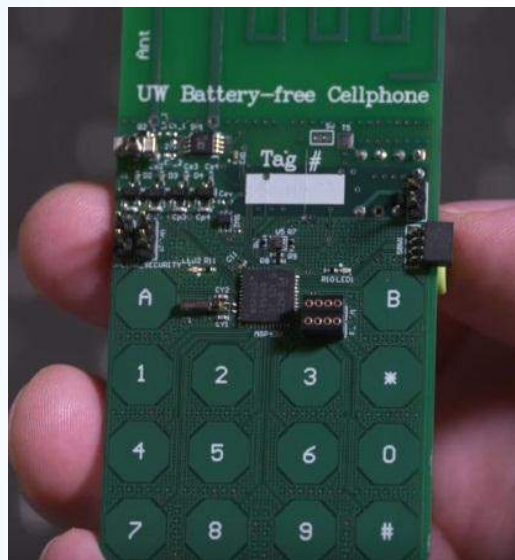
**02**

# FIRST BATTERY-FREE CELL PHONE INVENTED

Odisha Sun Times Editorial Desk Researchers at the University of Washington (UW) have invented a phone that harvests the few microwatts of power it requires from either ambient radio signals or light and requires no batteries.

Detailed in a paper published in the Proceedings of the Association for Computing Machinery on Interactive, Mobile, Wearable and Ubiquitous Technologies, the battery-free cellphone marks a major leap forward in moving beyond chargers, cords and dying phones.

The team of computer scientists and electrical engineers eliminated a power-hungry step in cellular transmissions, namely converting analog signals that convey sound into digital data that a phone can understand, which consumes so much energy that it's been impossible to design a phone that can rely on ambient power sources.



- ◆ Instead, the new technology it takes advantage of tiny vibrations in a phone's microphone or speaker that occur when a person is talking into a phone or listening to a call.
- ◆ An antenna connected to those components converts that motion into changes in standard analog radio signal emitted by a cellular base station. The process essentially encodes speech patterns in reflected radio signals in a way that uses almost no power.
- ◆ To transmit speech, the phone uses vibrations from the device's microphone to encode speech patterns in the reflected signals.
- ◆ To receive speech, it converts encoded radio signals into sound vibrations that are picked up by the phone's speaker.
- ◆ In the prototype device, the user presses a button to switch between the "transmitting" and "listening" modes.
- ◆

**DO YOU  
KNOW?**

Cybersecurity researchers at check point have Identified a mobile malware called 'copycat' that infected 1.4 core Android devices globally . The malware earned hackers behind the campaign nearly ₹10core in fake ad revenue in two months



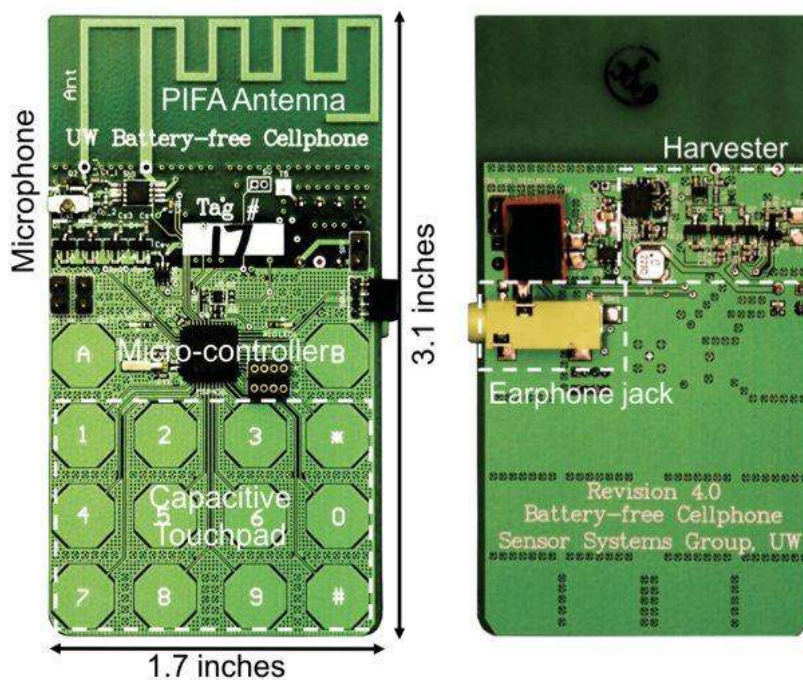
**03**

Using off-the-shelf components on a printed circuit board, the UW team demonstrated that the prototype can perform basic phone functions, transmitting speech, data and receiving user input via buttons.

Shyam Gollakota, an associate professor in the Paul G. Allen School of Computer Science & Engineering at UW said that they had built what they believe for the first functioning cellphone that consumes almost zero power.

To achieve the really, really low power consumption that we need to run a phone by harvesting energy from the environment, we had to fundamentally rethink how these devices are designed.

However, the phone does require a small amount of energy to perform some operations. The prototype has a power budget of 3.5 microwatts.



The researchers demonstrated how to harvest this small amount of energy from two different sources. The phone prototype can operate on power gathered from ambient radio signals transmitted by a base station up to 9.45 meters away.

And using power harvested from ambient light with a tiny solar cell, roughly the size of a grain of rice, the device was able to communicate with a base station that was 15.24 meters away.

Next, according to a news release from UW, the research team plans to focus on improving the battery-free phone's operating range and encrypting conversations to make them.



# ANIMATRONICS

Animatronics refers to the use of robotic devices to emulate a human or an animal, or bring lifelike characteristics to an otherwise inanimate object. Animatronic figures are often powered by pneumatics, hydraulics, or by electrical means, and can be implemented using both computer control and human control, including teleportation. Motion actuators are often used to imitate muscle movements and create realistic motions in limbs. Figures are covered with body shells and flexible skins made of hard and soft plastic materials finished with details like colors, hair, feathers and other components to make the figure more realistic.

An animatronics character is built around an internal supporting frame, usually made of steel. Attached to these "bones" are the "muscles" which can be manufactured using elastic netting composed of styrene beads. The frame provides the support for the electronics and mechanical components, as well as providing the shape for the outer skins. The "skin" of the figure is most often made of foam rubber, silicone or urethane poured into moulds and allowed to cure.



An animatronics character is typically designed to be as realistic as possible and thus, is built similarly to how it would be in real life. The framework of the figure is like the "skeleton". Joints, motors, and actuators act as the "muscles". Connecting all the electrical components together are wires, such as the "nervous system" of a real animal or person.

Steel, aluminum, plastic, and wood are all commonly used in building animatronics but each has its best purpose. The relative strength, as well as the weight of the material itself, should be considered when determining the most appropriate material to use. The cost of the material may also be a concern.

**DO YOU  
KNOW?**

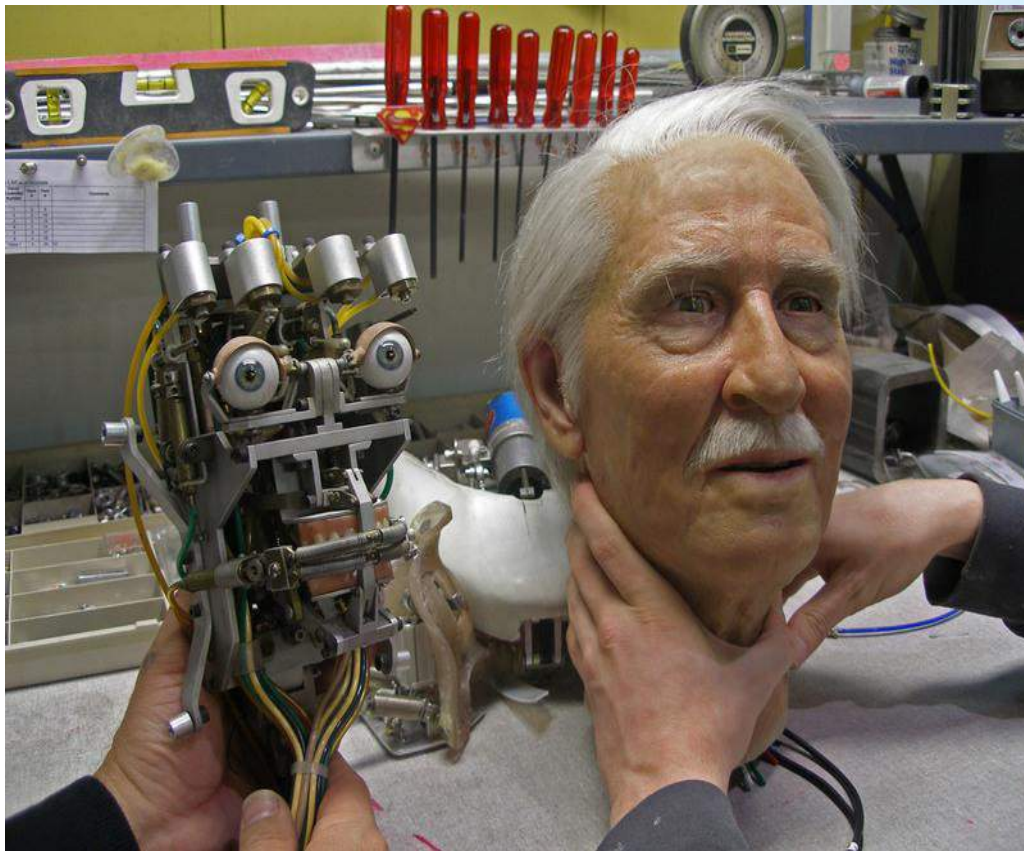
Technology major Apple has received a patent for a method to let users call emergency services discreetly by using their fingerprint. The patent describes how users can programme different fingerprints, patterns and even the amount of force required to switch the phone into 'panic mode'.



**05**

Several materials are commonly used in the fabrication of an animatronics figure's exterior. Depending on the particular circumstances, the best material will be used to produce the most lifelike form. For example, "eyes" and "teeth" are commonly made completely out of acrylic.

Pneumatic actuators can be used for small animatronics but are not powerful enough for large designs and must be supplemented with hydraulics. To create more realistic movement in large figures, an analog system is generally used to give the figures a full range of fluid motion rather than simple two position movements.



Mimicking the often subtle displays of humans and other living creatures, and the associated movement is a challenging task when developing animatronics. One of the most common emotional models is the facial action coding system (FACS) developed by Ekman and Friesen. FACS defines that through facial expression, humans can recognize 6 basic emotions: anger, disgust, fear, joy, sadness, and surprise. Another theory is that of Ortony, Clore, and Collins, or the OCC model. Which defines 22 different emotional categories.

## DO YOU KNOW?

Researchers have discovered code for 'panic mode' in Android 7.1 that lets users escape an app if it tries to hijack their phone's screen. Pressing the back button four times in quick succession can override apps with malware or frozen and cannot be closed.



# DON'T DOWNLOAD THIRD PARTY GST APPS!

Think twice before downloading those apps on your smartphone for GST-related queries. Cyber experts have raised the alarm over apps that claim to assist in calculating or filing Goods and Services Tax (GST) returns.

Security agencies asserted that market is flooded with scores of apps that claim to be providing information about government schemes and initiatives, of which most of them are dubious in nature and not safe to use.

According to the cyber experts, most of these dubious mobile applications allegedly work for data capturing or phishing. There is a pool of applications run by individuals that is based outside the country or may be running from unidentified location as there is no regulatory body to keep check on them.



Besides GST, fake apps on checking daily fuel price have also flooded the market. "The situation is worrying as most of the applications on government initiatives are suspicious in nature. I have scanned several apps offering GST calculation and checking daily fuel price and found only a handful of them actually useful.

Other apps may be just involved in data capturing," said cyber security expert Kislay Choudhary, chairman of NGO Indian Cyber Army. Choudhary explained that most of the apps took permissions to access mobile gallery, phone, contact, messages, camera and GPS location which are not required.

"It cannot be ruled out that most of the apps are misusing the data accessed by them. They could sell these data or may use it for nefarious purpose like spying," he said. According to the experts, scamsters cash in on curiosity of people and accordingly develop an app. Post demonetization, several financial apps popped up for download, a similar trend was witnessed for fuel price indicator and GST calculation.

**DO YOU  
KNOW?**

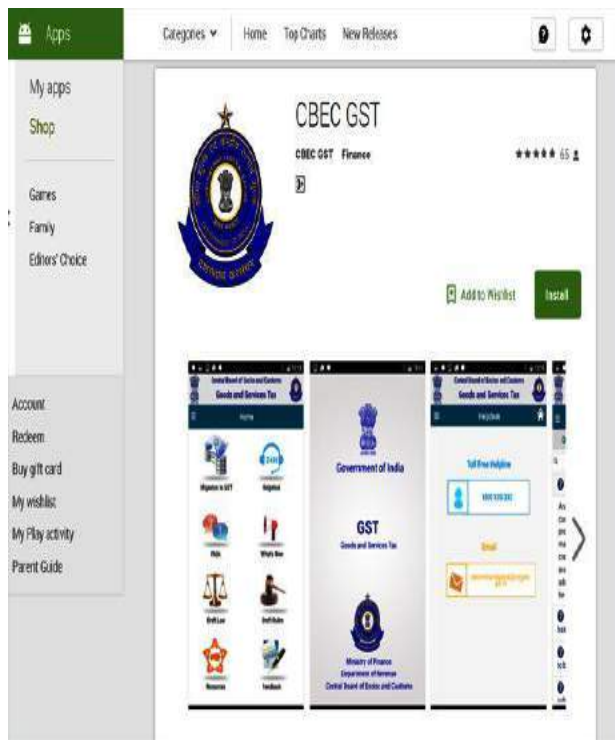
Indian origin researchers have developed an app named "Entrupy" to help users detect fake branded products. The system developed using artificial intelligence is connected to the app to analyse the images of the products and provide result in real time.



**07**

Shockingly, even the dubious apps have thousands of downloads with high rating. Score of dubious apps are also active in the name of Prime Minister Narendra Modi. A simple search on the play store throws up dozens of Narendra Modi apps, some even calling themselves fake apps.

Earlier, one of the apps running on his name was found to be using a Bangladesh based web host and email address. According to experts, the play store is also flooded with fake banking apps, which takes full access of the user's files. "Application-making is the latest trend as there is an app for everything in market.



Many of these apps are discrete data collection tools. How much permissions an app should take from the user and what does the app do of the data gathered should be regulated and it is a key topic to be covered under privacy law," said Mumbai-based cyber lawyer Prashant Mali, adding that only government apps should be considered safe.

Even the security agencies Cop 'punished' for taking on BJP men have found that online fraudsters are creating fake government websites carrying the name and picture of prominent leaders and then circulating the malicious links on social media platforms.

Central government's ambitious DigiLocker app also faced duplicity issue as fake mobile apps claiming to be the real one flooded the Google Play Store.

This is particularly dangerous because personal information is at risk of being stolen by cyber criminals in case someone uses these fake apps. These fake apps function like regular government portals as once the user enter the site, they have to complete regular formalities. According to experts, one should be cautious in sharing information online, especially for those trending apps.

## *NASA is about to find out if a supercomputer can...*

SpaceX's most recent launch lifted over 6,000 pounds of stuff destined for the ISS, including a super computer. The machine, made by Hewlett Packard Enterprise and called the Spaceborne Computer, is capable worth of computing power, which puts it roughly in line with a late-1990s supercomputer. Made up of two pizza box-shaped machines in a single enclosure, the HPE supercomputer is a part of a year-long experiment to see how an off-the-shelf computer system can fare in space if protected in the right way by software.

Long space missions like a trip to Mars come with considerable communications delays, so equipping astronauts with a powerful supercomputer would allow them to solve complex problems without having to wait for the issue and the solution to be transmitted to and from Earth. But radiation on a trip like that can damage computers, so NASA and HPE are to see if software can provide the necessary protection to keep things functioning correctly.



Just like NASA's famous identical twin experiment in which Scott Kelly spent a year in space and his brother, Mark Kelly, stayed down on Earth with the supercomputer in space, and his brother on this planet, a doppelganger machine located in Wisconsin acting as a control in this experiment.

HPE's approach with the Space borne Computer, a two-node, water-cooled machine, is different from the way a mission-critical computer in space is physically protected (or "hardened," in space gear speak) from radiation. For example, the chief computer for the Juno spacecraft inhabits a "protective titanium vault with walls about one centimeter thick," which made that processor. Instead of physical protection for the HPE computer, the company is hoping to learn if software can do something similar.

**DO YOU  
KNOW?**

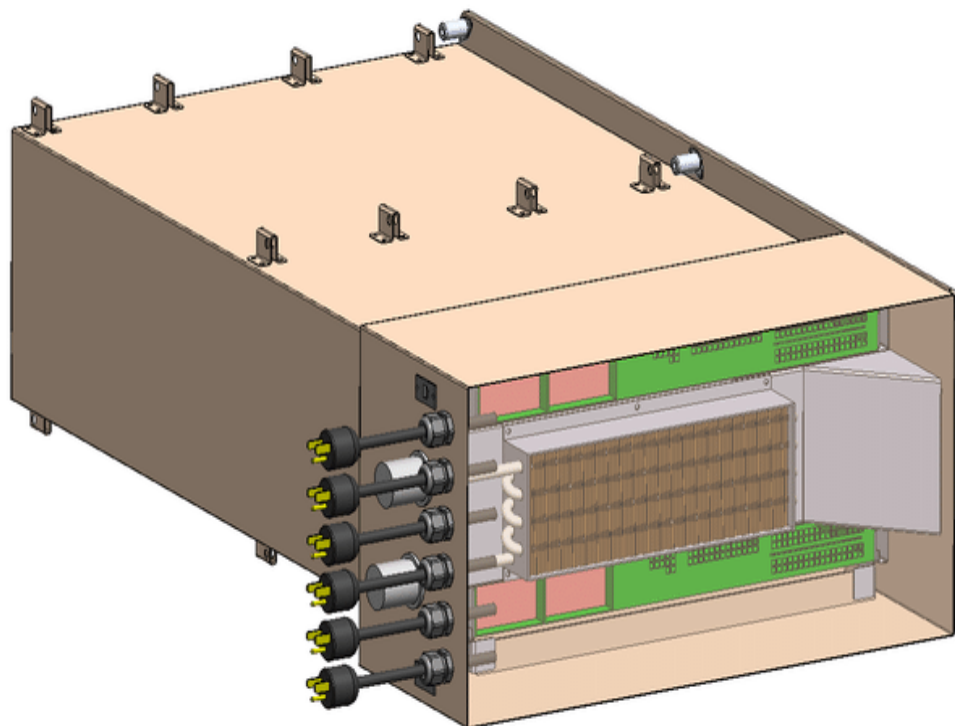
The world's smallest spacecraft ever launched have successfully been placed in low earth orbit by ISRO'S PSLV rocket. Named sprites, the 3.5cmx 3.5c satellites weight 4grams each and turn on sunlight.



**09**

The HPE project's principal investigator, says that the "dramatic vision" for the future of this line of research is one in which before an astronaut travels to space, he or she would be able to take a top-of-the-line, off-the-shelf machine with them, and software could make it space-worthy. Then the astronaut could put whatever programs she wanted on the machine, a process that, a computer scientist, compares to having an iPhone in space onto which you've preloaded your apps.

In general, they say that smart machines on Earth that exercise "self-care" may turn themselves off in the face of dangerous conditions. Another idea is that a machine can intentionally run slowly so that it can handle errors as it goes, as opposed to running at maximum capacity and not having the bandwidth to also cope with problems.



Scientists say that they will find out what works, what do not as they have a whole list. HPE said in a the system software will manage real time throttling of the computer systems based on current conditions and can mitigate environmentally induced errors. (If you're wondering what Hewlett Packard Enterprise is, it's one-half of the old HP, which divided in 2015; the other half is now HP, Inc., which makes personal computers and printers.)

Scientists say that this system is not planned to replace the [physically] hardened system. The intention is that something like this could function as a "decision support" tool on a long mission to a place like Mars, and not a primary mission computer.

## DO YOU KNOW?

Security company IOActive have demonstrated how an ATM can be hacked to discharge cash till it's empty. They found an opening near the ATM's speakers that could be loosened by hackers to expose a USB port which can be tricked.



## DISNEY'S 'MAGIC BENCH' PUTS YOU WITH ANIMATED CHARACTERS!!!

A new "Magic Bench" designed by Disney Research lets you interact with endearing animated characters in which there is no need for special glasses or headsets.

Instead, the complete environment the seat, the sitter and the cartoon humanoid animals is mirrored on a screen opposite the bench, making it possible for others to watch the scene unfold.



This illusion works by a camera and sensor capture images which gather depth information about physical objects the bench and the person that algorithms integrate with the 3D animations. Meanwhile, haptic sensors built into the bench deliver vibrations that are synchronized to animated actions on the screen, creating the illusion that the animated figures are occupying real-world space next to the user.

Moshe Mahler, principal digital artist at Disney Research, said that their mantra for this project was to hear a character coming, see them enter the space, and feel them sit next to us.

Augmented-reality overlays animated elements into views of the real world, typically by using special optical devices or mobile technology.

However, one of its limitations is that its illusion can be glimpsed by only a single user. The Magic Bench allows groups of people to gather in a single environment and collectively participate in an augmented- reality experience, all at the same time, according to the study authors.

### DO YOU KNOW?

Amazon has stopped the sale of phones of Blu over privacy concerns. Security firm kryptowire demonstrated how software in Blu phones collected data and send it to remote servers in china without altering people.



Sitting on the bench triggers the augmented-reality experience, introducing a character into the scene. Researchers used the real-color camera, the depth and color sensors in a Microsoft Kinect to capture the real-world scene of the Magic Bench and the person (or people) on it. Rebuilding them in 3D places the bench between a foreground and background, which can then be populated with whimsical characters.

But the Disney engineers discovered that if the reconstructed 3D scene were viewed at an angle, missing data and a small difference in alignment between the camera and sensor created gaps in the image known as "depth shadows."

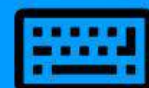


To eliminate these depth shadows, designers layered another element into the scene a 2D background captured by the Kinect's RGB camera, which seamlessly aligned with the scene when viewed head-on, the study authors wrote. Once the "stage" is set, it's ready to be shared with animated co-stars from elephants offering up a glowing orb to a giraffe lending an umbrella during a sudden drizzle.

Disney Research technicians presented the Magic Bench at SIGGRAPH 2017, an annual conference and exhibition on computer graphics and interactive techniques.

**DO YOU  
KNOW?**

Microsoft's first windows keyboard for iphone has been removed from the app store. Thus recommends user to swiftkey which uses AI to efficient typing, Swiftkey was acquired by Microsoft for over & 1,600 crore last year.

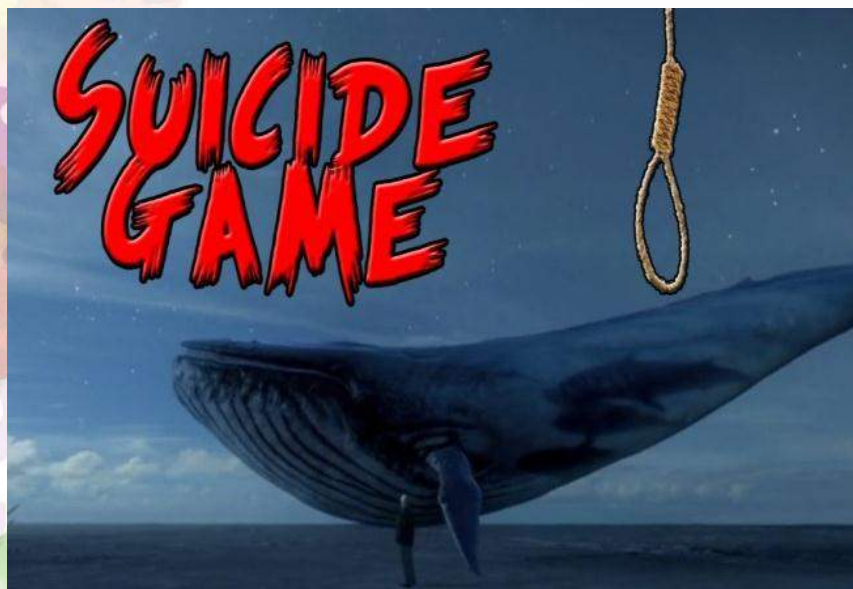


**12**



# THE BLUE WHALE GAME

The Blue Whale Game ("Blue Whale Challenge") is an internet game. That is claimed to exist in several countries. The game allegedly consists of a series of tasks assigned to players by administrators during a 50-days period, with the final challenge requiring the player to commit suicide. The term "Blue Whale" comes from the phenomenon of beached whales, which is linked to suicide. Blue Whale began in Russia in 2013 with "F57", one of the names of the so-called "death group" of the VKontakte social network, and allegedly caused its first suicide in 2015. Philipp Budeikin, a former psychology student who was expelled from his university, claimed that he invented the game. Budeikin stated that his purpose was to "clean" the society by pushing to suicide those he deemed as having no value.



In Russia in 2016, Blue Whale came into broader use among teenagers after a journalist brought attention to it through an article that linked many unrelated suicide victims to the Blue Whale, creating a wave of moral panic in Russia. Later, Budeikin was arrested and pled guilty to "inciting at least 16 teenage girls to commit suicide", leading to Russian suicide prevention legislation and renewed world-wide concern over the Blue Whale phenomenon. It has also been linked to other rising self-harm trends, such as "human embroidery" in China.

The game is based on the relationship between the challengers (also called players or participants) and the administrators. It involves a series of duties given by the administrators that players must complete, usually one per day, some of which involve self-mutilation. Some tasks can be given in advance, while others can be passed on by the administrators on that day, the last task being suicide. The list of tasks, to be completed in 50 days, includes waking up at 4:20 A.M., climbing a crane, carving a specific phrase on the person's own hand or arm, doing secret tasks, poking a needle to the arm or leg, standing on a bridge and roof, listening to music, and watching videos sent to the challengers by the administrator.

## DO YOU KNOW?

Chrome extension 'copyfish' was recently hacked to flood its 30,000 users with ads. The hack took place when one of copyfish's developers accessed a malicious link in an email. It took copyfish team a day to realish the attack.



NGO Citizen Circle for Social Welfare and Education has filed a Public Interest Litigation in Bombay High Court, seeking directions to the government and the police to stop availability and circulation of the “lethal online game the Blue Whale”. It also seeks directions for scrutiny of all online games available in India by the state cyber cell to verify if they are lethal, and take time-bound action to stop the availability of those found to be life-threatening. It has also sought for a commission to assist the court in the matter, besides setting up a 24X7 helpline for this.

If no urgent steps are taken to block the online availability of the lethal game in Maharashtra in order to save lives of the children and adults there may be other children playing this game and they may ultimately fall in the death trap.



- ◆ Parents, guardians, school teachers need to spend more time with kids.
- ◆ Keep an eye on teenager’s routine, notice discrepancies.
- ◆ Make kids aware of the dangers of games such as Blue Whale.
- ◆ If prone to depression, vulnerability, provide emotional support without judgments.
- ◆ The internet is an uncontrolled and uncensored entity, which makes it hard to control all activities that young and adults may indulge in.

Psychiatrist Deepti Kukreja of Nanavati Super Specialty Hospital in Mumbai told IANS that being available to talk to children and students when they go through vulnerable times, making them aware of the dangers of such games and providing psychological and emotional support in a non-judgmental way will go a long way in helping them get out of it.

She, who has dealt with several self-harming teenagers in his professional life, emphasized on media literacy as a measure to prevent teenagers from harmful content. Thus this is the only way to safeguard the society from this vulnerable game.

**DO YOU  
KNOW?**

Microsoft is planning to add eye-tracking support for windows 10 to help users suffering from disabilities. Its features users to launch apps by looking at them or type word using onscreen keyboard by looking it.



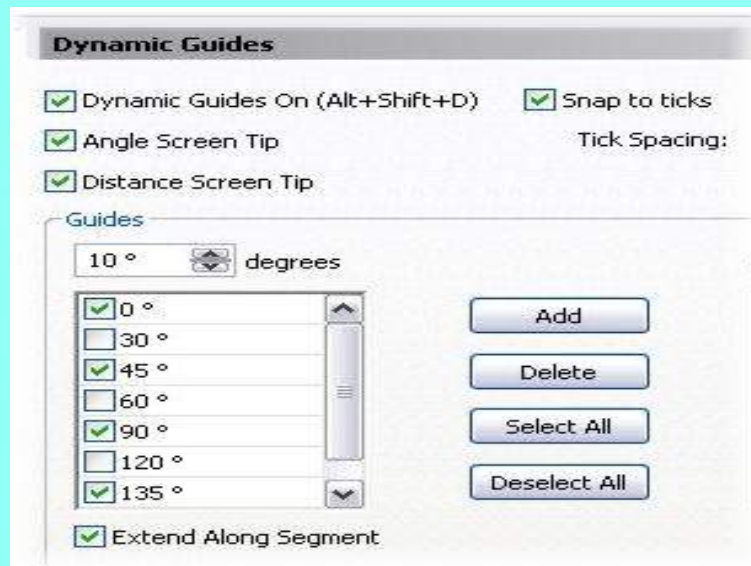
**14**

# LEARN A TOOL

## Pick Tool in Coral Draw X3

With the release of version 12, the default pick settings were changed to allow smoother operation of the new dynamic guides and object snapping features. Dynamic guides largely eliminate the guesswork involved in the precision drawing. As you move objects or draw new ones, dynamic guides appear on-screen temporarily between your cursor and the active object snap points on nearby objects. Your cursor magnetically follows the path of any guides that appear. Distance, angles and alignments with other snap points make precise cursor placement quite literally a snap.

You can customize slide behavior by using the dynamic guides pane of the objects dialog, which you can access by choosing view→dynamic guide setup. As you work, you can toggle the dynamic guides on and off with the alt+shift+D shortcut



The new object snapping options in Coral Draw 12 work in tandem with the new dynamic guides and enable you to involve up to nine different snap points in the action. The snap to object pane of the options dialog enables you to choose exactly which snap points to use. You can access these settings by choosing view→snap to object setup. As you work, you can toggle the object snapping on and off by using the Alt+Z shortcut.

Whether you're a new Coral Draw user or an expert, a little refresher on nodes, node tracking. Although different programs use different names for nodes. The concept remains the same. Whenever you draw a shape or line, nodes are defined either automatically or manually. Typically, nodes are the same outlined points between the curve or straight segments of any open or closed path. They control the size and shape of any vector object that you can create in Coral Draw.

**DO YOU  
KNOW?**

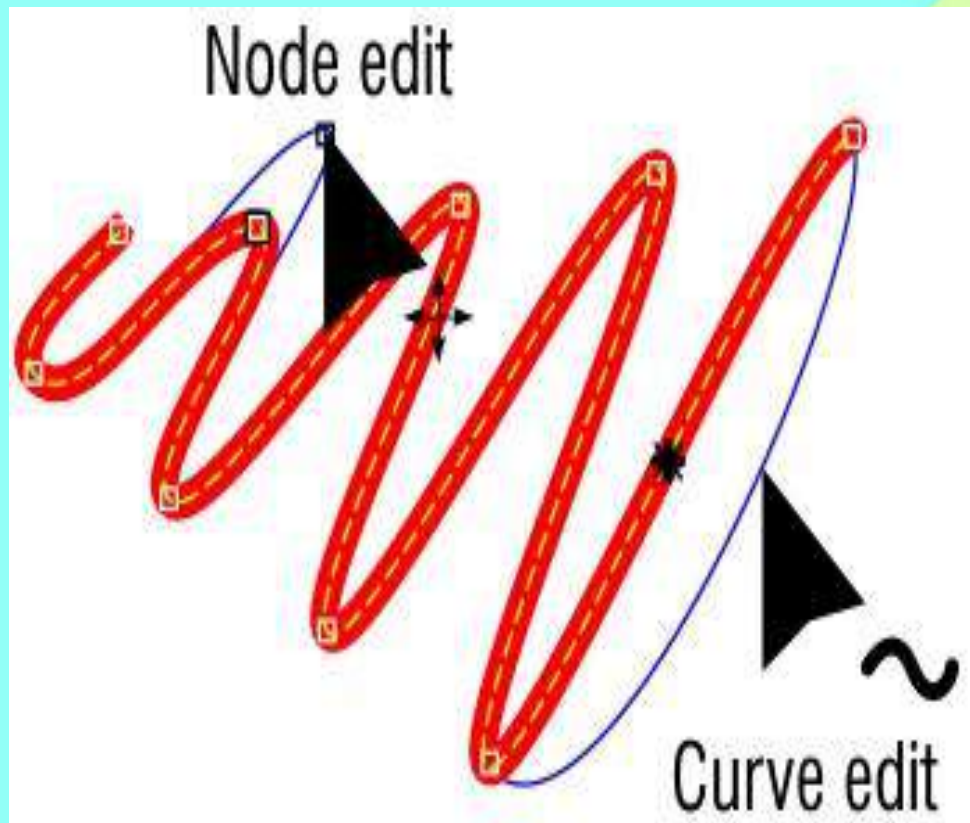
Facebook has shut down one of artificial intelligence systems after chatbots programmed to converse in English started speaking in their own language.



**15**

Shape created with object creation tools such as ellipse, rectangle, polygon, and perfect shape tools also includes specialized nodes that enables you to control unique object characteristics. You can quickly reshape ellipse into pies or arcs, interactively round the corners of rectangles, disort polygon points, and customize the glyph nodes or certain shapes drawn with a perfect shape tool.

Next, let's look at the pick tool and node tracking. The pick tool's primary function is to enable you to select, move, transform, or rotate one or more objects. Although the function is now disabled by default, its node tracking abilities enables it to mimic the shape tool in limited ways.



You can easily reactive node tracking. But there's downside to consider. While enabled, node tracking it sometimes ore hindrance than help particularly if you plan to take full advantage of new dynamic guides and object snapping in coral draw 12. Here's for many users, object nodes often serve as the grab point for moving and snapping object to the nodes of other object. The tracking action prevents essentially prevents you from selecting and moving the entire object.

The up side to the equation is that you can control the pick tool's node tracking behavior in coral draw by using the object dialog. You can active it if and when you need to. Now that you know the issues, though you can make an informed decision on whether to enable the feature based on how you work.

## DO YOU KNOW?

State-owned telecom operator BSNL was hit by a malware attack that affected nearly 2,000 BSNL broadband modems and changed the default system password.



# REVIEW BOX

## DELL H825CDW REVIEW: THE BEST COLOUR LASER MFP FOR SMALL OFFICES:

### COMPROMISE BETWEEN SPEED, QUALITY AND COST:

With inkjets getting ever faster and cheaper to run, it gets harder to find laser printers we'd recommend. Dell's new H825cdw is in with a shout, though: it's a color laser multifunction peripheral (MFP) with a great set of features including all the interfaces you could need, automatic duplex (double-sided) printing and scanning, NFC, and integration with various cloud services.

### SPECIFICATIONS:

Technology: Single-pass color laser, Maximum print resolution: 600x600dpi, Maximum optical scan resolution (output bit depth): 600x600dpi (24-bit), Dimensions (HxWxD): 500x429x504mm, Weight: 31.7kg, Maximum paper size: A4/legal.



### HARDWARE:

- ◆ Technology : Single-pass color laser
- ◆ Maximum print resolution : 600x600dpi
- ◆ Maximum optical scan resolution(output bit depth): 600x600dpi
- ◆ Number of colors (cartridges): 4 (4)
- ◆ Standard interfaces: USB, Gigabit Ethernet, 802.11b/g/n wireless, USB host
- ◆ Optional interfaces: None
- ◆ Dimensions(HxWxD) : 500x429x504mm
- ◆ Weight : 31.7kg.

**DO YOU  
KNOW?**

IBM scientists have captured a record 330 TB of uncompressed data, equal to 33 crore books, into a palm-sized cartridge. The record of 201 GB per square inch on magnetic tape is over 20 times the areal density of commercial tape drives.

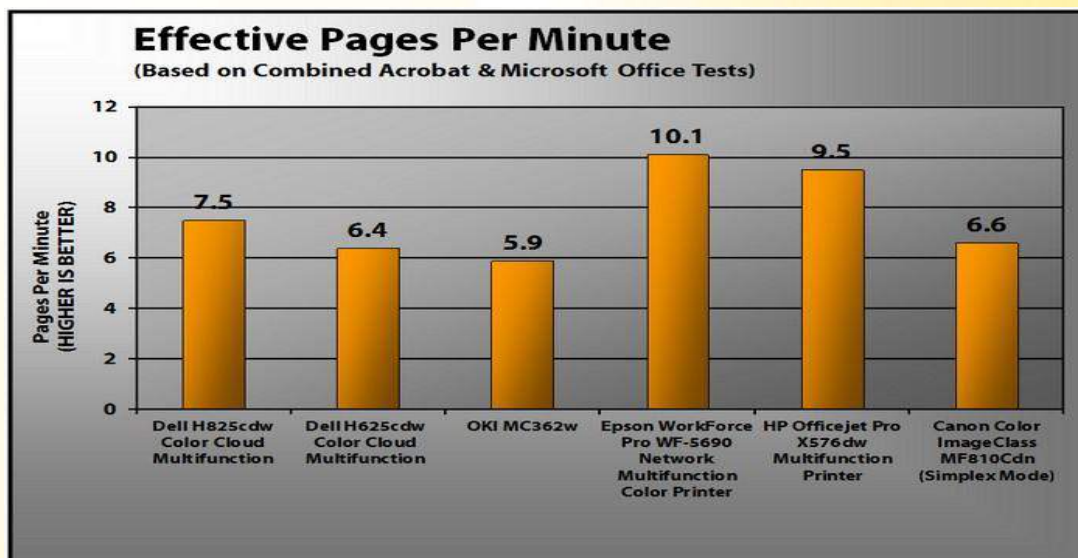


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- ◆ Duty cycle (pages per month) 50,000 maximum, 700-3,500 recommended Paper handling.
- ◆ Maximum paper size: A4/legal
- ◆ Maximum paper weight: 220gsm
- ◆ Standard paper trays (capacity) : 2 (300)
- ◆ Maximum paper trays (capacity) : 3 (850)
- ◆ Duplex : Yes
- ◆ Automatic Document Feeder capacity : 50

#### FEATURES:

- ◆ Supported operating systems : Windows Vista or later, Mac OS X 10.7 or later, various Linux distributions, SAP R/3 Release 4.6B onwards
- ◆ Other features 10.9cm color touchscreen, NFC.



#### BUYING INFORMATION:

- ◆ Warranty: One year next business day onsite
- ◆ Price INR-23273.44 Inc. VAT
- ◆ Consumable parts and prices Extra-high capacity black cartridge (5,000 pages) 593-BBRZ INR-6710.22. Extra-high capacity cyan, magenta and yellow cartridges (4,000 pages each) INR-9343.35 each (ISO/IEC 19798). Black (724-BBNE), cyan (724-BBNG), magenta (724-BBND) and yellow (724-BBNI) drums 50,000 pages each, £30 each. Waste toner box 724-BBNF, 30,000 pages, INR-1019.27.
- ◆ Quoted life of supplied black toner 1,200 pages (ISO/IEC 19798)
- ◆ Quoted life of supplied color toner 1,200 pages (ISO/IEC 19798)

**DO YOU  
KNOW?**

Wikileaks has published details of the central Intelligence agency's 'Dumbo' project, a system that manipulates devices such as webcams and microphone on microsoft windows-operating systems.



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# Mind Punch

1. An electric train is moving north at 100mph and a wind is blowing to the west at 10mph. Which way does the smoke blow?
2. Which word in the dictionary is spelled incorrectly?
3. What are the next three letters in the following sequence, F, M, A, M, J, J, A, \_\_, \_\_, \_\_.?
4. Which Hollywood movie does this picture represent?



5. Complete the table series puzzle by replacing the?? With the correct number.

81	36	144
??	25	16
64	100	49

6. Make the below equation true by placing three correct balls in the picture below.

Select 3 balls and put them into the circles below such that the sum of the numbers should be 30.

$\text{○} + \text{○} + \text{○} = 30$

GPuzzles.com

**DO YOU  
KNOW?**

Russian firm tactical missiles corporation is developing Artificial intelligence powered missiles that can reportedly make decisions like choosing a target by itself.



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7. In a year, there are 12 months. Seven months have 31 days. How many months have 28 days?
8. Which weighs more, a pound of feathers or a pound of bricks?
9. Do you see any logic with which the letters are arranged in the given picture? If you can, it won't take you much time to find the missing letter.



10. Chelsea organized a race in which Luis, Terry, Hazard, and Pedro have participated. The results of the race is as follow:
- : Luis beats Terry
  - : Hazard beats Pedro
  - : Pedro beats Luis
- So who was the fastest in the race ?





# IT VITA

1. What is a full form of IS?
2. The operating system that is self-contained in a device and resident in the ROM is\_\_\_\_\_.
3. Who is known as the Father of SMS?
4. Who is a father of Indian software industry?
5. Which software is developed by German to hack encrypted data?
6. Name of the technology which is developed by IIT – Kanpur from Silk Fiber to store data.
7. Who invented the mobile phone?
8. Packets of information that travels between a browser and the web server is known as \_\_\_\_\_.
9. Who invented mail system and @ symbol for addresses?
10. Which city has become the India's first city to use robot to control Unruly traffic?
11. A dual layer Blue-ray Disc can store data up to \_\_\_\_\_ GB.
12. What is a first search engine in internet?
13. How many bits are used by the IPv6 address?
14. 'IOT' refers to....
15. First computer virus is known as\_\_\_\_\_.

**DO YOU  
KNOW?**

University of Washington scientists claim to have infected a computer with a malware coded into a strand of DNA. They corrupted the software of the DNA sequencing machine that tried to process the data and gained full control over it.



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# FAMOUS AND FAVORITE

## MARISSA MAYER



Marissa Ann Mayer is an American information technology executive, formerly serving as the president and CEO of Yahoo!, a position she had held starting July 2012. In 1999, she joined Google and she was the first female engineer of company and she was the 20th employee of Google. Up to 13 years, she was associated with Google and play a key role there in Google news, maps, images, Search and more.

<b>BORN</b>	30th may 1975 (AGE 42).
<b>EDUCATION</b>	Stanford University (1999), Stanford University (1997), Wausau West High School (1993).
<b>AWARDS</b>	Young Global Leader award, Woman of the Year award and so on.
<b>SALARY</b>	USD \$2 million (including benefits)
<b>NATIONALITY</b>	AMERICAN

**DO YOU  
KNOW?**

Founded in 2006 Twitter made "zero" dollar as revenue for the first 3 years.



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# SOLUTIONS

## MIND PUNCH

1. There is no smoke in an electric train
2. Incorrectly
3. S,O & N
4. Need for Speed
5. 121
6. 30
7. They all do
8. They both weight one pound
9. T
10. Hazard

## IT VITA

1. Information System
2. Embedded Operating System
3. Matti Makkonen
4. Faqir Chand Kohl
5. RCIS (Remote Communication Interception Software)i
6. Silk Fibroin
7. Martin Cooper
8. Cookie
9. Raymond Samuel Tomlinson
10. Indore
11. 50GB
12. Archie
13. 128bits
14. Internet of Things
15. Creeper Virus

**DO YOU  
KNOW?**

In 1971, the first speech recognition software named, "Hearsay" was developed in India.



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# **SENSE OF GRATITUDE**

**The Editorial Board**

**expresses its sincere**

**gratitude to all those who**

**are responsible, either by**

**being on the stage or**

**behind the screen for**

**the successful launch**

**Of the magazine!!!...**