KONGU ARTS AND SCIENCE COLLEGE
(AUTONOMOUS)

28 *Years of Excellence* Since 1994

JUNE-JULY 21

D B T

SPONSORED STAR DEPARTMENT

CYBER CREWS ASSOCIATION

✉ itunlimitedmagazine@gmail.com

🌐 www.kasc.ac.in

IT UNLIMITED MAGAZINE

85
ISSUE

DEPARTMENT OF COMPUTER SCIENCE (UG)

AI

KONGU

CYBERCREWS

EDITORIAL BOARD

CONTENT

Thoughts Of The Issue

Reasons Why I Become A Programmer

- Lots Of Oportunity
- Build Creative Software
- Secure Life
- Work Anywhere
- High Demand
- Get Well Paid

FREE ADVICE

ANONYMOUS PACK FOR EVERY HACKER

BROWSER
- TOR
- BRAVE
- FIREFOX

@_techsociety

VPN
- EXPRESS
- PROTON
- NORD

@_techsociety

SEARCH ENGINE
- DUCKDUCKGO
- TORCH
- QWANT

INFORMATION

Privacy	Website/App
10%	Whatsapp, Google, Chrome, Gmail
50%	Telegram, Bing, Firefox, Outlook
90%	Signal, DuckDuckGo, Tor, Proton Mail

MESSAGE

YOUR LAPTOP MUST HAVE THESE

- **RAM** — MINIMUM: 4GB
- **Processor** — MINIMUM: i3
- **Graphic Card** — REQUIREMENT: NIL
- **VS Code** — VERSION: 1.51
- **Internet** — TYPE: WIFI OR ETHERNET
- **System** — TYPE: 64 BIT

DO YOU KNOW ?

A DECADES-OLD PROBLEM ABOUT HOW TO RELIABLY CONTROL MILLIONS OF QUBITS IN A SILICON QUANTUM COMPUTER CHIP HAS NOW BEEN SOLVED.

01

CYBER SECURITY

Graduates of cyber security-focused programs — like the Online Master of Science in Cybersecurity from the University of Nevada, Reno — have several career opportunities available to them. Some of the first opportunities to consider include roles like:

1. Security architect

According to PayScale, security architects design, establish and deploy the network and endpoint security protections for the organization, and lead the charge to

continually update and improve these measures. Security architects must ensure that safeguards can be properly integrated into the institution's network infrastructure and information systems, and that the protections they design function as planned. In some environments, the security architect is also responsible for IT tickets and incident reporting and may also spearhead analysis after a security incident is identified.

While some employers will accept candidates with a bachelor's degree in computer security or computer science, many prefer master's level training. Some employers might also require candidates to have certain industry security credentials and certifications.

The Bureau of Labor Statistics noted that similar roles have a job outlook growth of about 5% through 2028, during which time about 8,400 positions will need to be filled.

PayScale points out that the role of security architect can be particularly well-paying. On average, these professionals earn an average salary of $123,642, with the highest percentage of earners reporting compensation of $163,000 annually.

2. Information security analyst

Certain within types of cyber security careers might appear to overlap, and this is true in many instances. However, there are distinctions between these roles to be aware of.

Information security analysts, for example, may take part in responsibilities that may also fall under the security engineer role. According to the BLS, this includes tasks like monitoring information systems for suspicious activity and breaches, deploying proper

DO YOU KNOW? A NEW ALGORITHM HELPS DRONES FIND THE FASTEST ROUTE AROUND OBSTACLES WITHOUT CRASHING. THE SYSTEM COULD ENABLE FAST, NIMBLE DRONES FOR

02

protection measures and responding to any security incidents.

However, in addition to these activities, information security analysts also spearhead important proactive response initiatives, including disaster recovery and business continuity plans. As part of their roles, information security analysts must be up to date on current cyber threats, as well as security best practices, and thus are in the best position to include this expertise in the organization's disaster recovery plan.

Security analysts will also prepare and provide reports after a security incident has taken place, outlining the root cause (if known) of the breach and the extent of the damage. Analysts might also train new users and IT staff on new security capabilities.

The information security analyst role is one of the fastest growing in the cyber security sector, with a 32% job outlook increase forecast through 2028. This will create more than 35,000 open positions, requiring trained expert candidates.

This role is also well-paying, with a median annual wage of $99,730. However, compensation can range from $96,190 to as much as $158,860 for the highest 10% of earners.

3. Security engineer

Another type of cyber security career that graduates can pursue is that of Security engineer. These professionals work to bolster the protections of an organization's infrastructure, as well as safeguards around highly sensitive projects or product development efforts. Security engineers must also identify and close gaps related to current security threats, and respond to any detected intrusions. These professionals must not only have in-depth knowledge of information systems protections, but incident response and analysis as well, according to PayScale.

Security engineers lead analysis and evaluation of security issues that

might impact the organization. Additionally, security engineers also lead efforts to test and deploy any new or upgraded systems, including physical hardware components or software platforms.

6G AND 7G TECHNOLOGY

6G TECHNOLOGY

6G networks will be able to use higher frequencies than 5G networks and provide substantially higher capacity and much lower latency.

The 6G mobile system for the global coverage will integrate 5G wireless mobile system and satellite network.

very fast Internet speed access on air through wireless and mobile devices possibly up to 11 Gbps, while travelling or in a remote location.

Specially designed Nano Antennas will be implemented at different geographical locations.

The globe will be decorated by fly sensors with the help of 6G technology. These fly sensors will provide information to their remote observer stations.

FEATURES OF 6G TECHNOLOGY

Data rates will be up to 10-11 Gbps.

Home automation and other related applications. Smart Homes, Cities and Villages.

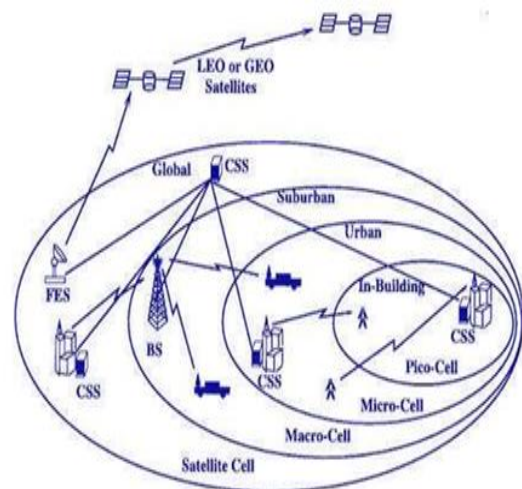Space technology Defense applications will be modified with 6G networks.

Home based ATM systems.

Satellite to Satellite Communication for the development of mankind.

Natural Calamities will be controlled with 6G networks.

Mind to Mind Communication may be possible.

6G WITH SATELLITE NETWORKS

6G with Satellite Networks

The global navigation satellites systems are determine a use's position.

The telecommunication satellite system can supply the voice and multimedia data for user's communication requirement.

The earth image satellite system contains the weather information as extra service for mobile users.

Any two different satellite systems are necessary for handoff/roaming when mobile users moving from one country to another. This kind of handoff/roaming is space handoff/roaming.

7.5G TECHNOLOGY

It provides the very high speed of peak download and peak upload of data rate.

Here space time block codes are used to view the high definition of video broadcasting.

Within a second we can download the five films that is 20 GB files and upload the 15 GB files or any datum.

Therefore it also navigates the satellite networks techniques, hence using the OFDM methodology and FEC for the speed of communication process.

It is possible technique only when achieve the higher bandwidth and improves the satellite cell sensitivity with its signal fidelity.

COMPARISON OF 6G AND 7G

Parameters	6G	7G
Frequency	95GHz-3THz	95GHz-3THz
Data rate	About11Gbps	About11+Gbps
Pros	Globalcoverage system	No issue of data capacitycoverage and hand off leftbehind, low cost of call
Cons	Difficulty for spaceroaming, high cost ofmobile call and similar with 5G disadvantages	Similar with 5G and 6G Disadvantages

The Pegasus Spyware

The Pegasus spyware

The Pegasus spyware or software is a surveillance tool and the most powerful spyware ever invented. Across the world, This hacking software or spyware is marketed, licensed, and developed by the Israeli company "NSO Groups". The document released by NSO groups presents the capabilities of this malicious software in detail. This spyware or software makes use of the "Zero-day" vulnerability which means faults in the OS of mobile which is unknown to the phone's user
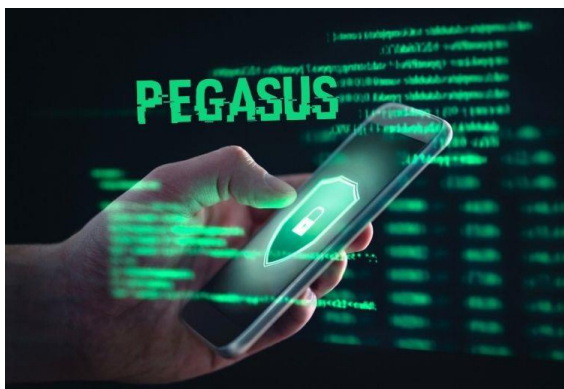
and has not been patched. Hence, Pegasus identifies such flaws and enters into the operating system of the targeted person's mobile. The hacking can be accomplished through "Zero-click" records that don't need any human interaction or human error.

The new form of attack has rendered the Pegasus spyware the most hazardous software that jeopardises the individual right to privacy. It can hack billions of phones running either Android or ISO working networks. The spyware can also be installed over a wireless transceiver (radio transmitter and receiver) located near the target. It can turn your phone into surveillance device.

The NSO groups

In 2010, NSO Group Technologies was established in Herzliya that is situated in the north of Tel Aviv, by Niv Carmi, Shalev Hulio, and Omri Lavie. The NSO group is an acronym of the first names of its three founders. NSO groups produce products that ofenable the government to spy on citizens. During terrorism and criminal investigations, NSO groups company helps "Government intelligence and law-enforcement agencies to use technology and meet the challenges of encryption by describing its products roles on its website." Nevertheless, as you might imagine, the civil liberties and groups aren't satisfied with the spyware-for-hire business, and restricting the business

to government clients does little to hush their suspicions.

The recent story of the Pegasus project

A list of 50000 phone numbers leaked by the news outlets of Forbidden stories, Paris-based journalism non profit, and right groups Amnesty International worldwide showed that we're potentially targeted by Pegasus spyware or software and sent to media of different countries. The investigation on Pegasus spyware by forbidden stories called it a Pegasus project, during the investigation, forensic analyses and technical support were provided by Amnesty International's Security Lab. We are not sure of how many were targeted for surveillance and how many of those attempts were accomplished.

According to the Washington Post, After performing forensic analyses it is been found that 22 smartphones in India are on the list, and at least 10 targeted with Pegasus, seven of them are successful Initially, a database of 50000 numbers have been targeted for surveillance by clients of NSO groups was revealed by the Forbidden stories.

The news organisations working on this new Pegasus project were able to find the owners of 150) numbers across at least 10 countries. Tus, an important attempt should be made to differentiate the names that appear on the list. Subsequently, On July 27, 2021, 'The wire' on its list so far the news has revealed 155 Names in collaboration. With 16 other media organizations. That list includes political figures, activists, students, lawyers, and journalists, among others.

DO YOU KNOW?

7) AN ENGINEERING RESEARCHER HAS MODIFIED A SMARTWATCH TO REDUCE STRESS. THE NEW TECHNOLOGY MONITORS SWEAT TO INFER BRAIN STRESS AND, WHEN DETECTED.

07

CYBER ATTACK 2021

A cyber-attack is any attempt to gain unauthorized access to a computer, computing system or computer network with the intent to cause damage.

A data breach is an incident where information is stolen or taken from a system without the knowledge or authorization of the system's owner.

Colonial Pipeline ransomware attack

On May 7, 2021, Colonial Pipeline, an American oil pipeline system that originates in Houston, Texas, and carries gasoline and jet fuel mainly to the South eastern United States, suffered a ransomware cyberattack that impacted computerized equipment managing the pipeline.

In response, Colonial Pipeline Company halted all of the pipeline's operations to contain the attack. With the assistance of the FBI, Colonial Pipeline paid the requested ransom (75 bitcoin or $4.4 million) within several hours after the attack. The hackers then sent Colonial Pipeline a software application to restore their network, but it operated very slowly.

The Federal Motor Carrier Safety Administration issued a regional emergency declaration for 17 states and

Washington, D.C., to keep fuel supply lines open on May 9. It was the largest cyberattack on an oil infrastructure target in the history of the United States. The FBI and various media sources identified the criminal hacking group Dark Side as the responsible party. The same group is believed to have stolen 100 gigabytes of data from company servers the day before the malware attack.

McDonald's Cyber Attack Targets Data

On June 4, Mc donald's became the victim of a successful cyber-attack that involved the extraction of data.

In South Korea and Taiwan, customers' email addresses, physical addresses, and phone numbers were exposed. Also in Taiwan, some employees' names and contact information were exposed. However, Mcdonald's claimed that the volume of information exposed was small and that it had appointed outside consultants to deal with it. It took the company one week to stop unauthorized access to the data.

Attack on Tamil Nadu

Bengaluru-based cyber security startup Technisanct has said that Tamil Nadu's public distribution system data has been breached.

The data, including Aadhaar card numbers, addresses and mobile numbers, belonging to over 5.2 million consumers, have been lifted from their own server, said Nanda kishore, Harikumar, founder, Technisanct. Data belonging to 5.2 million users, which includes 49,19,668 Aadhaar numbers, was uploaded on a popular hackers' forum on June 28 2021. It was also identified that tnpds.gov.in was a victim of a cyber attack and was hacked by a cyber criminal group that goes by the name 1945VN.

Facebook Data Leak Impacts 533 Million Users

In April, Alon Gal, co-founder, and CTO of cybercrime intelligence firm Hudson Rock seemingly discovered the latest incident which involved the personal information of 533 million Facebook users from 106 different countries. The personal information included Facebook members' bio, birthdate, full name, location, past location, relationship status, and face book IT.

The members of the hacking forum have got access to freely avail these pieces of information. Facebook claims that it did not know whose information was leaked and therefore could not inform the members about the leakage.

Microsoft Exchange, A Lack of Mending

In March, Volexity, the security firm, unearthed a Microsoft Exchange flaw that enabled hackers to install web shells to extract data and credentials. The four CVEs that were involved are CVE-2021-26855, CVE-2021-26857, CVE-2021-26858.

Among these the first one provides access and the last three allow code implementation. 120,000 systems had been contaminated and less than 10,000 remained unpatched. On April 14, NIST produced four other distinctive CVEs, all of which included remote execution. Though the FBI's attempts are necessary, organizations cannot depend on the agency for their safety.

ROBOTICS

Robotics is an interdisciplinary field that integrates computer science and engineering. Robotics involves design, construction, operation and use of robots. The goal of robotics is to design machines that can help and assist humans. Robotics integrates field of mechanical engineering, electrical engineering, information engineering, mechatronics, electronics, bio engineering, computer engineering, control engineering, software engineering, mathematics, among others.

Robotics develops machines that can substitute for humans and replicate human actions. Robots can be used in many situations for many purposes, but today many are used in dangerous environments (including inspection of radioactive materials, bomb detection

and deactivation), manufacturing process, or where humans cannot survive(eg, in space, underwater, in high heat, and clean up and containment of hazardous materials and radiation). Robots can take on any form, but some are made to resemble humans in appearance. This is claimed to help in the acceptance of robots in certain replicative behaviours which are usually performed by people. Such robots attempt to replicate walking, lifting, speech, cognition, or any other human activity. Many of today's robots
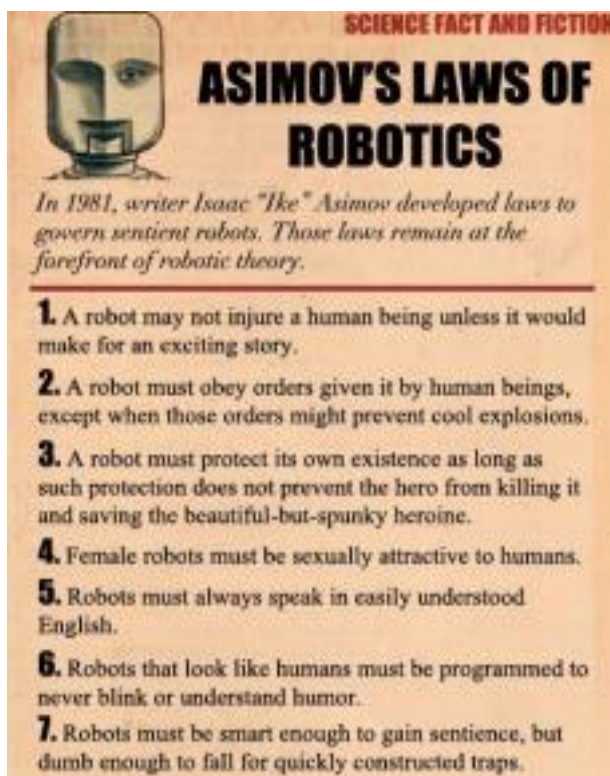

are inspired by nature, contributing to the field of bio-inspired robotics Certain robots require user input to operate while other robots function autonomously. The concept of creating robots that can operate autonomously dates back to classical times, but research into the functionality and potential uses of robots did not grow substantially until the 20th century. Throughout history, it has been frequently assumed by various scholars, inventors, engineers and technicians that robots will one day be able to mimic human behaviour and manage tasks in a human-like fashion.

Today, robotics is a rapidly growing field, as technological advances continue; researching, designing, and building new robots serve various practical purposes, whether domestically, commercially or militarily. Many robots are built to do jobs that are hazardous to people, such as defusing bombs, finding survivors in unstable ruins, and exploring Mines and shipwrecks.

Laws of Robotics

The three laws of Asimov

SCIENCE FACT AND FICTION

ASIMOV'S LAWS OF ROBOTICS

In 1981, writer Isaac "Ike" Asimov developed laws to govern sentient robots. Those laws remain at the forefront of robotic theory.

1. A robot may not injure a human being unless it would make for an exciting story.

2. A robot must obey orders given it by human beings, except when those orders might prevent cool explosions.

3. A robot must protect its own existence as long as such protection does not prevent the hero from killing it and saving the beautiful-but-spunky heroine.

4. Female robots must be sexually attractive to humans.

5. Robots must always speak in easily understood English.

6. Robots that look like humans must be programmed to never blink or understand humor.

7. Robots must be smart enough to gain sentience, but dumb enough to fall for quickly constructed traps.

Law one:

A robot may not injure a human being or, through in action, allow a human being to come to harm.

Law Two:

A robot must obey the orders given its by human beings except where such orders would conflict with the First Law.

Law Three:

A robot must protect its own existence as long as such protection does not conflict with the first or second law.

Definitions of robot

Definition of robot institute of America, 1979:

A reprogrammable, multifunctional manipulator designed to move material, parts, tools or specialized devices through various programmed motions for the performance of a variety.

Definition by webster's dictionary: An automatic device that performs function normally ascribed to humans or a machine in the form of a human. Definition by British department of industry:

A reprogrammable manipulator device.

Definition by Mike Brady:

Robotics is that field concerned with the intelligent connection of perception to action.

WINDOWS 11

WINDOWS 11 SPECIAL:

Windows 11 will let you set up virtual desktops in a way that's more similar to MacOS, toggling between multiple desktops for personal, work, school or gaming use. You can also change your wallpaper on each virtual desktop. Easier transition from monitor to laptop, and better multitasking.
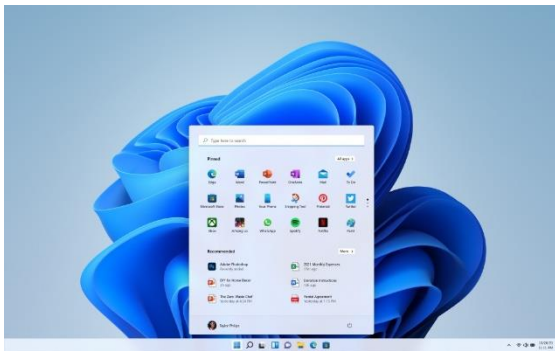
WINDOWS 11 CONCEPT:

Windows 11 will be available through a free upgrade for eligible Windows 10 PCs and on new PCs beginning this holiday. To check if your current Windows 10 PC is eligible for the free upgrade to Windows 11, **visit Windows.com to download the PC Health Check app**.

WINDOWS 11 LOOK LIKE:

Windows 11 features a streamlined new design, with **pastel-like colors and rounded corners**, and overall a more Mac-like look. The Windows Start menu has moved from the bottom left of the screen to the middle, with app icons arranged in the center next to it.

WINDOWS 11 GOOD THINGS:

The Windows 11 version isn't quite as **bad** as the macOS one, but I still prefer the single Action Center panel for notifications and quick settings. I appreciate the circled number—similar to those on some mobile app icons—that shows how many notifications you have.
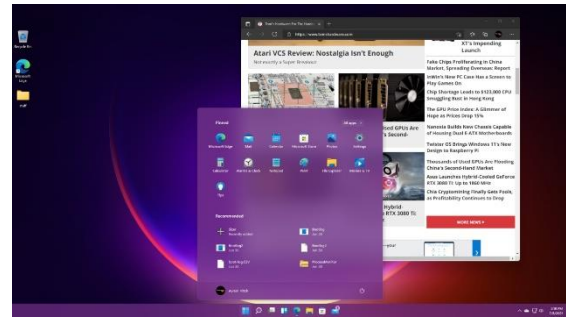
WINDOWS 10 USERS GET WINDOWS 11 FOR FREE :

Microsoft recently announced the launch of its next-generation Windows operating system, that is, Windows 11. It was stated then that **Windows 11 would be a free upgrade for Windows 10 users**. However, many are set to be disappointed and you need to find out if you will be the one who may not get the upgrade.

WINDOWS MEANS:

A window is **a separate viewing area on a computer display screen** in a system that allows multiple viewing areas as part of a graphical user interface (GUI). Windows are managed by a windows manager as part of a windowing system . A window can usually be resized by the user.


WINDOWS CURRENT OS:

As of May 2021, the most recent version of Windows for PCs, tablets and embedded devices is **Windows 10, version 21H1**. The most recent version for server computers is Windows Server, version 20H2.

FEATURES OF WINDOWS 11:

- A new, more Mac-like interface. ...
- Integrated Android apps. ...
- Widgets. ...
- Microsoft Teams integration.
- Xbox tech for better gaming
- Better virtual desktop support.

- Easier transition from monitor to laptop, and better multitasking..
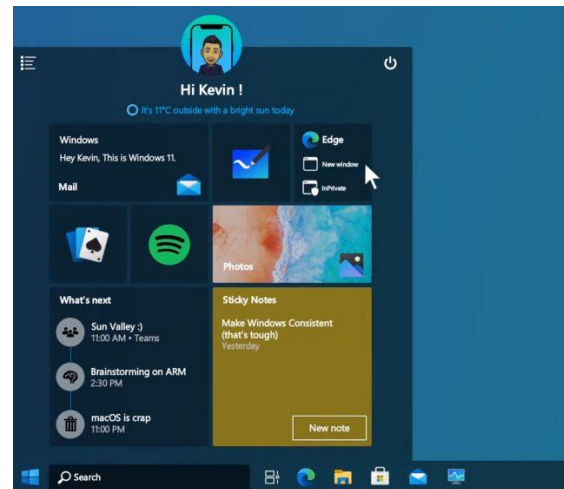
Reception of Windows 11 upon its reveal was positive, with critics praising the new design and productivity features. However, Microsoft was criticized for creating confusion over the minimum system requirements for Windows 11. The increased system requirements (compared to those of Windows 10) initially published by Microsoft could see as many as 60 percent of existing Windows 10 PCs unable to upgrade to Windows 11. Despite the official requirements, pre-release versions of Windows 11 can be installed on systems with legacy BIOS and without Secure Boot or TPM 2.0 by editing the installation media.

BULLETIN BOARD

A bulletin board (pin board, pin board, noticeboard, or notice board in British English) is a surface intended for the posting of public messages, for example, to advertise items wanted or for sale, announce events, or provide information. Bulletin boards are often made of a material such as cork to facilitate addition and removal of messages, as well as a writing surface such as blackboard or whiteboard. A bulletin board which combines a pin board (corkboard) and writing surface is known as a combination bulletin board. Bulletin boards can also be entirely in the digital domain and placed on computer networks so people can leave and erase messages for other people to read and see, as in a bulletin board system.

Bulletin boards are particularly prevalent at universities. They are used by many sports groups and extracurricular groups and anything from local shops to official notices.

Dormitory corridors, well-trafficked hallways, lobbies, and freestanding kiosks often have cork boards attached to facilitate the posting of notices. At some universities, lampposts, bollards, trees, and walls often become impromptu posting sites in areas where official boards are sparse in number.

Internet forums are a replacement for traditional bulletin boards. Online bulletin boards are sometimes referred to as message boards. The terms bulletin board, message board and even Internet forum are interchangeable, although often one bulletin board or message board can contain a number of Internet forums or discussion groups. An online board can serve the same purpose as a physical bulletin board.

Magnet boards, or magnetic bulletin boards, are a popular substitute for cork boards because they lack the problem of board deterioration from the insertion and removal of pins over time. There are three main types of bulletin boards that you can set-up in your classroom

1. Display

2. Information

3. Interactive.

Bulletin boards are effective in multiple ways and help teachers and office managers save time by displaying information to large groups of people simultaneously. When used correctly, bulletin boards help promote communication between members, foster community awareness and development, and enhance learning.

Standard Size Bulletin boards can range in size from 18" by 24" to full wall length.

Characteristics of a Good Bulletin Board:

- It should be with finished edge.
- It must be fixed on the wall to prevent accidents.
- It must be colourful and attractive.
- Have at least a unified theme for clarity.
- Avoid overcrowded display.

Some attract attention as they display students work or family photos. Others simply brighten school hallways. Ed World's "Principal Files" team members share some of their favourite bulletin board displays. Perhaps an idea or two here will spur a bulletin board that will liven up your school's hallways.

Advantages:

It's a written record.

You can always refer to it to see exactly what was said.

Disadvantage:

It eliminates valuable, non- verbal communication.

The appropriate use of memos, reports, bulletins and newsletters Communication is very important in workplaces.

Bulletin Board System(BBS):

bulletin board system (BBS) is a computer or an application dedicated to the sharing or exchange of messages or other files on a network. Originally an electronic version of the type of bulletin board found on the wall in many kitchens and work places, the BBS was used to post simple messages between users. Use the following address: mcvsd.org. Using a POP3 client to connect to the server via the Internet and retrieve your email.

Blackberry handhelds are integrated into an organization's e-mail system through a software package called "Blackberry Enterprise Server "(BES). Versions of BES are available for Microsoft Exchange, Lotus Domino and Novell Group Wise.

HOW IT WORKS…
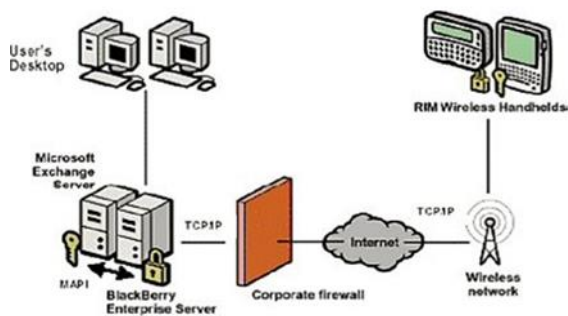
The email message is sent.

Message arrives at your email server (usually the exchange server) and is sent as normal to your PC/ Laptop.

The Blackberry server (the mail is delivered using a "push" concept to the Blackberry Enterprise Server) compresses, encrypts and forwards the message automatically to your Blackberry handset.

Message arrives at the Blackberry via the Internet and the mobile carrier's network.

The Blackberry handheld device receives decrypts and decompresses the email, and alerts the user.

BLACKBERRY ENTERPRISE SERVER

Blackberry Enterprise Server is the fully-featured Blackberry mobile email service. It's designed for medium to large organizations with their own Lotus Domino or Microsoft Exchange servers for email and mobile data applications, that are going to start with at least 20 users and grow from there.

Blackberry Enterprise Server lets the user access his/her email, electronic calendar, tasks list and contacts list as well as any internal applications or software on their BlackBerry handheld.

The Blackberry Enterprise Server supports triple DES security (considered unbreakable) so confidential data is transmitted securely.
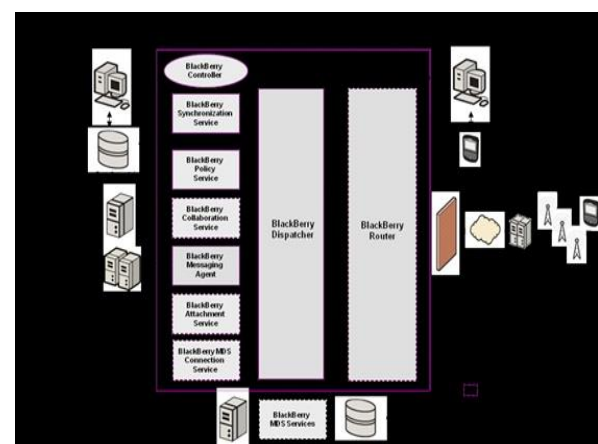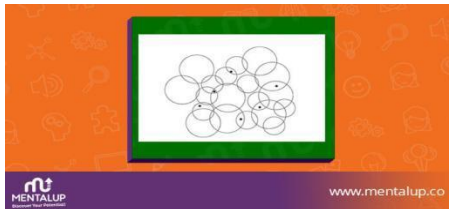
¡Mind Punch

1) What Number Should Replace the Question Mark?

This may not be a number. Think of a situation in everyday life where these numbers appear.

2)Can you count the number of circles that contain a black dot?

3) I add five to nine and get two. The answer is correct, but how?

**4) How many numbers do you see here?**

5) How Many People Are in the Family? Your parents have six sons including you and each son has one sister. How many people are in the family?

6) Mr Smith has 4 daughters. Each of his daughters has a brother. How many children does Mr Smith have?

7) Which Tank Will Fill First Puzzle. It's a hard math puzzle! Don't worry, we think you will find the answer if you give a shot!

8) Guess the Missing Number. Proceeding up the staircase, the numbers form a logical sequence.
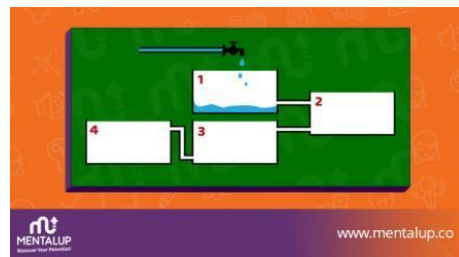
What number belongs on the top step?

9) What is the number of parking space containing the car?

10) Can you guess who is left-handed?.

1. The custom-made aircraft "Air India One" is manufactured by which company?

2. Which fin-tech company is to organize a dedicated 'App Developers' Conference'?

3. Which Technology major has unveiled its Rich Communication Services (RCS) messaging globally?

4. Which Indian IT major has recently obtained Google Cloud Partner status?

5. NASSCOM has partnered with which technology company to launch 'AI Gamechangers' programme?

6. What is "Baikal-GVD" that has been in news recently?

7. Which technology company has created a 2-nanometer chip, the smallest and most powerful microchip?

8. Which country announced the 'Intermediary Guidelines and Digital Media Ethics Code'?

9. The DOGE-1 Mission to the Moon will be launched by which company in 2022?

10. Which company has partnered with the Indian government to roll out a vaccine finder tool on its mobile app in India to get vaccinated?

11. Which telecom company has become the first one in India to demonstrate the operation of the 5G network?

12. Which coompany has launched its first brand campaign 'It's Between You' in India that narrates real stories about how Indians communicate daily' in their closest relationships?

13. ISRO has plans to set up India's own space station in which year?

14. Name of the virus that hit 1.5 crore android devices across the country recently.

15. Which of the following has partnered will UNESCO to adopt technology in classrooms?

DO YOU KNOW? SEISMIC MONITORING DEVICES LINKED TO THE INTERNET ARE VULNERABLE TO CYBERATTACKS THAT COULD DISRUPT DATA COLLECTION AND PROCESSING,

f / 18

$FAMOUS AND FAVOURITES

SHAFI GOLDWASSER

Director, Simons Institute, UC Berkeley

Shafi Goldwasser is the Director of the Simons Institute for the Theory of Computing, and the C. Lester Hogan Professor in Electrical Engineering and Computer Sciences at UC Berkeley. She is also the RSA Professor of Electrical Engineering and Computer Science at MIT, and a professor of computer science and applied mathematics at the Weizmann Institute of Science in Israel. Goldwasser received a BS in applied mathematics from Carnegie Mellon University in 1979, and MS and PhD in computer science from UC Berkeley in 1984.

Goldwasser was the recipient of ACM Turing Award for 2012. She was also the recipient of the Gödel Prize in 1993 and another in 2001 for her work on interactive proofs and connections to approximation, and was awarded the ACM Grace Murray Hopper Award (1996), the RSA award in mathematics (1998), the ACM Athena award for women in computer science (2008), the Benjamin Franklin Medal in Computer and Cognitive Science (2010), the IEEE Emanuel R. Piore Award (2011), the Barnard College Medal of Distinction (2016), and the Suffrage Science Award (2016). She is a member of the AAAS, ACM, NAE, NAS, Israeli Academy of Science, London Mathematical Society, and Russian Academy of Science. Goldwasser is a co-inventor of zero-knowledge proofs, which probabilistically and interactively demonstrate the validity of an assertion without conveying any additional knowledge, and are a key tool in the design of cryptographic protocols. Her work in complexity theory includes the classification of approximation problems, showing that some problems in NP remain hard even when only an approximate solution is needed, and pioneering methods for delegating computations to untrusted servers. Her work in number theory includes the invention with Joe Kilian of primality proving using elliptic curves.

Solutions

! MIND PUNCH	IT VITA +
1) R	1. Boeing
2) 12	2. Paytm
3) 2 PM	3. Google
4) 10	4. Infosys
5) 9	5. Microsoft
6) 5	6. Russian Telescope
7) 3	7. IBM
8) 840	8. India
9) 87	9. SpaceX
10) 5	10. Facebook
	11. Airtel
	12. Whatsapp
	13. 2030
	14. Agent Smith
	15. Dell

DEPARTMENT OF
COMPUTER SCIENCE (UG)

85
I S S U E

D B T
SPONSORED STAR DEPARTMENT

CYBER CREWS
ASSOCIATION

IT UNLIMITED MAGAZINE
A BIMONTHLY BONANZA
JUNE-JULY 21

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.....!!

✉ itunlimitedmagazine@gmail.com

🌐 www.kasc.ac.in