

NAME: IRFAN ARIF

STUDENT ID 16955

DEPARTMENT : BS MICROBIOLOGY 2ND SEMESTER

ANSWER NO 2 (A)

Plotters

They are advanced printers which are utilized to deliver high-drawings which incorporate plans, circuit outlines or guides. These sorts of printers are utilized in specific fields, for example, drafting and designing yet drawings made by plotters are expensive. At the point when you use ink-stream printer innovation on an a lot bigger scope, however enormous organization printer consistently makes photograph practical quality shading prints. These superior and significant expense printers are for the most part utilized by visual specialists for banners, signs and other expert quality showcases. In plotters there are more than one mechanized pens that can make structures, for example, charts or outlines and so forth. Printer can just print a solitary line at once however plotters can without much of a stretch draw ceaseless lines from highlight point at same time. They are normally utilized for CAE and are considerably more costly than printers.

Printer

Printer is a yield gadget that produces illustrations and text on a physical medium, for example, paper. Various sorts and styles of printers exist with various rates, capacities and printing techniques.

These days most PC client's print by associating PC to a printer with a link and an assortment of printing alternatives are accessible now to the clients. Today, remote printing innovation makes the assignment of printing from advanced mobile phone, note pad PC or computerized camera much simpler. Bluetooth and infrared are two remote advances utilized for printing. PC or other gadget transmits yield to a printer utilizing through radio waves in Bluetooth printing. What's more, a printer speaks with PC or other gadget utilizing infrared light waves in Infrared printing.

ANSWER NO 2 (B)

Stage 1: Sending

To start the laser printing process, the record is sent from the particular PC to the laser printer and the sent archive is handled by the laser printer.

Stage 2: Cleaning

Cleaning is a physical and electrical procedure completed so as to expel the past print work and set up the photosensitive drum for the new print work. Leftovers of toner on the drum are scratched away by an elastic cleaning sharp edge into a flotsam and jetsam depression. Remainders of electrical charges on the drum from the past print work are defused by electrostatic delete lights. Oil is then applied to the warmth roller so as to ensure a satisfactory measure of warmth is equitably applied to move the approaching picture.

Stage 3: Conditioning

Molding includes applying a negative charge to the drum unit and the paper as it goes through the crown wire or move roller. The use of a negative charge to the paper permits a picture to be electrostatically moved to the page.

Stage 4: Exposing

Laser time! The following stage is uncovering. In this progression, the photosensitive drum is presented to a laser shaft, (potentially a laser bar refracted from a turning mirror inside the printer). Each region of the drum presented to the laser bar has its surface charge diminished to around 100 volts DC. An imperceptible dormant picture is produced as the drum turns.

Stage 5: Developing

In the creating step, toner is applied to the idle picture on the drum. The toner is contained adversely charged powdered plastics — dark, cyan, maroon, and yellow. The drum is held at a minute good ways from the toner by a control sharp edge.

Stage 6: Transferring

The subsequent stage is moving. The optional crown, or move, applies a positive charge to the paper. The contrarily charged toner on the drum is attractively pulled in to the now decidedly charged paper. The picture is moved to the paper and keeps up its situation because of its positive charge.

Stage 7: Fusing

The last advance is combining. Warmth and weight are applied to the toner by the intertwining rollers. The toner creates a lasting bond as it is squeezed and softened into the paper. Teflon covers the intertwining rollers as a light silicon oil is applied so as to evacuate any chance of the paper adhering to them.

Catch A Toner Buzz

As should be obvious, laser printing is a profoundly mind boggling process with a great deal of moving parts. This is the reason there are such a significant number of dangers associated with utilizing perfect or remanufactured laser printing items, particularly knock-off toners.

Brand name, authentic, Original Equipment Manufacturer (OEM) laser toners convey far less dangers than perfect and remanufactured laser toners. Furthermore non-OEM toners convey substandard picture quality and lower page yields than name brands. Stick with OEM ink and toner for your printer

ANSWER NO 3 (A)

A metropolitan region organize (MAN) is a system with a size more prominent than LAN however littler than a WAN. It typically contains arranged interconnections inside a city that likewise offers an association with the Internet.

The distinctive highlights of MAN are

- Network size for the most part goes from 5 to 50 km. It might be as little as a gathering of structures in a grounds to as extensive as covering the entire city.
- Data rates are moderate to high.
- In general, a MAN is either possessed by a client gathering or by a system supplier who offers administration to clients, as opposed to a solitary association as in LAN.

- It encourages sharing of territorial assets.
- They give uplinks to associating LANs to WANs and Internet.

Case of MAN

- Cable TV arrange
- Telephone systems giving fast DSL lines
- IEEE 802.16 or WiMAX, that furnishes rapid broadband access with Internet availability to client premises.

ANSWER NO 3 (B)

What Is Network Topology?

System geography alludes to how different hubs, gadgets, and associations on your system are genuinely or consistently orchestrated according to one another. Think about your system as a city, and the geography as the guide. Similarly as there are numerous approaches to organize and keep up a city, for example, ensuring the roads and lanes can encourage section between the pieces of town getting the most traffic—there are a few different ways to orchestrate a system. Each has favorable circumstances and drawbacks and relying upon the requirements of your organization, certain courses of action can give you a more prominent level of network and security.

Why Is Network Topology Important?

The design of your system is significant for a few reasons. Most importantly, it assumes a basic job in how and how well your system capacities. Picking the correct geography for your organization's operational model can build execution while making it simpler to find issues, investigate blunders, and all the more successfully apportion assets over the system to guarantee ideal system wellbeing. A smoothed out and appropriately oversaw organize geography can build vitality and information proficiency, which can thus assist with diminishing operational and support costs.

1. Physical – The physical system geography alludes to the real associations (wires, links, and so forth.) of how the system is organized. Arrangement, upkeep, and provisioning errands require understanding into the physical system.

2. Logical – The coherent system geography is a more elevated level thought of how the system is set up, including which hubs interface with one another and in which ways, just as how information is transmitted through the system. Consistent system geography incorporates any virtual and cloud assets.

ANSWER NO 4

Transmission Media and Types

In arrange interchanges, a transmission medium is a physical association or an interface between the transmitter and the recipient. There are two significant classifications of transmission media, to be specific guided and remote (or unguided). Let us go for a stroll through the sorts of transmission media and connectors in detail in this exercise.

We should initially investigate the various sorts of guided transmission media each in turn.

1. Contorted Pair Cable

Contorted pair links have been around for quite a while. They were chiefly imagined for voice transmissions. Bent pair is a generally utilized medium in systems administration since it's lighter, less expensive, progressively adaptable, simple to introduce, and gives more noteworthy rates than coaxial links. There are two sorts of bent pair links: the unshielded wound pair (UTP) and the protected curved pair (STP). How about we investigate every one of them.

The unshielded wound pair link has 4 sets of copper wires that are available inside a plastic sheath. These wires are wound to shield them from obstruction. The main insurance accessible for an UTP link is a plastic sheath that is slight in size.

The protected wound pair link is generally utilized in rapid systems. The significant contrast among UTP and protected turned pair is that STP utilizes a metallic shield to wrap the wires. This metallic shield forestalls obstruction to a superior degree than UTP. These STP links accompany numbering; the higher the numbering, the better the obstruction anticipation. For instance: most PC systems must go with CAT 3 or CAT 5, and nothing not as much as this.

2. Coaxial Cables

The coaxial links have a focal copper transmitter, encompassed by a protecting layer, a leading shield, and the furthest plastic sheath. In this manner, there are three protection layers for the internal copper link. There are two fundamental methods of information transmission in coaxial links: baseband mode that has devoted data transfer capacity, and broadband mode that has circulated link transfer speed.

Satellite TV and simple TVs principally utilize coaxial links. Coaxial links have preferred protection from traverse curved pair links. The coaxial links are utilized for significant distance correspondence. The most broadly utilized sorts of coaxial links are RG-59 and RG-6 (RG means 'radio guide'). RG-59 has lesser protecting and is appropriate for short link lengths and satellite TV associations.

RG-6 has preferred protection over RG-59 and is utilized for satellite TV and computerized signal transmissions for better quality and longer separations.

There are numerous points of interest to coaxial links, including the accompanying:

- High data transmission
- Easy and modest establishment
- Better invulnerability from clamor
- Better scaling

Be that as it may, there are likewise various burdens to c

ANSWER NO 1(A)

Scanner limitations

The following notes cover limitations pertaining to the Scanner process of Data Insight:

- In case of Windows 2012 Servers used as Windows File Servers, the Scanner does fetch a group having permission based on a condition. For example, "all users who have xyzas manager have full access to the share/folder". However, the indexer discards it currently. The console does not display the group as having Dynamic ACL. The other permissions on the path are shown properly.

Resilient File System (ReFS) is supported only for scanning. Auditing is not supported since the drive cannot be attached to the filter driver.

- Scanner does not support share names of more than 200 characters.
- Scanner modifies the access time of directories while traversing the filesystem.

Parallel scanner limitations

The following notes cover limitations pertaining to the parallel scanner process of Data Insight:

- Parallel scanner does not support incremental scan. Only full scans are supported.
- Parallel scanner cannot be run for the NFS shares.
- Parallel scanner does not support filtering out shares based on the **Exclude Rules** configuration.
- Parallel scanner does not support throttling of parallel scans for NetApp 7-mode and Cluster-Mode file servers.
- The **Scan History** sub-tab on the **Scanning** dashboard does not display the historical details of a parallel scan.
- The scanning throughput is not displayed for the parallel scanner on the **In-Progress Scans** page.
- For Windows File Server agents version older than 5.2, the parallel scanner cannot be executed. Even if it is configured, the single thread scan runs.

ANSWER 1 (B)

MICR (magnetic ink character recognition) is a technology used to verify the legitimacy or originality of paper documents, especially checks. Special ink, which is sensitive to magnetic fields, is used in the printing of certain characters on the original documents. Information can be encoded in the magnetic characters.

The use of MICR can enhance security and minimize the losses caused by some types of crime. If a document has been forged - for example, a counterfeit check produced using a color photocopying machine, the magnetic-ink line will either not respond to magnetic fields, or will produce an incorrect code when scanned using a device designed to recover the information in the magnetic characters. Even a legitimate check can be rejected if the MICR reader indicates that the owner of the account has a history of writing bad checks.

Retailers commonly use MICR readers to minimize their exposure to check fraud. Corporations and government agencies also use the technology to speed up the sorting of documents.

