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## **QUESTION NO 1 ANSWER:**

## a) SCANNER LIMITATION:

The following notes cover limitations pertaining to the scanner process of data insight.

In case of window 2012 severs used as Windows file servers, the scanner does fetch a group having permission based on a condition. For example, all users who have xyz as manager have full access to share/ folder". However, the indexer discards it currently. The console does not display the group as having dynamic ACL. The other permission on the path are shown properly.

#### OCR:

Scanner equipped with a character recognition software ( called OCR software ) that cover the bit images of character to equivalent ASCII codes

Enable word process of input text and also requires less storage for storing the document as text rather than an image.

### **MAGNETIC INK CHARARTER:**

MICR used for banking industry for faster processing of large volume of cheques.

Banks identification code (name, branch, etc) account number and cheque number are preprinted (encoded) using character from a special character set on all cheque

Special ink is used that contain magnitazible particle of iron oxide.

MICR reader-sorter reads data on cheques and sorts them for distribution to other banks for further processing.

## **QUESTION NO 2 ANSWER:**

# a) PRINTER AND PLOTTER:

It is an output device that produce graphics and texts on a physical medium such as paper.

Printer are often connected to computers either wirelessly or through the use of USB cable.

One printer can be connected with many computers allowing all computers to be able to print on that printer.

Today, wireless printing technology makes the task of printing from smart phone, notebook, computer or digital camera even easier.

# **PLOTTER:**

It is a special output device used to produce hard copies of large graphs and designs on paper, such as construction maps, engineering drawings, architectural plans and business charts. The plotter is either a peripheral components that you add your computer system or a standalone device with its own internal processor.

# b) LASER PRINTER:

A laser printer is a printer that uses a focused beam or light to transfer text and image onto paper. Though contrary to popular belief, the laser does not actually burn the images onto the paper. Instead, as paper passes through the printer, the laser beam fires at the surface of a cylindrical drum called a photoreceptor. This drum has as electrical charge (typically positive), that is reversed in areas where the laser beam hits it. By the reversing the charge in center area of the drum, the laser beam can print patterns (such as text and pictures) onto the photoreceptor. Once the pattern has been created on the drum, it is coated with toner from a toner cartridge. The toner is black in most cartridge, but may be cyan, magenta and yellow in color laser printers. The positively charged by the laser.

When the paper passes through the printer, the drum is given a strong negative charge, which allows the toner to transfer and stick to the paper. The result is a clean copy of the image written on the paper.

Because laser printers do not use ink, they have less image smearing problems than inkjet printers and are able to print pages faster. For this reason, businesses tend to use laser printers, while consumers are more likely to use inkjet printers. Laser printers typically have a resolution of 600 dpi (dots per inch) or higher.

# **QUESTION NO 3 ANSWER :**

# a) METROPOLITAN NETWORK AREA:

Designed to extend over a district, council and even an entire city.

It may be a single network such as a cable, television network, or it may be a means of connecting a number of LANs into a larger network so that resources may be shared LAN-to-LAN as well as device to device.

For example, a company can use MAN to connect the LANs in all of its office throughout a city.

## b) Topology :

it is defined is the arrangement with which computer system or network devices are connected together.

I would like to setup star topology of the following reasons.

1 due to hub device network control management is easier.

2 easy to extend network

3 easy to locate problem because cable failure only effect a single user

4 easy to maintain network.

### **QUESTION NO 4 ANSWER :**

### **MULTIMEDIA:**

Media is something that can be used for presentation of information.

Two basic way to present some information of are;

#### Unimedia presentation:

Single media is used to present information .

#### Multimedia presentation:

More than one media is used to present information.

Multimedia presentation of any information greatly enhances the comprehension capability of the user as it involve use of more our senses

## Common media:

Common media for storage access, and transmission of information are:

Text ( alphanumeric characters )

Graphics (line drawing and images)

Animation (moving images)

Video (videographed real-life events)

Multimedia information technology refers to use of more than one of these media for information presentation to users

### Text media:

Alphanumeric characters are used to present information text form. Computer are widely

Used for text processing keyboard, OCRs, computer screens, and printer are some commonly used hardware devices for processing text media.

Text editing, text searching, hypertext, and text importing / exporting are some highly desirable features of a multimedia .computer system for better presentation and used for text formation.

#### Graphics media :

Computer graphics deals with generation, representation, manipulation and display, of pictures, (line drawing and images) with a computer.

Locating devices ( such as mouse, a joystick, or a stylus )

Digitizer, scanner digital, cameras, computer screens with graphics display capability, laser printer, are some common hardware devices for processing graphics media

#### Animation media:

A computer animation deals with generation, sequencing and display (at a specified rate (of a set of images (called frames) to create an effect of visual change or motion, similar to a movie film(video)

Animation is commonly used in those intences where video geography is not possible or animation can better illustrate the concept then video.

Animation deals with display a sequence of images at a reasonable speed to create impression of movement. For a jerk-free full motion animation, 25 to 30 frames for second is required.

## Audio media:

Computer audio deals with synthesizing, recording, and playback, of audio or sound with a computer

Sound board, microphone, speaker, MIDI, devices sound synthesizer sound adit or and audio mixer are some commonly used hardware devices.

### Video media:

Computer video deals with recording and display of a sequence of images at a reasonable speed to create an impression of movement. Each individual image of such a sequence is called a frame.

Video camera, video monitor, video board, and video editor, are some of the commonly used hardware devices for processing video media