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Course : Computer Applications

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Question No 1 Answer###

Part(A) Differentiate between plotters and printers?

Plotters:

They are sophisticated printers which are used to produce high drawings which include blueprints circuit diagrams or maps . these types of printers are used in specialized fields such as drafting and engineering but drawing made plotters are very costly . when you use ink printer technology on a much larger scale but large format printer always creates photo realistic quality colour prints. These high performance and high cost printers are most used by graphic artists for posters signs and other professional quality displays . in plotters there are more than one automated pens that can create designs such as diagrams or blueprints etc. printer can only print a single line at a time but plotters can easily draw continuous lines from point to point at same time . they are usually used for CAE and much more expensive than printers.

Printer :

Printer as a output device that produces graphics and text on a physical medium such as paper . Different types of

printers exist with different speeds capabilities and printing methods.

Nowadays most computer users print by connecting computer to a printer with a cable and a variety of

Of printing options are available now to the users. today wireless printing technology makes the task of printing from smart phone , notebook computer or digital camera even easier . Bluetooth and infrared are two wireless technology used for printing . computer or device transmits output to a printer using through radio waves in Bluetooth printing . and a printer communicates with computer or other device using infrared light waves in infrared printing.

Part(B)

What is barcode? Explain barcode reader?

Barcode:

A barcode, consisting of bars and spaces, is a machine-readable representation of numerals and characters. ... A barcode consists of bars and spaces of varying width that can be read with an optical barcode scanner.

Barcode Reader:

A barcode reader (or barcode scanner) is an optical scanner that can read printed barcodes, decode the data contained in the barcode and send the data to a computer. Like a flatbed scanner, it consists of a light source, a lens and a light sensor translating for optical impulses into electrical signals. Additionally, nearly all barcode readers contain *decoder* circuitry that can

analyze the barcode's image data provided by the sensor and sending the barcode's content to the scanner's output port.

###Question No 2 Answer###

Part(A)

Write a note on flatbed scanner?

Flatbed scanner:

Rectangular in shape.

Consists of a flat glass surface covered by a Lid(Cover).

A light source beneath the glass surface moves from left to right in order to scan the document.

Documents are placed upside down on the glass surface in order to be scanned by the scanner.

Size is usually 8.5 x 14 inches

A scanner that provides a flat, glass surface to hold a sheet of paper, book or other object for scanning. The scan head is moved under the glass. Flatbed scanners often come with sheet feeders for scanning multiple sheets of paper rather than one at a time. Contrast with "sheet-fed scanner," which accepts only paper, and contrast with handheld scanner and drum scanner.

Part(B)

Explain the printing process of an ink jet printer?

Ink jet printer process:

- Inkjet printing, like laser printing, is a non-impact process. Ink is emitted from nozzles while they pass over media. The operation of an inkjet printer is easy to visualize: liquid ink in various colours being squirted onto paper and other media, like plastic film and canvas, to build an image. A print head scans the page in horizontal strips, using the printer's motor assembly to move it from left to right and back again, while the paper is rolled up in vertical steps, again by the printer. A strip (or row) of the image is printed, then the paper moves on, ready for the next strip. To speed things up, the print head doesn't print just a single row of pixels in each pass, but a vertical row of pixels at a time.

For most inkjet printers, the print head takes about half a second to print the strip across a page.

- Character printers that form characters and all kinds of images by spraying small drops of ink on to the paper.
- Print head contains up to 64 tiny nozzles that can be selectively heated up in a few micro seconds by an integrated circuit register.

- To print a character, the printer selectively heats the appropriate
- set of nozzles as the print head moves horizontally
- Can print many special characters, different sizes of print, and graphics such as charts and graphs.

###Question No 3 Answer###

Part(A)

Explain wide area network with suitable example?

Wide Area Network:

A wide area network (also known as WAN), is a large network of information that is not tied to a single location. WANs can facilitate communication, the sharing of information and much more between devices from around the world through a WAN provider.

WANs can be vital for international businesses, but they are also essential for everyday use, as the internet is considered the largest WAN in the world. Keep reading for more information on WANs, their use, how they differ from other networks and their overall purpose for businesses and people, alike.

Example

A network of bank cash dispensers is a WAN. A school network is usually a LAN. LANs are often connected to WANs, for example a

school network could be connected to the Internet. WANs can be connected together using the Internet, leased lines or satellite links.

Part (B)

Define Topology? Write a few advantages of bus topology?

Topology:

Topology is the physical configuration of a network that determines how the network's computers are connected. Common configurations include the bus topology, linear bus, mesh topology, ring topology, star topology, tree topology and hybrid topology.

Advantages of Bus topology:

- Easy to connect a computer or peripheral to a linear bus.
- Requires less cable length than a star topology.
- Entire network shuts down if there is a break in the main cable.
- Difficult to identify the problem if the entire network shuts down.
- Not meant to be used as a stand-alone solution.

###Question No 4 Answer###

Q No 4 : In your opinion what are different types of common media used for storage access and

transmission of information ? Explain each type in detail ?

There are different type of common media

Media : media is a means of communication . the following are common types of media

Radio: Traditional radio and digital equivalents such as podcasts

Video: video and film based content such as television movies promotional videos , commercials and video sharing websites.

Publications: publication such as books, magazines , newspapers , blogs and research papers.

Social media : digital tools that allow people to communicate and share and produce.

Messaging : traditional mail and digital messaging tools such as email and messaging apps.

Digital communities : forums , chats, and other tools that allow people to socialize , share information and form communities

Games : digital games and virtual environments

Application : application is a general term for software that people use including mobile apps.

Graphics : graphics as signs billboards ,digital, advertising , t- shirts and product packaging.

Public speaking : speaking directly to groups of people often with visual aids such as graphics , sliders and video.

Art & Music: art displayed in public and musical performance .

Performance : theatre and other performances such as dance.