

Assignment-1
Computer Graphics and multimedia Application
(CA-301)

Answer-1

Input Devices:-

1. Keyboard:- A simple device comprising keys and each key denotes either an alphabet, number or number commands which can be given to a computer from various actions to be performed.
2. Mouse:- It is also known as a pointing device. Using mouse we can directly click on the various icons present on the system and open up various files and programs.
3. Joy Stick - Mostly used to control the movement in video games.
4. Light pen:- Used in conjunction with computer's cathode ray tube.
5. Microphone - It converts sound into an electrical signal.

~~Input~~ Output Devices:-

1. monitor - The device which displays all the icons, text, images etc over a screen is called the monitor.
2. printer:- A device which makes a copy of the pictorial or textual content, usually over a paper is called a printer.
3. Speakers:- Speakers are attached with a computer system and also are a hardware device which can be attached separately.
4. projector:- An optical device which presents an image or moving images onto a projection screen is called a projector.
5. Head phones:- They perform the same function as a speakers, the only difference is the frequency of sound.

Answer-2

printer:- A printer is an external hardware output device whose work is to acquire the text and graphics output from the computer and generate a hard copy of it. So, basically it processes the soft copy and produces its hard copy.

plotter:- A plotter is the category of printer that takes commands from the computer and then makes drawings on the paper with the help of various pens. It is used for producing hard copies of large graphs and designs on papers like construction maps, engineering drawings, architectural plans and business charts.

Answer-3

Display devices:- The device is an output device used to represent the information in the form of images (visual form). Display systems are mostly called a video monitor or video display unit (VDU).

CRT- (Cathode-ray Tube):- Here CRT stands for cathode ray tube. It is a technology which is used in traditional computer monitor and television.

LCD- (Liquid-crystal display):- The LCD depends upon the light modulation properties of liquid crystals.

LED:- (Light Emitting Diode):- LED is a device which emits when current passes through. It is a semiconductor device.

Answer-4

Raster Scan :- Raster scan and random scan are the mechanisms used in displays for rendering the picture of an object on the screen of the monitor. The main difference between raster scan and random scan lies in the drawings of a picture where the raster scan points the electron beam at the entire screen but incorporating just one line at a time in the downward direction. On the other hand in the random scan, the electron beam is guided on just those region of the screen where the picture actually lies.

Random Scan :- The random scan works in a completely different manner to the raster scan where the electron beam is pointed to merely those areas of the screen where the picture is to be drawn. However it only involves one line at a time when drawing a picture that is why it is also known as the vector or calligraphic display. The component lines of an object by a random scan is drawn in the way as shown in the diagram below.

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Answer-5	BASIS FOR COMPARISON	DDA ALGORITHM	BRESENHAM ALGORITHM
	1. Efficiency	Low	High.
	2. Calculations involved	Complex	Simple
	3. Speed	Comparatively less	more
	4. Operations used	multiplication and division	Addition and subtraction
	5. Arithmetic computation values	Floating point	Integer types
	6. precision	Low	High
	7. Cost	Expensive	moderate or cheaper relatively.
	8. Optimization	Not provided	provided.