**8th June, 2020 JESUS AND MARY SCHOOL AND COLLEGE MODULE 3**

**CLASS 4**

**COMPUTER SCIENCE**

**CHAPTER-2 : COMPUTER PERIPHERALS**

**TOPIC :**

* **I-P-O (INPUT-PROCESSING-OUTPUT) CYCLE**
* **INPUT AND OUTPUT DEVICES**
* **PROCESSING DEVICES**

**EXPLANATION**

* Hardware and software are two major components of computer system. Which help the user to solve their problems.

**HARDWARE :**

* The parts of computer which we can see and touch are hardware.
* As like -
* **Input Device**- Keyboard, Mouse, Scanner, Microphone, MICR, OMR.
* **Output Device-** Monitor, Printer, Plotter, Speaker and headphones, Plotter.
* **Storage Device-** Hard disk, Blue ray, Floppy disk, Pen Drive, DVD.

**EXTERNAL HARDWARE COMPONENTS :**

* The components which are visible from outside and help the user to work on computer system are called external components.

**INPUT DEVICE :**

* Devices through which we feed data or instructions are called input devices.
* Input devices are used to enter data or instructions into the memory of the computer.
* The word input means whatever is put into something.

**KEYBOARD :**

* Keyboard is most important and most commonly used in a computer system.
* The keyboard of a computer is quite similar to that of an electronic typewriter.
* The push buttons on the keyboard are called keys.

**MOUSE :**

* Mouse is used as a operator to move the cursor or select certain items from a menu.
* There are three buttons in the mouse.

**TABLET :**

* Tablet is a computer input device that allows one to hand-draw images and graphics, similar to the way one draws images with a pencil and paper.

**JOYSTICK :**

* Joystick is used for controlling the movement of the cursor or a pointer in a computer device.
* Joystick mostly used for gaming applications and, sometimes, in graphics applications.

**LIGHT PEN :**

* Light pen is used to input any graphics design to the computer.
* It is a pen like photo sensitive instrument.

**TOUCH SCREEN :**

* A touch screen is a computer display screen.
* The screen is sensitive.
* Touch screen used by touching it with a finger or a stylus pen.

**DIGITAL CAMERA :**

* A digital camera is an electronic device which takes video or still photograph or both, digitally by recording images.
* These cameras use memory cards with flash memory to store images.

**SCANNER :**

* A scanner is used for scan documents.
* There are three types of scanners.
* Flatbed Scanner
* Handheld Scanner
* Drum Scanner

**BAR CODE READER:**

* A bar code reader is an electronic device which is used to read printed bar codes.
* A bar code reader uses a laser beam to read the series of thick and thin lines which represent the bar code number.
* The bar code is 13 digits long and it has four main divisions.

**OUTPUT DEVICES:**

* The output devices provide communication between the computer and the user.
* The results of various operations by the computer on the data we have given are communicated by the output devices.
* Some of the commonly used output devices are the following:

**MONITOR:**

* Monitor is the most important output devices of a computer and most commonly used.
* Monitor looks like a television set. It can display text characters and graphics in colours or in shades of grey.
* Whatever is typed on the keyboard gets displayed on the monitor.

**TYPES OF MONITOR :**

* CRT (Cathode Ray Tube)
* LCD (Liquid Crystal Display)
* LED (Light-Emitting Diode)
* CRT monitors are bigger in size whereas, LCD monitors are flat and thus take less space.

**PRINTER :**

* Printer is an output device connected to a produce images (numbers, alphabets, graphics etc.) on the paper.
* The information printed by the printer on a paper is known as ‘Hard Copy’ of the output.
* Printers are available today with different shapes, sizes and printing technologies.
* There are two categories of printers- **impact printers** and **non-impact printers.**
* Some of impact printers are: dot matrix printer, daisy-wheel printer and drum printer.
* Some of non-impact printers are: Inkjet and Laser printer.

**PLOTTER:**

* A plotter gives high quality output on papers.
* There are two types of plotter:
1. Drum Plotter **b.** Flatbed Plotter
* It is used to generate large printouts of constructions maps, engineering drawing and big posters.

**PROJECTOR:**

* A projector is a device that displays videos, images or text on a large screen.
* The two types of projectors are LCD (Liquid Crystal Display) and DLP (Digital Light Processing) projectors.

**SPEAKERS AND HEADPHONES:**

Speakers and headphones are used to listen to music and songs as output from the computers.

**WORKSHEET 3**

* **QUESTION / ANSWER :**

**Q1.** Give the difference between Dot Matrix Printer and Inkjet Printer.

**Ans.** Dot Matrix Printers fire a fine wire, through an inked ribbon, onto the page while Inkjet Printers spray small drops of ink onto the paper.

**Q2.** What is an IPO cycle?

**Ans.** Computer works by taking input, processing it and giving output. This is known as the input-process-output cycle of a computer.

**Q3.** Name any two types of scanner.

**Ans.** The two types of scanner are:

1. Desktop or flatbed scanner
2. Planetary scanner.

**Q4.** Write three features of plotter.

**Ans.** The three features of plotter are :

1. The plotter is a computer printer for printing vector graphics.
2. The plotter is capable of producing colour drawings in a matter of minutes.
3. Plotters differ from printers in that they draw lines using a pen.

**Q5.** What are the different types of mouse?

**Ans.** The different types of mouse are:

1. Mechanical Mouse
2. Optical Mouse
3. Cord-Less Mouse
* **FILL IN THE BLANKS :**
1. We use a **Keyboard** to type text in the computer.
2. The **CPU**  performs most of the calculations which enable a computer to function. It is sometimes referred to as the “brain” of the computer.
3. Two computer input devices are the following: **Mouse, Scanner.**
4. Two computer output devices are the following: **Monitor, Printer.**
5. A computer is a machine which works on a cycle known as **IPO** cycle.
* **Write whether the following device is an input or output device :**
1. Monitor **Output**
2. Keyboard **Input**
3. Scanner **Input**
4. Laser Printer **Output**
5. Mouse **Input**
6. Speakers **Output**
7. Digital Camera **Input**
8. Joystick **Input**
9. Light Pen **Input**
10. Plotter **Output**

**Note- Please do all this work in your “Copies” OR “Notebooks” which will be checked when school reopens. Please consider this important.**

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