

FUNDAMENTAL of COMPUTERS- VII

Paper : BC-307

Section-A

1.

- (I) **Volatile memory** contrary to non-volatile memory, is computer memory that requires power to maintain the stored information; it retains its contents while powered, but when power is interrupted stored data is immediately lost.

example- RAM

- (II) by striking a print head against an ink ribbon. Two common types of **non-impact printers** include inkjet **printers**, which spray small drops of ink onto each page, and laser **printers**, which roll ink onto the paper using a cylindrical drum.
- (III) A **compiler** is a computer program (or set of programs) that transforms source code written in a programming language (the source language) into another computer language (the target language, often having a binary form known as object code).
- (IV) Magnetic disk, Magnetic Tape, Hard Disk, CD ROM, DVD ROM, Pen drive, Floppy Disk .
- (V) **Application software** is a set of one or more programs designed to carry out operations for a specific **application**. **Application software** cannot run on itself and is dependent on system **software** to execute.
- (VI) Pen drive Storage capacity is more than floppy disk. Pen drive is a smaller than floppy disk and pen drive Accessing capacity is better than floppy disk so Pen Drive is more Suitable rather than floppy disk.
- (VII) **Multiprocessing** is the term also refers to the ability of a system to support more than one processor and/or the ability to allocate tasks between them.
- (VIII) bit is smallest unit of data, byte is collection of 8 bit, nibble is collection of 4 bit and word is a collection of 16 bit.
- (IX) For virus protection we can use Antivirus software. This software scans files for pieces of code called signature. Antivirus software mostly involves updating the signature file. There are 5 computer generation are presented.

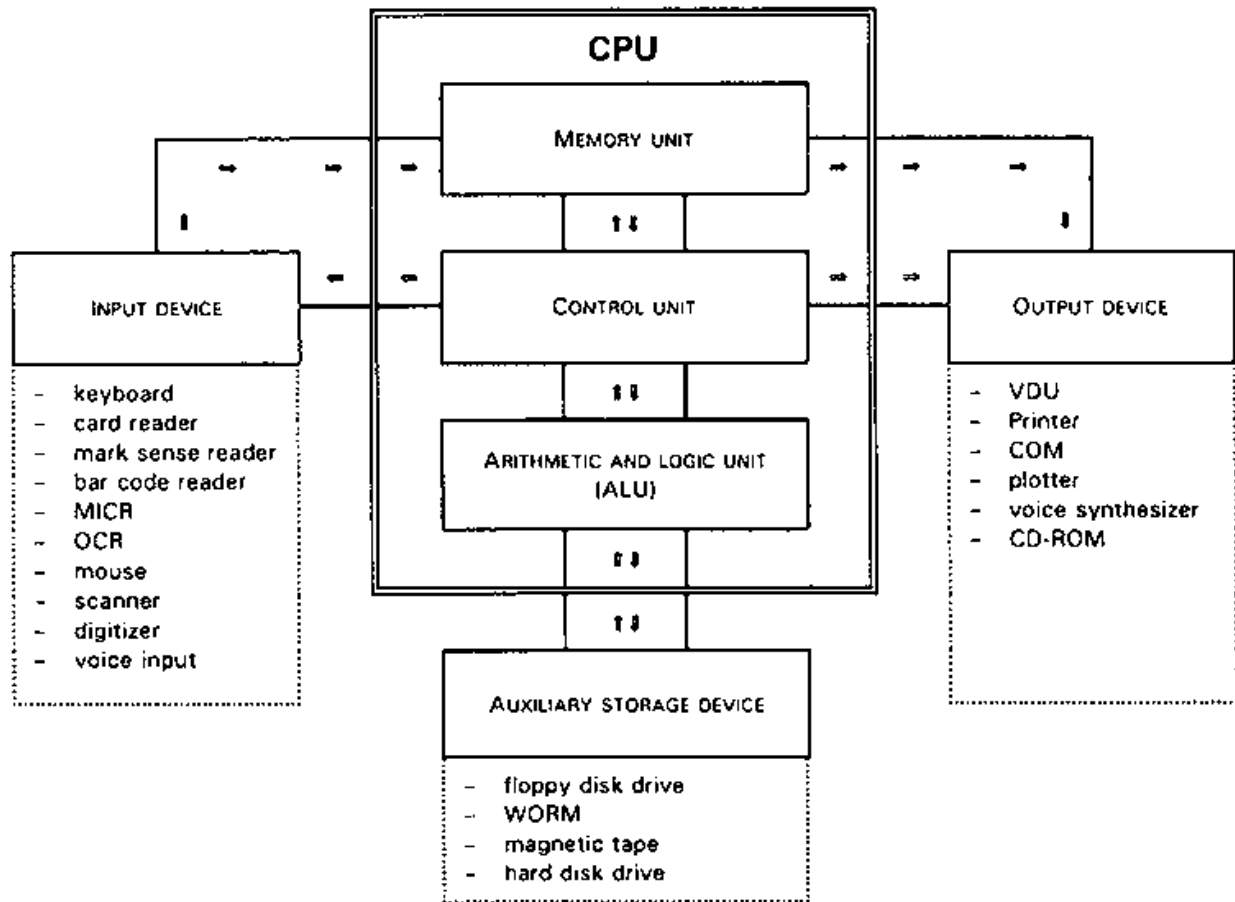
- (X) Most modern **printers** are called **non-impact printers** since they do not operating

Section-B

2 You should mention all five generations of computer with advantage and disadvantage and you should compare 2nd and 3rd generation on that points.

- I integrated circuit.
- II secondary storage
- III size
- IV Language used

3 You should write basic operations of computer system with this diagram and input, output central processing unit and its work in brief as discussed in class.



4 An **output device** is any piece of computer hardware equipment used to communicate the results of data processing carried out by an information processing system (such as a computer) which converts the electronically generated information into human-readable form.

You should explain any three from the following output device.

- I Monitors
- II Printers
- III Plotters
- IV Screen image projector
- V Voice response system

5 RAM full form is Random Access Memory. It is a Volatile memory used for temporary storage. Typical ranges 256MB - 16 GB. Random Access means direct access to any part of memory. It provides fast accessing compare to secondary storage.

ROM is Nonvolatile Memories. Its full form is Read only memory. Nonvolatile memories retain value even if powered off. Types of ROMs-

- Programmable ROM (PROM)
- Erasable programmable ROM (EPROM)
- Electrically erasable PROM (EEPROM)
- Ultra violet erasable PROM (UVPROM)

You should also explain the types of ROM and how it works.

6 **programming language :-** In computer technology, a set of conventions in which instructions for the machine are written. There are many **languages** that allow humans to communicate with computers; C++, BASIC, and Java are some common ones.

you should explain in following points in detail with translators -

1 high label language

2 Low label language

and also explain different programming language example c , c++, BASIC, COBOL, FORTRAN, Pascal etc.

7 Operating system is an integrated set of program that controls the resources of computer systems and provide its user with an interface that is more convenient to use.

(1) Making System Convenient to use

(2) Managing the Resources of computer system

You should also explain the following topic in brief

- I Process management
- II Memory Management
- III File Management
- IV Security
- V Command interpretation

8 draw diagram of all this devices

a) **Mouse**

A **mouse** is the most widely used pointing device with a GUI environment on personal computers. A **mechanical mouse** has a rubber ball on its underside to detect movement of the mouse. An **optical mouse** uses devices that emit and sense light to detect the mouse's movement. A **cordless mouse** (either mechanical or optical) transmits data using wireless technology such as radio waves or infrared light waves.

Advantages

- _ A mouse is user-friendly for computer beginners.
- _ A mouse is easy and convenient to use with a graphical user interface.
- _ Using a mouse to select items or move to a particular position on the screen is faster than using a keyboard.

Disadvantages

- _ It is not easy and convenient to input text with a mouse.
- _ Issuing commands by using a mouse is slower than by using a keyboard.
- _ A mouse is not accurate enough for drawings that require high precision.
- _ A mouse usually requires a flat surface to operate.
- _ A mouse needs more desk space to operate when compared with a trackball.

b) Electric Pen

An electronic pen is Point and draw device. You hold the pen in your hand and directly point with it on the screen to select menu items or icon or directly draw graphics on the screen with it; or write with it on a special pad for direct input of the written information to the system.

c) **Touchscreen**

A **touch screen** is an *input/output* touch-sensitive display. Touch screens are often used for information kiosks located in department stores, hotels, airports, and museums.

Touch

screens are also used for ATM machines to allow easy access of bank accounts.

Advantages

- _ No extra peripherals are needed except the monitor.
- _ A touch screen allows easy access to commands, which are usually identified by words or symbols on the screen.

Disadvantages

- _ Touch screens are not suitable for inputting a large amount of data because they require a lot of arm movements.
- _ Only items already on the screen can be selected.

d) **Joystick**

A **joystick** is a pointing device with a vertical lever mounted on a base. The lever usually includes buttons called triggers, which activate certain events when pressed. Joysticks are mainly used for computer games and ultrasound scanners in hospitals.

Advantages

- _ A joystick allows fast interactions required in most games.

Disadvantages

- _ It is difficult to use a joystick to select objects accurately on the screen.