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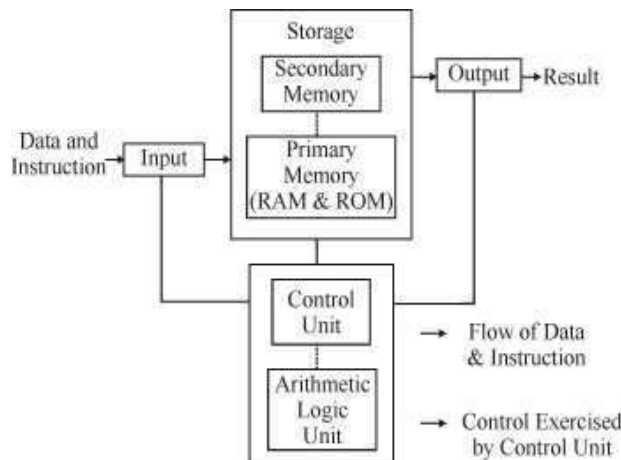
## Architecture of Computer

### Introduction

The word 'Computer' is derived from the Latin word 'Compute' which means 'to calculate'. Therefore, the literal meaning of computer is 'calculator'.

A computer is an electronic device that receives data and control through input and displays it as an output by working on it according to the instructions given.

In other word, a Computer is an electronic device which takes some input, do some arithmetic & logical operation and produce the desired result.



It has following components

- Input unit (For accepting data & Instruction)
- Storing Data (Primary & Secondary memory)
- Processing Data (CPU)
- Output unit (displaying result & print)
- Controlling and coordinating all operations inside computer (Control unit)

Computer is a system, so all the subsystem interact with each other to achieve the goal of computer

(a) **Input**– Input device is the main component of Computer. Through this device data & instruction are inserted inside the Computer. Main input device is Keyboard, Mouse, Scanner & Trackball & Light Pen etc.

(b) **Storage**– Storage is the properties of computer where data & instructions are stored in computer. Some storage are volatile and some non-volatile. There are two types of Storage

- Primary storage
- Secondary storage

**Primary storage**– Primary memory is key fast memory. It is an electronic device so all content of memory takes equal time. Main memory is also called Random access memory (RAM). The Program and data are loaded into the primary

memory before processing. CPU directly interact With the RAM. It is volatile in nature. Primary memory is very expensive & therefore Limited in capacity.

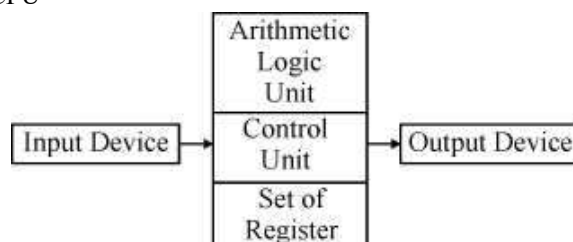
**Secondary Storage**– Secondary memory is made up of magnetic material. Memory all the instruction & Data which is not going to be executed is stored in secondary memory. Secondary memory is slower and cheaper than main memory so Its capacity is large. It is characterized by low cost, large access time & large storage Capacity.

(c) **Processing**– Program is made of instruction & data. The process of performing operation on data as per the instruction specified by Program is called Processing. Data Processing is an activity where data is manipulated so that meaningful information can be achieved. Data and instruction is taken from main memory & transferred to ALU (Arithmetic Logic unit), a part of CPU, which perform every type of calculation. When all the processing completes, the final result is transferred to main memory

(d) **Output**– In output unit result is displayed. result is given through output devices like monitor, Printer etc. computer process the data in binary format & result of Processing is also in the binary form. the result can not be directly given to the user, The output device therefore convert the result in available in binary form into human readable language. before displaying it to the user.

(e) **Controlling**– The function of managing the controlling of all the component i.e Coordinating all the operation is done by control unit. Control unit fetch the instruction, decode the instruction and execute the instruction.

**Computer Arithmetic Operations**– ALU is mathematical Brain of computer, ALU is digital circuit that provides arithmetic & logic operations, It is the fundamental building block of the central processing unit of a computer. Most of the operations are performed by one or more ALU which load data from input register. Registers are small amount of storage available to the CPU



## Central Processing Unit and Instructions

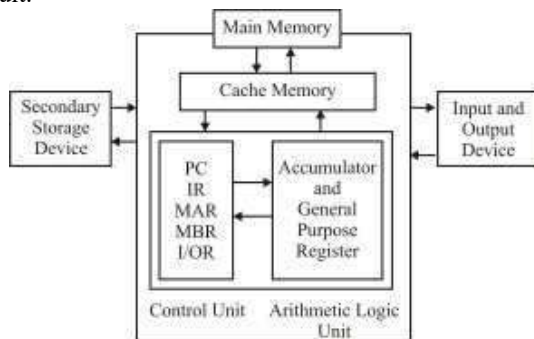
CPU Consist of arithmetic logic unit (ALU) control unit (CU) and Register the Brain of computer is known as Central Processing Unit. It carries out the actual Processing, it is known as processor of computer. It is placed on the circuit Known as integrated circuit, Integrated circuits are made up of semiconductor material. Program consist of data & instruction. These are given to CPU for execution of Program.

CPU fetches the program and data from memory and perform arithmetic and logic operation as per given instruction and stores the result back to memory. CPU has its own memory called Register. Register are part of CPU chip and they are limited in size and number. These Register are used for storing data, instruction and intermediate result.

### CPU has two main component–

Arithmetic Logic Unit (ALU) and Control Unit (CU), ALU perform all kind of calculations such as arithmetic (Add, subtract, multiply divide), comparison (Less than, Greater than or Equal to) and other operation

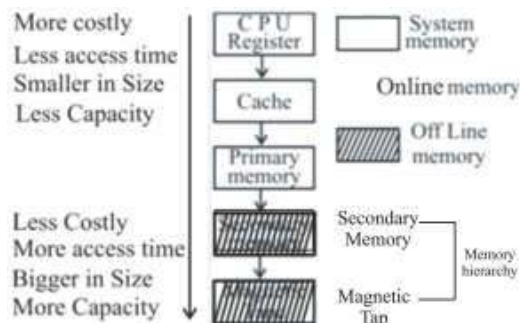
Control unit's main function is to direct and coordinate the computer operations. It interpret the instruction and initiates action to execute them. Control Unit, Control the flow of data through the computer system & direct the ALU, input-output (I/O) devices and other units. It is also called central nervous system of the computer system In addition the CU is responsible for fetching decoding, executing instructions and storing result.



## Memory Organization

A computer system require to store the data & instruction for processing, Whenever we talk about the memory of computer system we usually Talk about the main or primary memory.

Secondary memory is used to store data, instructions and result permanently for future use.



### Memory Hierarchy–

Memory usually refers to random access memory typically DRAM (Dynamic RAM) and memory can also refer to other forms of data storage.

Term storage refers to storage Devices that are not directly accessible by the CPU (Secondary Storage) Example of secondary storage device are hard disk, optical disk Drives and other devices that are slower than RAM but are used to store data permanently.

**CPU Register–** Register are directly accessible by CPU. Registers are the fastest of all forms of computer data storage.

**Cache Memory–** Cache memory is located between Register and main memory. It is used to store instruction & data that are repeatedly require to execute Program. CPU first checks within the data & instruction is available in cache memory. When the same piece of data and instruction is needed, the CPU read it from cache memory instead of main memory .

**Primary Memory –** Primary memory (main memory or Internal memory can be directly accessed by the CPU. CPU continuously reads instruction stored in the primary memory and execute them any data that has to be operated by CPU is also store there, There are two types of primary memory RAM & ROM. RAM is usually referred to as main memory & It is faster than the secondary memory.

ROM is non-volatile, which means its contents are not lost even when the power is turned off. It is a small but faster permanent storage for the contents which are rarely changed. For Example, boot loader that loads the operating system into primary memory, is stored in ROM.

**Secondary Memory–** Primary memory has limited storage capacity and is either volatile (RAM) or read-only (ROM). This memory is not directly accessible by the CPU. Secondary Storage devices hold data even when the computer is switch off. An example of such a device is hard-disk.

Computer usually uses its input/output channel to access the data from secondary storage device to transfer the data in the main memory. While the CPU can read the data stored in main memory in nanoseconds, the data from these days there are secondary storage devices like SDD which support very fast data Transfer speed as compared to earlier HDD (Hard disk Drive). Data transfer between commutes has become easier and simple due to availability of small-sized and portable flash or pen drive.

## Important Questions Asked in Previous Years Examinations

1. **Who controls the movement of signals between CPU and I/O?**  
 (a) ALU (b) Control Unit  
 (c) Memory Unit (d) Secondary stores  
 (e) None of these

(SBI 2012)

**Ans : (b)** The Control Unit Controls the movement of signals between the CPU and I/O

2. **Which of the following CPU registers is used by ALU to store operands?**  
 (a) Both program counter and accumulator  
 (b) Program counter  
 (c) Accumulator  
 (d) Address register

RRB Bengaluru LP-2004

**Ans. (c) :** An accumulator is a type of register for short term, intermediate storage of arithmetic and logic data in a Computer's Central Processing unit (CPU).

3. **In Micro programmed control unit, subsequent instruction words are fetched into the.....**  
 (a) Instruction Register (b) Transistor  
 (c) CMOS battery (d) Program Counter

Bihar PGT TRE 2.0, 15.12.2023

AHC RO 2019 (Exam date 10.01.2020)

**Ans. (a) :** In micro programmed control units, subsequent instruction words are fetched into the instruction register in a normal way. However, the operation code of each instruction is not directly decoded to enable immediate control signal generation but it comprises the initial address at a micro program contained in the control store.

4. **Computer systems that store instructions and data from the same memory unit without any distinction are based on the \_\_\_\_\_ structure.**  
 (a) Harvard (b) Babbage  
 (c) Knuth (d) Von-Neumann

WBPS Instructor-18.09.2021

HSSC wireman Instructor -17.12.2019, Shift-I

**Ans : (d)** Von Neumann architecture" refers to any stored program computer, in which an instruction and a data operation cannot occur at the same time because they share their space on a 'Common Bus'.

5. **Which part of the CPU selects, interprets and monitors the execution of program instructions.**  
 (a) Memory (b) Register Unit  
 (c) Control Unit (d) ALU

S.S.C. C.G.L (Tier-I), 2014

**Ans : (c)** Control Unit considered as the central nervous system of computer obtains the instructions from the memory, interprets them and directs the operation of the computer. It selects, interprets and monitors the execution of the program instructions by generating the timing and control signals.

6. **Which bus is used to specify memory locations for the data being transferred?**  
 (a) Control bus (b) Data bus  
 (c) Address bus (d) I/O bus

NVS PGT 19.09.2019 (Shift-I)

**Ans. (c) :** It is group of conducting wires which carries address only. Address bus is unidirectional because data flow in one direction from micro processor to memory or from micro processor to input/output devices.

7. **With respect to integrated circuit, what is the full form of VLSI?**

- (a) Varied Large Scale Integration  
 (b) Very Large-Scale Integration  
 (c) Varied Large-Scale Interrogation  
 (d) Very Large-Scale Interface

UPPCL TG-II 19-03-2021 (Shift-II)

**Ans. (b) :** The full form of VLSI is Very Large-Scale Integration, it is used in microprocessor, Phone's chip, graphic card etc.

8. **Which of the following transmits different commands or control signals from one component to another component of a computer system?**

- (a) Data Bus  
 (b) Address Bus  
 (c) Both Data Bus and Address Bus  
 (d) Control Bus

(AHC RO-2016)

**Ans : (d)** Control bus is a group of conducting wires, which is used to generate timing and control signals to control all the associated peripherals micro processor uses control bus to process data that is what to do with selected memory location.

9. **CPU is the main component of the computer, which of the following is the full form of CPU?**

- (a) Central Programming Unit  
 (b) Control Processing Unit  
 (c) Computer Processing Unit  
 (d) Central Processing Unit

HSSC wireman Instructor -17.12.2019, Shift-I

RRB Guwahati L.P.- 2008

**Ans. (d) :** A CPU (Central Processing Unit) is the primary component of a computer that performs most of the processing tasks. It executes instructions from programs and manages data within a computer's memory.

10. **The program instructions are represented in binary and stored in the \_\_\_\_\_ from which they are fetched, decoded and executed by the CPU.**

- (a) memory (b) memory and chip  
 (c) chip (d) control unit

RRB Kolkata LP-2009

**Ans : (a)** Memory is the electronic holding place for the instruction and data a computer needs to reach quickly. Its where information is stored for immediate use. Memory is one of the basic functions of a computer, because without it a computer would not be able to function properly.

11. **Control Unit is called the..... of a computer.**

- (a) heart  
 (b) nerve center or brain  
 (c) Kidney  
 (d) All options are correct

SSC JE Electrical (Exam date 27.01.2018) Shift-I

**Ans. (b) :** Central Processing Unit has three main Components- Control Unit, Memory register and Arithmetic Logic Unit. The Control Unit directs processor operation. Therefore it is called the nerve centre or brain of the computer.

12. An ALU typically uses an accumulator to store operands and results. Which of the following options correctly describes the accumulator?

(a) Register (b) Main Memory  
(c) Processing Unit (d) Secondary Memory

**WBPSCT Instructor-18.09.2021**

**Ans. (a) :** The full name of ALU is Arithmetic Logic Unit. It usually uses an accumulator to store operands and results. Registers are the smallest data holding elements that are built into the processor itself. These are the memory locations that are directly accessible by the processor. It may hold an instruction, a storage address or any kind of data such as a bit sequence or individual characters.

13. Which of the following hardware components is also considered as a storage unit, though it has a very small strong capacity?

(a) Register (b) Control Unit  
(c) Data Bus (d) ALU

**HSSC wireman Instructor -17.12.2019, Shift-II**

**Ans. (a) :** Register memory is fastest and most expensive memory of the computer system. Its data storage capacity is less.

14. A \_\_\_\_\_ shows how operational attributes are linked together and contributes towards realizing the computer's.

(a) component design  
(b) computer architecture  
(c) computer working  
(d) computer organization

**KPSC Jr. Instructor 22.11.2018w**

**Ans : (d)** Computer organization so is how operational attributes are linked together and contribute to realizing the architectural specification.

15. A \_\_\_\_\_ is the conceptual design and fundamental operational structure of a computer system.

(a) computer organization  
(b) component design  
(c) computer working  
(d) computer architecture

**KPSC Instructor Electronic-25.06.2014**

**Ans : (d)** Computer architecting is a theoretical basic process. Under which the structural of the computer is prepared.

16. ....tells the computer's memory, arithmetic logic unit and input and output devices how to respond to a program's instructions.

(a) Storage Unit (b) Input Device  
(c) Control Unit (d) Logic Unit

**(SSC 10+2 CHSL 19.01.17, 1.15 pm)**

**(CCC April 2015)**

**(Uttarakhand RO 2017)**

**Ans : (c)** Control Unit is a component of a computers Central Processing Unit that directs the operation of the processor. It tells the computer's memory, arithmetic logic unit and input/output devices how to respond to the instruction that have been sent to the processor.

17. Which material is used to manufacture Computer Chips?

(a) Silver (b) Iron  
(c) Gold (d) Semiconductor

**UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans : (d)** Silicon is the material of choice in the chip industry. Unlike the metals normally used to conduct electrical currents. Silicon is a semiconductor, meaning that its conductive properties can be increased by mixing it with other materials such as phosphorus or boron.

18. Which among the following is/are types of microcontrollers in embedded system?

**A. ARM microcontroller**

**B. MRP microcontroller**

(a) Neither A nor B (b) Only B  
(c) Only A (d) Both A and B

**UPPCL Technical Grade-II (Shift-II) 20.03.2021**

**Ans. (c) :** ARM stands for Advanced Rise Machine. The most popular Microcontrollers Programming in the digital embedded system world, and most of the industries prefer only ARM microcontrollers since it consists of significant features to implement products with an excellent appearance. It is cost sensitive and high performance device, which has been used in a wide range of application such as industrial Instrument control systems, wireless networking and sensors and automotive body systems etc.

19. With reference to microcontroller, PIC stands for \_\_\_\_\_.

(a) Prefaced Internet Controller  
(b) Prefaced Interface Controller  
(c) Peripheral Internet Controller  
(d) Peripheral Interface Controller

**DSSSB Craft Instructor (ESM) 06.10.2019**

**RRB Bengaluru LP-2004**

**Ans. (d) :** PIC stands for Peripheral Interface Controller, which was developed in the year 1993 by the General Instruments Microcontrollers. It is controlled by software and programmed in such as was that it performs different tasks and controls a generation line. PIC microcontrollers are used in different new application such as smart phones, audio accessories and advanced medical devices.

20. 'BUS' in computer \_\_\_\_\_

(a) Indicates a data item  
(b) Information transmitting is a set of physical wires  
(c) Indicates an address item.  
(d) Has become a synonym for the file present in the operating system.

**DSSSB Craft Instructor (ESM) 06.10.2019**

**MP Electrician Instructor 07.11.2016, Morning**

**Ans : (b)** A bus is a high speed internal connection. Buses are used to send control signals and data between the processor and other components. Three types of bus are used.

1. Address bus 2. Data bus 3. Control bus

**21. Which of the following facts is false regarding the control unit?**

- (a) It receive instructions from memory, interprets them and directs operation of the computer
- (b) It process and stores data
- (c) It manages and coordinates all the units of the computer
- (d) It is responsible for controlling the transfer of data and instruction between other units of the computer

**GSSSB Supervisor Electronic Instructor 18.01.2014  
KPSC Instructor Electronics Mech.20.07.2018**

**Ans. (b) :** Except option (b) all other options are true regarding to the control unit because processing and storing data is not function of the Control Unit.

**22. Which of the following is an integrated component of CPU and is generally used to store data and addresses during program execution?**

- (a) Arithmetic logic unit
- (b) Register
- (c) Control unit
- (d) Secondary memory

**GSSSB Electronic Instructor-22.01.2017**

**Ans. (b) :** Register is a type of computer memory used by the CPU to quickly accept, store, and transfer data and instructions that are being used immediately. The registers used by the CPU are often called processor registers is an integrated component of the CPU.

**23. Which of the following statements is incorrect regarding ALU?**

- (a) ALU uses CPU registers for operations
- (b) ALU is one of the main component of the CPU
- (c) ALU controls the functions of the control unit
- (d) ALU performs both arithmetic and logic operations

**KPSC Jr. Instructor- 09.07.2014**

**Ans. (c) :** Arithmetic Logic Unit (ALU) is a digital circuit that provides arithmetic and logic operations. The Control Unit (CU) is a component of a CPU that directs the operation of the processor. ALU does not control the functions of the Control Unit. Hence statement (c) is incorrect.

**24. Find out whether the given statements are true or false with reference to the CPU.**

**(i) It is made up of register memory, control unit and arithmetic logic unit.**

**(ii) In modern computers, it is contained in an integrated circuit chip called the motherboard.**

- (a) (i) - True, (ii) - True
- (b) (i) - True, (ii) - False
- (c) (i) - False, (ii) - False
- (d) (i) - False, (i)- True

**UPPCL Technical Grade-II Shift-I, 28.03.2021**

**Ans. (b) :** CPU (Central Processing Unit) is the computer's part that retrieves and executes information. The CPU is essentially the brain of a CAD (Computer Aided Design) system. It consists of an Arithmetic

Logic Unit (ALU), a Control Unit (CU) and various register memory. CPU is simply referred as processor, while the given statement is not correct with respect to the second CPU.

**25. During execution, CPU selects and retrieves instructions from the \_\_\_\_.**

- (a) registers
- (b) main memory
- (c) auxiliary memory
- (d) secondary memory

**UPPCL Technical Grade-II (Shift-I) 20.03.2021**

**Ans. (b) :** The Control Unit of the Central Processing Unit regulars and integrates the operations of the computer. It selects and retrieves instructions from the main memory in proper sequence and interprets then so as to activate the other functional elements of the system at the appropriate moment.

**26. Which memory can be directly accessed by the CPU of the computer?**

- (a) Magnetic tape
- (b) Hard disc
- (c) Memory card
- (d) Cache memory

**DSSSB Craft Instructor (ESM) 06.10.2019**

**Ans. (d) :** Cache memory is a type of high - speed volatile computer memory that provides high speed data access to a processor (CPU) and store frequently used computer programs, applications and data.

**27. ALU is one of the main components of a computer's CPU. Which of the following is the full form of -**

- (a) Arithmetic Logic Unit
- (b) Algorithmic Looping Unit
- (c) Arithmetic Language Unit
- (d) Algorithmic Logic Unit

**RRB Gorakhpur L.P.-2008**

**Ans. (a) :** The full form of ALU is 'Arithmetic Logic Unit'. It is a main component of the CPU. It is used to perform arithmetic and logic operations.

**28. Which of the following components maintains order, directs the operation of the entire system and does not perform any actual processing on data?**

- (a) Control Unit
- (b) ROM
- (c) Mother board
- (d) I/O unit

**MP Electrician Instructor 07.11.2016, Morning**

**Ans. (a) :** The control unit is the part of CPU (Central Processing Unit). It control every component of the computer and creates a sequence of all work process and completes the work. It direct the system but does not perform data processing.

**29. A CPU with a clock rate of 1.8 GHz can perform clock cycles per second.**

- (a) 18,000,000
- (b) 1,800,000
- (c) 180,000,000
- (d) 1,800,000,000

**WBPSB Instructor-18.09.2021**

**Ans. (d) :** Clock speed of CPU execution per second it measures the number of cycles, which is measured in gigahertz (GHz). A 'Cycle' is the basic unit that measures CPU speed. CPU with clock rate of 1.8 GHz per second can measure up to 1,800,000,000 clock cycles

30. A CPU with a memory address register (MAR) of 24 bits can address up to \_\_\_\_ memory (in bytes).

(a) 16 MB (b) 8 KB  
(c) 16 KB (d) 8 MB

**HSSC wireman Instructor -17.12.2019, Shift-I**

**Ans. (a) :** Memory address register (MAR) is a CPU register whose function is to store memory addresses. A CPU with memory address register (MAR) of 24 bits can address up to 16 MB (in bytes).

31. Which of the following is the processing unit of the computer?

(a) CPU (b) memory  
(c) Graphic Card (d) mother board

**KPSC Jr. Instructor 22.11.2018w**

**Punjab Wireman instructor-07.07.2013**

**Ans. (a) :** A Central Processing Unit, also called a central processor main processor or just processor, is the electronic circuitry that executes instructions comprising a computer program. The CPU performs basic arithmetic, logic, controlling and input/output operations specified by the instruction in the program.

32. The size of a word in computer is

(a) None of these  
(b) varies within the same computer  
(c) fixed in every case  
(d) fixed in a computer, but varies among different computers

**KPSC Instructor Electronic-25.06.2014**

**Ans. (d) :** Word "size" refers to the amount of data a CPU's internal data registers can hold and process at one time. Modern desktop computers have 64-bit words. Computers embedded in appliances and consumer products have word size of 8, 16 or 32 bits.

33. Accumulator is an integral component of

(a) CPU (b) Hard Disk  
(c) RAM (d) Cache memory

**(RRB SSE (Shift-III), 03.09.2015)**

**Ans : (a)** The accumulator is a register in which intermediate arithmetic logic unit results are stored. Without a register like an accumulator, it would be necessary to write the result of each calculation to main memory, perhaps only to be read 'write' back again for use in the next operation.

34. Cache memory is a small amount of extremely fast static \_\_\_\_ and is located close to the \_\_\_\_.

(a) RAM, CPU (b) ROM, Motherboard  
(c) RAM, Hard disc (d) ROM, CPU

**UP PCL Technical Grade-II-11.11.2016**

**UPPCL Technical Grade-II (Re-exam) 16.10.2016**

**Ans. (a) :** Cache memory is a primary memory used by the CPU to reduce the average cost of retrieving data from main memory. This static RAM is small in size and located close to the CPU.

35. Which of the following statement is wrong?

(a) External memory has high storage capacity and is stable.  
(b) Registers are high speed storage area located outside the CPU.

(c) ROM is a fixed primary memory.  
(d) Cache memory is a very high speed memory between CPU and RAM.

**UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans. (b) :** Statement 'b' wrong because register memory is the inside the CPU not outside. Register memory is the smallest and fastest memory in a computer. It is not a part of main memory and is located in the CPU in the form of registers, which are the smallest data holding elements.

36. Which among the following are the components of CPU?

(a) RAM and ROM  
(b) ALU and Memory  
(c) ALU and Registers  
(d) ALU and Control Unit

**GSSSB Supervisor Electronic Instructor 18.01.2014**

**Ans. (d) :** ALU stands for Arithmetic Logic Unit. CU stands for control unit. It performs all the arithmetic and logical operations and process user input. It controls the operations of processor, memory. ALU and other input/output devices. It is directed by control unit.

37. Which of the following is a part of the CPU of a computer?

(a) Motherboard (b) ALU  
(c) SRAM (d) DRAM

**GSSSB Electronic Instructor-22.01.2017**

**Ans. (b) :** Central Processing Unit are-

1. Control Unit
2. Arithmetic Logic Unit
3. Memory Unit

38. All the arithmetic and logical operations in a computer are done by.....

(a) ALU (b) CU  
(c) Register (d) None option is correct.

**KPSC Jr. Instructor- 09.07.2014**

**Ans. (a) :** ALU stands for Arithmetic Logic Unit. ALU enables computers to perform mathematical operations an binary number. They can be found of the heart of every digital computer and are one of the most important parts of CPU.

39. Which of the following storage devices directly interacts with the CPU?

(a) Tertiary Storage (b) Secondary, Storage  
(c) Primary Storage (d) Hard Disk

**RRB Bengaluru LP-2004**

**Ans. (c) :** The CPU interacts directly with the primary memory to perform read/write operation. It is two types

- (i) RAM (Random Access Memory)
- (ii) ROM (Read only Memory)

RAM is a volatile i.e. as long as the power is supplied to the computer it retains the data in it.

40. Which of the following components of the CPU maintains and regulates the flow of information across the processor?

(a) PC register (b) Control Unit (CU)  
(c) ALU (d) Accumulator

**DSSSB Craft Instructor (ESM) 06.10.2019**

**MP Electrician Instructor 07.11.2016, Morning**

**Ans. (b) :** CU stands for Control Unit. It is one of the fundamental parts of the CPU. The main work of CU is to tell the most efficient method to work. It guides all the related operations to the individual parts of the processor.

**41. Which of the following options is inconsistent with the remaining three?**

- (a) Cache Memory
- (b) Arithmetic and Logic Unit
- (c) Instruction Decoder
- (d) Control Unit

**RRB Kolkata LP-2009**

**HSSC wireman Instructor -17.12.2019, Shift-I**

**GSSSB Electronic Instructor-21.01.2014**

**Ans. (c) :** Cache memory, Arithmetic Logic Unit and Control Unit are part of Central Processing Unit while instruction decoder of a processor is a combinatorial circuit sometimes in the form of a read-only memory, sometimes in the form of an ordinary combinatorial circuit, its purpose to translate an instruction cache into the address in the micro memory where the micro cache for the instruction starts.

**42. Which of the following statement is not true about the central Processing Unit (CPU)?**

- (a) Control unit is a part of CPU
- (b) CPU executes stored program instructions
- (c) CPU is also known as microprocessor.
- (d) Kernel is the core of CPU.

**UPPCL TG-II (20-03-2021) (Shift-II)**

**Ans. (d) :** Kernel is not core of CPU. Kernel is the essential center of a computer operating system. It is the core that provides basic services for all after parts of the OS. It is the main layer between the OS and hardware.

**43. Where are the functions of adding, comparing and matching done in a computer?**

- (a) Memory chip
- (b) CPU chip
- (c) Floppy disk
- (d) Hard disk

**S.S.C. M.T.S, 2011**

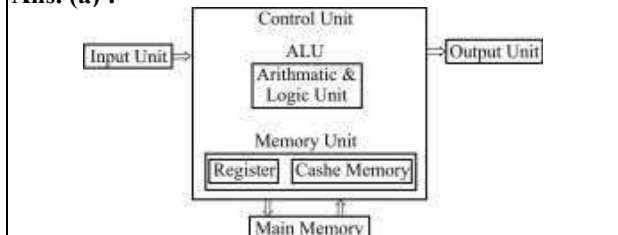
**Ans : (b)** The Central Processing Unit is the main part of the computer. CPU chip or main processor is the part in the computer which performs or executes of the instructions or programs. The CPU is a very efficient calculator.

**44. With reference to the central processing unit (CPU) which of the following statements is not true?**

- (a) CPU processes data and instructions
- (b) ALU is a part of CPU
- (c) CPU also has a set of registers
- (d) It performs arithmetic operations

**UPPCL TG-II 27-03-2021 (Shift-II)**

**Ans. (a) :**



The CPU can process those instructions easily control unit that knows how to interpret program instructions and an arithmetic logic unit that knows how to add numbers. With the control unit and ALU combined, the CPU can process much more complex programs than a simple calculator.

**45. Which of the following provides internal storage to the CPU?**

- (a) Register
- (b) Register and RAM
- (c) RAM
- (d) Hard disk

**Punjab Wireman instructor-07.07.2013**

**Ans : (a)** A processor register is one of a small set of data holding places that are part of the computer processor. A register may hold an instruction a storage address, or any kind of data. Some instructions specify registers as part of the instruction.

**46. Which of the following options does the CPU memory include?**

- (a) Secondary Memory
- (b) Only Scratch Pad Memory
- (c) Scratch Pad Memory and Cache Memory
- (d) Only Cache Memory

**UPP Computer Operator 21-12-2018 (Batch-01)**

**Ans : (c)** Scratchpad memory is a high speed internal memory directly connected to the CPU core and used for temporary storage to hold very small items of data for rapid retrieval and cache memory is the temporary memory officially termed CPU cache memory. This chip based feature of your computer lets you access some information more quickly than if you access it from your computers main hard drive.

**47. "For computer, world consists of zeros and ones only. To store the zeros and ones,..... is placed inside a processor:**

- (a) I/O device
- (b) Instruction set
- (c) Transistor
- (d) Main Memory

**(UPPCL TG2 11-11-2016)**

**Ans : (c)** For the computer the world is made of zero and one. To store these zero or one, a transistor is installed inside the processor. All the calculations in the computer are done through '0's and '1's only.

**48. The four basic tasks performed by CPU are Fetch, ....., Manipulate and Output:**

- (a) Design
- (b) Decode
- (c) Display
- (d) Regulate

**(UPPCL TG-2 11-11-2016)**

**Ans : (b)** The four primary function of a CPU are fetch, decode, execute and write back. Decoding is the process of converting code into plain text or any format that is useful for subsequent processes.

**49. Which of the following represents the amount of work that the system is capable of doing per unit time?**

- (a) Flow (throughput)
- (b) Load
- (c) Thread
- (d) Response time

**UPPCL TG-II 20-03-2021 (Shift-I)**

**Ans. (a) :** Throughput is a term used in information technology that indicates how many units of information can be processed in a set amount of time.

50. Most of the processing in computers takes place in\_\_\_\_\_.

- (a) Memory (b) RAM  
(c) CPU (d) Motherboard  
(e) ALU

(PNB (Clerk) 2011)  
(IBPS 2011)

**Ans : (c)** Most of the processing in the computer takes place in the CPU. The processing speed of CPU is measured in Hertz (Hz). At present, processors with gigahertz and megahertz speeds are being used.

51. Identify the correct order of the stages of a data processing cycle.

- (a) Input stage-> Output stage-> Processing stage-> Storage stage  
(b) Input stage-> Processing stage-> Storage stage-> Output stage  
(c) Processing stage-> Input stage-> Output stage-> Storage stage  
(d) Input stage-> Processing stage-> Output stage-> Storage stage

UKSSSC Tech. Electrical Instructor-21.11.2017  
KPSC Jr. Instructor- 09.07.2014

**Ans : (d)** The data processing cycle consists of a series of steps where raw data (input) is fed into a system to produce actionable insights (output). Each step is taken in a specific order, but the entire process is repeated in a cyclic manner.

Input stage → Processing stage → Output stage → Storage stage

52. Another name for computer chip is \_\_\_\_\_

- (a) Microchip (b) Mother board  
(c) CPU (d) Microprocessor

RRB NTPC, (Shift -2) Online, 28.03.2016

**Ans : (a)** A microchip (also called a chip) a computer chip, an integrated circuit on a small flat piece of silicon on the chip transistors acts as miniature electrical switches that can turn a current on or off.

53. To increase CPU throughput which of the following memories is placed between the CPU and main memory?

- (a) Secondary memory (b) Cache memory  
(c) Sequential memory (d) Auxiliary memory

KPSC Instructor Electronics Mech.20.07.2018

**Ans. (b) :** Throughput is the number of processes that complete execution per time unit. If the computer system completes n processes in t second time then,

$$\text{Throughput} = \frac{\text{Total number of processes completed}}{\text{Time taken by the process}} = \frac{n}{t}$$

To increase CPU throughput cache memory is placed between the CPU and main memory.

54. The CPU clock speed refers to the number of:

- (a) CPUs it can have  
(b) RAMs it can have  
(c) clocks it can have  
(d) Number of cycles CPU executes per second

DSSSB Craft Instructor (ESM) 06.10.2019

**Ans. (d) :** CPU processes many instructions from different programs every second. The clock speed measures the number of cycles your CPU executes per second, measured in GHz.

55. The Celeron, Pentium and Core sequence formats are:

- (a) Computer RAM  
(b) Computer Microchip  
(c) Computer Processor  
(d) All of the above

RAS/RTS (Pre) G.S., 2013

**Ans : (c)** A processor is the logic circuit system that responds to commands and processes the basic instructions that drive the computer to produce desired results.

56. We express the speed of the computer in microseconds. Which of the following is equal to one microsecond?

- (a)  $10^{-9}$  second (b)  $10^{-3}$  second  
(c)  $10^{-6}$  second (d)  $10^{-2}$  second

UPPCL TG-II 20-03-2021 (Shift-I)

**Ans. (c) :** 1 microsecond =  $1 \times 10^{-6}$  second

57. MIPS is a computer performance measurement method for rate of instruction execution per unit time. What is its full form?

- (a) Master instruction per second  
(b) Memory instruction per second  
(c) Metric instruction per second  
(d) Million instruction per second

UPPCL Technical Grade-II (Shift- II) 27.03.2021

**Ans. (d) :** MIPS stands for Million instructions per second. MIPS is an approximate measure of a computer raw processing power. MIPS figures can be misleading because measurement techniques often differ, and different computers may require different sets of instructions to perform the same activity.

58. What is MFLOPS?

- (a) It is used to measure the state of the CPU.  
(b) It is used to measure the speed of CPU.  
(c) It is a memory unit.  
(d) It is used to measure memory access time.

UPPCL TG-II 19-03-2021 (Shift-I)

**Ans. (b) :** MFLOPS stands for Mega Floating Point Operation Per Second, MFLOPS are a common measure of the speed of computer used to perform floating point calculations. Another common measure of computer speed are power is MIPS (Million instructions per second), which indicates integer performance.

59. Which of the following statement is/are true?

(i) GFLOPS is smaller than TFLOPS

(ii) MFLOPS is greater than GFLOPS

- (a) Only (ii) (b) Only (i)  
(c) Neither (i) nor (ii) (d) (i) and (ii) both

UPPCL TG-II 19-03-2021 (Shift-II)



Ans. (b) : Processing Speed-Flops		
Name	Unit	Value
Kilo FLOPS	KFLOPS	$10^3$
Mega FLOPS	MFLOPS	$10^6$
Giga FLOPS	GFLOPS	$10^9$
Tera FLOPS	TFLOPS	$10^{12}$
Peta FLOPS	PFLOPS	$10^{15}$
Exa FLOPS	EFLOPS	$10^{18}$
Zetta FLOPS	ZFLOPS	$10^{21}$
Yotta FLOPS	YFLOPS	$10^{24}$

60. High power micro processors are-  
 (a) Pentium, Pentium pro (b) Pentium II and III  
 (c) Pentium II (d) All of these  
**(UPSSSC JE-2016)**

**Ans : (d)** The Pentium pro is a sixth generation \*86 microprocessor and it was introduced by Intel in 1995. After the Pentium pro-processor, Pentium II was developed by Intel in 1997. Pentium II is manufactured based on P6 Micro architecture and it is a sixth generation \*86 compatible microprocessors.

Pentium II after the Pentium II the next version of the Pentium processors is Pentium III. This processor was developed by Intel in 1999.

61. Which of the following is not a part of CPU.  
 (a) Memory Unit (b) Arithmetic Logic Unit  
 (c) Control Unit (d) Input Unit

**HSSC wireman Instructor -17.12.2019, Shift-I  
 Punjab Wireman instructor-07.07.2013  
 UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans : (d)** Memory Unit, Arithmetic Logic Unit and Control Unit are part of Central Processing Unit (CPU) while input unit is input device.

62. "For computer, world consists of zeros and ones only. To store the zeros and ones,..... is placed inside a processor:  
 (a) I/O device (b) Instruction set  
 (c) Transistor (d) Main Memory

**(UPPCL TG2 11-11-2016)**

**Ans : (c)** For the computer the world is made of zero and one. To store these zero or one, a transistor is installed inside the processor. All the calculations in the computer are done through '0's and '1's only.

63. Which of the following is an example of a high speed microprocessor?  
 (a) Pentium (b) CD ROM  
 (c) Keyboard (d) Printer

**RRB Gorakhpur L.P.-2008**

**Ans : (a)** The Pentium is a widely used personal computer microprocessor from the Intel corporation. First offered in 1993, the Pentium quickly replaced Intel's 486 microchip of choice in manufacturing a personal computer. Microprocessor sold the under brand name Pentium.

64. Computer administration refers to the \_\_\_\_\_ units and their inter relationships that implement architectural specifications.  
 (a) Dynamic (b) Navigational  
 (c) Stationary (d) Operational

**UPPCL Technical Grade-II-02.08.2015**

**Ans : (d)** Computer management refers to the operational units and their relationship that implement architectural specifications.

65. ALU is a part of a computer is.....  
 (a) Application (b) ROM  
 (c) RAM (d) Processor

**ARO Alld. HC, 14.12.2021, Shift-I  
 (SSC 10+2 CHSL 02.02.17, 1.15 pm)**

**Ans : (d)** A Central Processing Unit (CPU), also called a Central Processor, main processor or just processor is the electronic circuitry that executes instructions comprising a computers program. The CPU performs basic arithmetic, logic, controlling and input/output operations specified by the instruction in the program. ALU and CU together are usually referred to as a processor.

66. ALU is the part of  
 (a) CPU (b) CU  
 (c) Memory (d) None of these  
**(UPPCL TG2 Re-exam 16-10-2016)**

**Ans : (a)** An Arithmetic Logic Unit is the part of a Central Processing Unit that carries out arithmetic and logic operations on the operands in computer instruction words.

67. What is the full form of PGA graphics card?

- (a) Professional Graphics Array  
 (b) Portal Graphic Array  
 (c) Personal Graphics Array  
 (d) Public Giga Array

**WBPSIC Instructor-18.09.2021**

**Ans. (a) :** PGA stands for Professional Graphics Adapter or Array. PGA is a video standard developed by IBM that supports up to 640\*400 resolution.

68. Which of the following provides the slot to connect graphics cards?

- (a) RAM slot (b) AGP slot  
 (c) USB port (d) PCI slot

**HSSC wireman Instructor -17.12.2019, Shift-I**

**Ans. (b) :** An Accelerated Graphics Port (AGP) is a point to point channel that is used for high speed video output. This port is used to connect graphics cards to a computers motherboard.

69. What is the full form of ULSI?

- (a) Unique-Large-Scale Integration  
 (b) Ultra-Large-Scale Integration  
 (c) Ultra-Light-Scale Integration  
 (d) Unique-Light-Scale Integration

**KPSC Instructor Electronic-25.06.2014**

**Ans. (b) :** The full form of ULSI is Ultra - Large - Scale Integration. ULSI is the process of integrating or embedding millions of transistors on a single silicon semiconductor microchip.

70. The set of wires, connecting the microprocessor and the memory, through which the data flows is called:

- (a) memory (b) data wire  
 (c) database (d) data bus

**GSSSB Electronic Instructor-21.01.2014**

**Ans : (d)** Data bus is a group of conducting wires which carries data only. Data bus is bidirectional because data flow in both directions from microprocessor to memory or input/output devices and from memory or input/output devices to microprocessor.

**71. In multitasking situation, semaphore is used to solve \_\_\_\_\_ and \_\_\_\_\_.**

- (a) Process synchronization problem, task scheduling
- (b) CPU memory synchronization, resolution of I/O deadlocks.
- (c) Important section problem, process synchronization
- (d) Solution of booting problem critical section problem.

**UPPCL ARO-15.09.2018**

**Ans : (c)** CPU in multitasking editing situation memory synchronization (CPU memory synchronization) I/O used to resolve deadlocks.

**72. What is SATA and IDE?**

- (a) Palmtops
- (b) Motherboard Manufacturer
- (c) Type of hard disk drive
- (d) Type of flash drive

**KPSC Jr. Instructor- 09.07.2014**

**Ans : (c)** SATA stands for Serial Advanced Technology Attachment. SATA is a computer bus interface or standard hardware interface which connected hard drives, SSD and CD/DVD drives to the computer. IDE stands for Integrated Drive Electronics. It is an interface standard for connection of storage devices such as HDD, SSD and CD/DVD drive to the computer.

**73. Without \_\_\_\_\_ a system cannot operate.**

- (a) Motherboard
- (b) Keyboard
- (c) Speakers
- (d) Mouse

**RRB Kolkata LP-2009**

**Ans : (a)** Motherboard is the printed circuit board installed in most of the electronic plants such as laptop computers etc. A computer is made up of components installed in the microprocessor, main memory and motherboard. Along with this some devices are attached to control storage, video display and sound. Therefore the system can not be operated without it.

**74. In computing \_\_\_\_\_ is the term given to the texture and size of a motherboard.**

- (a) Form factor
- (b) CPU
- (c) ALU
- (d) Term factor

**DSSSB Craft Instructor (ESM) 06.10.2019**

**Ans : (a)** Form factor is a hardware design aspect that defines and prescribes the size, shape and other physical specific specification of components, particularly in electronics. A form factor may represent a board class of similarly sized components or it may prescribe a specific standard.

**75. Electronic Numerical Integrator and Computer (ENIAC) was first binary programmable computer based on \_\_\_\_.**

- (a) Blaise Pascal's concept
- (b) Von Neumann's architecture

(c) Charles Babbage's architecture

(d) Turing's machine concept

**KPSC Instructor Electronics Mech.20.07.2018**

**Ans. (b) :** Electronic Numerical Integrator and Computer (ENIAC) was the first binary programmable computer based on Von Neumann's architecture. ENIAC was designed by John Mauchly and J. Presper Eckert. ENIAC was completed in 1945 and first put to work for practical purpose on December 10, 1945.

**76. A microprocessor with 8-bit word length can process.....bits data simultaneously.**

- (a) 4
- (b) 8
- (c) 16
- (d) 32

**(RRB SSE (shift-II), 02.09.2015)**

**Ans : (b)** Word length is determined by the width of the internal data bus, registers, and ALU, among other factors. At a time, an 8-bit CPU can process 8 bit of data. Depending on the type of microcomputer, the word length might range from 4 to 64 bits.

**77. With respect to microprocessors, what is the full form of VLSI?**

- (a) Varying Light-Scale Integration
- (b) Very Light-Scale Integration
- (c) Very Large-Scale Integration
- (d) Varying Large-Scale Integration

**Punjab Wireman instructor-07.07.2013**

**Ans. (c) :** With respect to microprocessors, the full form of VLSI is Very Large Scale Integration. It is a type of Integrated circuit (IC). In which many transistors are engaged.

**78. From the following does the actual instruction execute during data processing?**

- (a) Arithmetic logic unit
- (b) Information unit
- (c) Storage unit
- (d) Output unit

**AHC ARO 2019 (Exam date 24.02.2019)**

**Ans. (a) :** It is a main component of the Central Processing Unit. It performs arithmetic and logic operation, it has the ability to perform all processes related such as addition, subtraction, including Boolean comparisons. The actual instruction is executed during data processing

**79. Which of the following basic operations is/are performed by a computer?**

- (a) Arithmetic operation
- (b) Logical operation
- (c) Storage and retrieval
- (d) All of these

**(UPPCL TG2 Re-exam 16-10-2016)**

**Ans : (d)** The basic operation performed by a computer are arithmetic operation, storage and retrieved and logical operation. Basically computer does five basic operations that are input, output, storing, process and controlling.

# Input & Output Devices

## Input Devices

The devices through which data is inputted, that is the devices from which words, data or instructions are put in memory, are called input devices.

**Following are some of the major input devices.**

### Mouse–

It is an input device, it is used in the computer to give instructions to the computer with the help of graphics. It was invented by Douglas Engelbart. It usually has two or three buttons. It has left button, right button and scroll wheel in the middle.

### Keyboard–

Keyboard is the most important device of any computer. You can enter text or numerical data in the computer from the keyboard itself. In a keyboard, all the letters are arranged in the same order as in a typewriter but it has more buttons than a typewriter.

### Trackball–

A trackball is a pointing device similar to a mouse, but it consists of a ball that is controlled by rotating the fingers to control the movement of the pointer. It neither needs a flat surface nor does it need to be moved around like a mouse.

### Scanner–

The scanner is used to convert the image written or printed on the paper into digital form and store it in the memory/disc of the computer and for editing. There are three types of scanners available:

1. Flat Bed Scanner
2. Hand Held Scanner
3. Drum Scanner

### Joystick–

Joystick is an input device. It is a pointing device. It moves in all directions. It is used in flight simulators, computer gaming systems. It consists of a stick, which rotates on a base and reports its angle and direction to the CPU.

### Light Pen–

Light pen is an electro-optical pointing input device. It uses a photosensitive detector to select objects on the display screen.

### Web Camera–

This is a digital camera, which is connected with the computer. Web camera are used for online videos conferencing and chatting.

### Digitizer–

Digitizer is an input device that converts analog information into digital form. Digitizer is also known as graphics tablet. It is specially used for designing images, animations and graphics. It consists of a pen and a pad.

### Microphone–

It is an input device that inputs sound, which is then stored in digital form.

### Magnetic Ink Character Recognition (MICR)–

Examines MICR information in the form of a matrix. It is used in banks to identify the code number and the check number printed on the check with a magnetic ink.

### Bar Code Reader (BCR)–

A bar code reader is an input device used to read bar codes (data in the form of light and dark lines) printed on a paper product.

### Optical Character Reader (OCR)–

OCR is an input device. Its use converts the image of hand written and typed or printed text into digital form.

### Optical Mark Reader (OMR)–

OMR is an input device which is used for recognize (select one among some options) symbols made by pen or pencil.

## Output Devices

An output device is a device through which the result of the work done by the CPU (processor) is obtained in the form of output such as monitor, printer etc.

### Monitor–

Monitor is an output device which displays the result of the input as output on the screen.

- (i) CRT Monitor (Cathode Ray Tube)
- (ii) Flat Panel Screen Monitor LCD (Liquid Crystal Display), LED (Light Emitting Diode) & TFT (Thin Film Transistor)

### Printer–

Printer is an output device, it uses the results received from the computer as a output by printing on a paper.

- (i) **Impact Printer**– This printer paper, ribbon and character prints data together on all three.
- (ii) **Non-Impact Printer**– This printer is a noise free printer, it does not hit paper, but leaves the splash of the ink on paper. They use electrostatic chemicals.

### Plotter–

This is an output device, which is used in large drawing or pictures such as construction plant Auto CAD. To make drawing, the pen, pencil, marker etc. Is the use of writing tool. It provides output such as graphs and sketches.

### Speakers–

This is an output device that is connected to the computer and tells the sound as the output through the speaker.

### Projector–

A projector is an output device that enables the user to project output into a large surface such as a large screen or a wall. It is connected to the computer and uses light and lens to show text, pictures, videos. It is used for presentation.

### Speech Synthesizer–

Speech Synthesizer is an output device, by which text message is converted into voice message and received as output.

## Important Questions Asked in Previous Years Examinations

1. An 'Optical Character Reader' is an example of:

- (a) control unit
- (b) input unit
- (c) arithmetic and logic unit
- (d) output unit

**UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans. (b) :** OCR stands for Optical Character Recognition. This is input device, OCR is the process that converts an image of text into a machine-readable text format. For example, if you seen a form or a receipt. Your computer saves the scan as an image file. You can't use a text editor to edit, search or count the words in the image file. However, you can use OCR to convert the image into a text document with its contents stored as text data.

2. A device that is connected to a computer but it is NOT part of the core computer architecture is known as

- (a) Processing Device
- (b) Memory Device
- (c) Peripheral Device
- (d) On-board Device

**RRB Gorakhpur L.P.-2008**

**Ans: (c)** Peripheral device is an auxiliary device used to put information into and get information out of a computer. The term peripheral device refers to all hardware components that are attached to a computer and are controlled by the computer system, but they are not the core components of the computer such as the CPU or power supply unit.

3. Which of the following input devices is used as a personal computer peripheral or general control device consisting of a hand - held stick that rotates around a loose and moves the screen cursor around rotates?

- (a) Microphone
- (b) MICR
- (c) Biometric
- (d) Joystick

**DSSSB Craft Instructor (ESM) 06.10.2019**

**Ans. (d) :** Joystick is an input device which works like a trackball. The ball has a stick attached to it that rotates on a base and reports its angle or direction to the CPU. It is used in video games, simulator training etc.

4. Which of the following types of mouse uses laser rays for cursor movement on the computer screen?

- (a) Optical
- (b) Electrical
- (c) Gyroscopic
- (d) Mechanical

**MP Electrician Instructor 07.11.2016, Morning**

**Ans. (a) :** Optical mouse uses a laser to detect the movement of the mouse. An optical mouse uses LEDs, optical sensor, and digital signal processing in place of traditional mouse ball and electromechanical transducers.

5. Which of the following mouse actions is commonly used to start a program or open a file?

- (a) Right click
- (b) Double Click
- (c) Left click
- (d) Drag and drop

**WBPSIC Instructor-18.09.2021**

**Ans. (b) :** Double click on mouse action is usually used to start a program or open a file.

6. Select the odd option.

- (a) Joystick
- (b) Printer
- (c) Keyboard
- (d) Mouse

**HSSC wireman Instructor -17.12.2019, Shift-I**

**Ans. (b) :** Input devices are hardware components or peripherals used to provide data and commands to a computer or electronic device. They allow users to input information, interact with software, and control the device's functions. Mouse, Keyboard and Joystick are input devices, while printer is output device.

7. All of the following are examples of various input devices, EXCEPT:

- (a) Speakers
- (b) Keyboard
- (c) Mouse
- (d) Optical Scanner

**HSSC wireman Instructor -17.12.2019, Shift-II**

**RRB Kolkata LP-2012**

**Ans. (a) :** Input devices are hardware components that allow users to enter data or commands into a computer. Some common input devices:-

- keyboard
- Touch Screen
- Joystick
- Mouse
- Scanner
- Barcode Reader

An output device is a hardware component that displays or provides information from a computer common examples include monitor, printer, speaker and headphone.

8. The two running programs coordinates to the I/O stream is called as \_\_\_\_.

- (a) Cache
- (b) Pipe
- (c) Buffer
- (d) Thread

**RRB Kolkata LP-2009**

**Ans : (b)** The two running programs coordinates to the I/O stream is called as pipe. Pipe is a method of which information is passed from one program process to another program process.

9. Which of the following statements regarding input devices of a computer is incorrect?

- (a) They convert input data into digital form.
- (b) Data entered through the keyboard are directly transferred to the Memory Data Register (MDR).
- (c) Mouse is an input device.
- (d) They are used to send data to the computer.

**KPSC Jr. Instructor 22.11.2018w**

**Ans. (b) :** An input device is a computer device that allows computer users to enter data into the system and send instructions to the system to perform tasks. Following are the input devices in a computer – Braille reader, GPS device, optical mark reader etc. Hence, option a, c, d is related to computer input device and option (b) is not correct.

10. Which of the following is an input device?

- (a) Optical character reader (b) Projector  
(c) Headphones (d) Inkjet printer

(UPPCL TG-2 26.06.2016)

RRB Kolkata LP-2006

**Ans. (a) :** The main input and output devices of the computer are as follow:

**Input Devices**— Keyboard, Mouse, Trackball, Barcode reader, Optical Character Reader, Joystick, Scanner, Webcam, Touchpad etc.

**Output Devices**— Monitor, Printer, Projector, Plotter, LCD, Projection Panel, Headphone, Speaker etc.

11. Which device sends information to a computer system for processing?

- (a) Monitor (b) Printing  
(c) Input (d) Output

UPPCL-JE 31-01-2019 (Batch -01)

RRB Ajmer-2004

**Ans. (c):** Input device sends data to computer system which is processed by processor and after processing, result is obtained with the help of output device.

12. The device that converts a physical image into a digital one is called:

- (a) Scanner (b) Image Converter  
(c) Printer (d) Recorder

RRB Gorakhpur L.P.-2008

**Ans. (a) :** Scanner is an input device through which we scan the hard copy data and convert that into the digital form.

13. Which of the following is not an output device?

- (a) Printer (b) Plotter  
(c) Scanner (d) Speaker

Punjab Wireman instructor-07.07.2013

**Ans : (c)** Devices that produce or display results after processing, are called output devices such as printers, plotters and speakers while scanner is an input device that is used to convert text or images into digital form.

14. Which of the following is not a part of input stage?

- (a) Data Capture  
(b) Performance of Instructions  
(c) Data Collection  
(d) Encoding

UPPCL Technical Grade-II-09.08.2015

**Ans. (b) :** The process of input takes place in several stages like data capture, data encoding, data collection but display of instructions is not a part of input stage.

15. The Insert key on the keyboard of a computer system is used to toggle between the \_\_\_\_\_ and \_\_\_\_\_ modes during data entry.

- (a) insert, overwrite  
(b) backspace, overwrite  
(c) delete, insert  
(d) delete, overwrite

Punjab Wireman instructor-07.07.2013

**Ans. (a) :** The Insert key is mainly used to switch between the two modes of entering text and to toggle between the Insert and Overwrite modes during data entry.

16. The default layout of most keyboards is called -

- (a) ALPHABET (b) QWERTY  
(c) ASCII (d) IEEE

KPSC Instructor Electronic-25.06.2018

**Ans. (b) :** The default layout of most keyboards is QWERTY. It was first designed by shells and Glidden typewriter in 1868.

17. A device that allows you to take to a computer (such as a mouse or keyboard) is a/an \_\_\_\_\_ device.

- (a) Storage (b) Process  
(c) Input (d) Output

GSSSB Electronic Instructor-21.01.2014

**Ans. (c) :** Input devices like keyboard, Mouse, Touchpad etc. are used to give instructions to the computer.

18. Which of the following is an Input device?

- (a) Joystick (b) Plotter  
(c) Coder (d) Printer

UKSSSC Tech. Electrical Instructor-21.11.20178

**Ans. (a) :** Joystick is an input device which works like a trackball. A stick is attached to the ball through, which it is rotated. It is used in video games, simulator training etc.

19. Which among the following input devices consists of a stick which pivots on a base and reports its angle or direction of the CPU?

- (a) Microphone (b) Light pen  
(c) Keyboard (d) Joystick

UPPCL JE 2019 (Batch-02)

**Ans. (d):** Joystick is an input device consists of a stick which pivots on a base and reports its angle or direction of the CPU.

20. Light pen and Joystick are \_\_\_\_\_.

- (a) storage devices (b) input devices  
(c) algorithms (d) output devices

HSSC wireman Instructor -17.12.2019, Shift-I

**Ans. (b):** Devices through which we give instructions to the computer are called as input devices. For example- Light pen, Joystick, Mouse, Keyboard etc.

21. Which of the given options is odd?

- (a) Trackball (b) Keyboard  
(c) Antivirus (d) Mouse

UPPCL TG-II 25-01-2019 (Morning)

**Ans : (c)** Trackball, Keyboard and Mouse all these are hardware devices whereas antivirus is software.

22. A mouse, trackball and joystick are examples of

- (a) pointing devices  
(b) pen input devices  
(c) data collection devices  
(d) multimedia devices

(UPPCL TG-2 26.06.2016)

UPPCL-JE 31-01-2019 (Batch -01)

**Ans:** (a) Mouse is a small hand held pointing device that basically control the two-dimensional movement of the cursor of the display screen pointing devices are the input devices that are generally used for moving the cursor to a particular location to point an object on the screen.

Some of the commonly used pointing devices are: Mouse, trackball, Light pen, Joystick, Touch screen. A pointing device is a human interface device that allows a user to input spatial data to a computer.

**23. Touchpad is a good alternative to the mouse, it is an example of .....**

- (a) Software device (b) Printing device  
(c) Pointing device (d) Temporary device

**(UPPCL TG2 11-11-2016)**

**Ans :** (c) Touchpad is an input device, with the help of which we give instructions to our system just by touching the screen.

**24. Which of the following statements is wrong?**

- (i) The cordless mouse is not physically connected to the computer.  
(ii) The cordless mouse relies on infrared or radio waves to communicate with the computer.  
(a) Only (ii) (b) Both (i) and (ii)  
(c) Neither (i) nor (ii) (d) Only (i)

**UPPCL (TG-II) 24-01-2019 (EVENING)**

**Ans :** (c) Cordless mouse is an input device used in computer. It is very modern mouse which does not require cable to connect. In this, infrared or radio waves are needed for transmission.

**25. The technology of scanning that recognized handwritten text and printed text is**

- (a) MICR (b) OMR  
(c) OCR (d) BCR

**UPPCL-JE 31-01-2019 (Batch -01)**

**Ans:** (c) OCR (Optical Character Recognition) is a technology of scanning that recognizes handwritten text and printed text.

**26. The technology of scanning that reads the check boxes contained inside a predefined space is**

- (a) BCR (b) OCR  
(c) OMR (d) MICR

**UPPCL JE 2019 (Batch-02)**

**Ans:** (c) Optical Mark Recognition (OMR) is a method of entering data into a computer system, which reads the check box in the predefined position.

**27. For reading a candidate's choice in multiple choice questions which of the following input devices is generally used?**

- (a) Magnetic Ink Card Reader  
(b) Optical Character Reader  
(c) Optical Mark Reader  
(d) Bar Code Reader

**UPPCL JE 2019 (Batch-01)**

**Ans:** (c) Optical Mark Reader is an input device, which is used to read a candidate's choice in multiple choice questions.

**28. Which of the following options of mouse properties is used to swap the functions of the right and left mouse buttons?**

- (a) Pointer Options  
(b) ClickLock  
(c) Double-click speed  
(d) Button configuration

**KPSC Jr. Instructor 22.11.2018w**

**Ans. (d) :** Button configuration option of mouse properties is used to swap the functions of the right and left mouse buttons, whereas pointer options change the pointer shape, ClickLock enables you to highlight or drag items without holding down the mouse button.

**29. Which of the following statement(s) is/are true about changing mouse properties in Windows 10?**

- (i) The function of the left button of the mouse cannot be changed.  
(ii) The size of the mouse pointer can be changed.  
(a) Only (ii) (b) Neither (i) nor (ii)  
(c) Both (i) and (ii) (d) Only (i)

**HSSC wireman Instructor -17.12.2019, Shift-II**

**Ans. (a) :** To change the mouse properties in Windows 10, the function of the left mouse button can be changed and the size of the mouse pointer can also be changed, hence the given statement (ii) is true.

**30. Which of the following statement is/are correct about changing mouse properties in windows 10.**

- (i) The cursor speed of the mouse cannot be changed.  
(ii) It is possible to change the function of the left mouse button to open the context menu.  
(a) Both (i) and (ii) (b) Only (i)  
(c) Only (ii) (d) Neither (i) Nor (ii)

**UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans. (c) :** Statement (i) is incorrect with respect to mouse properties in windows 10 because in this we can change the speed of the mouse cursor as per our requirement. Statement (ii) is true, can change the function of the left mouse button to open the context menu.

**31. The Click Lock property of the mouse -**

- (a) None of these  
(b) Allows to prevent items from getting clicked  
(c) Allows to set password for items  
(d) Allows to drag without holding mouse button

**MP Electrician Instructor 07.11.2016, Morning  
WBPS Instructor-18.09.2021**

**Ans :** (d) The 'ClickLock' property of the mouse, enables a user to lock down the primary mouse button after a single click. This allows you to highlight or drag without holding down the primary mouse button.

32. Microphone is a/an \_\_\_\_\_ device, which receives sound as input.
- Signal Digitizing
  - Audio signal collection
  - Audio signal processing
  - Input

**RRB Gorakhpur L.P.-2008**

**Ans : (d)** A microphone is an input device. It converts sound waves into electrical signals that can be processed and recorded by a computer or other electronic devices.

33. Which input device converts analog information into digital form and can be used for doing fine works of drawing and image manipulation?
- Microphone
  - Bar Code Reader
  - Digitizer
  - Graphic Plotter

**UPPCL JE 2019 (Batch-02)**

**Ans: (c)** A digitizer is an input device or technology used to convert analog information, such as drawings, hand written notes, images into digital format that a computer can understand and manipulate. It is commonly used in graphic design, art and industries where precise input or capturing of analog data is needed.

34. Which of the following is not an input device?

- Track Ball
- Plotter
- Light Pen
- Magnetic Scanner

**DSSSB Craft Instructor (ESM) 06.10.2019**

**Ans : (b)** Track ball, Light pen and magnetic scanner, all are input devices, while plotter is output device.

35. A keyboard is used

- to enter text and numbers and send commands to the computer
- to create new keys to use with your computer
- to open the computer
- for all of these

**(UPPCL TG2 Re-exam 16-10-2016)**

**Ans : (a)** Keyboard is an input device. Keyboard is used to enter data in the computer. Shortcut Keys are used to give commands to the computer. The main button of the Keyboard are as bellow-

- Numeric buttons (A-Z, 0-9)
- Function button
- Cursor button
- Special button

36. Which of the following is a toggle key on a keyboard?

- Alt
- Shift
- Scroll lock
- Ctrl

**UPPCL Technical Grade-II (Shift- II) 27.03.2021**

**Ans. (c) :** Toggle 'Key' is used to turn a function off or on or to switch between two functions. There are three toggle keys in the keyboard.

- Num Lock
- Caps Lock
- Scroll Lock

Toggle key can also be turned on/off as per requirement.

37. Parallel ports usually are not used to connect \_\_\_\_\_.

- Modem
- Scanner
- Printer
- CD Writer

**UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans. (a) :** Printers, Scanners, CD writers, etc. are usually connected to parallel ports while modems are connected to serial ports.

38. A combination of the keyboard and the visual display unit is called a \_\_\_\_\_.

- mouse
- port
- terminal
- cable

**GSSSB Supervisor Electronic Instructor 18.01.2014**

**KPSC Instructor Electronics Mech.20.07.2018**

**Ans : (c)** A computer terminal is an electronic or electromechanical hardware device used to display or print data in a computer, a computer terminal including a keyboard and VDU are attached to each other.

39. QWERTY keyboard design was originally intended to

- Make typing harder and inefficient
- Improve the typing accuracy
- Make typing more efficient
- Improve the typing speed

**UPPCL JE 2019 (Batch-01)**

**Ans: (a)** QWERTY was originally created to make typing difficult and inefficient. It was designed in 1868 by type writer inventor Christopher Shields.

40. QWERTY refers to:

- Arrangement of hardware parts of a standard computer or mobile devices
- Arrangement of keys on a standard English computer keyboard or typewriter
- Arrangement of only function keys on a standard English computer keyboard
- Arrangement of only numeric keys on a standard English computer keyboard

**UPPCL JE 31-01-2019 (Batch-02)**

**Ans: (b)** QWERTY refers to arrangement of keys on a standard English computer keyboard or typewriter.

41. The wildcard character for matching any number of characters is

- Hyphen Sign
- Ampersand Sign
- Asterisk Sign
- Dollar Sign

**WBPS Instructor-18.09.2021**

**Ans : (c)** Asterisk is a little star symbol which matches letters. It is located on numeric key 8 of keyboard which matches any number of characters.

42. Shift key and Print Screen key in a computer keyboard are known as

- Special purpose keys
- Standard keys
- Navigation keys
- Function keys

**UPPCL JE 2019 (Batch-01)**

**Ans: (a)** In computer keyboard, shift and print screen keys are called special purpose keys.

43. Which key deletes the character to the left of the cursor?

- (a) End (b) Backspace  
(c) Home (d) Delete

(UPPCL TG-2 26.06.2016)

(UPPCL TG-2 Re-exam 16-10-2016)

**Ans : (b)**

Backspace - Deletes the character to the left of the cursor.  
Delete - Deletes the character to the right of the cursor.  
Home - The home key brings cursor to the beginning of the line.  
End - The end key brings cursor to the end of the line

44. The arrow keys, Home Key, End Key, Page Up and Page Down keys in a computer keyboard are classified as

- (a) Function keys (b) Special purpose keys  
(c) Standard keys (d) Navigation keys

UPPCL JE 2019 (Batch-02)

**Ans: (d)** In computer keyboard, the arrow keys, home key, end key, page up and page down keys are kept in the category of navigation keys.

45. Ctrl, Shift and Alt are called

- (a) Adjustment keys (b) Function keys  
(c) Modifier keys (d) Alphanumeric keys

(UPPCL TG-2 26.06.2016)

**Ans : (c)**

Function key : F<sub>1</sub>.....F<sub>12</sub>  
Alphanumeric key : A.....Z, 0.....9  
Modifier key : Ctrl, Alt, Shift  
Adjustment key : Function key, Arrow key and as such keys by which brightness etc, are adjusted.

46. Which of the following keys work in a toggle mode in a computer keyboard?

- (a) Shift (b) Caps lock  
(c) Enter (d) Ctrl

UPPCL TG-II 27-03-2021 (Shift-II)

**Ans. (b) :** The most commonly used toggle key is the caps lock key which alternates letters between upper case and lower case.

47. A computer keyboard generally has \_\_\_\_\_ function keys.

- (a) 11 (b) 10  
(c) 16 (d) 12

UPPCL (TG-II) 24-01-2019 (Morning)

**Ans : (d)** The function keys or F keys are line up at the top of the keyboard and label F<sub>1</sub> to F<sub>12</sub>. These keys act as shortcuts performing certain functions such as saving a file, printing data or refreshing a page. The number of function 'keys' is 12.

48. Which of the following is not an option in the buttons tab at the bottom of the mouse properties window of the control panel in windows 10 OS?

- (a) Clicklock  
(b) Button configuration  
(c) Single Click speed  
(d) Double-click speed

HSSC wireman Instructor -17.12.2019, Shift-II

**Ans. (c) :** In windows 10 OS clicklock, buttons configuration and double click speed are found in the buttons tab under the mouse properties window of the control panel whereas single click speed is not an option available.

49. The blinking symbol on the computer screen is called

- (a) Mouse (b) hand  
(c) cursor (d) logo

(UPPCL TG2 Re-exam 16-10-2016)

**Ans : (c)** The blinking symbol on the computer screen is called the cursor, it shows the current position, where word will typed.

50. Which of the following is used to read hand written or printed text to make a digital image that is stored in memory?

- (a) Printer (b) Laser beam  
(c) Scanner (d) Touchpad

(UPPCL TG-2 26.06.2016)

**Ans : (c)** A scanner is a device that alternatively scans an image, printed text, hand writing or an object and converts them into a digital image and stores it in memory.

51. Which of the following is a direct input device wherein data is inputted into the computer directly by a machine or device?

- (a) Touch screen (b) Barcode scanner  
(c) Microphone (d) Webcam

RRB Kolkata LP-2009

MP Electrician Instructor 07.11.2016, Morning

**Ans. (b) :** A barcode reader or barcode scanner is an optical scanner that can read printed barcodes, decode the data contained in the barcode to a computer.

52. Which of the following devices is used to print very large drawings or complex line art by mechanical movement of a pen or other instrument across the surface of a piece of paper?

- (a) Line Printer (b) Inkjet Printer  
(c) Scanner (d) Plotter

UPSSSC JE 2018 ( Exam date 16.04.2022)

**Ans. (d) :** Plotter is used to print very large drawings or complex line art by mechanical movement of a pen or other instrument across the surface of a piece of paper this plotters pen work on X axis and paper wrapped on the drum is moved horizontally along the X axis.



53. Which of the following scanners looks similar to a photocopier machine and it consists of a box containing a glass plate on its top and a lid that covers the glass plate?
- (a) Laser (b) Flatbed  
(c) Inkjet (d) Dot matrix

UPPCL JE 31-01-2019 (Batch-02)

**Ans: (b)** Flatbed scanner looks like to a photocopier machine and it consists of a box containing a glass plate on its top and a lid that covers the glass plate the lid of flatbed scanners is adjustable that makes the scanning of different object such as documents and leaflets possible.

54. MICR Scanner — is an example of.
- (a) Control Unit (b) Input Unit  
(c) Output Unit (d) Secondary Memory

KPSC Jr. Instructor 22.11.2018w

Punjab Wireman instructor-07.07.2013

**Ans. (b) :** Magnetic Ink Character Recognition (MICR) is an input device. It is commonly used in banks as a large number of cheques are processed every day. The bank's code number are cheque and number printed on the cheque with a special type of ink which particles are magnetic material which are machine readable.

55. Which of the following is not an output device ?
- (a) Plotter  
(b) Speech synthesizer  
(c) MICR  
(d) Smart and intelligent terminal

HSSC wireman Instructor -17.12.2019, Shift-II

**Ans. (c) :** Plotter, Speech synthesizer and Smart intelligent terminal are output devices, whereas Magnetic Ink Character Recognition is an input device.

56. Which of the following types of scanner reads characters, marks and codes with the help of a light source and they are used for objective type answer papers in competitive examinations?
- (a) Optical Character Recognition  
(b) Optical Mark Recognition  
(c) Optical Barcode Recognition  
(d) Magnetic Ink Character Recognition

UPSSSC JE 2018 ( Exam date 16.04.2022)

(UPPCL TG-2 26.06.2016)

**Ans. (b) :** Optical Mark Recognition Scanner reads alphabets, numbers and codes with the help of light source and is used for objective type answer sheets in competitive examination.

57. \_\_\_\_\_ is a technology used by banking or other finance industries for faster processing of cheques.
- (a) OCR (b) OMR  
(c) MICR (d) ISBN

(UPPCL TG-2 26.06.2016)

**Ans : (c)** MICR (Magnetic Ink Character Recognition) is a technology used by banking or other finance industries for faster processing of cheques.

58. The panels used in ATM machines, safe Checking Kiosks at Airports etc are examples of \_\_\_\_\_
- (a) Laser pens (b) Analog display units  
(c) Touch panels (d) Projectors

UPPCL Technical Grade-II (Shift-II) 20.03.2021

**Ans : (c)** Touch panels is a pointing device that enables user to enter data such as text, picture, image, directly touching the screen and interact with computer system. It is used in a variety of applications such as cell phones, PDA's ATMs and games.

59. Match the following:

- |                         |                     |
|-------------------------|---------------------|
| 1. Software             | A. Light pen        |
| 2. Input device         | B. Speaker          |
| 3. Output device        | C. Secondary memory |
| 4. SSD                  | D. Set of program   |
| (a) 1- D, 2-A, 3-B, 4-C |                     |
| (b) 1-D, 2-C, 3-B, 4-A  |                     |
| (c) 1-A, 2-D, 3-B, 4-C  |                     |
| (d) 1-D, 2-A, 3-C, 4-B  |                     |

GSSSB Electronic Instructor-21.01.2014

**Ans. : (a)** Matched options are as follows:

1.	Software	D	Set of program
2.	Input device	A	Light pen
3.	Output device	B	Speaker
4.	SSD	C	Secondary memory

S.N.	Main Output Device
1.	Monitor
2.	Printer
3.	Speaker
4.	Plotter
5.	Screen Image Projector

60. Which of the following statements is incorrect with reference to the visual display unit (VDU) of a computer system?

- (a) VDU creates images by arranging tiny dots known as pixels, in a rectangular pattern  
(b) VDU is the primary output device of a computer  
(c) VDU has differences between cathode-ray tube and flat-panel display  
(d) The size of the pixel determines the clarity of the image displayed on the VDU

HSSC wireman Instructor -17.12.2019, Shift-II

**Ans. (d) :** The size of the pixel determines the clarity of the image displayed on the VDU.

61. Which of the following statements is correct about the output devices of a computer?

- (a) It is used to send data to the computer  
(b) Mouse is an output device  
(c) It converts digital data into a form understandable by humans  
(d) It converts data into digital form

Punjab Wireman instructor-07.07.2013

**Ans. (c) :** Output devices are hardware components of a computer system that displays or presents information to the user or another machine. They convert digital data generated by computer into human - readable or machine readable form. Ex- Monitors, Printers, Speakers, Projectors, Headphones etc. Mouse is an input device. So, option (c) is correct.

**62. Which of the following statements is incorrect regarding computer output devices?**

- (a) It converts digital data into a form that is human understanding
- (b) It converts data into digital form
- (c) It receives data from the computer system for display
- (d) Printer is an output device

**KPSC Instructor Electronic-25.06.2014**

**GSSSB Electronic Instructor-21.01.2014**

**UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans. (b) :** Output device is a component of computer system which displays data or instructions as result after processing. Example - Monitor, Printer, Speaker, Plotter video card. It converts digital data into a form that is human understandable.

**63. Which of the following is NOT a type of printer?**

- (a) Drum
- (b) Daisy wheel
- (c) Laser
- (d) Switch

**UPPCL Technical Grade-II (Shift-I) 19.03.2021**

**Ans. (d) :** Drum, daisy wheel and laser printers are types of printers by which the result is obtained from computer in the form of hardcopy whereas switch is a network device that is used to segment the networks in to different subnet works called subnets or LAN segments.

**64. Which of the following printers prints characters by striking a pin on an ink-ribbon?**

- (a) Dot matrix
- (b) LED
- (c) Laser
- (d) Inkjet

**RRB Kolkata LP-2009**

**Ans. (a) :** Dot matrix printer is an impact printer which print character using a fixed number of pin or wires.

**65. A/An \_\_\_\_\_ is an output device that produces high quality graphics using an ink pen.**

- (a) Dot Matrix Printer
- (b) Plotter
- (c) VDU
- (d) Inkjet Printer

**UPPCL (TG-II) 24-01-2019 (EVENING)**

**Ans : (b)** Plotter is an output device that is used to print high quality graphics and image. It uses one or more pens to produce a high quality drawing.

**66. Which output device draws pictures on a paper based on the commands given from a computer using a pen?**

- (a) Scanner
- (b) Monitor
- (c) Inkjet printer
- (d) Drum plotter

**UPPCL-JE 31-01-2019 (Batch -01)**

**Ans: (d)** Drum plotter is a graphic output device that draws lines or image with a continuously moving pen on a sheet of paper rolled around a rotating drum that moves the paper in a direction perpendicular to the

motion of the pen. The plotters are divided into the following four categories on the basis of their working Drum plotter, Flatbed, Inkjet and Electrostatic etc.

**67. There are two types of plotters, whose name are—**

- (a) spiral and flatbed
- (b) flatbed and cone
- (c) drum and flatbed
- (d) drum and spiral

**DSSSB Craft Instructor (ESM) 06.10.2019**

**MP Electrician Instructor 07.11.2016, Morning**

**Ans: (c)** Plotter is a computer printer which is used to vector graphics. Mainly three types of plotters are:-

(i) Drum (ii) Flatbed (iii) Inkjet.

**68. Which of the following is NOT a type of monitor?**

- (a) TFT Monitor
- (b) High-Definition Multimedia Interface (HDMI)
- (c) LCD Monitor
- (d) CRT Monitor

**WBPSB Instructor-18.09.2021**

**Ans : (b)** TFT, LCD and CRT are types of monitor whereas High Definition Multimedia Interface (HDMI) is the most frequently used HD signal for transferring both high definition audio and video over signal cable.

**69. Which of the following monitors is made of thick glass vacuum tube, a result of which is a smoothed screen with a coating of phosphorus on the inner surface?**

- (a) Plasma
- (b) LED
- (c) CRT
- (d) LCD

**HSSC wireman Instructor -17.12.2019, Shift-I**

**Ans. (c) :** CRT is short form of Cathode Ray Tube. It is a traditional monitor made of thick glass vacuum tube. There is a coding of phosphorus on the inner surface of every CRT, which makes the monitor screen smooth.

**70. Computer Display is also called**

- (a) Multimedia Monitor Terminals (MMT)
- (b) Cathode Ray Tube (CRT)
- (c) Video Display Terminal (VDT)
- (d) Video Distribution Units (VDU)

**UPPCL JE 31-01-2019 (Batch-02)**

**Ans: (c)** A computer display or monitor is an electronic output device that is also known as Video Display Terminal (VDT) or a Video Display Unit (VDU). It is used to display image, text, Video and graphics information.

**71. Computer monitor is also called VDU. What does VDU mean?**

- (a) Vertical Dialysis Unit
- (b) Video Dialysis Unit
- (c) Vertical Display Unit
- (d) Video Display Unit

**UPPCL (TG-II) 24-01-2019 (EVENING)**

**Ans : (d)** VDU means Video Display Unit, it is a computer display or monitor that is used to display image, text, video and graphics information.

72. Computer monitor is also known as-

- (a) Video Display Unit
- (b) Vertical Dialysis Unit
- (c) Vertical Display Unit
- (d) Video Dialysis Unit

**KPSC Jr. Instructor 22.11.2018w**

**Ans. (a) :** VDU stands for "Visual Display Unit" or "Video Display Unit", it is also called monitor or screen. VDU displays images generated by a computer or other device.

73. An image is composed of

- (a) Pels
- (b) Pexels
- (c) Dots
- (d) All of these

**KPSC Instructor Electronic-25.06.2014**

**Ans. (d) :** An image is composed of pels, pixel and dots.

- Pixel is the smallest element of an image. It is also known as PELs.
- Dots are light receptor called photodiode.  
1 Dot = 1 Pixel

74. Which of the given options best describes the truthfulness of the following statements?

- (i) In 1-bit images, each pixel is stored as a single byte.
  - (ii) A 1-bit image with resolution 640×480 needs a storage space of 640 + 480 bits.
- (a) (i) - False, (ii) - True
  - (b) (i) - True, (ii) - False
  - (c) (i) - True, (ii) - True
  - (d) (i) - False, (ii) - False

**GSSSB Electronic Instructor-21.01.2014**

**Ans. (d) :** In 1-bit images, each pixel is stored as a single bit i.e 0 or 1.

For 1 bit images with 640×480 resolution

$$\frac{640 \times 480}{8 \times 1024} = 37.5 \text{ KB of space will be required.}$$

Hence the above statement is false.

75. The default screen on the monitor when no other application is running is called

- (a) Login Screen
- (b) Interface
- (c) Desktop
- (d) Screensaver

**UKSSSC Tech. Electrical Instructor-21.11.2017**

**Ans. (c) :** When no other application is running on the monitor, it is called the home screen of the computer i.e. desktop.

The login screen is the screen of the web pages accessed by the user on which the user is signed in. In computing, an interface is the extent to which two parts of a computer system are in contact. User interface works between the computers and the human.

A screen saver is an animated picture that is automatically activated on a personal computer when no user activity is felt for a specific amount of time.

76. Computer output microfilm technology is used to record computer \_\_\_\_\_ film images.

- (a) Macroscopic
- (b) Bioscope
- (c) Microscopic
- (d) Laparoscopic

**GSSSB Supervisor Electronic Instructor 18.01.2014**

**Ans : (c)** Computer output microfilm technology is used to record computer microscopic film images.

77. Unit(s) used for measuring speed of printer is/are?

- A. CPM
  - B. RPM
  - C. PPM
- (a) Only A
  - (b) Only B
  - (c) Only C
  - (d) Both A & C

**(UPPCL TG2 11-11-2016)**

**Ans : (d)** The unit for measuring the speed of a printer is CPM and PPM, whereas RPM is the unit to measure the speed of a machine.

78. Printing speed of laser printers is measured in

- (a) Lines per page
- (b) Characters per hour
- (c) Characters per line
- (d) Pages per minute

**UPPCL JE 2019 (Batch-02)**

**Ans: (d)** The unit of measurement for the printing speed of a laser printer is Pages Per Minutes (PPM).

79. Which of the following options best describes the truth of the given statements?

- (i) Inkjet printers print by spraying droplets of ink on the paper.
  - (ii) Laser printer fuses ink onto paper with the help of heat.
- (a) (i) true (ii) true
  - (b) (i) true (ii) false
  - (c) (i) false (ii) false
  - (d) (i) false (ii) true

**KPSC Instructor Electronics Mech.20.07.2018**

**Ans. (a) :** Both of the above options are correct. Ink jet printers spray liquid ink onto paper with small, precise droplets. Ink housed in replaceable or refillable cartridges most of which include a print head consisting of thousands of tiny nozzles through which ink is sprayed and which are arranged together.

Laser printer is an electrostatic digital printing process. It produces high quality text and graphics by repeatedly passing a laser beam over a negative charged cylinder called a "drum" to define the differently charged image.

80. Which of the following devices is capable of producing large-format drawings like graphs and construction drawings?

- (a) Laser printer
- (b) Flat-bed printer
- (c) Inkjet printer
- (d) Dot matrix printer

**GSSSB Electronic Instructor-22.01.2017**

**Ans : (b)** A flat-bed printer is a device capable of producing large-format drawings such as graphs and construction drawings. It usually prints digital images on plastic or paperboard.

81. How does a laser printers print?

- (a) Line by Line
- (b) Pixel by Pixel
- (c) Page by Page
- (d) Character by Character

**UPPCL-JE 31-01-2019 (Batch -01)**

**Ans:** (c) Laser printer is a non-impact printer which prints page by page. It produces images with the help of a laser beam.

**82. A \_\_\_\_\_ printer creates an image directly on paper by spraying ink through up to 64 small nozzles.**

- (a) Daisy Wheels (b) Laser  
(c) Inkjet (d) Dot Matrix

**KPSC Jr. Instructor- 09.07.2014**

**Ans :** (c) An inkjet printer creates an image directly on paper by spraying ink through up to 64 small nozzles. Inkjet printer offers a resolution of 300 dots per inch and produces high quality printouts such as graphics and image.

**83. Select an incompatible device from the following options.**

- (a) Scanner (b) Keyboard  
(c) Webcam (d) Printer

**RRB Bengaluru LP-2004**

**Ans :** (d) Among the given options scanner, keyboard and webcam are input devices whereas printer is an output device.

**84. Which one of the given options is different from the rest?**

- (a) Laser Printer (b) Dot matrix printer  
(c) Thermal printer (d) Inkjet printer

**UPPCL TG-II 25-01-2019 (Evening)**

**Ans :** (b) Printer is an output device, which prints the information received from the computer on paper. Printers are divided into two parts on the basis of printing, impact printers and non-impact printers. Here, dot matrix paper is an impact printer while the rest are non-impact printer.

**85. Which of the following printers can use continuous paper instead of single sheet?**

- (a) Inkjet printer  
(b) Dot matrix printer  
(c) Both Inkjet and Laser printer  
(d) Laser printer

**UPPCL TG-II 25-01-2019 (Evening)**

**Ans :** (b) The print head of a dot matrix printer consists of a matrix of many pins and each pin prints a dot by touching the ribbon and paper, in this printer a continuous roll of paper takes place without applying a single sheet and this type of continuous printers are installed in bank or ticket machine or ATM etc.

**86. \_\_\_\_\_ printers create text and graphics on paper without actually striking the paper.**

- (a) Dot matrix (b) Daisy wheel  
(c) Impact (d) Non-impact

**UPPCL (TG-II) 24-01-2019 (EVENING)**

**Ans :** (d) Non-impact printer is a type of printer it create text and graphics on paper without actually striking the paper.

**87. Laser printers use \_\_\_\_\_**

- (a) No toner, as they use heat sensitive paper  
(b) Powdered toner in a cartridge  
(c) Ribbon toner  
(d) Liquid toner

**MP Electrician Instructor 07.11.2016, Morning**

**Ans :** (b) The laser printer was invented in 1969 by Gary Starkweather. Laser printers use powdered toner in the Cartridge.

**88. Which type of printers uses light to produce the dots needed to form the characters to be printed on a page?**

- (a) Line Printers (b) Chain Printers  
(c) Laser Printers (d) Dot Matrix Printers

**UPPCL-JE 31-01-2019 (Batch -01)**

**Ans:** (c) Laser printers uses light to produce the dots needed to form the characters to be printed on a paper.

**89. Which of the following printers is non-impact type?**

- (a) Daisy Wheel Printer (b) Laser Printer  
(c) Dot Matrix Printer (d) Line Printer

**WBPSK Instructor-18.09.2021**

**Ans :** (b) Laser Printer is an electrostatic digital printing process. It prints high quality text and graphics. This type of printer is non-impact type printer.

**90. Which of the following is behind the computer case?**

- (a) DVD Drive (b) Floppy Drive  
(c) Zip Drive (d) Parallel or printer port

**HSSC Electrician Instructor -17.12.2019**

**Ans :** (d) The printer port is also called the parallel port which is used by the printer. The printer port is always present behind the computer casing.

**91. Which of the following is output device?**

- (a) Scanner (b) LCD projector  
(c) Mouse (d) Light pen

**Punjab Wireman instructor-07.07.2013**

**Ans :** (b) LCD projector is an output device whereas scanner, mouse and light pen are input devices.

S.No.	Input Device
1	Keyboard
2	Mouse
3	Track ball
4	Joystick
5	Scanner
6	Microphone
7	Webcam
8	Barcode Reader
9	OCR (Optical Character Reader)
10	MICR (Magnetic Ink Character Reader)
11	OMR (Optical Mark Reader)
12	Kimball Tag Reader
13	Speech Recognition System
14	Light Pen
15	Touch Screen