

Types of Computer - Notes for Competitive Exams PDF

Knowledge about the types of computers for example is essential for all the learners who are enthusiastically and passionately preparing for the competitive exams. There are different types of computers. The different types of computers and their functions are discussed here. The main types of computers and their specific functions should be specially noted down.

A computer is an electronic device that can perform multiple functions. It can convert data into meaningful information. A computer works with the help of input and output devices. The processing unit, control unit, and storage unit together play a vital role in the functioning of the computer. It converts the input or the instructions given by the user and converts it into the set of the desired output. There are different types of computers available and can be categorized into different levels based on the size and the data handling capacity.

Based on size the computers can be classified into Supercomputer, Mainframe computer, Minicomputer, Workstation, and PC (Personal Computer). Based on the data handling ability, the computers can be classified into Analogue Computer, Digital Computer, and thirdly the Hybrid Computer.

Supercomputer:

computers with high speed are called supercomputers. In 1976 it was developed by Roger Cray. Supercomputers are deemed as the largest and quickest computers. They are faster in terms of speed of processing data and information. Supercomputers can process an enormous quantity of data in a second. The thousands of affiliated processors in supercomputers allow it to perform in such a way which can amaze human beings. Supercomputers are widely used in scientific and engineering applications. They can be helpful in fields like scientific simulations and inventions, weather forecasting, and nuclear energy research.

Characteristics of supercomputers:

- Supercomputers are the fastest computers
- Supercomputers are highly expensive.
- It can calculate respective calculations per second
- It is widely used in the stock market
- It can manage the online currency
- It can analyze data fast

Mainframe computer:

Mainframe computers can sustain thousands of individual users at the same time. It can aid considerable programs simultaneously. The mainframe computers can accomplish diverse operations at a single stretch. Mainframe computers are considered ideal for the banking and telecom sectors. The mainframe computers can process an elevated magnitude of data at a single stretch.

Characteristics of mainframe computers:

- An expensive computer.
- high storage capacity
- Known for the great performance.
- processes a huge quantity of data
- It has long life and functions smoothly and effectively.

Minicomputer:

A multiprocessing computer that is in medium size is called the Minicomputer. Minicomputer possesses two or more additional processors. It can facilitate 200 users in a single stretch and can work effectively and simultaneously. It can be used in universities or

branches for inventory management, billing, accounting purposes. It is more miniature than a mainframe computer but more extensive than a microcomputer.

Characteristics of minicomputer:

- It has low weight
- Easy to carry
- Less expensive when compared to other computers
- Fastest computer

4. Workstation:

For technical or scientific applications a Workstation can be used effectively. It possesses a fast and long-lasting microprocessor. It has a considerable part of RAM. The workstation is known for its high-speed graphic adapter. It cannot be used by multiple users in a single stretch as it is designed for single-user. It can perform with great accuracy.

Characteristics of Workstation:

Highly expensive

Complex work purposes.

Specific works with great accuracy

Large storage capacity

Effectively handle animation

It can be used for data analysis, editing, and video creation.

5. Personal Computer:

The personal computer is also known as the microcomputer.

It is also called a general-purpose computer. The personal computer is also destined only for individual use. The personal computer is a personalized version of the computer. The personal computer consists of a microprocessor which is known as memory, input unit central processing unit(CPU), output unit. The computer is designed for personal work.

Characteristics of PC (Personal Computer):

the limited number of software

smallest in size.

personal use.

Easy to handle and use

6. Analogue Computer:

The Analog computer is used to process analog data. The data is not having discrete values which are called analog data. An analog computer doesn't need any approximate values. The computer can accept the data from the measuring device. It can function without converting anything into numerals and codes.

7. Digital Computer:

Digital computers can efficiently execute computations and logical functions at elevated speeds. It uses raw data as an input and is stored in the memory converting it into the final output. The raw input data is converted to 0 and 1 by the computer. All laptops are digital computers.

8. Hybrid Computer:

Hybrid computers are a combination of many computers. The combination of analog and digital computers in turn produces the hybrid computer.

Hybrid computers are quick like analog computers. It has the accuracy and memory of the digital computer. The combination of the analog and hybrid can accept the signals and convert the data at a fast rate.