

Explain what is Fundamentals of Computer?

Computer fundamentals can be describe as the learning or studying some basic [functions of computer](#) starting from their origin to modern day. Study of basic computer types to their characteristics, advantages and disadvantages are included in the Learning of fundamentals of computers. Before Shifting to advance computer knowledge it is highly recommended to be aware of this topic thoroughly as it would make you more confident and comfortable while acquiring more advanced computer skills.

A Computer can be defined or described as a machine or device which can work with information such as store, retrieve, manipulate and process data. The Term computer is derived from the word "computare" which is a Latin word and was used for calculation thus it can be more precisely defined as a Programmable machine which is used in some numerical calculations. Before few decades these machines were used for only calculations but nowadays they are widely and hugely used in all sections of human society.

Computer Fundamentals



Modern Computers are incredibly advanced thanks to the new upgradation and enhancement of technologies. They can store huge amount of data in the internal as well as external sources. Computer Hard disk is the primary source of storing data. These days their speed has dramatically increased the work or job which used to take long hours to perform can be done in few seconds this is because of the heavy development in the IT sector specially in computer hardware peripherals and devices which are so advance that it is hard to believe.

The Speed of computer mainly and primarily depends upon some factors such as what [type of motherboard](#) you are using, Processor Speed and RAM [Random Access Memory].

Motherboard:: Computer Motherboard is designed on a piece of PCB Which is called as Printed Circuit Board where all other components are attached to it such as hard disk ,processor, ram etc.

Processor:: Processor is again called as CPU which stands for central Processing Unit. It is also called as Heart of Computer System.

RAM:: RAM stands for [Random Access Memory](#) which is temporary storage medium and it's is volatile memory. They tend to lose data when power is off. However, the speed of computer depends upon ram as well. You can install more capacity of ram to increase your computer speed but firstly you have to check the compatibility factors of motherboards and other components or the device.

Hard Disk:: This is a permanent storage unit of a computer which can store data in high volume and you can retrieve data whenever and wherever you need. They are available in market in huge data storing capacity.

There are mainly four common functions of computer system

- Input
- Output
- Processing
- Storage

Input:: The Computer receives its data from input devices in the form of raw data and later this data is processed inhuman readable form with the help of other PC devices.

The primary [input devices of computer system](#) are

- Keyboard
- Mouse
- Scanner
- Trackball
- Lightpen
- Joystick

Output :: The [output devices of computer](#) receives data from system and further process the data in human readable form .

Some Common Output devices are ::

- Printers
- Monitors
- Speakers
- Headphones
- Projectors

Processing :: This is the core function of modern day PC when the data is received from the memory it receives the data for further processing.

Storage :: There are mainly two storage unit of PC

1. Primary Storage
2. Secondary Storage

Primary Storage :: Random Access Memory [RAM] is the primary storage unit of computers.

Secondary Storage :: Hard Disk Drives and Pendrives are called as secondary Storage unit.

Different Types of Computer

The overall development of computer and computer generations has reached to new heights due to vast improvement in modern technology the fundamentals of computer has changed rapidly. They are categorized in four different types according to their speed, size, capabilities and cost.

1. Super Computer
2. Mainframe
3. Mini
4. Micro

Super :: They are the fastest and most expensive compared to all others. They require huge space for their installation.

Mainframe :: They are not as fast as super computer and require huge space for installation plus they are very expensive.

Mini :: They are smaller, cheaper and slower compared to super and mainframe computer.

Micro :: They are called as Personal computer [PC]

Advantages of Computers

Nowadays they are playing a vital role in the development of human society they are making work load as easy efficient and fast you would not have imagined before. If you ask me what basic fundamental advantage of computer is. I will say its role in studying students can learn literally anything on computer from science to philosophy each and everything.

Use of modern day computer in studying has changed the style and learning methods of students people don't want to waste their time in searching for good coaching classes in their town they prefer online study where they can get quality education with online certificates and even degrees with video tutorials and quality and authenticate study materials worldwide while sitting in their home.

Below I have mentioned some of the basic advantages of Computer

- Online Education
- Business
- Speed
- Accuracy
- Online Education
- Military

- Research

Disadvantages of Computer System

As there are numerous advantage of using modern day PC there are disadvantages to.

- Spread of Pornography
- Hate & violence related articles
- Cyber Crimes
- Negative Effect on health

Computer Software and Hardware

PC software can be described as a collection of programming codes which are programmed in such a way to perform specific task given to them. These types of software's are developed by computer programmer or software developer which takes care of users need and what type of operation they need to perform to derive a specific or special result.

There are mainly two types of softwares::

1. System Software
2. Application Software

System Software :: They are those software's which directly interact with the PC. The primary example is Operating system and device drivers.

Application software:: These are also called as customized software which are developed for personal use or developed for customers to perform some specific task. **Example:: Tally , Ms-office , ERP Softwares**