

# UNIT-1

## Introduction



### DATA:-

⇒

Data is raw facts and figures. It can be any numbers, figures, sounds etc.

or,

Data is a unprocessed information.



### Information Society:-

⇒

Information Society is such a society which is well aware of all the latest developments and innovations happening around the world. The members of Information Society adopt and use those information for their betterment upliftment and development.

or,

Information Society is a society in which the creation, distribution and manipulation of information is the most important activity in a information society. The information is the chief driver of socio-economic activity. The material goods are replaced by information as the main <sup>goods</sup> ~~goods~~ for generating economy. The tools of the information society are computers and telecommunication devices rather than plough or, plough. Now-a-days information leads to information economy.

⇒

Many economical activities are taking place due to information exchange, transmission, vibration etc.

## ★ Information Economy:-

⇒ Information economy is an economy with an increased emphasis on international activities. It is characterised by conversion and integration of communication and data processing technologies into information technology. The technological revolution which comes through computer has rapidly increased the importance of information economy. The information economy has accelerated the shift of industrialised countries from manufacturing-based economies towards based economies.

## ★ Definition of Modern Day Computers:-

⇒ Computer is an electronic device. It accepts input from the user, processes those input and gives output.

It stores data and information for retrieval. It performs logic, arithmetic etc operations.

or,

computer is an electronic device which performs input, processing, output <sup>and storage</sup> under the control of a program.

## ★ Characteristics of Computer:-

⇒ Following are the characteristics of computer-

1) Automatic

⇒ Computers are automatic devices once they start a job, they carry out until it is completed without any human assistance.

### ii) Speed:-

⇒ Computer has exceptional/unbelievable working speed. millions of instructions are executed in less than a second time. Its speed ranges from  $10^{-6}$ ,  $10^{-9}$  &  $10^{-12}$

### iii) Accuracy:-

⇒ A computer performs every calculation at a very high speed and with 100% accuracy so, its performance is outstandingly best.

### iv) Diligence:-

⇒ A computer is free from tiredness, lack of concentration and monotony. It can work 24/7.

### v) Versatility:-

⇒ A computer is a versatile device at one moment it is repairing biodata another moment it is printing some documents, it is playing music... and so on.

### vi) Storage:-

⇒ A computer has huge amount of memory to store data. It is the data safe & secure until it is not deleted or corrupted by external factors.

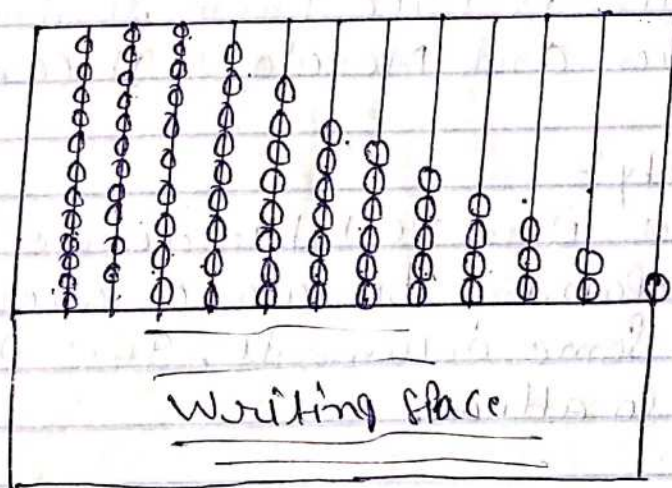
### ★ Drawback of Computer:-

⇒ Computer has no intelligence. It performs the instructions given by the user. It can't take decision on its own.

- ii) Computer has no feelings and emotions. It is a machine which understands only the instructions given by the user. It doesn't understand the sentiments, feelings, and emotions of humans.

### ☆ History of Computing :-

⇒ The History of Computing dates back to 2300 BC. It is found that the early Chinese were using a device for calculation during the period 1700 BC to 2300 BC. This device was called as 'ABACUS' this device consists of metal rods having beads in.



It was a simple device having no automatic functions. It was helpful in carrying all the four basic arithmetic operations.

In 1617 John Napier built a machine known as "Napier Bones". Here a range of forms were used to facilitate multiplication and division.

Blaise Pascal developed a calculating machine known as difference engine. In early 17th century. It was also called arithmetic machine.

well as Pascaline. Blaise Pascal developed his calculating machine because his father was tax Supervisor and he had to perform laborious calculations for hours and hours. He designed a machine to add and subtract two numbers directly and to perform multiplication and division through repeated addition and subtraction.



### Common application of Computers:-

- ⇒ i) Internet Surfing
- ii) In Academics (School, Colleges, Training Centres)
- iii) In Medical Science
- iv) Aeronautics
- v) Oceanography
- vi) Agriculture
- vii) Meteorological department
- viii) Space Technology
- ix) Defence
- x) Medicine
- xi) Research & Development (R&D)



### Definition of Information System and Information Technology:-

⇒ Information System refers to the entire information from its generation to the transmission of end user. It consists of Professional Personnel, Governing Policies, HR Policies, Selection and requirement of Staffs, Controlling, Co-ordination.

Information technology refers to technically skilled Software and Hardware Professionals, Computer Systems and

machines. It deals with specific software technologies to complete the given task.

### ★ Multimedia:-

⇒ There are two basic ways of Presenting Information —

#### a) Unimedium Presentation:-

⇒ In this medium single medium is used to Present Information. for eg- Music, Systems, Radio, Books (without images).

#### b) Multimedia Presentation:-

⇒ Here, more than one medium is used to Present Information. for eg. - TV, Computers, Smart Phones — etc.  
→ Text, audio, video, Image, graphics, Animation.

### ★ Requirement for Computer System to Support Multimedia Presentation.

⇒ i) Faster CPU and latest Processor.

ii) Large Storage device Capacity.

iii) Large Main memory.

iv) Good graphical terminals.

v) Audio I/O Devices.