

# UNIT-1

## ➤ ABOUT CALCULATOR AND COMPUTER

- Calculator comes from the word calculate which means arithmetical operation.
- Computer comes from the word compute which means both arithmetical and logical operation.
- Compute refers to +, -, \*, %, <, >, <=, >= etc.
- Calculate refers to +, -, \*, /.
- Computer is an electronic device which performs arithmetical and logical operation.
- Calculator is an electronic device which performs any arithmetical operator.
- Computer means a device, a tool, a machine or equipment which performs arithmetical and logical operation.
- Electronic device means a device with always work on fixed voltage.

## ➤ BASIC FUNCTION OF COMPUTE

- Does arithmetic such as +, -, \*, /.
- Compare values.
- Storage, search, retrieve (result).

## ➤ Characteristic of computer

- Very high speed: - computer has very high speed computer next calculation.
- Super high accuracy & degree reliability: - computer get accurate information and it is very high life one or more reliable for exact.
- Storage capacity: - A system can store a great information amount of in it.

## FUNDAMENTALS OF COMPUTER

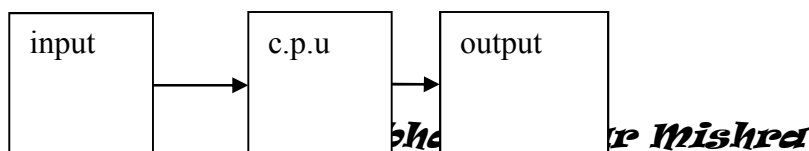
- Work in sequence: - It is ability to take in store a sequence of information.
- Power of making logic: -The ability to communicate with other system such as audio graphics and user sandy work etc.
- Diligence: - It is ability to more and more.
- No feeling: - There is not any sentiment in computer.

### ➤ Application of computer

1. Banking system.
2. Railway system.
3. Internet.
4. Shopping mole management.
5. Office management.
6. Hospital management.
7. Airline management.
8. Electronic media management.
9. Biotechnology.
10. Agriculture management.
11. Treatment of health.
12. Share market management.
13. Seen video clip and film.
14. Post office management.

### ➤ Anatomy of computer

- Input unit.
- C.p.u.
- Output unit.



Ex: -  
Keyboard  
Mouse  
Scanner

Ex: -  
pointer  
plotter  
V.D.U.

- Input: -it is used for accepting the data. The data are entered in to the computer system with the helps of this unit.
- C.P.U.:- It is use to process the data, the entered data is process by C.P.U..
- Output unit: - It gives the information retrieve the data. It gets the specific result for information.

➤ Data: -

Data are row fact the unarranged facts and figure the instruction given to the computer for desire result.

- Information: - Retrieve the data; process data result given by the computer after processing manipulates data information is summarization of data.

➤ Important of information: -

- Meaningful
- Surprise element
- Accuracy
- Time lines(to take timely action)
- Conformity with previous knowledge.
- Correction of previous knowledge.

➤ Information economy

## FUNDAMENTALS OF COMPUTER

If the user with machine wants maximum number of output with the minimum number of input. It is called information economy.

The preparation of formal in information is not free in the computer. It expresses money, labour, time and other be source.

### ➤ Information society

The information society can be simply defined as the instruction man and machine which under information for the number of human grouping it called information society.

The object of information society used to be given useful and meaningful information for the society.

### ➤ History of computer

- Computer comes from the word compute. Computer which means does calculations.
- Computer invented because man searches fast and accurate calculating device.
- Modern-day computer with speed and power is cultivation or invention of individual.
- It is the in result of countless of invention ideas and development contributed by server of number of person a last several ideas.
- In the human race start a doing some trade. it felt need from calculating device.
- Some contribution recurring history of computing.

### ➤ Abacus

- Abacus the earlier and simplest device user for calculation was abacus.
- It was the first machined calculating invent in 3000 b.c by cattiness.
- Abacus a day board with certain number of bits problem.

➤ Napier's logs & Bones

- The next manual calculating device logarithm was invented by John Napier in 1617.
- The use of logarithm is able due to transform multiplication and division into addition, subtraction.

Problem

$$\log a \cdot b = \log a + \log b$$

$$\log a/b = \log a - \log b$$

- You also invented bones card with solve multiplication problem.

➤ Pascal's adding machine

- The first machined adding machine was invented by Blaise PASCAL's in 1642.
- It developed it to help his father, who was an officer in France.
- The next machine was more effective calculator produced by in 1671.
- It was used to perform multiplication and division.
- It was only perform multiplication and division.

➤ Jacquard's loom

- Joseph Jacquard was a textile manufacturer.
- He invented automatic loom in 1804.
- He was punch card to produce complex cloth pattern day automatic loom depends upon the effect or presence of 'hook' on the class.
- Jacquard's looms paved the way for modern stories or machines and binary coding system on punch card.

➤ Charles Babbage (1792-1871)

- Father of computer (Because he brought out the concept of speed and storage).

## FUNDAMENTALS OF COMPUTER

- Charles Babbage: - a professor of mathematics at the Cambridge university.
- In 1822 Charles Babbage invented of automatic differential engine.
- Differential engine which could value accounting algebraic calculating and mathematical table up to 20 decimal place.
- Letter of 1842 this genius was able to develop elect rain engine which was atomic machine design to addition (the read operation and memory).
- To build analytical engine he spent seventy thousand dollar on this project at the time.
- Then analytical engine to able the store intermediate result and setup words for substance calculations.
- Idea stories drive from punch card of Josef jacquard.

### ➤ Hollerith machine

- The next major contribution to development can for halmen Hollerith of USA.
- Hollerith development a machine run or electrically first for the calculating and recording of data.
- Hollerith machine was capable of reading both the number data processing giving out the letter.
- The input was in form of punch card and communication holes for according of data be invented a machine called tabulator.
- Theestablish a company TMC (tabulating machine company) 1896.which today known as IBM (international business machine).

NOTE- Howard Aiken has developed the first computer MARK-1

### ➤ Information system

- Information via computer system.
- Information produce with him helps of human computer interface.

Ex: -

## FUNDAMENTALS OF COMPUTER

- Bank information system.
- Railway information system.
- Hospital information system.
- Hotel management system'

### ➤ Information technology

It is based on communication of H/W (equipment) machine that facilities creation. Modification storage retrieval translation of information via electronic media. It includes computing and communication technology various aspects of it are: -

- H/W & S/W connectivity's.
- Telecommunication (video, TV).
- Science.
- Computer human interface.

### ➤ Multi media

• Multi	Media
↓	↓
Many	communication translator medium source of
information.	

- It is the combination of audio (sound), graphic (drawing and painting), animation (moving image), video text etc.
- It is the latest revolution of sweep the world of information technology.
- It is already being in verity of application.
- Media publishing graphic.
- Media after new carrier option for young professional.