

LESSON**1****Introduction to Computer****Objective of this Chapter**

- 1.1 What is a Computer?
- 1.2 Definition of Computer
- 1.3 What can we do on a Computer?
- 1.4 Applications of a Computer
- 1.5 Characteristics of Computer
- 1.6 Limitations of a Computer

Introduction

Computer has become very important nowadays because it is very much accurate, fast and can accomplish many tasks easily. Many of our day to day activities are based on computer. Computers are used in Schools, Banks, Hospitals, Shops, booking counters of Railways and Airlines, Education and Entertainment. The term computer is derived from the Latin term 'computare', this means "to calculate". Computer cannot do anything without any instruction.

1.1 What is a Computer ?

Computer is an electronic machine. It is designed to work with Informations. It receives Data and Instructions from user. The process of giving Data and Instructions to Computer is called Input. Computer processes the input. After processing computer gives us result which is called Output.



Fig. 1.1 Computer



1.2 Definition of Computer

“Computer is an electronic machine that takes data as input from the user and processes these data according to the set of instructions called program and gives the result (output). It saves output for the future use. It can process both numerical and non-numerical calculations”.

1.3 What can we do on a Computer?

A computer can perform the following functions:-

1. We can do mathematical calculations on computer.
2. We can check spelling of a text on Computer.
3. We can draw pictures on Computer.
4. We can use Computer to print books and newspaper.
5. We can play games on Computer.
6. We can listen songs and see films on Computer.
7. We can book our tickets to travel in Trains, Buses and Airplanes.
8. We can check arrival and departure time of Trains, Buses and Airplanes.
9. We can check the weather conditions of a place before travelling.
10. We can prepare reports, results of our school or time table.
11. We can search the map of a place where we wish to travel.

1.4 Applications of a Computer

Computers are used in many fields. Some of the following fields are:-

- 1.4.1. In Education field
- 1.4.2. In Health and Medicine field
- 1.4.3. In Shops
- 1.4.4. In Business
- 1.4.5. In Banks
- 1.4.6. In Entertainment field



1.4.7. In different Government fields.

1.4.8. In Sports

Let us learn about the use of computers in different fields in detail :

1.4.1 In Education field

Computers are widely used in teaching by teachers and students. Teachers use computer to make lesson plans, reports and time table. The students use computers for drawing, making projects and to solve different kinds of problems quickly and efficiently. They use computers to collect different information about education on the Internet.



Fig. 1.2 In Education Field

1.4.2 In Health and Medicine field :

Nearly every area of health and medicine uses computers. For example, in hospitals computers are used for maintaining patient history and other records. They are also used for patient monitoring and diagnosis of diseases etc. Computer is also used in hospital laboratories to perform different medical tests.



Fig. 1.3 In Health and Medicine

1.4.3 In Shops

Computer is also used in shops. On computer, a shop keeper can keep the records of goods which is available in his shop. He can maintain the



record of tax and record of sales-purchase on a computer. Nowadays many shopkeepers maintain bills of sales-purchase with the help of computers.



Fig. 1.4 In shops

1.4.4 In Business

Computers are very helpful in business also. With the help of computers a businessman can contact his clients using email. A businessman can take meetings with his clients using Video Conferencing. With the help of computers he can maintain his books of accounts.



Fig. 1.5 In Business

1.4.5 In Banks

Computers are widely used in banks. They are used in banks for record keeping and maintaining accounts of customers. Most of the banks provide the facility of ATMs (Debit Card). The customers can withdraw and deposit money in his account through ATM (Debit Card) at any time.



Fig. 1.6 In Banks



1.4.6 In Entertainment field

Computer is also helpful in our Entertainment. With the help of Computers a computer designer can give special effects in movies. With the help of computers even imaginary characters (cartoons) can play a part in making movies, videos, and commercials.



Fig. 1.7 In Entertainment

1.4.7 In different Government fields

Various departments of the Government use computer for their departmental planning, control and law enforcement activities. Computers are widely used in Traffic, Tourism, Information & Broadcasting, Education, Aviation and many other sectors.



Fig 1.8 In Government Sectors

1.4.8 In Sports

Computers are mostly used in Sports also. In cricket some scoreboards are manually update but nowadays most professional sports venues have very modern scoreboards that update scores and information immediately



after the information is entered into the computer and display result to audiences.



Fig. 1.9 In Sports

1.5 Characteristics of a Computer

As we know that a Computer is a very useful machine. It has many characteristics as described below :

- 1.5.1. Speed
- 1.5.2. Accuracy
- 1.5.3. Diligence
- 1.5.4. Versatility
- 1.5.5. Automation
- 1.5.6. Storage

Let us learn about the characteristics of computer in detail :

1.5.1. Speed

Computer can work very fast. It takes only few seconds for calculations that we take hours to complete. We will be surprised to know that a computer can perform millions of instructions and even more per second.

1.5.2. Accuracy

The degree of accuracy of computer is very high and every calculation is performed with the same accuracy. The errors in computer are due to human and inaccurate data because in whatsoever manner data and instructions are fed into computer, it processes the data and instructions in the same manner.

1.5.3. Diligence

A computer is free from tiredness, lack of concentration, fatigue, etc. It can work for hours without creating any error.



1.5.4. Versatility

It means the capacity to perform completely different type of work. We may use our computer to do calculations and on the same time we may use it for inventory management or to prepare Sale/Purchase bills and listening songs.

1.5.5. Automation

Once the instructions are fed into computer it works automatically on it without any human intervention. It works till the completion. It executes the program until it meets logical instructions to terminate the job.

1.5.6. Storage

The Computer has an in-built memory where it can store a large amount of data. we can also store data in secondary storage devices such as CD's, DVD's and USB Pen Drives.

1.6 Limitations of Computer

Although a computer is very fast, powerful and accurate machine, but it has the following limitations :

1. A computer cannot generate information on its own.
2. A computer cannot correct wrong instructions.
3. A computer cannot come up with its original decision.
4. Computer cannot do any work without getting instruction from the user.
5. It does not have feelings or emotion like a human being.
6. It does not have knowledge and experience like a human being.

Points to Remember

1. Computer is an electronic machine.
2. Computer gives accurate result if right instructions are given
3. Computer never gets tired
4. Computer is versatile machine.
5. Computer possess no intelligence
6. Computer has no feelings or emotions



Exercise

1. Fill in the Blanks using the right option :

1. is an electronic machine.
(1) Cycle (2) Typewriter (3) Computer (4) All of these.
2. The speed of computer is
(1) Fast (2) Slow (3) Medium (4) None of these.
3. Computer has very large
(1) Speed (2) Memory (3) Display (4) Keyboard
4. In business computers are used to prepare
(1) Cash (2) Tickets
(3) Books of account (4) None of these
5. Computers are used in Education by and
(1) Teachers, students (2) Businessman, Banker
(3) Parents, children (4) all of these

2. Write down True or False :

1. Computer can perform Mathematical Calculations.
2. Computer cannot take decision itself.
3. Computer doesn't have storage capacity.
4. A computer cannot correct wrong instructions.
5. Computer is an electronic machine which receives input, processes it and gives output.

3. Short Answer type Questions :

1. What is a Computer?
2. Give definition of Computer ?
3. What can we do on a Computer ? Write any four.
4. How a Computer is helpful in Health and Medicine ?
5. How a Computer is helpful in Banks ?

4. Long Answer type Questions :

1. Write down about the fields where a Computer can be used ?
2. Write Down characteristics of a Computer.
3. Write Down the limitations of a Computer.

