CLASS VI COMPUTER

Chapter 1: Computer Story (Explanation)

Introduction:

Many households has different generations living under a roof like grandparents, parents and children. Various generation had various sources of entertainment.

Similarly, we have different generation of computers. The computers which we see today have passed through different stages of development before they reach to current state.

First generation computers(1940-1956):

• Used vacuum tubes and very big in size

•Emits large amount of heat

•Slow in working

Second generation computers(1956-1963):

•Used transistors and smaller in size as compared to previous generation

• Fast in working

• Used magnetic tapes and Punch cards to store data

Third generation computers (1964-1971):

• Used integrated circuits and more smaller in size

• Fast in working

• Can do complex calculations

Fourth generation computers (1971 -present):

• Using microprocessor and are light weight

• Small in size as compared to previous generations computer

• Currently being used

Fifth generation computers(present and future):

• Still under development

• Will be using artificial intelligence

• Will take decisions on the basis of stored data

Classification of computers

Computers can be classified into four categories on the basis of their size and speed.

1. Microcomputers-Micro computers are small personal computers having microprocessor as a CPU, contained on a single integrated circuit chip. Example- laptop and desktop Workstation- these are personal computers having powerful Microprocessor and a superior quality monitor. They are mainly used in engineering application, Desktop publishing etc .

2. Mini computers- these computers were powerful and reasonable than mainframe computer, so the users switched over to these. But with the PC becoming more powerful mini computers became less important.

3. Mainframe computers- These are huge computers which can occupy a whole room. Many user can be accommodated at the same time by using terminals(devices having a keyboard and screen).

4. Super computers- Super computers are the most powerful computer which uses multiple CPUs to work on a problem or to execute a program. These computers are mainly used in weather forecasting, climate research etc.

What is common in all types of computers?

Every computer follows five basic functions to work on data i.e Input, storing, processing, output and control data flow.

There are various units to perform these functions they are-

1. **Input unit-** This unit is responsible to take data from the user and send it to computer. For example keyboard and mouse.

2. **Central Processing Unit** – CPU is called as the brain of a computer. It controls all the devices and all types of data processing functions. It contains following units:
a. ALU(ARITHMETIC AND LOGICAL UNIT)performs all the arithmetic(addition, subtraction, multiplication, Division) and logical operations of a computer.
b. Control unit maintains the order and controls the flow of data in a computer.
c. Memory unit stores the data in the computer and also hold dat and instructions for processing.

3. **Output unit** – This unit is responsible to display the result of processing to the monitor.