

FUNDAMENTALS OF COMPUTER

01

JANUARY

SATURDAY

Ques: → What is a computer?

Ans: → Computer is an electronic device which accepts data from the user, processing on it and provide desired output.

Ques: → What are the characteristics of computer?

OR, why we use computer in every field of life?

Ans: → A) Speed: → Computer can work very fast. It takes only few seconds for calculations that we take hours to complete.

B) Accuracy: → Computer gives hundred percent error free result.

C) Diligence: → Computer is free from tiredness, lack of concentration, e.t.c.

D) versatility: → Computer have capacity to perform completely different type of work.

E) Storage: → Computer has an in-built memory where it can store large amount of data.

02 Sunday

Ques: → What are the limitation of computer?

Ans: → 1.7 NO IQ: → Computer is a dumb machine and it can not do any work ~~and~~ without instruction from the user.

2.7 NO Feeling: → It does not have feelings, taste, experience etc.

Ques: → Who was the father of ~~the~~ computer?

Ans: → Charles Babbage.

* History of Computer →

Machine

Inventor

- | | |
|--|--|
| A. Calculating machine
→ ABACUS | → Egyptian and Chinese people. |
| B. Napier's bones | → John Napier (1617AD) |
| C. Slide Rule | → Edmund Gunter (16th century). |
| D. Pascal's Adding and Subtraction machine | → Blaise Pascal. |
| E. Leibniz's multiplication and dividing machine | → Gottfried Leibniz (1673) |
| F. Babbage's Analytical Engine | → Charles Babbage (The father of Computer) (1823). |

Ques: What is the first mathematical device built and when was it built?

Ans: Analytical engine, 1823.

Ques: Who is called the father of computer technology?

Ans: CHARLES BABBAGE.

Ques: Who was the first programmer of the computer?

Ans: LADY ADA LOVELACE.

Computer Generations

Ques: → How many generations the evolution of computer is divided?

Ans: → A [A]. First Generation Computers

1. → The operating speed was quite slow.

2. → These computers were large in size.

3. → Consume more electricity.

4. → Heat generation high.

5. → Memory capacity low.

6. → Programming none.

7. → Use Diode valve / vacuum tube as an electronic component.

8. → e.g. → (i). ENIAC = Electronic Numerical Integrator and calculator.

(ii). EDVAC = Electronic discrete variable Automatic computer.

(iii). EDSAC = Electronic Delay Storage Automatic computer.

(iv). UNIVAC-1 = Universal Accounting Computer

B. Second Generation Computers

1. → Size small in comparison of 1st generation computers.

2. → Less electricity consumption in comparison of 1st generation computer.

3. → High operating speed in comparison of 1st generation computer.

4. → Use Transistors as an electronic component.

5.7 COBOL, FORTRAN Programming language was introduced.

6.7 e.g. → IBM 1620, IBM 1401

COBOL = Common business oriented language

FORTRAN = FORmula TRANslation

IBM = International Business machine Corporation.

[C]. Third Generation Computers

1.7 Computers of this generation will small in size, low cost, large memory and processing speed was very high.

2.7 Use ICs (Integrated circuits) as an electronic component.

3.7 BASIC language introduced. (High level language).

4.7 e.g. → IBM-360, ICL-1900, IBM-370 and VAX-750

BASIC = Beginners All Purpose Symbolic Instruction Code.

[D]. Fourth Generation Computers

1.7 The present day computers that we see today are the fourth generation computers that started around 1975.

2.7 It uses Large scale Integrated circuits (LSIC). as an electronic component.

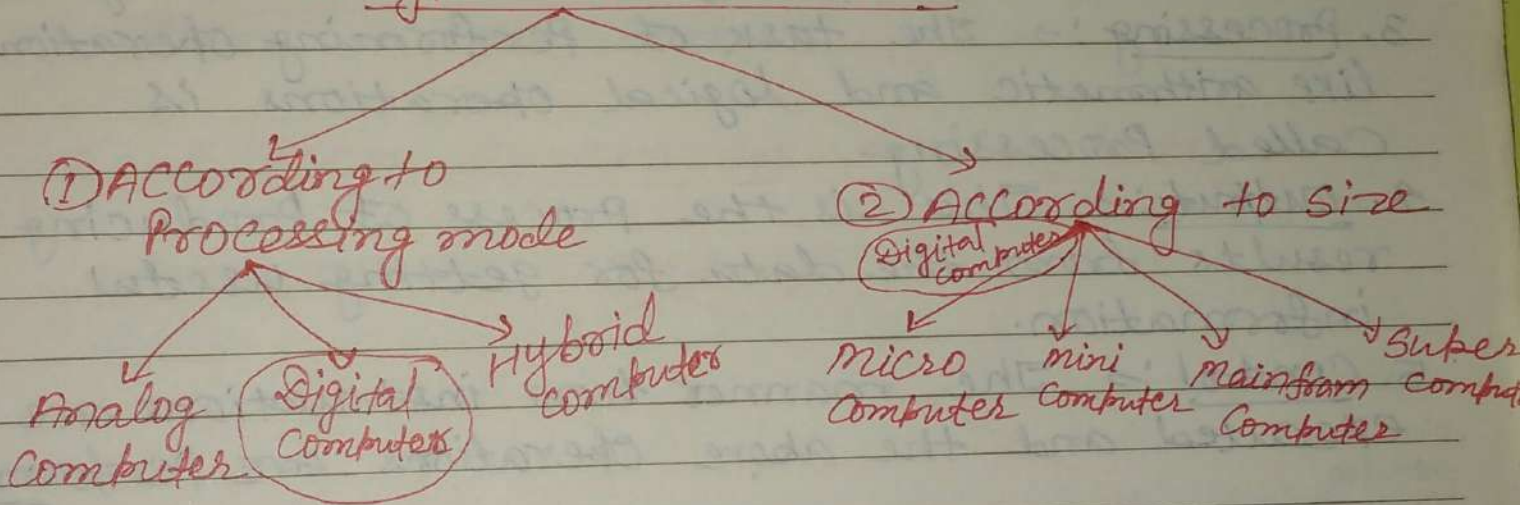
3.7 Microprocessor introduced.

(E) Fifth Generation Computers

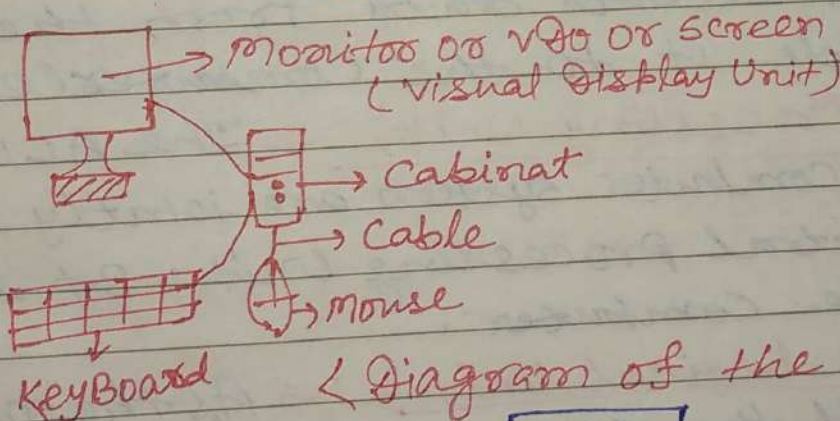
1.7 The concept of Artificial Intelligence has been introduced to allow the computers to take its own decision.

2.7 It is still in a developmental stage.

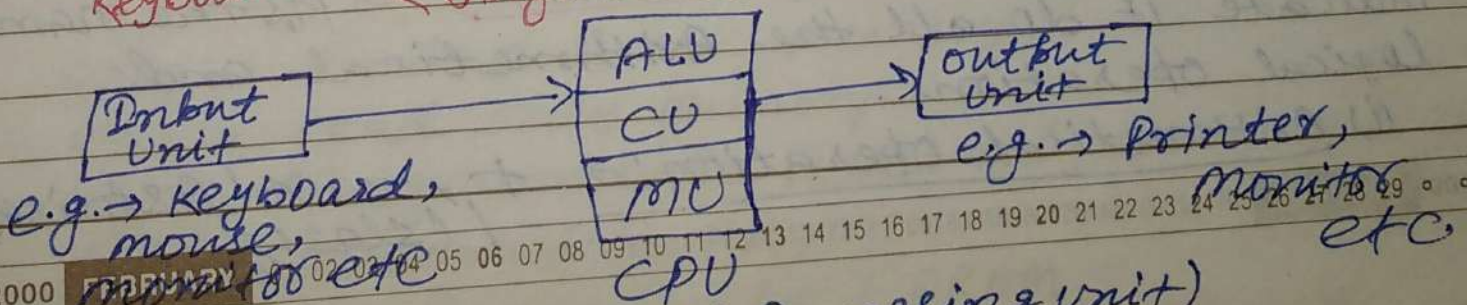
* Types of Computers



2. Computers Organisation



< Diagram of the computer >



< Block diagram of the computer (Central Processing Unit) >