

Basic Computer
Duration 52 days

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1. Generations of Computer (I-V)
2. Block Diagram of a Computer
3. Functions of the Different Units Input unit, Output unit, Memory unit, CPU (ALU+CU)
4. Input & Output Devices

Input Devices:

- a) Keyboard,
- b) Point and draw devices, mouse, joystick, track ball, light pen
- c) Data Scanning devices
image scanner, OCR, OMR, MICR, Bar code reader, card reader
- d) Voice Recognition Device
- e) Digitizers

Output Devices:

- a) Monitor
- b) Printer
laser peinter, dotmatrix printer, ink jet printer

c) Projecter

Memories [Memory hierarchy]

5. Registers [Types of Registers]

6. Cache Memory

7. Primary Memory

i) RAM

a) How data is stored in a RAM

b) DRAM and SRAM

ii) ROM

a) ROM BIOS/ Firmware

b) Types of ROM

8. Secondary Memories

i) Hard disk

a) Structure of a hard disk, how data is stored in a hard disk, concept of tracks, sectors, clusters, cylinders

b) formatting of hard disk (low level formatting and high level formatting)

ii) Floppy [data storage mechanism]

iii) CD [data storage mechanism]

Software

9. System Software

a. Operating System

i. Functions of O/S

ii. Types of O/S

b. Program Language Translators

i. Assembler

- ii. Compiler

- iii. Interpreter

- c. Utility Programs

- d. Communication Software

- e. Performance Monitoring Software

10. Application Software

11. Software hierarchy and dependence between the different layers

12. Computer Languages

- i. Machine language

- ii. Assembly language

- iii. High level language

Practical

MS Office

- i) Microsoft Word

- ii) Microsoft Excel

- iii) Microsoft Powerpoint