3rd Semester

Computer Syllabus for Fundamentals of Computer Application ED course

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
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 hilevel formatting)
   ii) Floopy [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