

## CORE COURSE-IV

# M.ED. CC104: FUNDAMENTAL OF INFORMATION TECHNOLOGY IN EDUCATION

### Objectives:

Students will be able to -

1. Give definition, need, categories, types, properties, values and services of information
2. Describe process, types, barriers and use of communication.
3. Apply models of teaching in classroom teaching
4. Use different technological aids in their instruction
5. Introduce system peripherals of computer, different software and operating systems
6. Introduce terminology of networking and internet
7. Use computer in instruction, evaluation and research

### UNIT-I Introduction to Information Technology

- 1.1 Definition and scope of information technology
- 1.2 Need of information technology in education
- 1.3 Concept of data, information, knowledge and intelligent
- 1.4 Sources and properties of information
- 1.5 Resistance to information flow
- 1.6 Information services
- 1.7 Concept of information technology
- 1.8 Caution against over use of information technology

### UNIT-II Introduction to Computer

- 2.1 Computer: Definition, meaning, features, classification and usage
- 2.2 System Architecture
  - CPU: CU, ALU, Memory, I/P Unit Device, O/P Unit, Storage Unit
- 2.3 System Peripherals
  - I/P Unit: Key Board, Mouse, Scanner,
  - O/P Unit: VDU, Printer: Dot Matrix, Inkjet, Laser
  - Connecting Device: Modem
  - Storage Units: Floppy Disk, Hard Disk, Optical Disk
  - I/O Unit: FDD, HDD

### UNIT-III Introduction to Computer Softwares

- 3.1 Concept and Types of Software
- 3.2 System Software: Concept of OS, Types, Functions, Booting Process
- 3.3 Concept of DOS, DOS Command
  - Internal Commands: DIR, DATE, TIME, COPY, DELETE, CLS
  - External Commands: FORMAT, DISK COPY, PRINT
- 3.4 Concept of WINDOWS: Introduction of Desk Top, Elements and Functions of Typical Window
- 3.5 Application Software: Concept and Introduction of Some Useful Software:
  - Word Processor: MSWORD
  - Spread Sheet Package: MS EXCEL
  - Presentation Package: POWER POINT
  - Painting Tool: PAINT
- 3.6 Utility Software: Virus Scanning, Web Browser, Software Utility NAV, NDD

### UNIT-IV Instructional Technology:

- 4.1 Usage of Communication Principles in Instructional Technology: Instruction, Micro Teaching and Self Instructional Material
- 4.2 Technological Aids in Instruction:
  - Simulation
  - Language Laboratory
  - Team Teaching
- 4.3 Computer Aided Learning
  - Computer Assisted Learning
  - Computer Managed Learning
  - Computer Assisted Instruction