

Paper-I (MCA-101) : Introduction to Information Technology

(Note : Only introductory concepts to be taught in the course.)

UNIT- I

Information Concepts and Processing: Definition, Need, Qualities, value of information. Categories of information in business organization, levels of information, data concepts, logical and physical concepts, data processing, Introduction to office automation.

Number systems: Binary numbers, octal numbers, hexadecimal numbers, Radix- decimal, octal, hexadecimal, conversion from one form to another-Examples, Representation of decimal, octal, hexadecimal numbers: fractional numbers and signed numbers, 1's and 2's complement forms, Binary arithmetic-addition, subtraction ,multiplication and division-Examples. Codes-Variety types- ASCII and 8 bit EBCDIC

UNIT- II

An overview of a computer system: components of a computer system, various I/O and auxiliary storage devices

System software (Only Introductory level): Introduction to system software, Distinction between systems software and Application software. Introductory ideas of loaders and linkers

High level language (Only Introductory level): Different languages, introduction to Assemblers, Compilers and Interpreters, relative merits of compilers v/s interpreters

UNIT- III

Operating systems (Only introductory level): Evolution, introduction to OS , functions and facilities, single tasking and multitasking OS , single user and multi-user OS, characteristics of MS-DOS and Unix operating systems , DOS and UNIX commands for file and process management.

UNIT- IV

Text editors: overview of editing process

Graphical User Interfaces- Introduction to Windows, Word processing software packages and features, spread sheet packages and features

Database : Introduction to database and database packages.

Desktop Publishing: Introduction to desktop publishing and desk top publishing packages.

UNIT- V

Computer Communications (Only Introductory level) : Computer to computer communication through networking, Introduction to computer networks and networking software, Types of Networks, Internet and Intranet , Electronic mail.

Multimedia and Virtual reality: Introduction to Multimedia and Virtual reality

Specifications of a typical desktop computer system, Recent Developments in ICT

Recommended books:

1. Satish Jain , Information Technology
2. Alexis Leon , Fundamentals Of Information Technology
3. V.Rajaraman : Fundamentals of Computers