

## IT TOOLS AND APPLICATIONS

<b>Contents</b>	<b>Lecture No.</b>
<p><b>Computer Appreciation</b>            Characteristics of Computers, Input, Output, storage units, CPU, computer system, Binary number system, Binary to Decimal Conversion, Decimal to Binary Conversion, Binary coded Decimal (BCD) Code, ASCII Code.</p>	(1-2)
<p><b>Computer Organization</b>  <b>Central Processing Unit</b>            Control Unit, Arithmetic Unit, Instruction Set, Register, Processor Speed.</p> <p><b>Memory</b>            Main memory: Storage evaluation criteria, memory organization, capacity, RAM, read only memories. <b>Secondary Storage Devices:-</b> Magnetic disks, floppy and hard disks, optical disks CD-ROM, mass storage devices.</p> <p><b>Input Devices</b>            Keyboard, Mouse</p> <p><b>Output Devices</b>            Monitors, Printer</p> <p><b>Operating System Introduction</b> Main functions of operating system</p>	(3-5)
<p><b>Disk Operating Systems</b>            Simple DOS commands, simple file operations, directory related commands</p>	(6-7)
<p><b>Microsoft Windows</b>            An overview of different versions of Windows, Basic Windows elements, File management through Windows.</p> <p>Using essential accessories: Systems tools-Disk cleanup, Disk defragmenter, Entertainment, Games, Calculator, Imaging, Fax, Notepad, paint, WordPad. OLE concepts-embed or link an object into WordPad.</p>	(8-10)
<p><b>Word Processing</b>            Word processing concepts: Saving closing, opening an existing document, selecting text, editing text, finding and replacing text, printing documents, creating and printing merged documents, character and paragraph formatting. Page design and layout.</p> <p><b>Editing and Proofing Tools:</b> Checking and correcting spellings. Handling Graphics, Creating Tables and Charts. Document templates and wizards.</p>	(11-14)
<p><b>Review</b></p>	(15)
<p><b>First Test</b>  <b>Practical Test</b></p>	(16)
<p><b>Spreadsheet Package</b>            Spreadsheet concepts, Creating, Saving and Editing a Workbook, Inserting, Deleting Worksheets, entering data in a cell/formula Copying and Moving data from selected cells, Handling operators in Formulae, functions: Mathematical, Logical,</p>	(17-20)

<p>Statistical, Text, financial, Date and Time functions, Using Function Wizard.</p> <p><b>Formatting a Worksheet:</b> Formatting Cells- changing data alignment, changing date, number, character, or currency format, changing font, adding borders and colors, printing worksheets, charts and graphs- -Creating, previewing, modifying charts. Integrating word processor spread sheets, web pages.</p>	
<p><b>Presentation Package</b>          Creating, Opening and Saving Presentations using Microsoft PowerPoint, Creating the look of your presentation, Working in different views, Working with Slides, Adding and Formatting Text, Formatting paragraphs, Checking spelling and correcting typing mistakes, Making notes pages and handouts, Drawing and working with objects, Adding Clip Art and other pictures, Designing Slide shows, running and controlling a slide show, Printing Presentations.</p>	(21-24)
<p><b>Flow Charts</b></p>	(25-28)
<p><b>Input Devices</b>          Trackball, joystick, Scanner, OMR, Bar-code reader, MICR digitizer, card reader, voice recognition, web cam, video cameras.</p> <p><b>Output Devices</b>          Printers Dot matrix, Inkjet, Laser, Plotters, Computer Output Microfilm (COM), Multimedia Projector, Speech Synthesizer; Dumb, Smart and Intelligent Terminal.</p>	(29)
<p><b>Computer Software</b>          Relationship between Hardware and Software; System Software, application Software, compiler, names of some high level languages, free domain software's.</p>	(30)
<p><b>Operating Systems</b>          Main functions of an operating system, file management, file structure, file access method, file operations, file naming, directories, some popular operating system ---, MS-Windows NT, Unix, Linux.</p>	(31-33)
<p><b>Multimedia</b>          What is Multimedia, Text, Graphics, Animation, Audio, images, Video; Multimedia application in education, entertainment, marketing.</p>	(34)
<p><b>Data Base Operations</b>          Data Manipulation-Concept: Database, Relational Database, Integrity.          Operations: Creating, dropping, manipulating table structure. Manipulation of Data: Query, Data Entry Form, Reports.</p>	(35-40)
<p><b>Information Technology and Society</b>          Indian IT Act, Intellectual Property Rights – issues. Application of information technology in Railways, Airlines, Banking, Insurance, Inventory control, Financial systems, Hotel management, Education, Video games, Telephone exchanges, Mobile phones, Information kiosks, special effects in Movies, etc.</p>	(41-43)
<p><b>Review</b></p>	(44)
<p><b>Final Test</b>  <b>Practical Test</b></p>	(45)