



## Common to All B.Tech. Branches

### SYLLABUS

|                      |  |                        |                   |
|----------------------|--|------------------------|-------------------|
| Name of the Subject  | Fundamental of Computer Science & Information Technology | Subject Code           | 0020225(CS/IT/ET) |
| Semester             | I / II   | Board of Studies       | CS, IT, ET        |
| Maximum Marks        | 30(TA) 20(ESE)   | Minimum Marks          | 18(TA) 10(ESE)    |
| Lecture Periods/Week | Tutorial Periods/Week                                    | Practical Periods/Week | Credits           |
| -                    | -  | 2                      | 1                 |

#### 1. Working with Windows Operating system:

- Working with Windows desktop, start icon, taskbar, Recycle Bin, My Computer icon  
The Recycle Bin and deleted files creating shortcuts on the desktop.
- The Window accessories WordPad- editing an existing document, Use of Paint drawing tools, The Calculator, Clock.
- The Windows Explorer window, concept of drives, folders and files, Folder selection techniques, Switching drives, Folder creation, Moving or copying files, Renaming, Deleting files and folders.
- Printing, installing a printer driver, setting up a Printer, Default and installed printers, Controlling print queues. Viewing installed fonts, the clipboard and 'drag and drop', Basic clipboard concepts, linking vs. Embedding.

#### 2. Working with MS Word:

- Moving through a Word document menu bar and drop down menus toolbars
- Entering text into a Work document, selection techniques deleting text.
- Font formatting keyboard shortcuts.
- Paragraph formatting, Bullets and numbering.
- Page formatting what is page formatting? Page margins Page size and orientation, Page breaks, Headers and footers.
- Introducing tables and columns.
- Printing within Word Print setup printing options Print preview.
- Development of application using mail merge, Mail merging addresses for envelops.
- Printing an addressed envelope and letter.
- Creating and using macros in a document.

#### 3. Working with MS Excel:

- Creating and opening workbooks, entering data.
- Navigating in the worksheet, Selection items within Excel, Inserting and deleting cells, rows and column, Moving between worksheets, saving worksheet, workbook.
- Formatting and customizing data.

- d. Formulas, Functions and named ranges.
- e. Creating, manipulating & changing the chart type.
- f. Printing, Page setup, Margin, Sheet printing options, Printing a worksheet.

#### **4. Working with MS Power Point:**

- a. Preparing presentations with Microsoft Power Point, Slides and presentations, Opening an existing presentation, saving a presentation..
- b. Using the Auto Content wizard, Starting the Auto Content Wizard, Selection a presentation type within the Auto Content wizard, Presentation type, Presentation titles, footers and slide number.
- c. Creating a simple text slide, Selection a slide layout, Manipulating slide information within normal and outline view, Formatting and proofing text, Pictures and backgrounds, drawing toolbar, Auto shapes, Using clipart, Selection objects, Grouping and un-grouping object, The format painter.
- d. Creating and running a slide show, Navigating through a slide show, transitions, Slide show timings, Animation effects.

#### **5. Working with Internet Explorer:**

- a. Microsoft Internet Explorer & the Internet, Connection to the internet, The Internet Explorer program Window , The on-line web tutorial Using hyper links, Responding to an email link on a web page.
- b. Searching the Internet, Searching the web via Microsoft Internet Explorer, Searching the Internet using Search Engine, Searching the Internet using Yahoo, Commonly used search engines.
- c. Favorites, security & customizing Explorer, Organizing Favorite web sites, Customizing options- general, security, contents, connection, programs, advanced.

#### **6. Working on Internet Based Applications:**

- a. Using the Address Book, Adding a new contact, Creating a mailing group, addressing a message finding an e-mail address.
- b. Using electronic mail, Stating Outlook Express, Using the Outlook Express window Changing the window layout, Reading file attachment, taking action on message deleting, forwarding, replying Email & newsgroups, Creating and sending emails, Attached files, Receiving emails, Location and subscribing to newsgroups, Posting a message to a newsgroup.
- c. Chatting on internet, Understating Microsoft chat environment, Chat toolbar.

#### **REFERENCE:**

1. "MS-DOS Reference Manual"
2. "MSDN reference Manual"
3. Jiwan " An Introduction To Internet & E-Mail Technology for Beginners Jiwan Books International (P)Ltd. 2008
4. Sinha, " Computer Fundamentals – 4<sup>th</sup> Edition, BPB publication.
5. Saxena, Chauhan, Gupta."Fundamentals of Computer" Laxmi Publications 2006.



## Common to All B.Tech. Branches

### SYLLABUS

|                      |  |                        |                   |
|----------------------|--|------------------------|-------------------|
| Name of the Subject  | Fundamental of Computer Science & Information Technology | Subject Code           | 0020216(CS/IT/ET) |
| Semester             | I / II   | Board of Studies       | CS, IT, ET        |
| Maximum Marks        | 70   | Minimum Marks          | 25                |
| Lecture Periods/Week | Tutorial Periods/Week                                    | Practical Periods/Week | Credits           |
| 3                    | 1  | -                      | 4                 |

#### UNIT-I

##### AN OVERVIEW OF COMPUTER SYSTEM:

Anatomy of digital computers, Memory units, Main and Auxiliary storage, Devices, Input Output, Classification of Computer, Applications of Computers in different fields, radix number System: decimal, binary, octal, hexadecimal numbers and their inter conversions, Input Hard/Soft copy Devices, Storage Devices: Input Concepts, Input Devices, viz. Keyboard Mouse Joystick, TrackBall, Touch Screen, Light pen, MICR, OMR, OBR, OCR, Voice Input, Smart Cards, Bar Code readers, Digitizer, Scanner, etc. Graphic Display Devices: Memory Types of Computer Memory, Memory modules viz. SIMM, DIMM, EDO. RDRAM, SDRAM, DDRAM, etc Communication Pathways, Computer Registers, Data representation , Decimal System, Binary System, Octal System, Hexadecimal Encoding system: BCD, ASCII and EBCDIC, Binary calculations, Conversion of decimal system to other systems, Binary system to other system.

#### UNIT-II

##### OPERATING SYSTEM BASICS:

The User Interface, Running programs, Managing files, Introduction to PC operating systems: Dos (Introduction of DOS, its features, basic, Internal and External commands) Introduction to Windows and it's features. Advantages, logging on and shutting down Windows, Start button and task bar, starting and Quitting a program, Opening a document, Getting help, Finding files or folders, Changing system setting, Run command, What's on your computer Organizing files and folders, Working within documents, Saving work, Setting up a printer, Installing software and hardware, Copying and moving files quickly, Putting a shortcut on the Desktop.

### **UNIT- III**

#### **INTRODUCTION TO COMMON APPLICATION SOFTWARES:**

Case study of MS Office, Introduction to MS-WORD, document, creation , editing, printing and saving, spell, check and mail merge, Process text by using text processor package such as MS-WORD ( Bold, Italics, Under line, Fonts, Text Alignment, Borders and Shading, Header and

Footer ) Introduction to windows and it's features. Ms-Excel spread sheet, Sorting, Merging, Drawing Graphics and Introduction to MS Power Point.

### **UNIT- IV**

#### **INTRODUCTION TO COMPUTER NETWORKS AND DATA COMMUNICATION**

Introduction to the basics concepts of Networks and Data communication how computer network work, LAN, MAN, WAN, Major features of INTERNET, internet history, introduction to Email, WWW, Website, Introduction to the protocols, HTTP, SMTP, FTP, Using the Internet E-mails FTP search engines and domains.

### **UNIT-V**

#### **SYSTEM SOFTWARE & PROGRAMMING BASICS:**

Programming fundamentals, problem definitions, algorithms, flow charts and symbols, Machine language, assembly language, high level language, Assemblers, Compilers Interpreters, Linkers Loaders and their inter relationship, Debuggers, Simple programs Using C.

#### **TEXT BOOKS:**

1. Donald H. Sanders , “Computers Today, 2<sup>nd</sup> edition “ISBN 0070546827
2. Suresh K. Basandra “Computer Today” BPB Publications
3. P.K. Sinha, “Computer Fundamentals “, BPB Publications