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**MATS UNIVERSITY**

**MATS INSTITUTE OF OPEN & DISTANCE LEARNING**

**University Campus**

Village-Gullu, Aarang Kharora Highway, Aarang, Raipur (C.G.) 493 441

**Corporate & Admission Centre**

MATS Tower, Near New Bus Stand, Pandri, Raipur (C.G.)

**मैट्स विश्वविद्यालय**

**मैट्स मुक्त एवं दूरवर्ती शिक्षण संस्थान**

**विश्वविद्यालय परिसर**

ग्राम-गुल्लू, आरंग खरोरा हाईवे, आरंग, रायपुर (छ.ग.) 493 442

**कार्पोरेट एवं प्रवेश केन्द्र**

मैट्स टॉवर, नया बस स्टैण्ड के पास, पण्डरी, रायपुर (छ.ग.)

MATS Institute of Open & Distance Learning



MATS Institute of Open & Distance Learning

**SYLLABUS**

**of**

**Diploma in Computer Application (DCA)**

**Contact No. : 91-771-4078994, 95, 96, 98 Fax No. : 91-771-4078997**

**Web Site : [www.matsuniversity.ac.in](http://www.matsuniversity.ac.in),**

**E-mail : [admissions@matsuniversity.ac.in](mailto:admissions@matsuniversity.ac.in)**

## Examination Scheme (D.C.A.)

Paper No.	Course Title	Continuous Evaluation		Term-end Examination						Total Marks	
				Theory			Practical				
		Max.	Min.	Duration	Max.	Min.	Duration	Max	Min	Max.	Min.
I <sup>st</sup>	Fundamental of Computer and Information Technology	30	12	3 Hours	70	28	--	--	--	100	40
II <sup>nd</sup>	Application Programming in FoxPro	30	12	3 Hours	70	28	--	--	--	100	40
III <sup>rd</sup>	PC Packages (Windows, Word, Excel)	30	12	3 Hours	70	28	--	--	--	100	40
IV <sup>th</sup>	GUI Programming in visual Basic	30	12	3 Hours	70	28	--	--	--	100	40
V <sup>th</sup>	Desk Top Publishing (Page Maker, PowerPoint)	30	12	3 Hours	70	28	--	--	--	100	40
VI <sup>th</sup>	Internet and Web Page Designing	30	12	3 Hours	70	28	--	--	--	100	40
<b>Practical</b>	Computer Lab – I	--	--	--	--	--	3 Hours	100	40	100	40
	Computer Lab – II	--	--	--	--	--	3 Hours	100	40	100	40
	Project & Viva	Project Report-70			Viva-Voce-30			100	40	100	40
<b>Total</b>										<b>900</b>	<b>360</b>

### Note:-

- For passing the Examination minimum 40% marks must be scored in each Paper head individually.
- For passing the D.C.A. examination the aggregate marks must be at last 40% in theory & Continuous Evaluation and Practical papers.
- The examines who have obtained 60% or more marks in the total marks shall be placed in “First Division”
- The examines who have obtained less than 60% marks and more than 45% marks shall be placed in “Second Division” .
- Assignment work submitted for very important in the main examination.
- Assignment Work in Passing no. upon :
 

Total No. of Marks	30 each theory paper
Minimum Passing marks	12 Marks

## Paper-I : Fundamental of Computer & Information Technology

### Chapter 1 : Know the Computer

Introduction, What does computer stand for?, Strengths of computers, Limitations of computers, Fundamental uses of computers, Development of computers, Types of Computers, Generations of Computers, Summary, Exercise.

### Chapter 2 : Personal Computer

Introduction, Personal computer, Uses of personal computers, Components of personal computers, Evolution of PCs, Developments of processors, Architecture of pentium IV, Configuration of PC, Summary, Exercise.

### Chapter 3 : Boolean Algebra and Logic Gates

Introduction, Boolean Algebra, Binary Valued Quantities, And Operator, OR, Operator, NOT Operator, Basic Postulates of Boolean Algebra, Theorems of Boolean Algebra, De Morgan's Theorems, Reducing Boolean Expression by their Simplifications, Proving the Equations of Boolean Expressions By Truth Table, Principle of Duality, Standard Forms, Basic Logic Gates, Use of Logic Gates in Circuits, Karnaugh Maps.

### Chapter 4 : Number System

Introduction, Digital and Analog Operations, Binary Data, Binary Number System, Decimal Number System, Octal Number System, Hexadecimal Number System, Fractional Conversion, Coding System, Summary, Exercise.

### Chapter 5 : Data Representation and Binary Arithmetic

Introduction, Bits, Nibbles, Bytes and Words, Data Representation, Coding system, Binary Arithmetic, Binary Addition, Binary Subtraction, Binary Multiplication, Binary Division, Character Representation, Checking the Result of Binary Arithmetic, Summary, Exercises.

### Chapter 6 : Input Devices

Introduction, Input Device, Typing Input Devices, Pointing Input Devices, Scanning Input Devices, Audio Visual Input Devices, Summary, Exercise.

### Chapter 7 : Output Devices

Introduction, Output Devices, Soft Copy Vs Hard Copy Output, Monitor, Printers, Plotter, Electrostatic Technique, Special Purpose Output Equipments, Summary, Exercise.

### Chapter 8 : Central Processing Unit

Introduction, What is Central Processing Unit, Arithmetic And Logic Unit, Control Unit, Registers, Instruction set, Processor Speed, Summary, Exercise.

### Chapter 9 : Storage Devices

Introduction, Storage and its needs, Brain Vs Memory, Storage Evaluation Units, Data Access Methods, Primary Storage, Secondary Storage, Hard Disk Operations, Floppy Disk Drives, Winchester Disk, Optical Disk, VCD, CD-R, CD-RW, DVD, Zip Drive, Flash Drives, Blu Ray Disk, Memory Card, Driving Naming Conventions In a PC, Summary, Exercise.

### Chapter 10: Basics of Software

Introduction, What Does Software Stand For ?, Needs of software, Types of software, Open Source Software, Integrated Development Environment, Summary, Exercise.

### Chapter 11: Operating System

Introduction, Operating System, Why an Operating System, Functions of Operating System, The Booting Process, Types of Reboot, Booting From Different Operating System, Types of Operating System, Some Prominent Operating Systems, Summary, Exercise.

**Chapter 12: Disk Operating System**

Introduction, What is DOS?, Functions of DOS, Versions of DOS, DOS Commands, Important Internal Commands of DOS, Important External Commands of dos, Executable Vs Non-Executable Files In Dos, Summary, Exercise, Lab Work.

**Chapter 13: Programming Languages**

Introduction, Data, Information And Knowledge, Characteristics of Information, Comparison between human language and Computer Language, What is a program?, What is a Programming language?, Programming development cycle, Algorithm, Program Flowcharts, Pseudocode, Programming approaches, Programming Paradigms, Types of Programming Language, Third Generation Language; Fourth Generation Language, Summary, Exercise.

**Chapter 14: Virus**

Introduction, Virus, History, Mechanism of virus, How A Virus Spreads, How is virus named, A few Prominent Viruses, Types of Computer Virus; Related Concepts : Anti Virus Programs, Norton Anti - Virus (nav), Execution of NortonAnti-Virus, Summary, Exercise.

**Chapter 15: Communication and IT**

Introduction, Computer Network, Communication Process, Communication Types, Transmission Media, Wireless Media, Communication Channels/Media, Modem, Characteristics of a Modem, Types of Modem, Summary, Exercise.

**Chapter 16: Networks**

Introduction, Internet Vs Intranet, Types of Network, Topology, Types of Connectivity, Network Devices, Summary, Exercise.

**Chapter 17: Internet**

Introduction, What is Internet actually ?, Growth of Internet, Owner of the Internet, Internet Service Provider, Anatomy of Internet, ARPANET and Internet history of the World Wide Web; Services Available on Internet (Internet Tools), Basic internet terminologies, net etiquette, Application of internet, Summary, Exercise.

**Chapter 18: Management Information System**

Introduction, Information System, Management Information System (MIS), Fields of Information System, Elements Of MIS, Objectives Of MIS, Characteristics of mis, Impact Of MIS, Designing An MIS, Placement Of Mis, Views Of MIS, Pitfalls In Designing an MIS, Advantages of MIS, Disadvantages of MIS, Summary, Exercise.

**Chapter 19: Applications of Computers and Information Technology**

Introduction, Business And Computer, E-Mail, E-Commerce, Project management, Computers in Personnel Administration; Accounting, Computers in Cost and Budget Control, Marketing, Manufacturing; Materials management, Banking, Insurance and Stockbroking, Purchasing, Computers in warehousing, Summary, Exercise.

**Appendix-A**

**Appendix-B**

## Paper-II : Application Programming in Foxpro

- Unit I : DBMS and RDBMS**  
Introduction, What is FoxPro, FoxPro System, Creating a Database File in FoxPro, Closing Database File, Opening Database File, Different Data Types of FoxPro, Database Menu, Program Menu.
- Unit II : Displaying & Controlling Data**  
Introduction, Displaying the Records of Database Files, Different Designs of List, Principal Designs of Browse, Different Designs of Change Command, Modifying the Structure in Database Files, Displaying list of the Files.
- Unit III : Sorting and Indexing Database Files**  
Introduction, Indexing the Files by FoxPro Menu, Use of FIND and SEEK commands, Sorting the Files through FoxPro Menu, Plus Points of Sort command, Minus Points of Sort command.
- Unit IV : Memory Variables**  
Introduction, Creating and using the Memory Variables, Creating Array Memory Variables, Copying Multiple Records to Like Test, Display Memory Array, Using ?? Command.
- Unit V : Time & Date Functions and Commands**  
Set Clock on, Set Century On/Off, Set Mark to, Day & Month, Date Arithmetic.
- Unit VI : Functions Keys and Macros**  
Creating and Using the Key board Macros, Creating the Macros, Savings and Restoring the Macros, Using the Macros, Editing the Macros, Recording the Macros, Mathematical Commands and Functions.
- Unit VII : Programming with FoxPro**  
What is Program Command File, Creating a Program File, Running the Program File or Command File, Creating the Program File with Modify Command.
- Unit VIII : Working with Loops**  
Do While - End Do, The Classification of Mail.PRG Program, Editing a Program File, Running a Program File Through FoxPro Menu, Adding the Comments to Commands, Other Trim Functions, IIF ( ) The Compactness IF Function Nested If-End If Structure, Using Scan - End Scan, Handling Multiple Options with Do Case - End Case, Macro Substitution
- Unit IX : Error Conditions and Program Debugging Aids**  
Searching or Displaying Errors before Running a Program File, Unrecognized Command Verb, Saving Screen Activity in An Optical File, Running the Program in Slow Speed, Automatic Documentation with FoxDoc.
- Unit X : Multiple Database Files**  
Introduction, Opening Multiple Data Files, Linking the Database with Set Relation, Updating Information with Update, Appending Records from others Files (Append From), Copying the Structure of Database File, Opening the RQBE Window, Arranging and saving the Records in a File.
- Unit XI : Custom Screens**  
Introduction, Screen Co-ordinates in an User window, Restricting Data Input with Range, Assigning Default Value to Get Variables, Common Function Codes for @ ..... SAY, Validating GET VARIABLES.
- Unit XII : Creating Custom Screen & Designing Screen with Builder**  
Introduction, Creating the Screen Code, Designing a Custom Screen with CREATE SCREEN, Drawing a BOX, Creating a Push Buttons, Creating Radio Push Butt.
- Unit XIII : Creating Query, Report and Label**  
Database Query, Changing and Formatting the Report.

## Paper-III : PC Packages (window, Word, Excel)

- Chapter 1 Office Suite**  
Introduction, Meaning of Office Suite, Typical Office Suite Components, Different Office Suites.
- Chapter 2 Microsoft Office**  
Introduction, History of Microsoft Office, Components of Microsoft Office, Advantages of Microsoft Office, Microsoft Office 2007, New Features in Microsoft Office 2007, THE MINI TOOLBAR, Contextual Tabs, SmartArt.
- Chapter 3 Word Processing and Getting Familiar with Microsoft Word 2007**  
INTRODUCTION, FEATURES OF WORD PROCESSOR, MS-WORD—A POWERFUL WORD PROCESSOR, STARTING MS-WORD, ELEMENTS OF MS WORD 2007 WINDOW, SETTING UP YOUR WORD ENVIRONMENT, WORKING WITH MS-WORD, OPENING A FILE AS A COPY, OPENING A FILE AS READ-ONLY, COPYING A FILE , RENAMING A FILE, PREVIEWING A DOCUMENT, EXITING WORD, USING HELP ONLINE.
- Chapter 4 Text formatting**  
Introduction, Typing the text, Selecting Text with a mouse and keyboard, Deleting Text, Redoing/Repeating the last action, Formatting font, Advanced text formatting, Highlighting the text, Clearing Text Formatting, Copying Text Formatting, Moving the text, Copying the text, Paragraph, Aligning Paragraph, Applying borders and shadings.
- Chapter 5 Document Formatting**  
Introduction, Using page borders, Setting and removing tab stops, Using autotext, Using autocorrect, Deleting autocorrect entry, Customizing autocorrect, Headers and footers, Inserting date and time, Using goto, Cursor movement with key-board.
- Chapter 6 Creating Tables in MS-Word**  
Creating A Table, Using table templates, Formatting in a Table, Drawing Borders, Calculation in a Table.
- Chapter 7 Handling Graphics and Charts in MS-Word**  
Start with a drawing canvas, Follow these steps to create a shape, Using Word Art, Insert a clip from the Clip Organizer, Inserting a text box, Adding Pictures, Smartart Graphics, Creating charts.
- Chapter 8 Mail Merge, Template and Wizard**  
Introduction, Mail merge, Second way to Create and Print Merged document, Document templates, Zoom, Protecting Your Document, Overview of wizard.
- Chapter 9 Modifying Page Layout and Applying Styles and Themes**  
Themes, Page Setup, Set the Page Size, Setting up columns in the document, To setup unequal-width columns, Removing columns from the document, manual and automatic page breaks, section break, Inserting section break, Page background, Applying Styles.
- Chapter 10 Spreadsheet and MS-Excel**  
Features of MS Excel 2007, Starting MS-Excel, Opening A Workbook, Move Around a Worksheet, Entering Data in a cell.
- Chapter 11 Editing and Formatting in MS-Excel**  
Align Cell Entries, Copying data from selected cells, Create Borders, Add Background Color, Change the Font, Font Size, and Font Color, Move to a New Worksheet.
- Chapter 12 Entering Excel Formulas and Printing a Worksheet**  
Writing Formula, Parts of a formula, Using constants in formulas, Using references in formulas, Using functions in formulas, Changing the default date format , Perform Automatic Calculations, Set Print Options, Print.

**Chapter 13 Charts and Graphs**

Introduction, Types of Charts, Creating a Quick Chart Sheet, Parts of a Chart, Creating a Chart, Object Linking and Embedding (OLE), Sorting, Custom Sorts, Filtering.

**Chapter 14 Presentation Package And MS-PowerPoint**

Introduction, Chief Elements of Presentation, Powerpoint window and its Elements, Creating A Presentation, Creating A Blank Presentation, Opening a file, Saving Your Presentation.

**Chapter 15 Text Formatting in Slides**

Introduction, About Slide Layouts, Duplicating The Slides, Editing text on a slide, Moving Text, Checking Spelling of the text, Using Autocorrect, Finding and Replacing The Text, Applying Themes and background styles.

**Chapter 16 Table, Chart and other Drawing Objects**

Introduction, Creating a Table, Formatting a Table Style, Working with Rows and Columns, Changing Chart Type, Working With Shapes, Inserting Picture, Modifying Pictures, Insert movies, Other Options, Inserting Movie Clips from the Clip Organizer.

**Chapter 17 Adding Sound, Animations, Transitions to your slide**

Inserting Sound, Sound Options, Sounds in Clip Organizer, Sounds on CD, Adding Animations, Working with Animation Effects; Transition, Advancing Slides, Slide show Using Slide Show tab, Slide show by using Set up slide show button, Create a basic custom show.

**Chapter 18 Slides, Views, Notes, Handouts**

Introduction, PowerPoint Views, Normal view, Slide sorter view, Slide Show View, Notes Pages View, Creating Notes Pages; Notes Page view, Create and print a presentation in Outline view.

**Chapter 19 Outlook Express**

Introduction, WHAT IS outlook express?, Features of Outlook Express, starting outlook express, Concepts of CC and BCC, Email Address, Reading a received message, composing message; Replying And Forwarding Messages, Attaching files, Creating Signatute In Outlook Express; Formatting message text, What is MIME?, Applying stationery, Inserting a hyperlink or HTML page into a message, Flagging an e-mail or news message, Importing messages from other e-mail, programs, What are newsgroups?, Adding a newsgroup account, Switching between e-mail and news reading, Identities (Multiple Users on A Single, Computer), Adding a new identity, Managing Contacts With Outlook, creating; addresses, Importing an address book from another program, Using keyboard shortcuts in Outlook Express.

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## Paper-IV : GUI Programming in Visual Basic

### Chapter 1 Introduction to .NET

Introduction, What is a Program?, What is Programming?, What do you mean by NET Framework?, Features of .NET Framework, VB 6 VS VB.NET, VB.NET VS JAVA, VB.NET VS C#, What is .NET Architecture?, What is CLR?, What do you mean by Class Library?, Versions of .NET Framework, What are Assemblies?, Namespaces, CTS (Common Type System), Interfaces, What is special in VB.NET?.

### Chapter 2 Visual Studio 2005

Introduction, What is Visual Studio?, Flavors of Visual Studio, Visual Studio 2005, File Extensions Used in VB.Net; Using Visual Studio 2005, Feature of Visual Studio 2005, Output Window; Components Tray, References and the Reference Window, Quick View of VISUAL STUDIO 2005, Opening an existing project, Adding a Form to a Project.

### Chapter 3 The Visual Basic Language

Visual Basic Statements, Data Types in VB.NET, Declaring Variables, Declaration of Variables (Advanced), Data Type Conversion, String Functions, Formatting Data Arithmetic Operators, Parentheses and Precedence, OPERATOR OPERATION, Constants, Control Statements, Arrays in VB.NET, Specifying Optional Procedure Arguments, Passing a Variable Number of Arguments, Recursion; Using a Delegate.

### Chapter 4 Working with the Controls

The Toolbox, Adding and deleting Tools in the Toolbox, CREATING A TAB ON THE TOOLBOX, Form Designer Basics, The Button, The ComboBox, The ListBox, The Checkbox, The PictureBox, The RadioButtons, The Scroll Bar, Timer, ListView TreeView, Toolbar, Dialog Boxes, Menus in VB.NET, LinkLabel Control.

### Chapter 5 Designing Menus

Menus, Context menu, Event of the MenuItem, Creating menu items in Visual Studio .Net.

### Chapter 6 Object Oriented Programming with VB.NET

OOPs?, What is an Object?, What are Classes?, Visual Basic .NET and Object-Oriented, Principles of Object-Oriented Programming, Classes V/s Objects, Inheritance, Polymorphism and Overloading, Scope and Accessibility in Class Modules, Namespaces, Managed Execution, Assemblies, Assemblies in VB .NET

### Chapter 7 The .NET Framework Class Library

The .NET Framework Class Library, The System Namespace, Data Type Conversion Using Convert Class, The Array Class, The Math Class, The String Class, Other Namespaces, System.Collections, System.Data, System.IO.

### Chapter 8 OLE/COM/Win32 API

Object Linking and Embedding, History of OLE/COM, Component Object Model (COM), COM interoperability in .NET, Win32 API in .NET; COM Interoperability in .NET, Installation and Registration of Assembly, Microsoft Office solutions with Visual Studio .NET; Automation of Office from Visual Studio .NET, Creating and opening Microsoft Word document from VB.NET.



**Chapter 9 User Controls in VB.NET**

Introduction, The Control Class, The Control Class' Properties, The Control Class' Methods, Creating the Control Project 1, The RoundButton Control, Creating the Control Project 2, Building the new Button.

**Chapter 10 A Brief Introduction to Database Access with VB .NET**

Introduction, What is ADO?, What is ADO.NET?, The Connection Object, Connecting to a Database; The Command Object, The DataAdapter Object, The DataReader Object, The DataSet Object: Updating Your Database by Using, DataSets, The AcceptChanges ( ) Method, The RejectChanges ( ) Method, The HasChanges ( ) Method, The GetChanges ( ) Method, Working with DataSets in Visual Studio, Moving Around in DataSet and Retrieving Data, Using Strongly Typed DataSets, DataSets With Multiple Tables, Finding and Sorting Data in DataSets, Filtering on Row State and Version, Data View Manager.

**Chapter 11 Graphics in VB.NET**

Introduction, Service of GDI+, Using GDI+ Manged Classes, BRUSH Class; Bitmap Class, Graphics Class, Simple Drawing, Drawing Text, An Example: Show All Fonts, Printing; Printing Multiple Pages, More on the PrintPageEventArgs Class, Using a Print Dialog Control, Rolling Your Own Printing Code, Print Preview.

**Chapter 12 Learn by Examples**

Basic Examples of VB.NET, OOPs in VB.NET, Stack, Queue, Linked List I/O, Window Programming, Database (ADO.NET), Graphics.

**Index**

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## Paper-V : Desk Top Publishing (Page Maker, Power Point)

### UNIT I : Introduction to DTP

Definition, Characteristics, use of DTP in publication & Newspaper Printing, Various DTP Software, Bits cream & Vector Graphics, Printers - Dot Matrix, Inkjet and laser, Introduction to offset printing Technology, Typography - History, Elements, Selection Of Fonts, Points, use of blank spaces and dashes, white Spaces, Various Breaks, Good Designing and Easy Readability. Different measurements used in DTP printing.

**UNIT II :** Introduction to Adobe page maker, why PageMaker Popular in Publication, Toolbox, styles, Menus, Templates, Different Page Layouts, Importing Text, Auto Flow, Text Frames & Text books, Story Editor & Layout View, Spell Check & Replace, Attribute Settings, Alignments, Grids and Guides etc., working with text and graphics, tab setting, columns & getters

**UNIT III :** Import & Export of files, placing Texts & Graphics, Styles & Palettes, Picture Editing, Using Colours, Buttets, Masking, Fonts : Postscript Fonts, True Type Fonts, bit Stream & Vector Fonts., Column Balancing Breaks., Windows & Orphan Lines, Reverse Text Text Wrapping, Revert Command, Drop Caps, Printing, Options, Control Palette

**UNIT IV :** Clips & Image Files, Key Board Controls, OLE & Embedding, linking Plugging, Mathematic Equation, table Editor, Printing Options, Filters, Layers, PDF Files, Frame Option, Headers & Footers.

### UNIT V : Presentation Graphics

MS Power Point, Features and Various Versions, Creating Presentation using Slide Master and template in various colour schemes., working with different views and menus of power point., working with slides - make new slide, move copy, delete, duplicate lay outing of slide, zoom in or out of Slide, Editing and Formatting text : Alignment, Editing, inserting, deleting, selecting, formatting, of text find and replace text., Bullets, Footer, Paragraph Formatting, Spell Checking, Printing Presentation - Print Slides, notes handouts and outlines., inserting Object - Drawing and Inserting Object Using Cliparts, Pictures and Charts. Slide Sorter Transition effects and other animation effects. Presenting the show making sand alone presentation, pack and go wizards.

## Paper-VI : Internet & Web Page Designing

### **Chapter 1 Introduction to Internet**

Introduction, What is internet actually?, Growth of internet, Owner of the internet, Internet service provider, Anatomy of internet, Arpanet and internet history of the world wide web, Services available on internet wais, Basic internet terminologies, Net etiquette, Applications, Commerce on the internet, Governance on/through the internet, Impact of internet on society.

### **Chapter 2 TCP/IP - Internet Technology and Protocols**

Introduction, Switching technology, Internet protocols, Overview of TCP/IP reference model, Introduction to TCP/IP, Routers, Internet addressing scheme.

### **Chapter 3 Internet Connectivity**

Connectivity types, Level one connectivity, Level two connectivity, Level three connectivity, Hardware requirements, Modems, Narrow-band/phone-line dialup modems, Software requirements, Modem configuration: Telephone line options, Making a dial-up connection, Protocol options; Service options, News services, Desktop alerts.

### **Chapter 4 Internet Network**

Computer networks, Applications of networks, Common terminologies : Interoperability, Network security, The need for security, Common threats, Security barriers in network pathways; Network components : Communication media, Network devices, Types of network : client / server & peers, Addressing in internet, Domain name system (dns), Domain name and their organization, Network topology, Internet vs intranet.

### **Chapter 5 Services of Internet (Definition and Functions)**

Introduction, File transfer protocol, Ftp related terminologies, Ftp servers and authentication, Public and private software services, Ftp clients, Types of ftp client softwares, Displaying files, Remote login, Chat programs, Connecting to a server, Search engines.

### **Chapter 6 Electronic Mail**

Introduction, What is an e-mail?, Email networks and servers, Merits of e-mail, Limitations, E-mail protocols, Structure of an e-mail, E-mail address, Microsoft internet explorer and outlook express, Applying stationary; Web based emails, Working with yahoo, Starting the mail program, Creating signatute in outlook express, Creating signatute in yahoo, Email encryption, Why email encryption?, Digital certificate.

### **Chapter 7 Current Trends on Internet**

Current trends of Internet: Languages used on the Internet, Internet phones, Internet Video / Internet TV; Streaming Video & Audio, Collaborative computing, E-commerce, Technical and Organizational Aspects.

### **Chapter 8 Web Publishing**

Overview, SGML (standard generalized markup language), What is the need of a website?, Types of web sites, Components of web publishing, Domain name planning and registration, Choosing a web host and signing up for an account, Web hosting, Web design and development; Testing your website, Promotion of the site, Registering your site with a search engine, Publishing tools, Html editor, Image editor, Program to tranfer your files to a web server, Uploading web pages using cufteft.

### **Chapter 9 World Wide Web**

Introduction, Evolution of the www, Basic features, Mechanism of the world wide web, Search and meta-search engines, Searching the web, Using boolean

operators in your searches; Using advanced, Using a metasearch engine, Site specific search tools, Web protocols, Hyper text transfer protocol (http), Web server.

**Chapter 10 Browsers**

Introduction, www web browsers; Mozilla firefox browser, The opera browser, Google chrome, What are bookmarks?, Adding folders Favorites; Deleting favorite folders and pages, History; Progress indicator, Customizing internet explorer, Turning off graphics to display all web pages faster, Customizing the toolbar, Copying, saving and printing in internet explorer, Printing an image from a web page, Printing a web page, Cookies, What is cache setting ?, Internet explorer, The standard toolbar, Internet explorer keyboard shortcuts.

**Chapter 11 Hyper Text Markup Language Programming Basics**

Introduction, Html editors, Elements of html, Definition lists, Compact attribute, Nested list; Type attribute, Html links, Using alt attribute, Background graphics, Html document tables; Creating tables within tables, Html frames, Html rules, Introduction of multimedia, Meaning of multimedia, What is multimedia ?, Identifying multimedia elements, Audio on the web, Video on the web.

**Chapter 12 Introduction to Interactivity Tools**

Overview, What is asp?, Functions of asp, The basic syntax rule, Writing output to a browser, Adding some html to the text; Declaring a variable in asp, Declaring an array in asp, What is vbscript?, Java; Features of java, Starting with java, Javascript and java, Syntax and conventions, Frontpage, Introduction to flash, Installation of flash mx, Creating simple animation for the web, Working with layers in flash, Masking in flashmx, Bouncing effect in flash, To create motion tween, Flash ripple effect.

**Chapter 13 Internet Security Management Concepts, Information Privacy and Copyright Issues**

Overview, Basic security concepts, Security events, Measures for check threats, Firewalls, Monitoring tools, Security analysis tools, Cryptography, Information privacy, Copyrights and the internet; Copyright legislation in india, Key points of copyright, Encryption & decryption – cryptography; Terminology.

**Chapter 14 Firewalls**

Firewalls, Firewall Design Principles, Firewall Attributes, Firewall Strengths and Weaknesses, Types of Firewalls, Comparison of firewall types, DMZ DNS server; VLAN.

**Practical Assignment**