

SCHEME OF EXAMINATION AND DETAILED SYLLABUS

Faculty of CS & IT

**Diploma in Computer
Application (DCA)**


(Duration- 1 Year)

(For 2019 Batch)



Contact us:

 8252299990

 8404884433



AISECT University, Hazaribag

Matwari Chowk, in front of Gandhi Maidan, Hazaribag (JHARKHAND)-825301

DIPLOMA IN COMPUTER
Duration: 12 Months (1 Years) Eligibility:

COURSE STRUCTURE OF DCA I SEMESTER												
Subject Details			Main Examinations				Sessionals ***		Credit Distribution			Allotted Credits
Subject Code	Subject Name	Total Marks	Major		Minor		Max Marks	Min Marks	L	T	P	Subject wise Distribution
			Max Marks	Min Marks	Max Marks	Min Marks						
Theory Group												
2TDCA-101	Fundamentals of Computers & Information Technology	100	50	17	20	7	30	12	3	2	-	5
2TDCA-102	Operating Systems (DOS, Windows, Linux)	100	50	17	20	7	30	12	3	2	-	5
2TDCA-103	Computers in Office-I (MS Word & MS Excel)	100	50	17	20	7	30	12	3	2	-	5
2TDCA-104	Computers in Office-II (MS PowerPoint, MS Access & MS Outlook)	100	50	17	20	7	30	12	3	2	-	5

2TDCA-105	Communication Skills & Personality Development	100	50	17	20	7	30	12	3	2	-	5
Practical Group			Term End Practical Exam				Lab Performance					
2TDCA-102	Operating Systems (DOS, Windows, Linux)	50	25	8		25	8	-	-	1	1	
2TDCA-103	Computers in Office-I (MS Word & MS Excel)	50	25	8		25	8	-	-	1	1	
2TDCA-104	Computers in Office-II (MS PowerPoint, MS Access & MS Outlook)	50	25	8		25	8	-	-	1	1	
Grand Total		650									28	

COURSE STRUCTURE OF DCA II SEMESTER

Subject Details			Main Examinations				Sessionals ***		Credit Distribution			Allotted Credits
Subject Code	Subject Name	Total Marks	Major		Minor		Max Marks	Min Marks	L	T	P	Subject wise Distribution
			Max Marks	Min Marks	Max Marks	Min Marks						
Theory Group												
2TDCA-201	Introduction to Internet and web Technology	100	50	20	20	7	30	12	3	2	-	5
2TDCA-202	Introduction to financial Accounting with Tally	100	50	20	20	7	30	12	3	2	-	5
2TDCA-203	Programming in C	100	50	20	20	7	30	12	3	2	-	5
2TDCA-204	DBMS With MS Access	100	50	20	20	7	30	12	3	2	-	5
Practical Group			Term End Practical Exam				Lab Performance					
2TDCA-201	Introduction to Internet and web Technology	50	25		8		25	8	-	-	1	1
2TDCA-	Introduction to	50	25		8		25	8	-	-	1	1

FUNDAMENTALS OF COMPUTERS & INFORMATION TECHNOLOGY

COURSE OBJECTIVE:

- 1.To understand the basic knowledge of computer.
- 2.To understand the assembly-level programming.
- 3.To understand the input output devices, storage media, memory .
- 4.To understand the concept of Networking devices

Syllabus

UNIT- I

Know the Computer -Introduction, What does computer stands for? Strengths of computers, Limitations of computers, Fundamental uses of computers, Development of computers, Types of Computers, Generations of Computers

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

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

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.

UNIT- II

Input Devices - Introduction, Input Device, Typing Input Devices, Pointing Input Devices, Scanning Input Devices, Audio Visual Input Devices

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

Central Processing Unit - Introduction, What is Central Processing Unit, Arithmetic and Logic Unit, Control Unit, Registers, Instruction set, Processor Speed

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, Blue Ray Disk, Memory Card, Driving Naming Conventions In a PC

Basics of Software- Introduction, What Does Software Stand For? Needs of software, Types of software, Open Source Software, Integrated Development Environment

Operating System - Introduction, Operating System, Why an Operating System, Functions of Operating System, The Booting Process, Types of Reboot, Booting From Different Operating

COURSE CODE: 2TDCA-101

System, Types of Operating System, Some Prominent Operating Systems

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

UNIT- III

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, Pseudo code, Programming approaches, Programming Paradigms, Types of Programming Language, Third Generation Language, Fourth Generation Language

Computer 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 Norton Anti-Virus

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

UNIT- IV

Networks - Introduction, Internet Vs Intranet, Types of Network, Topology, Types of Connectivity, Network Devices

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

UNIT- V

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 Stock broking, Purchasing, Computers in warehousing

COURSE OUTCOMES: –

After study this student will be able to know about terms and concepts of Fundamentals of Computers & Information Technology (hardware, software, networking, security, Internet/Web, and applications).

Text Books:

- Computer Fundamental (3rd Ed) Sinha,P.K.
- Fundamental of Information Technology ShritvastavaCheton
- Fundamentals of Computers, Murthy,C.S.V. Delhi S. K. Kataria& Sons.
- MS office XP for Everyone, Saxena Sanjay, New Delhi Vikas Publication

Reference Books:

- Computer fundamental: V .Rajaraman; PHI
- Fundamental Of IT Leon and Leon Leon Tec World
- Fundamental of Computer Programming & Information Technology Sharma,G.& Singh G.

Chairperson
(Board of Studies)

Dean
(Academic Council)

(Registrar)
Seal

OPERATING SYSTEMS (DOS, WINDOWS, LINUX)

COURSE OBJECTIVE:-

1. To develop the understanding of Operating System.
2. To understand the Operating System Process Concepts, process state & process control
- 3 To understand the Features of Windows
- 4 To understand the Communication and Single User and Multiuser Operating System
5. To understand the Disk Scheduling, Disk Management

Syllabus:

UNIT-I

Operating system, definition and need. Main Services of operating system , various types of operating system, (definition and characteristics), multitasking, multiprocessing , multiprogramming, real time, time sharing, parallel, network operating system, booting process, file system.

DISK OPERATING SYSTEMS (DOS) - Introduction, History & versions of DOS DOS basics- Physical structure of disk, drive name, FAT, file & directory structure and naming rules, booting process, DOS system files.

DOS commands: Internal - DIR, MD, CD, RD, COPY, DEL, REN, VOL, DATE, TIME, CLS, PATH, TYPE etc.

External Commands - CHKDSK, XCOPY, PRINT, DISKCOPY, DISKCOMP, DOSKEY, TREE, MOVE, LABEL, APPEND, FORMAT, SORT, FDISK, BACKUP, EDIT, MODE, ATTRIB, HELP, SYS etc

UNIT-II

WINDOWS - Introduction to Windows, its various versions and features. Hardware requirements for various versions of Windows. Working with Windows (**Windows 7**) Windows concepts, Windows Structure, Desktop, Taskbar, Start Menu, Working with files and folders, create, copy, delete, renaming and moving files and folders, working with recycle bin-restoring deleted files, emptying the recycle bin, searching files and folders .My computer, formatting floppy disks, Using CDROM Disk and Dives.

Windows Accessories programs- Calculator, Notepad, Paint, WordPad, Character map, Paint, Command line.

Using Media Player, Sound Recorder, Volume Control. Taking Printout from programs, Printer Properties, Add fonts to Windows (Specially adding Hindi Fonts and using them). Setting up Regional and Language settings in Windows.

COURSE CODE: 2TDCA-102

UNIT-III

Advanced features of Windows -Managing Hardware & Software – Add or remove Hardware devices to/from computer, Add/remove programs, Using Scanner, Web camera, sharing of printers.

System Tools - Backup, Clipboard Viewer, Disk Defragmenter, Drive Space, Scandisk, System Information windows update.

UNIT-IV

Communication – Setting up Dial up Networking with Windows, Internet connection with Windows, Direct Cable Connection, Setting up TCP/IP properties, Hyper Terminal, Phone Dial ,Browsing the Web with internet explorer, communication through Outlook Express, Multiple Users Features of Windows. Creating and deleting user, changing user password etc. Accessibility Features of Windows.-Sharing Information between Programs, sharing folders and drives browsing the entire network, mapping windows shared drives, Using shared printers - Understanding OLE - Embed/Link Using Cut and Paste and Embed/Link Using Insert Object - Manage Embedded/Linked Object.

UNIT-V

LINUX - Linux introduction, Basic Features, Advantages, Features of Linux, Basic Architecture of Unix/Linux system, Kernel, Shell, Linux File system, Linux standard directories. Partitioning the Hard drive for Linux, Installing the Linux system, System, startup and shut-down process, How Linux works, Linux GUI, Linux Desktop, Creating files in Linux.

Essential linux commands Understanding shells, Commands for files and directories cd, ls, cp, md, rm, mkdir, rmdir, pwd, file, more, less, creating and viewing files using cat, file comparisons – cmp & comm, View files, disk related commands, checking disk free spaces.

COURSE OUTCOMES: –

After Study, the Student will be able to know about functioning of Operating System. To make students able to learn different types of operating systems along with concept of file systems and CPU scheduling algorithms used in operating system.

To provide knowledge of memory management and deadlock handling algorithms. At the end of the course, students will be able to implement various algorithms required for management, scheduling, allocation and communication used in operating system

Text Books:

- Computer Fundamental (3rd Ed), Sinha,P.K.
- Fundamental of Information Technology, ShritvastavaCheton
- Fundamentals of Computers, Murthy,C.S.V. Delhi S. K. Kataria& Sons.
- MS office XP for Everyone, Saxena Sanjay, New Delhi Vikas Publication

Reference Books:

- Operating System Concepts by Silberschatz & Galvin, Addison Wesley Publication 6th Edition.
- Operating System Concepts & Design by Milan Milen Kovic, TMH Publication
- Operating system William Stalling , Pearson Edu
- Linux and Shell Programming -Sumitabha Das, Tata McGraw Hill Publications.

Chairperson
(Board of Studies)

Dean
(Academic Council)

(Registrar)
Seal

COMPUTERS IN OFFICE–I (MS WORD & MS EXCEL)

COURSE OBJECTIVE:-

1. To understand the basic knowledge of MS Windows.
2. To understand the Office Packages.
3. To understand the MS Excel.
4. To understand the formulas writing in MS Excel

Syllabus:

UNIT-I

MS Word Basics: Introduction to MS Office; its components, Introduction to MSWord; Features & area of use. Working with MS Word.; Menus & Commands; Toolbars & Buttons; Shortcut Menus, Wizards & Templates; Creating a New Document; Saving document, Saving as different format, Different Page Views and layouts; Applying various Text Enhancements; Working with – Styles, Text Attributes; Paragraph and Page.

UNIT-II

Formatting- Using page border and watermark, Text Editing using various features ; Bullets, Numbering, Auto formatting, word count, various page view options, Printing & various print options

Advanced Features of MS-Word: Spell Check, Thesaurus, Find & Replace; Headers & Footers ; Inserting – Page Numbers, Pictures, Files, Auto texts, Symbols etc.; Working with section breaks and page breaks, Working with Columns, Tabs & Indents; Creation & Working with Tables including conversion to and from text; Margins & Space management in Document.

UNIT-III

Adding References – footnotes, endnotes, and Table of contents, Insert drawing, Mail Merge, Envelops & Mailing Labels, protect and secure documents in MS Word, Working in different languages in MS Word. Using Unicode in MS Word, Insert WordArt and other objects like shapes, clipart, charts and Smart Arts, symbol in Document. Using Macros in Word- Record, edit and run macros.

UNIT-IV

MS Excel: Introduction and area of use; Working with MS Excel.; concepts of Workbook & Worksheets; Using Wizards; Various Data Types; Using different features with Data, Cell and Texts; Inserting, Removing & Resizing of Columns & Rows; Working with Data & Ranges; Different Views of Worksheets; Zooming, Column Freezing, Labels, Hiding, Splitting etc.; Using different features with Data and Text.

UNIT-V

Formulas- Use of Formulas, Calculations using various type of functions-Logical, string, date & time, maths and other types; Cell Formatting including Borders & Shading; conditional formatting, sorting data items, Working with Different Chart Types; Printing of Workbook & Worksheets with

COURSE CODE: 2TDCA-103

various options. Import and export excel sheets to/from various format, add headers and footers, using macros in excel sheet- Record, edit and run macros.

COURSE OUTCOMES:-

After studying this student will be able to know about terms and concepts of Microsoft suite completely. (like MS-Word, Power-point-Excel and Outlook express)

Practical:

1. Introduction of Microsoft windows.
2. Creation of file and folder in MS Windows.
3. Introduction of MS Word.
4. Inserting Number, Bullets, Footer and Header.
5. Creating text, document and table in MS Word.
6. Write steps for mail merge.
7. Introduction of Microsoft excel.
8. Write steps to inserting formula in MS Excel.
9. Creating text, row and Column in MS Excel.
10. Introduction of Microsoft Power Point.
11. Write steps how to using graphics in power point.
12. Introduction and theory of Microsoft Outlook.

Text Books:

- MS-Office 2010 Mr. Kalpesh Patel (Computer World (2014))
- PC Software MS Office Naik Nitin K (Kamal Prakashan)

Reference Books:

- Introducing Windows 10 for IT Professionals Ed Bott (Microsoft Press)
- GO! with Microsoft Windows 10 Introductory Gaskin & Vargas (Publisher: Pearson)
- Microsoft Office 2010 a Complete Guide Blokdyk Gerardus (5starcooks)



Chairperson
(Board of Studies)

Dean
(Academic Council)

(Registrar)
Seal

COMPUTERS IN OFFICE–II (MS POWERPOINT, MS ACCESS & MS OUTLOOK)

COURSE OBJECTIVE:-

1. To understand the basic knowledge of MS Windows.
2. To understand the Office Packages.
3. To understand the MS Access.
4. To understand the MS Outlook Express.

Syllabus:

UNIT-I

MS PowerPoint: Introduction & area of use; Working with MS PowerPoint; Creating a New Presentation; Working with Presentation; Using Wizards; Slides & its different views; Inserting, Deleting and Copying of Slides; Working with Notes, Handouts, Columns & Lists; Adding Graphics, Sounds and Movies to a Slide.

UNIT-II

Working with PowerPoint Objects- PowerPoint Objects Insert WordArt and other objects like shapes, clipart, charts and Smart Arts, symbol in PowerPoint, Designing & Presentation of a Slide Show; Master slide, Adding custom animation and effects in your presentation, Add time to your slide, Slide Sorting, Printing Presentations, Notes, Handouts with print options, Package your presentation for CD.

UNIT-III

MS-Access – Getting Started, Adding and Changing Data, Simple Queries, Creating Append Queries, Creating QBE Queries, Multi-table QBE Queries, SQL Queries.

UNIT-IV

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 Signature In Outlook Express, Formatting message text, What is MIME?, Applying stationery.

UNIT-V

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

COURSE OUTCOMES: –

After studying this student will be able to know about terms and concepts of Microsoft suite completely.(like MS-Excel, MS-Access and Outlook express)

COURSE CODE: 2TDCA-104

Text Books:

- MS-Office 2010 Mr. Kalpesh Patel (Computer World (2014))
- PC Software MS Office Naik Nitin K (Kamal Prakashan)

Reference Books:

- Introducing Windows 10 for IT Professionals Ed Bott (Microsoft Press)
- GO! with Microsoft Windows 10 Introductory Gaskin & Vargas (Publisher: Pearson)
- Microsoft Office 2010 a Complete Guide Blokdyk Gerardus (5starcooks)

Chairperson
(Board of Studies)

Dean
(Academic Council)

(Registrar)
Seal

COMMUNICATION SKILLS & PERSONALITY DEVELOPMENT

COURSE OBJECTIVE:-

1. To understand how to communicate effectively and appropriately in real-life situation.
2. To use English effectively for study purpose across the curriculum.
3. To develop and integrate the use of the four language skills i.e. Reading, Listening, Speaking, Writing

Syllabus:

UNIT-I

English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*

Nouns : Countable and Uncountable, Pronouns : Personal, Relative and Others, Articles

The Parts of Speech, The Prepositions, Clauses : Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb.

UNIT-II

The Model Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary

Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills.

UNIT-III

Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality development: Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management.

UNIT-IV

Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation

Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking

UNIT-V

Techniques in Personality development I a) Self confidence b) Mnemonics c) Goal setting d) Time Management and effective planning

Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self acceptance and self growth

COURSE OUTCOMES: -

After study this student will be able to know about how to become active readers, what are the writing skills and process. Learn about oral communication skills.

Text Books:

- A Practical English Grammar A.J. Thomson & A.V. Martinet (New Delhi Oxford University)
- Written Communication in English Sarah Freeman (New Delhi : Orient Blackswan)

Reference Books:

- Essential of English grammer and composition Rajendrsa Pal
- Fundamental of English grammer N.C Sinha
- A comprehensive of English grammer Rajkumar Sharma



**Chairperson
(Board of Studies)**

**Dean
(Academic Council)**

**(Registrar)
Seal**

INTRODUCTION TO INTERNET & WEB TECHNOLOGY

COURSE OBJECTIVE:-

1. To understand concept of Internet
2. To understand the web technology terminologies.
3. To develop and integrate the use of current trends on internet technology
4. To understand firewall and HTML programming

Syllabus:-

UNIT-I

Introduction To Internet- introduction, , growth of 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.

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.

UNIT-II

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

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.

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 software, displaying files , remote login, chat programs, connecting to a server, search engines.

UNIT-III

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 signature in outlook express, creating signature in yahoo, email encryption, why email encryption?, digital certificate.

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

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,

COURSE CODE: 2TDCA-201

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 transfer your files to a web server, uploading web pages using Cute ftp.

UNIT-IV

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

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.

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.

UNIT-V

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

Firewalls - firewalls, firewall design principles, firewall attributes, firewall strengths and weaknesses, types of firewalls, comparison of firewall types, DMZ DNS server, VLAN

COURSE OUTCOMES:-

After study, the student will be able to know about Internet, Internet connectivity and services of internet internet security management and firewalls

Practical:

1. WAP which shows headings five time in ascending order. Align the heading also.
2. Write a program which show four paragraph under four headings.
3. Write a program for formatting the text & marked highlighted text.
4. Write a program for some text using CSS technique.
5. Write a program to insert an image in a page.
6. Write a program to make a table for any company employee's data record.
7. Write a program to make forms for different uses.
8. Write a java script to print the heading and paragraph & also create a button
9. Write a program to upload video on web page.
10. Write a program to change the back ground of any page.
11. Write a program to create a link between page.

Text Books:

- Internet & Web Design, A. Mansoor , Pragma Publications.

Reference Books:

- Learn HTML in a weekend Steven E. Callihan, PHI
- Using HTML, Lee Anne Phillips , PHI
- SAMS Teach Yourself Javascript in 24 Hrs. Michael Moncur, TechMedia
- “Programming In Java”, 2nd Edition, E. Balaguruswamy, TMH Publications ISBN 0-07-463542-5
- “Peter Norton Guide To Java Programming”, Peter Norton, Techmedia Publications ISBN 81-87105-61-5
- JAVA, How to Program, Deitel&Deitel, PHI, Pearson



**Chairperson
(Board of Studies)**

**Dean
(Academic Council)**

**(Registrar)
Seal**

INTRODUCTION TO FINANCIAL ACCOUNTING WITH TALLY

COURSE OBJECTIVE:-

1. To understand the concept of Financial Accounting
2. To understand the knowledge about Tally.
3. To develop and integrate the use of Accounting
4. To understand Cheque Printing, Multi Account Printing etc.

Syllabus:

UNIT-I

Accounting, Meaning Of Accounting, Objectives Of Accounting, Important Terms, Accounting Equation, Rules Of Debit And Credit- Journal & Ledger, Journal, Ledger, Cash Book, Subsidiary Books, Financial Statement, Trading & P&L A/C, Balance-sheet, Inventory, Adjustment Entries, Bill Of Exchange

Installing Tally 9, Introduction, Tally 9.0 (Release 1.0), Major Enhancements In Tally 9, Minor Enhancements In Tally 9, Multilingual Business Accounting And Inventory Management Features, Performance And Implementation Features, Accounting And Inventory Control Features, Installing Tally 9.0, Application Directory,

Data Directory, Configuration Directory, Language Directory, Activating Tally, Activating Tally Gold For Multi User, Registering Tally, Validating Tally, Tally Data Migration Tool, Uninstalling Tally 9

UNIT-II

ABC of Company, Creation Of New Company Selection Of New Company Deletion Of Company Alteration Of Company Shut A Company Company Features, Features Of Company Accounting Features Inventory Features, , Statutory Features Tally Screen Components, Title Bar, Button Bar, Calculator, Working Area, Quitting, Gateway Of Tally, Current Status Area Configuration, General, Numeric Symbols, Accts/Inventory Info, Printing, Connectivity, Licensing, Shop, Quit Budget, Introduction, Budget, Creating Budget, Alter A Budget, Delete Budget, Display Budget/ Budget Variance, Scenarios Job Costing, Introduction, Enabling Or Configure Job Costing In Tally, Master Creation For Job Costing, Voucher Type And Voucher Class, Job Cost Reports

UNIT-III

Reports, Introduction Accounting Reports, Trial Balance, Balance Sheet, Profit & Loss, Cash Flow Statement, Fund Flow Statement, Ratio Analysis, Day Book, Cash/Bank Book Sales Register Purchase Register Outstanding Interest Cost Centers Job Work Analysis Statistics Inventory Reports

Accounts Groups & Ledgers, Introduction Accounts Group Multiple Group Creation Display Group Alter Group Multiple Ledgers Display Ledger Alter Ledger Voucher Types

Payroll Accounting, Introduction, To Activate Payroll In Tally 9, Payroll Menu, Display Pay Heads, Multiple Group Creation, Employee Creation, Salary Detail, Attendance, Attendance Type, Voucher Creation.

UNIT-IV

COURSE CODE: 2TDCA-202

Export & Import, Introduction, Export, Import, ODBC Compliances. Cost Centre, Introduction Cost Centre, Creating Cost Centre, Display Cost Centre, Alter Cost Centre Cost Category, Create Cost Categories, , Display Cost Categories, Alter Cost Categories Voucher Entry Cost Centre Class, Creating Cost Centre, Invoice Entry Using Cost Centre Reports Related To Cost Centre

Foreign Currencies, Introduction Foreign Currency, Create Foreign Currency, Alter Foreign Currency, Display Foreign Currency, Exchange Rate Entry Voucher Entry Using Foreign Currency Voucher Entry through Forex Journal Voucher Class Reports Related To Foreign Currency

Interest, Introduction, Interest, Simple Mode, Interest On Outstanding Balances, Reports On Interest Calculated On Outstanding Balances, Advanced Parameter Mode, Interest Calculation Transaction By Transaction/Voucher Interest At Fixed Rate, Voucher Interest At Variable Rate, Statement Of Interest Due On Invoice, Interest Reports, Interest Voucher Class.

UNIT-V

Printing, Introduction Cheque Printing, Multi Account Printing, Printing Options General, Purchase Printing, Sales Transaction, Receipt Voucher, Journal/Contra, Debit/Credit Note, Reminder Letter, Confirmation Statement Reports Printing Button Related

Bank Reconciliation, Introduction, Bank Reconciliation In Tally 9, Configuration Of Bank Reconciliation

Security Control, Introduction Security Levels Access Type

Backup & Restore, introduction, Group Company, Create a Group Company, Alter a Group Company, Tally Audit, Splitting Company Data

Inventory, Introduction Stock Group Stock Item Stock Categories Godowns Units Of Measures Rate Of Duty Inventory Vouchers Reorder Level Inventory Reports Inventory Info Inventory Books Statement Of Inventory Batch Wise Details Price List

COURSE OUTCOMES:-

After study, the student will be able to know about Accounting, Company, Company Features, Features of Company Accounting, Interest Calculation Transaction and Cheque Printing, Multi Account Printing

Reference Book:

1. Implementing Tally 6.3 by Nadhani; BPB Publications
2. BPB Tally 6.3 by BPB Editorial Board (Hindi) BPB Publications
3. Tally 9 (Level 2) Traders Accounting BY ASOK.K.NADHANI
4. Official Guide to Financial Accounting Using Tally. ERP 9 with
5. GST by Tally Education

Chairperson
(Board of Studies)

Dean
(Academic Council)

(Registrar)
Seal

PROGRAMMING IN C

COURSE OBJECTIVE:-

1. To understand the basic knowledge of programming concepts.
- 2 To understand the C language & its concepts.

Syllabus:

UNIT- I

Principles of Programming, Introduction to Programming, Program Concept, Characteristics of Programming, Stages in Program Development, Tips for Program Designing, Programming Aids, Algorithms, Notations, Design, Flowcharts, Symbols, Rules

Programming Techniques and Logic, Introduction, Introduction to programming techniques, Top-down approach or technique, Bottom-up approach or technique, Unstructured technique of programming, Structured technique of programming, Modular technique of programming, Comparative study of programming techniques, Cohesion , Coupling, Debugging , Syntax Errors, Logical Errors, Data Entry Errors, Linker Errors, Runtime Errors, Program Testing

UNIT- II

Turbo C IDE, Turbo C IDE (Integrated Development Environment), Main Menu Bar, File Options, Edit option, Run option, Compile option, Project option, Options option, Debug option, Break/watch option, Edit Window, Message Window, Status bar, Editing, Compiling and Running a C Program, Features of C language, C language standards, Standardization , Successors of C language

Introduction to 'C', Introduction, Structure of a C program, 'C' Tokens, Keywords, Identifiers, 'C' Constants, Variables in C, Data Types, Derived Data Types : , Operators, Precedence and Associativity of operators, Hierarchy of operators at a glance, Expression & its Evolution, Type conversion in expressions , (Implicit and Explicit type conversion)

UNIT- III

Decision Making and Branching, Introduction, Sequential statements, Unformatted I/O functions, Formatted input using scanf () function, Formatted output using print(), Branching statements, The if-else statement, The nested if-statement, The switch statement.

Looping Statements, Introduction, for-statement, while-statement, do-while statement, Difference between while-loop and do-while loop, Nested loops, Jumps in loops.

UNIT- IV

Arrays, Introduction, Single-dimensional arrays, Reading and writing single dimensional arrays, Examples of Complex Programs, Searching, Sorting, Two-dimensional arrays (Multi-dimensional arrays), Reading-writing two-dimensional arrays, Manipulation in two-dimensional arrays,

Strings, Concepts of string, Strings in C language, String variable, Initializing strings, String input/output functions, Arrays of strings, String handling functions, Memory formatting

User Defined Functions, Introduction, Elements of user-defined functions, Categories of functions, Passing parameters to functions, Programming Examples, Arrays in functions, Nesting of Functions, Recursion, Command Line Arguments , Storage Classes

UNIT- V

Structure and Union, Introduction to structures, Structure and its definition, Structure declaration, Tagged Structure, Structure variables, Type-Defined Structure, Structure initialization, Accessing structures, Nested structures, Array of structures, Structures and functions, Sending individual

COURSE CODE: 2TDCA-203

members, Sending the whole structure, Passing structures through pointers, Uses of structures, Union and its definition

Pointers, Introduction, Pointer concepts, Pointer variable, Accessing variables through pointers, Pointer declaration and Definition, Initializing a pointer variable, Pointers to Pointers, Compatibility, Pointer applications, Pointers and other operators, Memory allocation functions, Memory map of C program, Memory management functions

COURSE OUTCOMES:-

- Illustrate the flowchart and design an algorithm for a given problem and to develop IC programs using operators
- Develop conditional and iterative statements to write C programs
- Exercise user defined functions to solve real time problems
- Exercise files concept to show input and output of files in C

Practicals:

1. Write a C Program to add two integer numbers.
2. Write a C Program to Check Whether a Number is Even or Odd.
3. Write a C Program to Check Whether a Number is Positive or Negative or Zero.
4. Write a C Program to Display Fibonacci Series.
5. Write a C Program to Reverse a Number.
6. Write a C Program to Check Whether a Number is Palindrome or Not.
7. Write a C Program to Make a Simple Calculator to Add, Subtract, Multiply or Divide Using switch...case.
8. Write a C Program to Calculate Factorial of a Number Using Recursion.
9. Write a C Program to Calculate Average Using Arrays.
10. Write a C Program to Add Two Matrix Using Multi-dimensional Arrays.
11. Write a C Program to Swap Numbers in Cyclic Order Using Call by Reference.

Reference Books:

- Programming In C , . Balaguruswamy, TMH Publications
- “ Programming With C ”, Gottfried, Schaum’s Outline Series, TMH Publications
- “ program design ”, Peter Juliff, PHI Publications
- “Let us c”, Yashwantkanetkar,

Text Books:

- “ Thinking In C ”, Mahapatra, PHI Publications
- “Introduction To Computers And Information Technology ”, AnuragSeetha, Ram Prasad & Sons, Bhopal.
- “ Computers Today ”, S.K.Basandra, Galgotia Publications

Chairperson
(Board of Studies)

Dean
(Academic Council)

(Registrar)
Seal

COURSE CODE: 2TDCA-204

DBMS WITH MS ACCESS

COURSE OBJECTIVE:-

1. To understand the concept of Data Base Management

Syllabus:

UNIT-I

Introduction to database -What is a Database, Why use a Relational Database, Overview of Database Design- Data Normalization (Determining tables, Determining Fields, Determining Relationships) Integrity Rules (Primary/Foreign Key, One-to-Many, Many-to-Many, One-to-One) Introduction to MS Access (Objects, Navigation).

UNIT-II

Tables in Database, Create a Table in MS Access- Data Types, Field Properties, Fields: names, types, properties- default values, format, caption, validation rules Data Entry, Add record delete record and edit text, Sort, find/replace, filter/ select, rearrange columns, freeze columns. Edit a Tables- copy, delete, import, modify table structure, find, replace.

UNIT-III

Working with Query, Setting up Relationships- Define relationships, add a relationship, set a rule for Referential Integrity, change the join type, delete a relationship, save relationship Queries & Filter - difference between queries and filter, filter using multiple fields AND, OR, advance filter Queries, create Query with one table, find record with select query, find duplicate record with query, find unmatched record with query, run query, save and change query.

UNIT-IV

Working with Forms, Introduction to Forms Types of Basic Forms: Columnar, Tabular, Datasheet, Main/Subforms, add headers and footers, add fields to form, add text to form use label option button, check box, combo box, list box Forms Wizard, Create Template.

UNIT-V

Working with Reports, Introduction to Reports, Types of Basic Reports: Single Column Tabular Report Groups/Total, single table report, multi table report preview report print report, Creating Reports and Labels, Wizard.

Reference Books:

MS Office XP complete BPB publication ISBN 8 1-7656-564-4

MS Access fast & easy by faithe wempen PHI.

- , "Programming In C", E. Balaguruswamy TMH Publications
- " Programming With C ", Gottfried, Schaum's Outline Series, TMH Publications
- " program design ", Peter Juliff, PHI Publications
- "Let us c", Yashwantkanetkar,

Text Books:

- Database Systems : Concepts, Designs and Application Shio Kumar Singh
- Introduction to Database Management Systems Atul Kahate

Course Outcomes:-

After study this student will be able to know about programs based upon data base with access concepts, sqery commands .

COURSE CODE: 2TDCA205

PROJECT REPORT