



RKDF UNIVERSITY

DIPLOMA IN COMPUTER APPLICATIONS (DCA)

S.No	Subject Code	Subject Name	Marks Allotted						
			Assignment Marks		Theory Marks		Practical Marks		Total Marks
			Max	Min	Max	Min	Max	Min	
1	DCA 101	Fundamentals of Computers & Information Technology	20	7	80	27	-	-	100
2	DCA 102	Introduction to Operating Systems (Dos, Windows)	20	7	80	27	-	-	100
3	DCA 103	PC Packages (MS Word, MS Excel, MS PowerPoint)	20	7	80	27	50	20	150
4	DCA 104	Desk Top Publishing (Page Maker, Photoshop)	20	7	80	27	50	20	150
5	DCA 105	Elective - 1 (A)MS-Access (B) Financial Accounting with Tally	20	7	80	27	50	20	150
6	DCA 106	Project Work	-	-	-	-	100	40	100
			100	35	400	135	250	100	750



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DETAILED SYLLABUS

DIPLOMA IN COMPUTER APPLICATIONS (DCA)

YEARLY MODE

Subject Title	Subject Code
Fundamentals of Computers	DCA-101

UNIT-I

Brief History of Development of Computers ,Computer System Concept, Computer System Characteristics, Capabilities and Limitations, Types of Computers-.,Personal Computer (PCs) - IBM PCs, Types of PCs- Desktop, Laptop, Notebook, Palmtop, etc. Basic Components of a Computer System - Control Unit, ALU, Input/Output semiconductor Memory. Storage fundamentals - Primary Vs Secondary memory.

UNIT-II

Input Devices :Keyboard, Mouse, Joystick, Scanners, Digital Camera, MICR,OCR, OMR, , Light pen, Touch Screen. Output Devices Monitors - Characteristics and types of monitor, Size, Resolution, Refresh Rate, Dot Pitch, Video Standard - VGA, SVGA, XGA etc. Printers - Daisy wheel, Dot Matrix, Inkjet, Laser. Plotter, Sound Card and Speakers.

UNIT-III

Various Storage Devices - Magnetic Disks, Hard Disk Drives, Floppy, Disks, Optical Disks, Computer Software ,Need, Types of Software's - System software, Application software System Software - Operating System, compiler, Assemblers, Interpreter .

UNIT-IV

Operating Systems –Functions ,Types- Batch, Single, Multiprogramming, Multiprocessing Programming languages- Machine, Assembly, High Level, 4GL, Application Software - Word-processing, Spreadsheet, Presentation Graphics, Data Base Management Software, **Number System**, Number System of computers- Binary, Octal, Hexadecimal, their conversion. Coding System – ASCII, EBCDIC.

UNIT-V

Direction of Transmissions Flow-Simplex, Half Duplex Full Duplex, Types of Network - LAN, WAN, MAN etc. Topologies of LAN - Ring, Bus, Star, Mesh and Tree topologies.

Computer Virus: Virus working principals, Types of viruses, Virus detection and Prevention Viruses on network.

TEXT & REFERENCE BOOKS :

COMPUTERS TODAY BY S.K. BASANDRA, GALGOTIA PUBLICATIONS.

FUNDAMENTALS OF INFORMATION TECHNOLOGY BY ALEXIS LEON & MATHEWS LEON, VIKAS PUBLISHING HOUSE, NEW DELHI.

DOS QUICK REFERENCE BY RAJEEV MATHUR, GALGOTIA PUBLICATIONS.



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Subject Title	Subject Code
Introduction to Operating Systems (DOS, Windows, Linux)	DCA-102

UNIT-I

DISK OPERATING SYSTEM (DOS): Introduction, History & Versions of DOS, DOS Basics - Physical Structure of Disk, Drive Name, FAT, File and Directory Structure and Naming Rules, Booting Process, DOS System Files. DOS Commands: Internal - DIR, MD, CD, RD, COPY, COPY CON, DEL, REN VOL, DATE, TIME, CLS, PATH, TYPE, VER etc. External - CHKDSK, XCOPY, PRINT, DISKCOPY, DOSKEY, TREE, MOVE, LABEL, FORMAT, SORT, FDISK, BACKUP, EDIT, MODE, ATTRIB, HELP, SYS etc, Executable V/s Non Executable Files in DOS.

UNIT-II

WINDOWS XP: Introduction to Windows XP and its Features, Hardware Requirements of Windows. Windows Concepts, Windows Structure, Desktop, Taskbar, Start Menu, My Pictures, My Music, My Documents, Working with Recycle Bin - Restoring a deleted file, Emptying the Recycle Bin. Managing Files, Folders and Disk - Navigating between Folders, Manipulating Files and Folders, Creating New Folder, Searching Files and Folders. My Computer – Exploring Hard Disk, Copying and Moving Files and Folder from One Drive to Another, Formatting Floppy Drive, Windows Explorer and its Facilities, Using Floppy, CD, DVD, Pen Drive, Burning CD. Windows Accessories - Calculator, Notepad, Paint, WordPad, Command Prompt. Entertainment- Media Players, Sound Recorder, Volume Control, Movie Maker.

UNIT-III

ADVANCED FEATURES OF WINDOWS XP:

Managing Hardware & Software - Installation of Hardware & Software, Using Scanner Web Camera, Printers. System Tools - Backup, Character Map, Clipboard Viewer, Disk Defragmenter, Drive Space, Scandisk, System Information, System Monitor, Disk Cleanup, Using Windows Update. Browsing the Web with Internet Explorer, Multiple User Features of Windows, Creating and Deleting User, Changing User Password, etc. Accessibility Features of Windows - Sharing Folders and Drives, Browsing the Entire Network, Using Shared Printers. OLE - Embed/Link Using Cut and Paste an Embed/ Link, Using Insert Object Manage Embedded/Linked Object.



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UNIT-IV

LINUX: History & Features of Linux, Linux Architecture, File System of Linux, Hardware Requirements of Linux, Various flavors of Linux, Linux Standard Directories, Functions of Profile and Login Files in Linux, Linux Kernel,

UNIT-V

WORKING WITH LINUX: KDE & Gnome Graphical Interfaces, Various Types of Shell Available in Linux, Multi-User Features of Linux, Login and Logout from Linux System, Linux commands - bc, cal, cat, cd, clear, cmp, cp, mv, date, find, ls, pwd, mkdir, more, rm, rmdir, chgrp, chmod, chown, tty, wc, who, whois, grep, telnet, vi editor, Using Floppy, CD-ROM and Pen Drive in Linux, Permissions and Ownerships,

TEXT & REFERENCE BOOKS:

DOS QUICK REFERENCE BY RAJEEV MATHUR, GALGOTIA PUBLICATIONS LINUX COMPLETE BY BPB PUBLICATIONS

PETER NORTON COMPLETE GUIDE TO LINUX BY PETER NORTON, TECHMEDIA PUBLICATIONS

LEVEL MODULE M 1.1 INFORMATION TECHNOLOGY BY KHANNA BOOK PUBLICATIONS, NEW DELHI

WINDOWS XP COMPLETE REFERENCE, BPB PUBLICATION



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DIPLOMA IN COMPUTER APPLICATIONS (DCA)

Subject Title	Subject Code
PC Packages (Windows, MS Word, MS Excel, MS Power point)	DCA-103

UNIT-I

MS Windows: Introduction to MS Windows; Features of Windows; Various versions of Windows & its use; Working with Windows; My Computer & Recycle bin ; Desktop, Icons and Windows Explorer; Screen description & working styles of Windows; Dialog Boxes & Toolbars; Working with Files & Folders; simple operations like copy, delete, moving of files and folders from one drive to another, Shortcuts & Autostarts; Accessories and Windows Settings using Control Panel- setting common devices using control panel, modem, printers, audio, network, fonts, creating users, internet settings, Start button & Program lists; Installing and Uninstalling new Hardware & Software program on your computer.

UNIT-II

Office Packages: Office activates and their software requirements, Word-processing, spreadsheet, Presentation graphics, Database, introduction and comparison of various office suites like MS-Office, Lotus-Office, Star-Office, Open-Office etc.

MS Word Basics: Introduction to MS Office, Introduction to MS Word, Features & area of use. Working with MS Word, Menus & Commands, Toolbars & Buttons, Shortcut Menus, Wizards & Templates, Creating a New Document, Different Page Views and layouts, Applying various Text Enhancements, Working with -Styles, Text Attributes, Paragraph and Page Formatting, Text Editing using various features ; Bullets, Numbering, Auto formatting, Printing & various print options

UNIT-III

Advanced Features of MS-Word: Spell Check, Thesaurus, Find & Replace; Headers & Footers, Inserting - Page Numbers, Pictures, Files, Autotexts, Symbols etc., Working with Columns, Tabs & Indents, Creation & Working with Tables including conversion to and from text, Margins & Space management in Document, Adding References and Graphics, Mail Merge, Envelops & Mailing Labels. Importing and exporting to and from various formats.

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, Column Freezing, Labels, Hiding, Splitting etc., Using different features with Data and Text; Use of Formulas, Calculations & Functions, Cell Formatting including Borders & Shading, Working with Different Chart Types; Printing of Workbook & Worksheets with various options.



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UNIT-V

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; Working with PowerPoint Objects, Designing & Presentation of a Slide Show, Printing Presentations, Notes, Handouts with print options.

Outlook Express: Features and uses, Configuration and using Outlook Express for accessing e-mails in office.

TEXT & REFERENCE BOOKS:

WINDOWS XP COMPLETE REFERENCE. BPB PUBLICATIONS

MS OFFICE XP COMPLETE BPB PUBLICATION

MS WINDOWS XP HOME EDITION COMPLETE, BPB PUBLICATION.

JOE HABRAKEN, MICROSOFT OFFICE 2000, 8 IN 1, BY, PRENTICE HALL OF INDIA

I.T .TOOLS AND APPLICATIONS, BY A. MANSOOR, PRAGYA PUBLICATIONS, MATURA



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DIPLOMA IN COMPUTER APPLICATIONS (DCA)

Subject Title	Subject Code
Desktop Publishing (Page Maker, Photoshop)	DCA-104

UNIT-I

D.T.P For Publications

Introductions to Printing, Types of Printing, Offset Printing, Working of offset Printing, Transparent Printout, Negative & Positives for Plate were making, Use of Desk Top Publishing in Publications, Importance of D.T.P in Publication, Advantage of D.T.P in Publication, Mixing of graphics & Image in a single page production, Laser printers - Use, Types, Advantage of lager printer in publication

UNIT-II

Page Layout

Different page format / Layouts, News paper page format, Page orientations, Columns & Gutters, Printing in reduced sizes.

Introductions To Page Maker

Page Maker Icon and help, Tool Box, Styles, Menus etc., Different screen Views, Importing text/Pictures, Auto Flow, Columns,

UNIT-III

Master Pages and Stories, Story Editor, Menu Commands and short-cut commands, Spell check, Find & Replace, Import Export etc., Fonts, Points Sizes, Spacing etc., Installing Printers, Scaling (Percentages), Printer setup Use of D.T.P. in Advertisements, Books & Magazines, News Paper, Table Editor

UNIT-IV

Introduction to Adobe Photoshop & Documents, Various Graphic Files and Extensions, Vector Image and Raster Images, Various Colour Modes and Models.

UNIT-V

Introduction to Screen and Work Area, Photoshop Tools & Palettes ,Use of Layers & Filters, Working with Images

TEXT & REFERENCE HOOKS:

PAGE MAKER 4.0 & 5.0 BY B.P.O. PUBLICATIONS.

PRAKHAR COMPLETE COURSE FOR DTP (CORELDRAW, PAGEMAKER, PHOTOSHOP



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Subject Title	Subject Code
Elective - 1 (A) MS Access	DCA-105(A)

UNIT-I

Introduction to database -What is a Database, Why use a Relational Database, concept of primary key relationship , Introduction to MS Access (Objects, Navigation).

UNIT-II

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

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 ,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

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

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.

TEXT & REFERENCE BOOKS:

MS OFFICE XP COMPLETE BPB PUBLICATION ISBN 8 1-7656-564-4

MS ACCESS FAST & EASY BY FAITHE WEMPEN PHI .



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DIPLOMA IN COMPUTER APPLICATIONS (DCA)

Subject Title	Subject Code
Elective - 1 (B) Financial Accounting with Tally	DCA-105(B)

UNIT-I

1. Basic Concepts of Accounting, Financial Statements, Financial Statement Analysis, Cost Centre, Basic concepts of Inventory
2. Tally Configuration & INI setup, Data Directory & Folders configuration, Single & Multiple User, Tally Screen Components, Mouse / Keyboard Conventions & Key, Combinations, Switching between screen areas, Quitting Tally. Maintaining Company Data, Basic Company Details, Create/Alter/Select/Load/Close a Company, Chart of Accounts, Company Features, and Configuration.

UNIT-II

1. Create, Alter & Display
 - a. Groups and Ledgers
 - b. All accounting voucher types
2. Accounting Voucher transactions, Account Invoice transactions, Excise Invoice, Export Invoice, Transactions using Bill-wise details.
3. Bank Reconciliation, Interest calculations using simple & advance parameters, Interest Calculations on outstanding balances & on invoices, Use of voucher class, adjustment of interest, Creation of voucher class, Invoice entry in a class situation.
4. Create, Alter & Delete Budgets for groups, ledgers & cost centre, Defining credit limit & credit period, Display Budgets & variances, Create, Alter & Delete a scenario.
5. Journal Transactions, payment voucher, Godown summary

UNIT-III

1. Reports like balance sheet, Profit & Loss account, Ratio analysis Trial Balance.
2. Accounts books like cash / bank book, All Ledgers Group summary & vouchers, Sales, purchase & journal registers.
3. Cost centre & category summary, Cost centre breakup ledger & group breakup, outstanding receivables & payables, interest receivable & payable, Statistics, Cash & Fund flow, Day book List of Accounts, Reversing journals, optional vouchers, post-dated vouchers.

UNIT-IV

1. Create, Alter & Display Stock Groups and Stock Items,
2. All inventory voucher types and transactions Inventory details in accounting vouchers.
3. Reports like Stock summary, Inventory books like Stock item, Group summary, Stock transfers, Physical stock register, Movement analysis, Stock group & item analysis, stock category analysis



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Ageing analysis, Sales order & Purchase order book, Statement of inventory related to Godowns, categories, stock query, Reorder status, Purchase & Sales order summary, Purchase & Sales bill pending, Exception reports like negative stock & ledger, overdue receivables & payables, memorandum vouchers, optional vouchers, post-dated vouchers, reversing journal

UNIT-V

1. Cheque Printing, Common printing options, Different printing formats, Multi-Account printing, Dynamic- Report specific options.
2. Creating Group Company, Use of Tally vault, Using Security control & defining different security levels, Use of Tally Audit.
3. Back-up & Restore, Splitting company data, Export & import of Data, ODBC compliance, use of E-mail, Internet publishing, Upload, web browser & online help, Re-write data.

TEXT & REFERENCE BOOKS

IMPLEMENTING TALLY 6.3 BY NADHANI; ISBN: 81 7656494X BPB PUBLICATIONS,

BPB TALLY 6.3 BY BPB EDITORIAL BOARD (HINDI) BPB PUBLICATIONS ISBN81 - 7656-594-6