

DETAILED SYLLABUS

POST GRADUATE DIPLOMA IN COMPUTER APPLICATIONS (PGDCA)



Department of Computer Applications & Science

**Makhanlal Chaturvedi National University of
Journalism and Communication, Bhopal**

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Post Graduate Diploma in Computer Applications (PGDCA) SEMESTER – I

S. No.	Paper Numerical Unique	Class & Papers	Paper Name/Subject	Theory paper		Practical Exams		Internal Evaluation		Total
				Max.	Min.	Max.	Min.	Max.	Min.	
1.	7617	1PGDCA1	Fundamentals of Computers & Information Technology	80	32	-	-	20	08	100
2.	7618	1PGDCA2	PC Packages (Word, Excel, Powerpoint)	50	20	30	12	20	08	100
Elective-I										
3.	7619	1PGDCA3 (A)	Database Using MySQL	50	20	30	12	20	08	100
4.	7620	1PGDCA3 (B)	Database Using MS-Access	50	20	30	12	20	08	100
Elective-II										
5.	7621	1PGDCA4 (A)	Fundamentals of Multimedia	50	20	30	12	20	08	100
6.	7622	1PGDCA4 (B)	Programming with VB .Net	50	20	30	12	20	08	100

Post Graduate Diploma in Computer Applications (PGDCA) SEMESTER – II

S. No.	Paper Numerical Unique	Class & Papers	Paper Name/Subject	Theory paper		Practical Exams		Internal Evaluation		Total
				Max.	Min.	Max.	Min.	Max.	Min.	
1.	7715	2PGDCA1	IT Trends & Technologies	80	32	-	-	20	08	100
2.	7716	2PGDCA2	Internet and Web Designing	50	20	30	12	20	08	100
Elective-I										
3.	7717	2PGDCA3 (A)	DTP with Page Maker & Photoshop	50	20	30	12	20	08	100
4.	7718	2PGDCA3 (B)	Financial Accounting with Tally	50	20	30	12	20	08	100
Elective-II										
5.	7719	2PGDCA4 (A)	Multimedia with Corel Draw, Premier & Sound Forge	50	20	30	12	20	08	100
6.	7720	2PGDCA4 (B)	Programming with ASP .Net	50	20	30	12	20	08	100

SEMESTER-II

2PGDCA1 – IT TRENDS & TECHNOLOGIES

UNIT-I

E-governance, e-democracy, Government efforts to encourage citizen participation, PPP model, E-governance websites & services, MPONLINE services, UIDI & Aadhar, E-governance mobile apps like UMANG, Digital Locker, Digital Library.

Introduction to cyber crime, types of attacks like spyware, malware, spam mail, logic bombs, denial of service, types of cyber crime like email fraud, phishing, spoofing, hacking, identity theft.

UNIT-II

E-Commerce- introductions, concepts, Advantages and Disadvantages, technology in E- Commerce, Benefits and impact of e-commerce

Electronic Payment Systems: Introduction, Types of Electronic Payment Systems, RTGS, IMPS, NEFT, Payment gateway, debit & credit card, internet banking, mobile wallet, UPI, BHIM, PAYTM app, online shopping, online marketing

UNIT-III

Introduction to wireless communication, Blue tooth, WiFi, WiMax, LiFi, Mobile technology, 2G, 3G, 4G, 5G services, IMEI, SIM, IP Telephony, Soft phone, Voice mail, Ad-hoc & sensor networks, GIS, ISP, Mobile Computing, Cellular System Cell, Mobile Switching office, Hands off, Base Station.

UNIT-IV

Artificial Intelligence and Expert system- Concepts of AI & Expert Systems, Merits and Demerits of Expert system, Application of Expert system and AI

Cloud computing- Introduction, types, application, services, Google play store, Apple store,

IOT- Introduction, Application & use

Big data- Introduction, Application & use

UNIT-V

Introduction to MIS, System Development Life Cycle, Various phases of system development, Considerations for system planning, Initial Investigation, Determining Users Requirements and Analysis, Fact Finding Process and Techniques, Data Analysis, data Dictionary, decision table, decision tree & form design process.

Reference Books:

- Fundamentals Of Information Technology By Alex Leon & Mleon, Vikas Publications.

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2023-24-25
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SEMESTER-II

2PGDCA2 – INTERNET AND WEB DESIGNING

UNIT-I

Introduction to Internet - Internet Evolution & Concept, Internet Vs Intranet, Growth of Internet, Internet Service Provider (ISP) & its Function, Connectivity- Dialup, Leased line, VSAT , URLs, Portals, Internet Services, Applications. E-MAIL- Basics of Sending & Receiving, Free Email services, Internet chatting - Voice chat, Text chat, World Wide Web (www)- History, Working, Web Browsers & its functions, Concept of Search Engines, Searching the Web, HTTP, URLs, Web Servers, Web Protocols, Networks layers & TCP/IP protocols, The Advantages and Disadvantages of Internet and World Wide Web

UNIT-II

HTML- Concepts of Hypertext, Versions of HTML, Elements of HTML, Syntax, Tags & Attributes, Head & Body Sections, Building, HTML Documents. Inserting Texts, Images, Hyperlinks, Backgrounds And Color Controls, Different HTML Tags, Table Layout and Presentation, Creating Lists, Use of Font Size & Attributes, List Types and Its Tags, Use of Frames and Forms in Web Pages, Creating Frameset, Opening pages into frames, Design Forms Contro

UNIT-III

Cascading Style Sheet (CSS) – Introduction, creating style , using inline and external CSS, Creating Divs with ID style, creating Tag & Class style using font family, size and colors, creating borders, Navigation links, creating effects with CSS, JavaScript Overview, syntax & conventions, Variables, Expressions, Branching & Looping statements, Functions, Arrays Objects, Events & Document Object Model - onClick, onMouseOver, on Submit, on Focus, on Change, onBlur, onLoad, onUnload, Alerts, Prompts & Confirms

UNIT-IV

Designing Websites with **Expression Web**– Introduction to WYSIWG HTML editor, advantages of using HTML editors, Creating a new site, Creating a new Page, Inserting and formatting text, Creating & Inserting Images, Adjusting Transparency settings, Adding Images with alternative Text, Aligning images, creating Email Link, Linking to other websites, Testing and targeting Links, Organizing files & folders, Designing Accessible Tables, styling a table, Editing table layouts, Adding style to a table using CSS

UNIT-V

Word Press- What is Word Press, Installation, Login, overview of admin panel, user profile, Word Press Themes, Themes depository, Create & add a new logo, Set up a static home page, Create Posts, Delete pages, Create Menu, Add a post, Delete a post, Add Widgets, Upload images, Add Images To a post, Insert and Format Text, Add a Hyperlink to an image, Add a Hyperlink to some text, Protocols- meaning, different web protocols- FTP, DNS, TCP, UDP, HTTP, IP Telnet Concept, FTP Commands - viewing Files and directories, Transfer and rename files, FTP with Filezilla & CuteFTP, Web Hosting – Concept, Introduction to Domain Name & DNS, procedure to register a Domain Name, Procedure for web hosting, Space on Host Server for Website.

SEMESTER-II

2PGDCA3(B) – FINANCIAL ACCOUNTING WITH TALLY

(ELECTIVE-III)

UNIT-I

Basic Concepts of Accounting, Financial Statements, Financial Statement Analysis, Cost Centre, Basic concepts of Inventory, 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

Create, Alter & Display Groups and Ledgers, All accounting voucher types, Accounting Voucher transactions, Account Invoice transactions, Excise Invoice, Export Invoice, Transactions using Bill-wise details.

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.

Create, Alter & Delete Budgets for groups, ledgers & cost centre, Defining credit limit & credit period, Display Budgets & variances, Create, Alter & Delete a scenario. Journal Transactions, payment voucher, Go down summary

UNIT-III

Reports like balance sheet, Profit & Loss account, Ratio analysis Trial Balance. Accounts books like cash/bank book, All Ledgers Group summary & vouchers, Sales, purchase & journal registers.

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

Create, Alter & Display Stock Groups and Stock Items, All inventory voucher types and transactions Inventory details in accounting vouchers.

Reports like Stock summary, Inventory books like Stock item, Group summary, Stock transfers, Physical stock register, Movement analysis, Stock group & item analysis,

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stock category analysis Ageing analysis, Sales order & Purchase order book, Statement of inventory related to Go downs, 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

Cheque Printing, Common printing options, Different printing formats, Multi-Account printing, Dynamic- Report specific options, Creating Group Company, Use of Tally vault, Using Security control & defining different security levels, Use of Tally Audit

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.

Reference Books:

- Nadhani, K.K, Accounting with Tally, BPB Publications, New Delhi
- Kogent Learning Solution, Tally ERP 9 in simple steps (Hindi), Dreamtech Press, New Delhi
- Goyal, Hemant Kumar, कम्प्यूटर द्वारा एकाउंटिंग, Radha Pocket Books
- Goyal, Hemant Kumar Sharma, Rajkumar, ए 2 जेड कम्प्यूटर द्वारा एकाउंटस, Ravi Pocket Books, Meerut
- N. Satyapal, Using Tally, Khanna Books Publishers, New Delhi
- Nadhani, Ashok K, Nadhani, Kisor K, Implementing Tally 9, BPB Publications, New Delhi

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SEMESTER-II

2PGDCA4(A) – MULTIMEDIA WITH CORELDRAW, PREMIER & SOUND FORGE

(ELECTIVE-IV)

UNIT-I

Introduction to CorelDraw, Usage and Advantages, Introduction to User Interface, Introduction to tool panel and workspaces, Introduction to various size and formats of panels and layouts, File layouts and layout properties, Objects and using color profiles.

UNIT-II

Text tools and text properties, Creating Vector graphics by using editing tools, Importing Images and graphics in Corel draw layout, Creating shapes and editing shapes, Drawing curves and editing curves, Creating special text effects, Creating special object effects, Using color effects.

UNIT-III

Using grid and rulers, Tracing images and graphics, working with borders and page arrangements, Using Masking effects with Text, Using Masking effects with objects

UNIT-IV

Adobe Premier: Introduction, Area of Use, Setting up new Project, Workspace: Project Video Display, Selected Clip Display, project panel Project Timeline Toolbar,

Toolbar description: Selection Tool, Track Select Forward Tool, Track Select Backward Tool Ripple Edit Tool, Rolling Edit Tool, Rate Stretch Tool, Razor tool, Slip tool, Slide Tool, Pen Tool, Hand Tool, Zoom Tool.

Importing files into Premier, Sequence, Titles, Video Motion, Video Opacity, Transition Panel, Effect panel, Color Correction, Adjusting Video Speed, Saving Project, Exporting Video

UNIT-V

Sound Forge: Introduction, Interface, Editing Toolbar, Transport toolbar, Opening new file, playing a file, playing file from specific point, playing a selection, Basic Sound Editing: Copying, Pasting, Cutting, Deleting, Cropping, Mixing, Recording Audio Normalizing, Using Markers, Noise Reduction.

Reference Books:

- Learn Corel Draw 11 by BPB PUBLISHING
- Corel Draw the official Guide by Gray David Bouton, Corel Press

Prakash Chandra
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