

DEPARTMENT OF COMPUTER SCIENCE

COURSE CURRICULUM & MARKING SCHEME PROGRAM

CODE: DPDC01

DCA 1st & 2nd SEMESTER

(Based on CBCS)



D. P. VIPRA COLLEGE,

(AN AUTONOMOUS INSTITUTION)

OLD HIGH COURT ROAD BILASPUR (CHHATTISGARH)

RE-ACCREDITED "A" GRADE BY NAAC Phone No: 07752-424497

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Scheme of DCA Under Semester System

Program Code& Name: DPDC01 - DCA

Session 2025-26

Semester	Course Code	Course Name	Credit			Total Credit	Marks			
			L	T	P		ESE	CIA	Total	
									MAX	MIN
First	DCAT101	Computer Fundamental	3	1	-	4	70	30	100	40
	DCAT102	PC Package	3	1	-	4	70	30	100	40
	DCAT103	Desktop Publishing	3	1	-	4	70	30	100	40
	DCAP101	PC Package Lab	-	-	3	3	35	15	50	20
	DCAP105	DTP Lab	-	-	3	3	35	15	50	20
Total						18	280	120	400	160
Second	DCAT201	Internet & Web Technology	3	1	-	4	70	30	100	40
	DCAT202	Programming in C	3	1	-	4	70	30	100	40
	DCAT203	Operating System	3	1	-	4	70	30	100	40
	DCAP201	Programming in C Lab	-	-	3	3	35	15	50	20
	DCAP202	Web Technology Lab	-	-	3	3	35	15	50	20
Total						18	280	120	400	160

Program Code and Name	DPDC01- Diploma in Computer Application			Semester	I
Exam Code and Name	4011 - Diploma in Computer Application First Semester			Paper	I
Course Code	DCAT101			Course Type	T
Course Title	Computer Fundamental				
Total Credit	4				
Total Marks	CIA: 30/15	ESE: 70/35	Max Marks: 100/50	Min. Pass. Marks: 40/20	
Prerequisites (if any)					
Course Outcomes	<p>CO1: Gain a comprehensive understanding of the working principle of computers and their memory systems.</p> <p>CO2: Acquire knowledge about the functions and uses of input and output devices.</p> <p>CO3: Differentiate between software types and hardware components and comprehend their interaction.</p> <p>CO4: Understand various mediums of data transmission and evaluate their respective advantages and disadvantages.</p> <p>CO5: Comprehend the internet, its applications, and the importance of internet security.</p>				

Contents of Course		
Unit	Contents	No. of Period
I	Introduction to Computers: Characteristics of computers, generation of computers, classification of computers, applications of computers. Input and Output Devices: Keyboard, pointing devices, digital camera, scanners. Output devices- printers, plotters, monitors, projectors Computer System: Central processing unit (CPU).	15
II	Memory: Memory hierarchy, random access memory (RAM), types of RAM, read only memory (ROM), types of ROM. Classification of secondary storage devices- magnetic tape, magnetic disk, optical disk. Number Systems: Number systems, conversion between number bases. Memory System Design: Main Memory Concepts, Cache Memory Organization, Associative Memory Concepts, Virtual Memory and Paging. Input/output and Interfacing, DMA, I/O processors.	15
III	Computer Software: Software definition, relationship between software and hardware, software categories, system software, application software. Operating System – Introduction of OS, Uses of OS, Functions of OS, Booting process, Types of Reboot, Booting from different OS, Types of OS, DOS, Windows.	15
IV	Networks: Introduction; Types of Networks; Topology: -Ring, Bus, Star, Mesh and Tree topologies. Computer Virus: Virus working principals, Types of viruses, Virus detection and Prevention Viruses on network, Antivirus software's.	15
Total no. of Lectures		60

Text books	1. Computer Fundamentals by P.K. Sinha; BPB Publication, New Delhi 2. Rajaraman V. – Fundamental of Computers, Prentice Hall of India Pvt. Ltd., New Delhi.
Reference books	1. Mano Morris, Computer system architecture, PHI, New Delhi. 2. Mano Morris, M. Digital Design, PHI, New Delhi. 3. Jain R. P., Modern Digital Electronics, Tata Mc Graw Hill , New Delhi.

Assessment and Evaluation		
Suggested Continuous Evaluation Methods:		
Maximum Marks: 100 Marks	Continuous Internal Assessment (CIA): 30 Marks	End Semester Exam (ESE) : 70 Marks
Continuous Internal Assessment (CIA)	Internal Test/Quiz- (2): 20 & 20 Assignment / Seminar: 10 Total Marks: 30	Better marks out of the two Test / Quiz + obtained marks is Assignment shall be considered against 30 Marks
End Semester Exam (ESE)	Three Section - A, B & C Section A: Q1. Objective- 10 x 1 = 10 Mark; Section B: Long Answer type questions 1 out of 2 from each unit- 4 x 5 = 20 Marks; Section C: Descriptive answer type questions 1 out of 2 from each unit- 4 x 10 = 40 Marks;	

Program Code and Name	DPDC01- Diploma in Computer Application			Semester	I
Exam Code and Name	4011 - Diploma in Computer Application First Semester			Paper	II
Course Code	DCAT102			Course Type	T
Course Title	PC Package				
Total Credit	4				
Total Marks	CIA: 30/15	ESE: 70/35	Max Marks: 100/50	Min. Pass. Marks: 40/20	
Prerequisites (if any)					
Course Outcomes	CO1: Basics of Microsoft Word, Microsoft Excel, Microsoft PowerPoint, and Disk Operating System. CO2: Document creation and formatting skills. CO3: Spreadsheet operations, formulas, and charts in Microsoft Excel. CO4: Presentation design using Microsoft PowerPoint.				

Contents of Course		
Unit	Contents	No. of Period
I	Disk Operating System (DOS): Introduction, History & Versions of DOS, DOS System Files. DOS Commands: Internal and External, Executable V/s Non-Executable Files in DOS. 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, Dialog Boxes & Toolbars; Working with Files & Folders, simple operations like copy, delete, moving of files and folders from one drive to another, control panel, modem, printers, audio, network, fonts, creating users, internet settings, Installing and Uninstalling new Hardware & Software program on your computer.	15
II	MS-Word Creating and Saving documents, Editing and Formatting Text, Page formatting, Finding and replacing text, Spell checking and Grammar checking, Printing document. Clipart, header & footer, Tables and its feature, inserting (Objects, picture, files, chart, shapes etc.), hyperlink, Design and layout, mail merge, Word Art, customizing MS Word.	15
III	MS Excel Spreadsheet terminology, organization of the worksheet area, entering information, editing cells using commands and functions, moving copying, inserting and deleting rows and columns, formatting worksheet, printing worksheet, creating charts, database in a worksheet, creating, sorting, querying and maintaining the database, multiple worksheets and Macros, working with objects.	15
IV	MS Power Point Anatomy of a power Point Presentation, Creating and Viewing a presentation, Inserting, Deleting and Copying of Slides; Working with Notes, Handouts, Columns & Lists, Managing Slide Shows, navigating through a presentation, adding graphics, multimedia and special effects, creating presentation for the web.	15
Total no. of Lectures		60

Text books	1. Comdex Computer Course Kit (windows 7 with office 2010), Gupta Vikas, Dreamtech Publication 2. Mastering MS Office 2000, Professional Edition by Courter, BPB Publication.
Reference books	1. MS Office 2000 Training Guide by Maria, BPB Publications. 2. MS Office complete by SYBEX. 3. PC Software Made Simple, Taxali, BPB.

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End Semester Exam (ESE)	Three Section - A, B & C Section A: Q1. Objective- 10 x 1 = 10 Mark; Section B: Long Answer type questions 1 out of 2 from each unit- 4 x 5 = 20 Marks; Section C: Descriptive answer type questions 1 out of 2 from each unit- 4 x 10 = 40 Marks;	

Program Code and Name	DPDC01- Diploma in Computer Application			Semester	I
Exam Code and Name	4011 - Diploma in Computer Application First Semester			Paper	III
Course Code	DCAT103			Course Type	T
Course Title	Desktop Publishing				
Total Credit	4				
Total Marks	CIA: 30/15	ESE: 70/35	Max Marks: 100/50	Min. Pass. Marks: 40/20	
Prerequisites (if any)					
Course Outcomes	CO1: Understand Microsoft Publisher interface, layout, and basic commands. CO2: Import, organize, and format text using text boxes, placeholders, and themes. CO3: Edit and review content, including use of tables and layout tools. CO4: Add images and finalize publications with preview, print, and email options.				

Contents of Course		
Unit	Contents	No. of Period
I	Page Maker: Page Maker Icon and help, Tool Box, Styles, Menus etc., Different screen Views, Importing text/Pictures, Auto Flow, Columns, 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.	15
II	Adobe Photoshop: Adobe Photoshop CS4: Menus and panels, Exploring the Toolbox, Working with Images: Working with Multiple Images, Rulers, Guides & Grids, Image Size Command, Adjusting Canvas Size & Canvas Rotation, Creating, Selecting, Linking & Deleting Layers, Painting with Selections, Red Eye Tool, Clone Stamp Tool, Color creation, Quick Mask Options, Creating Straight & Curved Paths, Creating Special Effects.	15
III	CorelDraw: CorelDraw Command Bars & Tools, Drawing Area-Objects-Lines, Working with Text & Artistic Media Tool, Fills & Modifying Outlines, Drop Shadows, Importing and Editing OCR Text, Templates, Drawing and Editing Curves and Lines, Three-point Tools, Clipart, Special Characters and Creating Symbols, Working with Layers & Creating a Master Layer, Brush Tools and Adding Objects, Interactive Tools, PowerClip Feature and the Envelope Tool.	15
IV	Other Work in DTP: Scanning, Type of Scanner, Importing image, text from scanner, ABBY fine reader, Acrobat (PDF) to Word, and Word to PDF, PDF Editor, PDF Annotator, PDF Infix, Voice to word conversion.	15
Total no. of Lectures		60

Text books	1. Corel DRAW X4, Deborah Miller, Pearson Education 2. Photoshop CS4 Quicksteps, Carole Matthews & Gary David Bouton, TMH
Reference books	1. Desktop Publishing Software: Adobe Creative Suite, Adobe Frame Maker, Adobe Indesign, Adobe PageMaker, Altsoft Xml2pdf, Bookmaking Software; Uni.press.org 2. Adobe Pagemaker 7.0 Inver 1st Edition, Kevin G. Proot, Ceneage Learning Pvt Ltd. 3. Corel Draw X4: The Official Guide, (Paperback), Gary David Bouton, TMH

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End Semester Exam (ESE)	Three Section - A, B & C Section A: Q1. Objective- 10 x 1 = 10 Mark; Section B: Long Answer type questions 1 out of 2 from each unit- 4 x 5 = 20 Marks; Section C: Descriptive answer type questions 1 out of 2 from each unit- 4 x 10 = 40 Marks;	

Program Code and Name	DPDC01- Diploma in Computer Application			Semester	I
Exam Code and Name	4011 - Diploma in Computer Application First Semester			Paper	I
Course Code	DCAP101			Course Type	P
Course Title	PC Package LAB				
Total Credit	3				
Total Marks	CIA: 30	ESE: 70	Max Marks: 100	Min. Pass. Marks: 40	
Prerequisites (if any)					
Course Outcomes	CO1: Ability to create, edit, and format text documents using Microsoft Word and Notepad. CO2: Ability to prepare spreadsheets, perform calculations, and generate charts using Microsoft Excel. CO3: Ability to create presentations and basic graphics using Microsoft PowerPoint and Microsoft Paint. CO4: Ability to maintain basic accounting records and vouchers using Tally Prime.				

Contents of Course	
Important Guidelines for Project	No. of Period
<p>MS Notepad</p> <ol style="list-style-type: none"> 1. Create a resume in Notepad and save it as resume.txt. 2. Type a leave application in Notepad and use Save As option. 3. Create a file containing 10 computer shortcuts in Notepad. <p>MS Paint</p> <ol style="list-style-type: none"> 4. Draw and color the Indian National Flag using Microsoft Paint. 5. Create a simple scenery using shapes and colors in Microsoft Paint. 6. Draw a computer system diagram in Microsoft Paint. <p>MS Word</p> <ol style="list-style-type: none"> 7. Create a college notice in Microsoft Word using formatting tools. 8. Prepare a bio-data/resume in Microsoft Word with table and photo. 9. Create a document in Microsoft Word using Header, Footer, and Page Number. 10. Type a letter in Microsoft Word and apply Bullets, Borders, and Font styles. <p>MS Excel</p> <ol style="list-style-type: none"> 11. Create a student marksheet in Microsoft Excel and calculate Total & Percentage. 12. Prepare a monthly expense sheet in Microsoft Excel using formulas. 13. Create a chart/graph in Microsoft Excel for student marks. <p>MS PowerPoint</p> <ol style="list-style-type: none"> 14. Create a 5-slide presentation about your college using Microsoft PowerPoint. 15. Create a presentation on “Computer Fundamentals” in Microsoft PowerPoint using animations and slide transitions. 	60

Text books	1. BPB's Computer Course Made Simple – Windows with MS Office & Tally Author: Jain / Geetha Publisher: BPB Publications
Reference books	<ol style="list-style-type: none"> 1. MS-Office–S.S. Shrivastava Publisher: Laxmi Publications 2. Puja Easy M.S. Office & Tally – Puja Editorial Board Publisher: Navjeevan Printers & Publishers 3. Computer Course Windows 7 with MS Office 2010 – Kratika Jain & Geetha Publisher: BPB Publications 4. Comdex Tally. ERP 9 Course Kit with GST and MS Excel – Vikas Gupta Publisher: Wiley India

Assessment and Evaluation		
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End Semester Exam (ESE)		

Program Code and Name	DPDC01- Diploma in Computer Application			Semester	I
Exam Code and Name	4011 - Diploma in Computer Application First Semester			Paper	II
Course Code	DCAP102			Course Type	P
Course Title	Desktop Publishing LAB				
Total Credit	3				
Total Marks	CIA: 30	ESE: 70	Max Marks: 100	Min. Pass. Marks: 40	
Prerequisites (if any)					
Course Outcomes	CO1: Ability to create and format publications such as brochures, pamphlets, newsletters, and invitation cards using Adobe PageMaker. CO2: Ability to edit and enhance images using tools and effects in Adobe Photoshop. CO3: Ability to design logos, banners, visiting cards, and vector graphics using CorelDRAW. CO4: Ability to scan, manage, convert, and edit PDF documents using scanner devices and Adobe Acrobat.				

Contents of Course	
Important Guidelines for Project	No. of Period
<p>PageMaker</p> <ol style="list-style-type: none"> 1. Create a wedding invitation card using Adobe PageMaker. 2. Design a college notice with different fonts and borders in Adobe PageMaker. 3. Prepare a one-page newsletter in Adobe PageMaker. 4. Create a pamphlet for computer courses using Adobe PageMaker. <p>Adobe Photoshop</p> <ol style="list-style-type: none"> 5. Resize and crop an image using Adobe Photoshop. 6. Change the background color of a photo in Adobe Photoshop. 7. Create a simple poster using text and images in Adobe Photoshop. 8. Apply basic effects and filters to an image in Adobe Photoshop. <p>CorelDRAW</p> <ol style="list-style-type: none"> 9. Design a visiting card in CorelDRAW. 10. Create a logo using shapes and text in CorelDRAW. 11. Draw and color a simple banner in CorelDRAW. 12. Create a certificate design in CorelDRAW. <p>PDF Editor & Scanner</p> <ol style="list-style-type: none"> 13. Convert a document into PDF using a PDF editor. 14. Merge two PDF files using Adobe Acrobat. 15. Scan a document and save it as PDF using a scanner device. 	60

Text books	1. Comdex Desktop Publishing Course Kit – Vikas Gupta Publisher: Dreamtech Press
Reference books	<ol style="list-style-type: none"> 1. D.T.P (Desktop Publishing) – Anuja Shah Publisher: Computer World Publication 2. Rapidex DTP Course – Shirish Chavan Publisher: Unicorn Books Pvt Ltd 3. DTP Course Book – Vishnu Priya Singh & Meenakshi Singh Publisher: Computech Publications

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End Semester Exam (ESE)		