

DETAILED SYLLABUS

DIPLOMA IN COMPUTER APPLICATIONS (DCA)



Department of Computer Applications & Science

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

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Diploma in Computer Applications (DCA) 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.	7805	1DCA1	Computers Fundamentals	80	32	-	-	20	08	100
2.	7806	1DCA2	PC Packages (Word, Excel, Powerpoint)	80	32	25	10	20	08	125
Elective-I (Any one)										
3.	7807	1DCA3 (A)	Database Using Foxpro	80	32	25	10	20	08	125
4.	7808	1DCA3 (B)	Database Using MS-Access	80	32	25	10	20	08	125

Diploma in Computer Applications (DCA) 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.	7905	2DCA1	IT Trends	80	32	-	-	20	08	100
2.	7906	2DCA2	Internet and E-Commerce	80	32	25	10	20	08	125
Elective-I (Any one)										
3.	7907	2DCA3 (A)	Multimedia with Corel Draw	80	32	25	10	20	08	125
4.	7908	2DCA3 (B)	DTP with PageMaker & Photoshop	80	32	25	10	20	08	125

SEMESTER-II

2DCA1 - IT TRENDS

UNIT-I

Multimedia Definition and concept, need of Multimedia, areas of use, multimedia elements- Text, Images, Sound, Animation and Video, Multimedia Hardware and Software requirement. Making simple Multimedia with PowerPoint Application of multimedia in different industries- Education, Entertainment, Journalism etc., Future of Multimedia, Career in Multimedia Production

UNIT-II

Text as a component of Multimedia, Concepts of plain & formatted text, RTF & HTML texts, Object Linking and Embedding concept, Fonts- need & types, Importance of sound in Multimedia, Mono V/S Stereo Sound, Effects in Sound, Analog V/S Digital Sound, Overview Of Various Sound File Formats on PC WAV, MP3. Concept of MIDI, Software for sound editing and mixing.

UNIT-III

E-governance, e-democracy, Government efforts to encourage citizen participation, PPP model, E-governance websites & services- SAMADHAN online, CM Helpline, MPonline services, mygov.in of government of India UIDI & Adhar, E-governance mobile apps like umang, Digital Locker, Digital Library, Introduction to cyber crime, types of attacks & crime – email fraud, phishing, spoofing, hacking, spyware, malware, spam mail, logic bombs, denial of service, identity theft.

UNIT-IV

Introduction to wireless LAN, Blue tooth, WiFi, WiMax Mobile technology, 2G, 3G, 4G 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-V

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 drive, Google Doc, Google form

Reference Books:

- Fundamentals of Information Technology By Alex Leon & Leon, Vikas Publications
- Frontiers Of Electronic Commerce, By- Kalakota, Ravi; Stone, Tom, Whinston, Andrew B, Addison Wesley Publishing Co, ISBN 8178080575
- E-Commerce An Indian Perspective (Second Edition) By Pt Joseph, S.J., Prentice-Hall Of India
- Recent Magazines of Computers and Communication
- Multimedia: Making It Work (4th Edition) By Thyvaughan, Tata Mcgraw Hills
- Multimedia in Action James E Shuman, Vikas Publishing House

SEMESTER-II

2DCA2 - INTERNET AND E-COMMERCE

UNIT-I

Introduction to Internet - Internet Evolution, Word Wide Web (WWW), Advantages and Disadvantages, Internet Vs Intranet, the purpose and function of an Internet Service Provider (ISP), Connectivity - Dialup, Leased line, VSAT , URLs, Portals, Internet Services, Application, E-MAIL- Basics of Sending & Receiving, Free Email services, Protocols, FTP, DNS, TCP, UDP, HTTP, IP Telnet Concept, Internet chatting- Voice chat, Text chat, Web Servers, Space on Host Server for Website, Web Portals & Web publishing concepts, Domain name registration.

UNIT-II

Applications of Internet, Basic Operations using Internet Browser-Working with browsers, View History in Browser, Search Engines, Searching information on Wikipedia, Subscribing and reading newspapers online, Typing text in the regional language- Google input tools, Using Google Maps, Working with Google Apps, Online Ticket Booking, Apply for PAN Card/Passport /Aadhar Card online, Pay electricity bill and service tax online, Booking gas refill online, Downloading eBooks, Create & Using Bookmarks, Using JustDial/quikr.com/getit.co.in/sulekha.com to find online services, social sites, Client server architecture & characteristics, Telnet (Remote login concepts) & FTP its uses.

UNIT-III

HTML- Concepts of Hypertext, Versions of HTML, Elements of HTML, HTML editors, Tags and attributes, Syntax, Head & Body Sections, Building, HTML Documents. Inserting Texts, Images, List & its type, Hyperlinks, Backgrounds And Color Controls, Table Layout and Presentation, Use of Font Size & Attributes, List Types and Its Tags, Use of Frames and Forms in, Web Pages HTML, Form and frame Design tools.

UNIT-IV

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-V

Introduction to E-Commerce, Electronic Commerce Framework, Evolution of E-commerce, Advantages and Disadvantage of E-commerce, Introduction, E-organization, Electronic Payment Systems, Electronic Cash, Smart Cards and Credit Card Based, Risks, Online Banking, E-Banking, E-Wallet, E shopping, E-Marketing: The scope of E-Marketing, M-commerce- introduction, Potential Growth and Future, Mobile banking, Paytm, Bhim, UPI app etc.

M. Maheshwari
gml
1/11/20

SEMESTER-II

2DCA3(A) - MULTIMEDIA WITH COREL DRAW

(ELECTIVE-II)

UNIT-I

Graphics in Multimedia, Importance of Graphics in Multimedia, Vector and Raster Graphics, Image Capturing Methods Scanner, Digital Camera Etc. Various Attributes of Images - Size, Color, Bit Depth, Resolution etc, Various Image File Format BMP, DIB, EPS, PIC, and TIF Format Their Features and limitations

UNIT-II

Video and Animation in Multimedia, Impact of Video in Multimedia, Basics of Video Analog and Digital Video, How to use video on PC, Brief note on various video standards PAL, NTSC, Different file formats and their use in Multimedia, MPEG, AVI, MJPG, Name of video editing software, Basics of Animation, Types of Animation and use of Animation, Software for Creating Animations

UNIT-III

Introduction to Corel draw, 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-IV

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-V

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

Reference Books:

- Learn Corel Draw 11 by BPB PUBLISHING
- Corel Draw the official Guide by Gray David Bouton, Corel Press
- Corel Draw Course 11, 12, X To X5 BY VISHNU P. SINGH, BPB PUBLISHING

Practical Questions:

Q. Refer the following points and Design a Birthday Party invitation card. Invitation Card should contain following:

- Size of card – 4.5 x 6.25 or 5 x 7 inches
- Invitation Matter (Hindi or English)
- Name of Birthday Boy/Girl. (Hindi or English)

M. Maheshwari

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CPA