

GOVT. BILASA GIRLS' P.G. (Auto.) COLLEGE

Link Road, Bilaspur (C.G.)

Phone No. : 07752-224249, Website : www.bilasagrllscollege.ac.in



SYLLABUS

**Diploma in Computer Application
(DCA)**

2021-22



Rules and Regulations for the Semester System at the Graduation Level

1. These subjects are compulsory for all students:-
 - (a) Environmental Studies (I Semester)
 - (b) English Language (II and III Semester)
 - (c) Hindi Language (IV and V Semester)
 - (d) Skill Based Course (VI Semester)
2. In each semester there will be only one theory paper in each elective Subject.
3. For Honours Degree Course, there will be one additional theory paper in each semester i.e. semesters, III to VI.
For Honours Degree Course, separate practical classes will be held round the year but the examinations shall be held only in even semesters i.e. semesters II, IV and VI.
4. **Marks Pattern:-**
 - (i) For non practical subjects, each theory paper will be of 100 marks i.e. 80 External + 20 Internal.
 - (ii) For practical subjects, each theory paper will be of 75 marks i.e. 60 External + 15 Internal.
 - (iii) Practical examination will be of 50 marks. Practical Classes will be held round the year but examination shall be held only in even semesters i.e. semesters II, IV and VI.
5. **Theory Examination:-**
Duration for theory examination shall be of two and half hours.
6. **Practical Examination:-**
Duration for Practical examination shall be as suggested in the syllabi.
7. **Admission Period:-**
 - (i) Admissions in the First Semester shall be completed before 15th of July every year.
 - (ii) Admissions in Semesters i.e. II, III, IV, V and VI shall be completed within 7 days after the completion of examinations on the provisional basis.
 - (iii) The provisional admission shall be regularized within 7 days from the date of declaration of result.
 - (iv) Request for permission for late admission shall not be entertained.
8. **Schedule of Classes-**
 - (i) I Semester's classes will be commenced from 16th of July every year
 - (ii) III and V Semester's classes will be commenced from 2nd July every year.
 - (iii) II, IV and VI Semester's classes will be commenced from 2nd January every year.
 - (iv) All the classes shall be continued till seven days prior to the commencement of the examination.
9. **Examination Schedule- Tentative Schedules of examinations are as under-**
 - (i) Odd semester (I, III & V) - 20th November to 20th December.
 - (ii) Even semester (II, IV & VI) - 15th April to 14th May.
10. **Examination Pattern -**
 - (a) Questions will be asked Unit wise and Section wise. Questions will be set from all Units Covering the entire syllabi.
 - (b) For non practical subjects, maximum marks will be 80 (External).
 - (c) For the practical based subjects, maximum marks will be 60 (External).
 - (d) In each theory paper there will be three sections and the marks distributed for different sections will be in the following pattern -

Theory (Non- Practical):- There will be three sections A, B and C in the question paper.
Section - A Objective Type/ In few words (30 words)

There will be 15 questions to be set, three from each unit and 10 to be attempted. Each question will carry 2 marks.

Section - B Short Answer Type (60 words)

There will be 5 questions to be set, 1 from each unit and all five questions to be attempted. Each question will carry 6 marks.

Section - C Long Answer / Eassy Type Question

There will be 5 questions to be set, 1 from each unit and 2 to be attempted. Each question will carry 15 marks.

Marks Scheme for - Non-practical subject -

Types of Questions	Question to be set from each Unit	Total No. of Questions	Questions to be solved	Marks assigned	Total Marks
Objective / In few words	03	15	10	02	20
Short Answer Type Questions	01	05	05	06	30
Long / Essay type of questions	01	05	02	15	30
Total - 80					

(i) **Theory (Practical Subject):-** There will be three sections A, B and C in the question paper.

Section - A Objective Type/ In few words (30 words)

There will be 15 questions to be set, three from each unit and 10 to be attempted. Each question will carry 2 marks.

Section - B Short Answer Type (60 words)

There will be 5 questions to be set, 1 from each unit and all five questions to be attempted. Each question will carry 4 marks.

Section - C Long Answer / Eassy Type Question

There will be 5 questions to be set, 1 from each unit and 2 to be attempted. Each question will carry 10 marks.

Marks Scheme for - Practical Subject -

Types of Questions	Question to be set from each Unit	Total No. of Questions	Questions to be solved	Marks assigned	Total Marks
Objective / In few words	03	15	10	02	20
Short Answer Type Questions	01	05	05	04	20
Long / Essay type of questions	01	05	02	10	20
Total - 60					

For question papers of compulsory papers of General group subjects i.e. Environmental Studies, English Language, Hindi Language and Skill Based Course, the pattern of question shall be applicable as suggested by the concerned Board of Studies.

(ii) **Practical**

	Each Practical
Laboratory Note Book / Project	10
Vive voce	10
Lab work / Field work	30
Total - 50	

- (e) In odd semester examination, a candidate shall appear in papers of odd semester(s) only. Similarly in even semester examinations, a candidate shall appear in papers of even semester(s) only. Papers of odd and even semesters shall not be confined in one examination.
- (f) Minimum passing marks for external/ semester end theory and practical shall be 34%.

- (g) There shall be provision of 3 grace marks and it would be distributed in maximum two theory Papers / Practical.

Internal Assessment

- Internal Tests are compulsory for theory papers and must be held as per following calendar:-
 Odd Semesters 1st Test - August, 2nd Test - October and 01 Assignment (during semester)
 Even Semesters 1st Test - February, 2nd Test - March and 01 Assignment (during semester)
- Each test & Assignment will be of 20 marks for the subjects without practical & 15 marks for the subjects having practicals. Average of the marks obtained in the best of two tests & assignment shall be incorporated as the final marks. Qualifying marks is 40%.
- If a candidate failed to attend the test on bonafide grounds, one special test may be arranged on the production of relevant documents, before submission of application forms and fees to the office.
- The Unit tests/Assignment marks to be sent to the examination cell of the college as per notification to be issued by the Principal/ Controller Examination from time to time.
- If a candidate (whose status is Regular / Ex/Supplementary) failed in First Year of the current session (2013-14) of annual system will be appeared in the first semester examination as ex-student with under the rules and regulations of Semester System. Number of Internal Test of passed year (2013-14) will not be incorporated or carried forward.

	Non Practical Subject		Practical Subject	
	External	Internal	External	Internal
MAX MARKS	80	20	60	15
MIN MARKS	28	08	21	06

Eligibility criteria for appearing in the examinations

- A candidate should have 75% of attendance both in theory and practical classes. 65% attendance may be considered only on special circumstances and on certification by the Principal of the college.
- A candidate shall have to qualify in the internal tests securing at least 40% marks.
- A candidate shall be allowed to appear in those papers only in which she has secured qualifying marks in internal test.
- If a candidate after taking admission in 1st semester could not continue the classes or could not obtain eligibility cannot appear in the 1st semester examinations. In such cases the student will not be allowed to continue in second semester and she has to continue the classes and obtain eligibility in 1st semester again in next academic year as ex-student.

11. Lecture Periods /Classes

There shall be a minimum of 50-60 hours Classes for each theory papers in respective course. Minimum of 50-60 hours shall be for each practical paper. This shall be strictly adhered to.

12. Other Guidelines

- There will be no provision for Revaluation, Supplementary or Betterment (Division Improvement).
- A candidate has to clear all the papers within 12 semesters (six years) from the year of first admission in the programme.
- A candidate will choose Honours subject just before the start of third semester from any one of the three elective subjects /group selected by her in the first semester. A candidate can change the Honours subject within 15 days from the date of admission in the third semester.
- The system of credit of ten point scale examination marks in the final mark sheet shall be introduced only after its formal approval by the competent authorities.

- (v) The system of Choice based credit system and Gradation system shall be introduced only after its formal approval by the competent authorities.

For Honours Degree Course (Total Marks: 2800).

13. Admission -

The process of admission in Honours Degree Course will be as follows -

- (i) Student shall select course (Pass Course / Honours Degree Course) at the time of first admission in the college.
- (ii) Admission shall be on merit basis after receiving the application from students.
- (iii) Number of seats for Honours Degree Course will be decided as per the Govt. Rules.

(A) Each theory Paper (Non Practical Subject)

<i>Each Theory Paper</i>		<i>Internal Assessment</i>	
Full Marks	Minimum Passing 34%	Full Marks	Minimum Marks 40%
80	28	20	08

(B) Each theory Paper (Practical Subject)

<i>Each Theory Paper</i>		<i>Internal Assessment</i>	
Full Marks	Minimum Passing 34%	Full Marks	Minimum Marks 40%
60	21	15	06

(C) Each Practical Paper

<i>Minimum Passing Percentage</i>	<i>Full Marks</i>	<i>Minimum Passing Marks</i>
34%	50	17

(D) Grace Marks

Total/Maximum 03 in two theory paper/practical.

Amendments in Promotion Rules for Semester System at the Graduation Level

- (a) A Candidate is eligible to continue the second semester classes immediately after the 1st Semester examinations and can appear in the 2nd semester examinations notwithstanding the number of arrear papers in 1st semester provided she must have appeared in the 1st semester examination.
- (b) A candidate will be promoted to 3rd semester with not more than two papers of 1st semester and she will continue to attend classes of 3rd semester provisionally. She will be allowed to get final admission in the 3rd semester with maximum of four back papers in all 1st semester and 2nd semester.
- (c) A Candidate is eligible to continue the 4th semester classes immediately after 3rd semester examination and can appear in the 4th semester examination with maximum 2 back papers in 1st semester and/or any numbers of back papers in 2nd and 3rd semester.
- (d) A candidate will be promoted in 5th semester with not more than 2 back papers in 3rd semester and not more than 4 back papers in all 3rd and 4th semester provided she has cleared 1st and 2nd semester examination.
- (e) A candidate is eligible to continue the 6th semester immediately after the 5th semester examination and can appear in 6th semester examination with maximum of 2 back papers in 3rd semester and/or any number of back papers in 4th and 5th semester examination.
- (f) If a Candidate of 6th Semester is passed in all the semesters except the 5th Semester with back in only one subject, she is allowed to appear in the back paper of the 5th Semester with the examination of 6th Semester.

- (g) The students at the UG Level can view their valued answer copies and apply for the **Challenged Valuation** within 03 days from the date of the declaration of the result.
- (h) A candidate will be eligible to get Graduation and Graduation Honours degree after passing all the six semester examination. For cleaning all semester papers a candidate will be given a period 6 years (12 semesters) from the year of first admission.

सेमेस्टर स्नातक स्तर प्रमोशन नियम

प्रथम सेमेस्टर में प्रवेश की पात्रता:-

- प्रथम सेमेस्टर में छात्राओं का प्रवेश छ.ग. शासन के प्रवेश नियम के आधार पर किया जायेगा।

द्वितीय सेमेस्टर में प्रवेश की पात्रता:-

- विद्यार्थी को प्रथम सेमेस्टर की परीक्षा के तत्काल बाद कितने भी विषयों में बैक के साथ द्वितीय सेमेस्टर में अध्ययन की पात्रता होगी, बशर्ते वह प्रथम सेमेस्टर की परीक्षा में शामिल हुआ हो।

तृतीय सेमेस्टर में प्रवेश की पात्रता:-

- प्रथम सेमेस्टर में 02 से अधिक विषयों में बैक नहीं होना चाहिए।
- प्रथम एवं द्वितीय सेमेस्टर में सम्मिलित रूप से 04 विषयों से अधिक में बैक न हो।

चतुर्थ सेमेस्टर में प्रवेश की पात्रता:-

- प्रथम सेमेस्टर में 02 से अधिक विषयों में बैक नहीं होना चाहिए।
- द्वितीय एवं तृतीय सेमेस्टर में कितने भी विषयों में बैक हो।

पंचम सेमेस्टर में प्रवेश की पात्रता:-

- प्रथम सेमेस्टर उत्तीर्ण होना चाहिए।
- द्वितीय सेमेस्टर उत्तीर्ण होना चाहिए।
- तृतीय सेमेस्टर में 02 से अधिक विषयों में बैक न हो।
- तृतीय एवं चतुर्थ सेमेस्टर में सम्मिलित रूप से 04 विषयों से अधिक में बैक न हो।

षष्ठम सेमेस्टर में प्रवेश की पात्रता:-

- प्रथम सेमेस्टर उत्तीर्ण होना चाहिए।
- द्वितीय सेमेस्टर उत्तीर्ण होना चाहिए।
- तृतीय सेमेस्टर में 02 से अधिक विषयों में बैक न हो।
- चतुर्थ एवं पंचम सेमेस्टर में कितने भी विषयों में बैक हो।
- यदि कोई छात्रा सभी सेमेस्टर में उत्तीर्ण है एवं केवल पंचम सेमेस्टर में 01 (एक) विषय में बैक है, ऐसी छात्रा को षष्ठम सेमेस्टर की परीक्षा के साथ परीक्षा देने का अवसर दिया जावेगा।
- विशेष -
 - ✓ मूल्यांकित उत्तर-पुस्तिकाओं के अवलोकन व Challenged Valuation की प्रक्रिया इस स्नातक स्तर सेमेस्टर परीक्षा अप्रैल-मई से लागू है। छात्राएं परीक्षा परिणाम घोषित होने की तिथि से 3 दिन के भीतर इस हेतु आवेदन प्राचार्य को दे सकती हैं।
 - ✓ विद्यार्थी को स्नातक एवं स्नातक आर्नस की उपाधि तभी प्राप्त होगी जबकि उसने सभी 06 सेमेस्टर की परीक्षाएँ उत्तीर्ण कर ली हों एवं 06 सेमेस्टर की परीक्षाएँ उत्तीर्ण करने हेतु उसे प्रथम प्रवेश की तिथि से लेकर 06 वर्षों की अवधि प्राप्त होगी।
 - ✓ छात्रा जिस सत्र बैक की परीक्षा में सम्मिलित होगी उसी सत्र का पाठ्यक्रम एवं परीक्षा संबंधी नियम लागू होगा।

GOVT. BILASA GIRLS P.G. COLLEGE BILASPUR (C.G.)

SYLLABUS
DIPLOMA IN COMPUTER APPLICATION (DCA)

Structure & Syllabi for One Year DCA Programme

1. The title of the programme is "Diploma in Computer Application" (DCA) and introduced from the academic year 2014-15.
2. **Objectives:** The objectives of the Programme shall be to provide sound academic base for proceeding career in Computer Application.
3. **Eligibility for admission:** In order to be eligible for admission to DCA a candidate must be (10+2) with minimum 40% marks in aggregate.
4. **Duration:** The duration of the DCA Programme shall be one year.
5. **The scheme of Examinations:** The DCA Examination will be of 800 marks as given Below:
 - i. Theory Papers: 600 marks
 - ii. Practical Papers: 200 marks
6. **The Standard of Passing and Award of Class**

In order to pass in the examination the candidate has to obtain 33% marks out of 100. (Minimum 33% marks must be obtained separately in theoretical papers as well as practical papers of University Examination).

The class/division will be awarded on the basis of aggregate marks obtained by the candidate for examinations.
7. The Medium of Instruction and Examination (Written and Viva) shall be English/Hindi.
8. **Instructions to Paper Setters:**
 - a. In each theory paper, six questions are to be set and paper has maximum 100 marks. Question paper should be in English as well as Hindi.
 - b. Question No. 1 should be compulsory and cover the entire syllabus. This question should have objective or short answer type questions. It should be of 30 marks.
 - c. Apart from Question No. 1, rest of the paper shall consist of five units as per the syllabus. Every unit should have two questions. However, student may be asked to attempt only 1 question from each unit. Each question should be 14 marks.

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SCHEME OF EXAMINATION FOR ONE YEAR DCA PROGRAMME

Session 2021-22

Paper
No.

Paper No.	Title of the Paper/s	Yearly Examination	Total Maximum Marks	Minimum Passing Marks in Term End Examination
		marks		
I	Fundamentals of Computers	100	100	33
II	Windows & PC Packages	100	100	33
III	Print Technology and Desktop Publishing	100	100	33
IV	Internet and Web Technology	100	100	33
V	Programming in C	100	100	33
VI	Introduction to Operating System	100	100	33
VII	LAB-I PC Package and DTP Lab	100	100	33
VIII	LAB-II Programming in C Lab	100	100	33
Total Marks			800	






SYLLABUS
DIPLOMA IN COMPUTER APPLICATION (DCA)PAPER-IFUNDAMENTALS OF COMPUTERS**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. Computer organization: Basic Component of Computer system - Control Unit, ALU, I/O, Memory.

UNIT-II

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

UNIT-III

Bytes and Addressable Memory, Memory Sizes, Types of Memory: RAM, Cache, ROM, Flash Memory, CMOS, Memory Access Times, Expansion Slots And Adapter Cards, Removable Flash Memory, Ports And Connectors: USB Ports, FireWire Ports, Buses, Storage: Characteristics of a Hard Disk, RAID, NAS, External and Removable Hard Disks, Miniature Hard Disks, USB Flash Drives, Cloud Storage, Optical Discs: CDs, DVDs.

UNIT-IV

Software – Definition, Types of Software- System Software, Application Software, System Software- Operating System, Language Translator(Compiler, Interpreter), Utility Programs. Operating system- Definition, Function, Types of operating system- Batch Processing, Multiprogramming, Time Sharing Operating System, Multiuser, Multitasking, Multiprocessing Operating System.

UNIT-V

Network- 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, Antivirus software's.

Text Books: 1. Fundamentals of Computers, P. K. Sinha, BPB.

2. Fundamental of Computers, Raja Raman V. Prentice Hall of India, New Delhi.

3. Introduction to Computers, Norton, Peter, McGraw Hill.

4. Computer Fundamentals, B. Ram, New Age International Pvt. Ltd.

5. Fundamental of Computer & IT, S.Jaiswal, Wiley dreamtech India.

References: 1. A+ Certification All-in-One Desk Reference for Dummies, G. Clarke

1. IBM PC & Clones: Hardware Trouble Shooting and Maintenance, B.Govindarajalu

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SYLLABUS
DIPLOMA IN COMPUTER APPLICATION (DCA)

PAPER-II
WINDOWS & PC PACKAGES

UNIT-I

Disk Operating System (DOS) and MS Windows 7: Introduction, History & Versions of DOS, DOS System Files. DOS Commands: Internal and External, Executable V/s Non Executable Files in DOS; **MS Windows 7:** 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

MS Word 2007: Introduction to MS Office, Introduction to MS Word, Features & area of use. Working with MS Word, , 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 2007 : 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 2007: Introduction and area of use, Working with MS Excel, concepts of Workbook & Worksheets, 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.

UNIT-V

MS PowerPoint 2007: 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.

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. 3. MS Office 2000 Training Guide by Maria, BPB Publications. 4. MS Office complete by SYBEX. 5. PC Software Made Simple, Taxali, BPB.

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PRINT TECHNOLOGY AND DESKTOP PUBLISHING

UNIT-I

Print Technology: Introductions to Printing, Types of Printers, Inkjet and DM Printer, Screen Printing, Offset Printing, Working of offset Printing, Transparent Printout, Negative & Positives for Plate were making, Laser printers - Use, Types, Advantage of laser printer in publication.

UNIT-II

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.

UNIT-III

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.

UNIT-IV

CorelDraw X4: CorelDraw X4 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.

UNIT-V

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.

- Text Books:**
1. How to Do Everything Adobe Photoshop CS4, Chad Perkins, TMH
 2. Desktop Publishing Software: Adobe Creative Suite, Adobe Frame Maker, Adobe Indesign, Adobe PageMaker, Altssoft Xml2pdf, Bookmaking Software; Uni.press.org
 3. Specifications of Adobe PageMaker (Paperback); Cede Publishing
 4. Adobe Pagemaker 7.0 Inver 1st Edition, Kevin G. Proot, Ceneage Learning Pvt Ltd.
 5. Corel Draw X4: The Official Guide, (Paperback), Gary David Bouton, TMH
- Reference Books:**
1. Corel DRAW X4, Deborah Miller, Pearson Education

2. Photoshop CS4 Quicksteps, Carole Matthews & Gary David Bouton, TMH

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SYLLABUS

DIPLOMA IN COMPUTER APPLICATION (DCA)

PAPER-IV

INTERNET AND WEB TECHNOLOGY

UNIT-I

Applications of Internet, History of Internet, WWW, Various Services, World Wide Web (WWW) History, Working, Web Browsers, Its function Concept of Search Engines, client server architecture

UNIT-II

Internet : Evolution, Protocols, Interface Concepts, Internet Vs Internet, Growth of Internet, ISP, Connectivity - Dial-up, Leased line, VSAT etc., URLs, Domain names, Portals, Applications.

E-Mail: Concepts, Basics of Sending & Receiving, E-mail, Free E-mail services.

UNIT-III

Transfer Protocols, Telnet & Chatting, Client/Server Architecture Characteristic, FTP & its usages. Telnet Concept, Remote Logging, Protocols, Internet chatting - Voice chat, text chat.

UNIT-IV

Searching the Web, HTTP, URLs, Web Servers, Web Protocols. Web Publishing Concepts, Domain Name Registration, HTML, Design Tools, HTML Editors, Image Editors.

UNIT-V

HTML Concepts of Hypertext, Versions of HTML, Elements of HTML Syntax, Head & Body Sections, Building HTML Documents, Inserting Texts, Images, Hyperlinks, Backgrounds And Colour Controls, Different HTML Tags, Table Layout and Presentation, Use of Font Size & Attributes, List types and its Tags.

Text Books:

1. Computer Networks, Andrew S. Tanenbaum, PHI / Pearson Education Inc.,
2. Computer Networking: A Top-Down Approach Featuring the Internet, James F. Kurose, Keith W. Ross, Pearson Education Inc., New Delhi.
3. Introduction to Data Communications and Networking, Wayne Tomasi, Pearson Edu
4. Data Communications and Networking, Curt White, CENGAGE Learning Pvt. Ltd.
5. Computer Networks, L. L. Peterson & B. S. Davie, Elsevier Inc,
6. Data Communication and Networking, Behrouz A. Forouzan, Tata McGraw-Hill.

References: 1. Data & Computer Communication, Black, PHI.

2. Data and Computer Communication, William Stallings, Pearson Education.
3. Computer and Communication Networks, Nader F. Mir, Pearson Education, 2007.
4. Communication Networks, Walrand, TMH.
5. Internetworking with TCP/IP, Douglas E. Comer, Prentice Hall India.
6. Computer Networks: Principles, Technologies and Protocols, Natalia Olifer & Victor Olifer, Wiley India Pvt. Ltd., New Delhi.

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GOVT. BILASA GIRLS P.G. COLLEGE BILASPUR (C.G.)

2019-20

SYLLABUS

DIPLOMA IN COMPUTER APPLICATION (DCA)

PAPER-V

PROGRAMMING IN 'C'

UNIT-I

C Language – Character set, Tokens of C - tokens-constant-keywords and identifiers- variables- data types- declaration and assignment of variables defining symbolic constants.- Operators and Expressions: Types of Operators- Arithmetic, Relational and Logical Operators Assignment, increment and decrement of operators - conditional bitwise and special operators - arithmetic expression and its evaluation - hierarchy of arithmetic operations - evaluations, precedence and associativity - mathematical functions.

UNIT-II

Control Branching and Decision-Making in C - If statement Switch statement - GOTO statement - The?: Operators. - Decision - Making and Looping, Types of Loop, nesting in a loop.

Arrays in C Single Two-dimensional and Multi-dimensional arrays. Handling of Character Set: Declaration & Initialization of string variables - reading from and writing to screen - Arithmetic operations - String handling functions.

UNIT-III

Functions: Definition, Library Functions User Defined Functions, Function Prototype, Function Definition, Function Call, Types of User Defined Functions, Arrays and Functions.

Structures and Unions: Definitions initialization and assigning values to members' arrays of structures and arrays within structures structure with in structure- unions - size of structures.

UNIT-IV

Declaration and initialization of pointers - pointer expression - pointer and arrays - pointer and character strings pointers and functions - pointers and structures pointer on pointers.

UNIT-V

File Maintenance in "C": Defining, Opening and closing a file - Input/Output operations on a file- random access to file - command line arguments.

Text Books:

1. Programming in "C" E Balgurusamy Tata mc Graw-Hill
 2. The "C" Programming Language: Brian W. Kenigham & Dennis Ritchie
 3. The Spirit of "C" - Henry Mulis
 4. Let Us C, Yashwant Kanetkar, BPB
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DIPLOMA IN COMPUTER APPLICATION (DCA)

PAPER-VI

INTRODUCTION TO OPERATING SYSTEM

Unit - I

Introduction to Operating System

What is an Operating System, Operating Systems Architecture, Types of Operating Systems, Process Model, Process States and Transitions, System Calls.

Unit - II

Process Management

Processes: Process Scheduling, Cooperating Processes, Inter-process Communication, CPU Scheduling: Scheduling Criteria, Scheduling Algorithms, Process Synchronization: Background, Deadlocks.

Unit - III

Memory Management

Main Memory Management: Background, Logical versus Physical Address space, swapping, Contiguous allocation, Paging, Segmentation, Segmentation with Paging, Virtual Memory: Demand Paging.

Unit - IV

Device and Storage Management

File-System Interface, Mass-Storage Structure, Device Management: Techniques for Device Management, Dedicated Devices, Shared Devices, Buffering, Multiple Paths, Secondary-Storage Structure: Disk Structure, Disk Scheduling, Disk Management.

Unit - V

File System Implementation

A Simple File System, Logical & Physical File System, File-System Interface: Access Methods, Directory Structure, Protection, Free-Space Management, Directory Implementation.

Text Books:

1. Operating System Concepts, Silberschatz and Galvin, Pearson Education Pub.
2. Operating Systems, Madnick E., Donovan J., Tata McGraw Hill,
3. Operating Systems, A. S. Tannenbaum, PHI

Reference Books:

1. Operating Systems Internals and Design Principle, William Stallings, Prentice Hall Publishers
2. Operating Systems - A Concept Based Approach, Dhananjay M. Dhamdhare, TMH

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DIPLOMA IN COMPUTER APPLICATION (DCA)

PAPER-VII

LAB-I

PC PACKAGE AND DTP LAB

Note: - Practical should cover syllabus of respected theoretical papers.

The break-up of marks for Practical will be as under

S.n	Argument	Maximum Marks	Minimum Passing Marks
1	Lab Record	20	
2	Viva-voce	30	
3	Program Development & Execution	50	
4	Total Marks	100	33

PAPER-VIII

LAB-II

PROGRAMMING IN CLAB

Note: - Practical should cover syllabus of respected theoretical papers.

The break-up of marks for Practical will be as under

S.n	Argument	Maximum Marks	Minimum Passing Marks
1	Lab Record	20	
2	Viva-voce	30	
3	Program Development & Execution	50	
4	Total Marks	100	33

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