कव्हर पेज का प्रारूप
(संशोधन/विलोपन पश्चात
निर्मित पाठ्यक्रम हेतु)

Pt. Ravishankar Shukla University,
Raipur (C.G.), India 492010

CURRICULUM & Syllabus
(Based on CBCS & LOCF)

DCA
(Semester System)

Semester: I-II

Session: 2025-26

Approved by:

Board of Studies : **Subject- COMPUTER SCIENCE**

Dates: **05-05-2025**

Name of Chairmen : **DR. SANJAY KUMAR**

Name of Member's : DR. ANIL KUMAR TIWARI, DR. VIBHA DUBEY, DR. SANJAY GUPTA
DR. PRANJLI DEWANGAN, DR. POOJA RATHI, DR. SANTOSH VISHWAS
DR. VINOD KUMAR PATLE DR. VARTIKA SHIRVASTHAV,
SHREE MANNU RAVANI, DR. PRAMOD MISHRA,
DR. SAMEEK BHATTACHARYA

Pt. Ravishankar Shukla University Raipur

CURRICULUM & SYLLABI

Diploma in Computer Applications

(DCA)

Semester System

Session: 2025-26 & onwards

Approved by:	Board of Studies	Academic Council
Date:	05 MAY 2025	

SCHEME OF TEACHING AND EXAMINATIONS
D.C.A. (Diploma in Computer Applications)

FIRST SEMESTER

Subject Code	SUBJECTS	Teaching Load Per Week			Credit L+ (T+P)/2	Examination Marks							
						Max. Marks				Min. Marks			
		L	T	P		Th	Ses	Pr	Total	Th	Ses	Pr	Total
DCA101	FUNDAMENTALS OF COMPUTERS & INFORMATION TECHNOLOGY	3	2	-	4	100	50	-	150	33	20	-	53
DCA102	OFFICE AUTOMATION	3	2	-	4	100	50	-	150	33	20	-	53
DCA103	PROGRAMMING In "C" LANGUAGE	3	2	-	4	100	50	-	150	33	20	-	53
DCA104	Practical based on DCA102	_	_	3 x 2	2	_	25	50	50	_	10	20	30
DCA105	Practical based on DCA103	_	_	3 x 2	2	_	25	50	50	_	10	20	30
	TOTAL	9	6	10	16	300	200	100	**600**	99	80	40	**219**

SCHEME OF TEACHING AND EXAMINATIONS
D.C.A. (Diploma in Computer Applications)
SECOND SEMESTER

Subject Code	SUBJECTS	Teaching Load Per Week			Credit L+ (T+P)/2	Examination Marks							
						Max. Marks				Min. Marks			
		L	T	P		Th	Ses	Pr	Total	Th	Ses	Pr	Total
DCA105	Introduction to HTML	3	2	-	4	100	50	-	150	33	20	-	53
DCA106	Internet and E-Commerce	3	2	-	4	100	50	-	150	33	20	-	53
DCA107	Database Management System	3	2	-	4	100	50	-	150	33	20	-	53
DCA108	Practical based on DCA105	_	_	3 x 2	2	_	25	50	75	_	10	20	20
DCA109	Practical based on DCA107	_	_	3 x 2	2	_	25	50	75	_	10	20	20
	TOTAL	9	6	10	16	300	200	100	**600**	99	60	40	**219**

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PT. RAVISHANKAR SHUKLA UNIVERSITY: RAIPUR (C.G.)
SCHOOL OF STUDIES IN COMPUTER SCIENCE
DIPLOMA IN COMPUTER APPLICATION
[DURATION - ONE YEAR - PART TIME]

The duration of the course shall be one year consisting of two semesters. There shall be three theory and one practical course in the each semester. There shall be grading system of awards.

FIRST SEMESTER:

Semester - I

DCA101	:	FUNDAMENTALS OF COMPUTERS & INFORMATION TECHNOLOGY
DCA102	:	OFFICE AUTOMATION
DCA103	:	PROGRAMMING In "C" LANGUAGE
DCA104	:	Practical based on DCA102
DCA105	:	Practical based on DCA103

DCA101
FUNDAMENTALS OF COMPUTERS & INFORMATION TECHNOLOGY

Course Outcomes

- Fundamental concepts of computers with the present level of knowledge of the students.
- Student will come to know about different input and output devices.
- Understand the basics of digital computer along with different storage unit.
- Familiarize operating systems, programming languages, peripheral devices, networking, multimedia and internet Understand different types of software

Unit – I - Computer Fundamental

Know the Computer – Introduction, Characteristics of Computers, Block diagram of computer. Types of computers and features, Mini Computers, Micro Computers, Mainframe Computers, Super Computers.,Generations of Computers.

Personal Computer – Introduction to Personal computer, Uses of personal computers, Components ofpersonal computers, Evolution of PCs, Architecture of Pentium IV.

Unit – II Computer Memory

Input Devices/Output Devices – Introduction to Input Device, Types of Input Devices, Introduction to Output Device, Types of Output Devices, Printers, Types of Printers, Impact Printer, Non-Impact Printer.

Central Processing Unit - Introduction, what is Central Processing Unit, Arithmetic and Logic Unit, Control Unit, Registers.

Storage Devices - Introduction, Storage and its needs, Brain Vs Memory, Primary Storage, Secondary Storage, Hard Disk Operations, Floppy Disk Drives, Winchester Disk, Optical Disk, VCD, CD-R, CD-RW, DVD, Zip Drive, Flash Drives, Blue Ray Disk, Memory Card.

Unit – III Software and Operating System

Basics of Software- Introduction, What Does Software Stand For? Needs of software, Types of software, Open-Source Software, Integrated Development Environment.

Operating System – Introduction to Operating System, Why an Operating System, Types of Operating System, Functions of Operating System, The Booting Process, Cold Booting, Warm Booting, Difference between Cold Booting and Warm Booting.

Disk Operating System - Introduction, what is DOS? Functions of DOS, Versions of DOS, Commands, Internal Commands of DOS, External Commands of DOS, Executable Vs Non-Executable Files in Dos.

Unit – IV Programming Language

Introduction to Programming Languages, Data, Information and Knowledge, Characteristics of Information, Comparison between human language and Computer Language, what is a program? What is a Programming language? Programming development cycle, Algorithm, Program Flowcharts, Pseudo code, Programming approaches, Programming Paradigms, Types of Programming Language, Third Generation Language, Fourth Generation Language.

Unit – V Computer Virus

Computer Virus - Introduction, Virus, History, Mechanism of virus, how a Virus Spreads, how is virus named, A few Prominent Viruses, Types of Computer Virus, Related Concepts: Anti-Virus Programs, Norton Anti - Virus (NAV), Execution of Norton Anti-Virus.

Text Books:

- Computer Fundamental (3rd Ed) Sinha,P.K.
- Fundamental of Information Technology ShritvastavaCheton
- Fundamentals of Computers, Murthy,C.S.V. Delhi S. K. Kataria& Sons.
- MS office XP for Everyone, Saxena Sanjay, New Delhi Vikas Publication

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DCA102
OFFICE AUTOMATION

Course Outcomes

After completion of the course,

- Students would be able to documents, spreadsheets, make small Presentations and would be acquainted with internet.
- Student will come to know about database creation and about creation of journal, ledger, trial balance of transaction in tally software.
- This subject helps in understanding the basics of office automation task.

Unit: I

MS Word Basics: Introduction to MS Office; its components, Introduction to MSWord; Features & area of use. Working with MS Word.; Menus & Commands; Toolbars & Buttons; Shortcut Menus, Wizards & Templates; Creating a New Document; Saving document, saving as different format, Different Page Views and layouts; Applying various Text Enhancements; Working with – Styles, Text Attributes; Paragraph and Page. Formatting- Using page border and watermark, Text Editingusing various features; Print option, Spell check, Find & Replace, Headers & Footers, Inserting – Page Numbers, Section breaks and page breaks, Tables, Insert menu, Macros in Word, Mail Merge.

Unit: II

MS Excel: Introduction and area of use; Working with MS Excel.; concepts of Workbook & Worksheets; Using Wizards; Various Data Types, Cell and Texts; Inserting, Removing & Resizing ofColumns & Rows; Formulas- Use of Formulas, Calculations using various type of functions-Logical,string, date & time, math's and other types.

Unit: III

MS PowerPoint: Introduction & area of use; Working with MS PowerPoint; Creating a NewPresentation; Working with Presentation; Slides & it's 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- PowerPoint Objects Insert WordArt andother objects like shapes, clipart, charts and Smart Arts, symbol in PowerPoint, Designing & Presentation of a Slide Show.

Unit: IV

MS-Access – Getting Started, Adding and Changing Data, Simple Queries, Creating AppendQueries, Creating QBE Queries, Multi-table QBE Queries, SQL Queries.

Unit: V

Outlook Express - introduction, WHAT IS outlook express? Features of Outlook Express, starting outlook express, Concepts of CC and BCC, Email Address, Reading a received message, composingmessage, Replying And Forwarding Messages, Attaching files, Creating Signature In OutlookExpress, Formatting message text.

Text Books:

- MS-Office 2010 Mr. Kalpesh Patel (Computer World (2014))
- PC Software MS Office Naik Nitin K (Kamal Prakashan)

Reference Books:

- Introducing Windows 10 for IT Professionals Ed Bott (Microsoft Press)
- .GO! with Microsoft Windows 10 Introductory Gaskin & Vargas (Publisher: Pearson)
- Microsoft Office 2010 a Complete Guide Blokdyk Gerardus (5starcooks)

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DCA103

PROGRAMMING In "C" LANGUAGE

Course Outcomes

- Student will understand the basic terminology used in computer programming and will be able to design programs involving decision structures, loops, functions and Arrays.
- Student will understand the different data structures and create/update basic data files.
- Skills - At the end of the course, a student will be able to :
  a) Analyse a simple programming problem specification.
  b) Design a high-level (programming language independent) solution to the problem using functional abstraction and general imperative programming language constructs. Write, compile, execute and debug a C program which maps the high-level design onto concrete C programming constructs

UNIT– I - Introduction to fundamental of C language
Introduction of C Programming, Structure of C Programming, what is Algorithm, Representationof Algorithm, Flowchart, Header file in C.
Datatypes – Primitive datatypes C (Integer, Char, float, double, long, long double and void),User define datatype, Variable, Constant.
Basic Input/Output – Formatted and Unformatted Input/Output Statement in C.

UNIT– II – Operator and Expression
Operator's - What is Operators? Types of operators – Arithmetic operators, Relational operators,Logical operators, Conditional operators, Increment/Decrement operators, Assignment operators, Bitwise operators.
Expression – Introduction to Expression, evolution of expression, Types of expression.

UNIT– III – Control Structure
Branching Statements – if Statement, if ..... else Statement, Nested if ..... else Statement,Multiway decision Statement.
Looping Statements – While loop. Do ..... While loop, For loop, Break Statement, SwitchStatement,
Jumping Statements - Continue Statement, Goto Statements.

UNIT– IV – Function and Array
Functions –Introduction to function, Types of function, Function Declaration, Function Calling and Function Definition, use of function, Advantages of function, Function accepting more thanone parameter, Return Values, Recursion function.
Array – Introduction to Array, Types of arrays, One Dimensional Array, Two-Dimensional Array, Multi-Dimensional Array.

UNIT– V – Structure and Union
Structure – Introduction to Structure, Declaring Structure, Initialization of Structure, Structurewithin Structure, Operation on Structure.
Union – Introduction to Union, Scope of Union, Differences between Structure and Union.

TEXT BOOK:
"let us c" author: yashvant kanetkar,
Programming in ANSI C author: E. Balaguruswami.

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DCA104 : Practical based on DCA102

1 **Scheme of Examination:-**
Practical examination will be two programs and a project demonstration. It will be of 3 hours duration. All programme with flowchart & algorithms. The distribution of practical marks will be as follows and

Program 1 (Word)	-	10
Program 2 (Excel/Access)	-	10
Program 3 (Powerpoint/Publisher)	-	10
Viva-Voice	-	10
[Practical Copy + Internal Record]	-	10
Total	-	**50**

2 Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
3 In every program there should be comment for each coded line or block of code.
4 All the following programs or a similar type of programs should be prepared.

MS- Office Practical : MS-Word

Write the following equation in MS-Word.

a) $4H_3PO_3=3H_3PO_4+PH_3$
b) $PCL_3+CL_2=PCL_5$
c) $(x+y)^2=x^2+y^2+2xy$

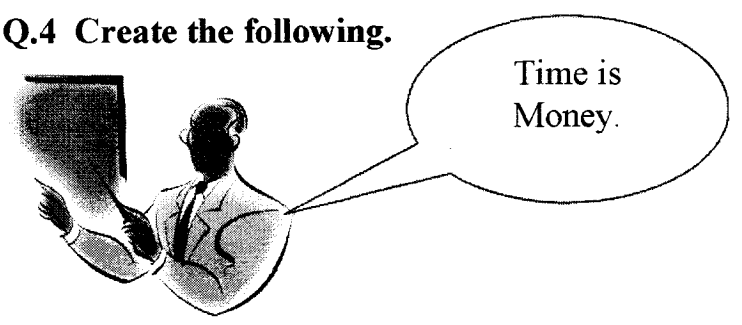
Write the following in MS-Word.

1. Preheat the oven to 220°C.
2. Copyright ©
3. Registered ®
4. Trademark ™

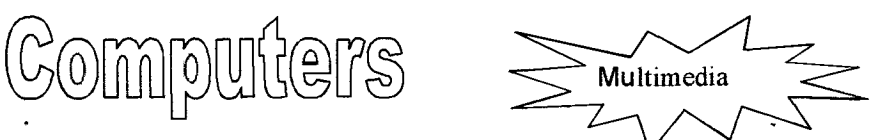
Create the following table in MS-Word.

Name		Rahul	
Roll No.		101	
Subject	Max	Min	Obtain
Java	100	33	75
Multimedia	100	33	70

Q.4 Create the following.



Q.5 Create the following.



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MS-Excel

Create the following worksheet and save the worksheet as wages.xls.

PACE COMPUTERS (ATC CEDT), GOVT. OF INDIA
Payroll for employee (temporary)

Today's date			**Pay rate**	

S. No.	Worker's Name	Hired on	Days Worked	Gross Wage
01	Kushagra	3-March-07		
02	Pradeep	4-March-07		
03	Puneet	5-March-07		
04	Rajeev	6-March-07		

* calculate days work and gross wages.

Create the following worksheet and save the worksheet as wages.xls.

Name	Basic Salary (monthly) (Rs.)	HRA (% of basic salary)	DA (Rs.)	Total Salary (1997)	Bonus (Rs)	Total Salary (1998)	% Increase
Shirome	5000	10	450		1200		
Somya	9000	15	800		200		
Tanya	7000	12	900		1800		

i. Calculate the Total Salary as sum of Basic Salary, HRA, DA, for each employee for 1997.

ii. Calculate total salary for year 1998 as sum of salary of 1997 and bonus.

iii. Calculate percentage increase in salary from 1997 to 1998.

Q. 3 Create a macro in MS- Excel to make selected cell, bold, italic outside borderand center across cell.

Q. 4Create bar chart with given data.

	2016	2002	2003
Tea	19	23	25
Coffee	22	24	22
sugar	45	40	45

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Q.5 Create the following table-

Principle 1500
Rate 4%
Time 5

300	3	4	5
1%	45	60	75
2%	90	120	150
3%	135	180	225

MS-Word

Create a PPT of at least 10 slides with one slide for comparison one slidedisplaying a chart with a table.

Create a PPT use reherse timing for the slider show.

Create a PPT presentation slide import sound and video clip.

Create a PPT presentation slide adding Hyperlinking.

Create ppt presentation and apply themes and transitions.

MS-Access

Write the steps for a creating new database.

Write the steps for creating in design view.

Write steps for adding data to a table.

Write steps for adding a field in a table.

Create a table in MS-Access with database "Student", containing a student table,fees table and grades tables and creating relationship between table.

Ms- Outlook

Sending an E-mail with Attachment.

Creating an sharing a calendar Event.

Setting an Out of office Replay.

Using categories to organize E-mail.

Searching for specific E-mails.

DCA105 : Practical based on DCA103

1. **Scheme of Practical Examination:-**
   Practical examination will be of 3 hours duration. All programs should be with flowchart & algorithms. The distribution of practical marks is as follows and

Programme 1 (with flowchart & algorithms)	-	10
Programme 2 (with flowchart & algorithms)	-	10
Programme 3 (with flowchart & algorithms)	-	10
Viva-Voice	-	10
[Practical Copy + Internal Record]	-	10
Total	-	**50**

2. Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
3. In every program there should be comment for each coded line or block of code.
4. All the programs or a similar type of programs should be prepared as per the practical list.
5. Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
6. In every program there should be comment for each coded line or block of code.
7. All the following programs or a similar type of programs should be prepared.

C Language Practical

S.NO.	NAME OF PRACTICAL
1.	Write a program to print"Hello world".
2.	Write a program to "Add two number".
3.	Write a program to perform "Arithmetic Operation".
4.	Write a program to calculate"Area of circle".
5.	Write a program to calculate"Simple Interset" of any no.
6.	Write a program to print following pattern.
	1 12 123 1234 12345
	* ** *** **** *****
7.	Create a single program to perform following tasks using, if-else,loop and single dimension character array without using function.
8.	Create a structure student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks.Declare astructure variable of student.Provide facilities to input data in data members and display result of student.
9.	Define union Emp having data members-one integer,one float and one single dimension character array Declare a union variable in main and test the union variable in main and test it.
10.	Write a program using Function.

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Semester - II

DCA106 : Introduction to HTML
DCA107 : INTERNET AND E-COMMERCE
DCA108 : DATABASE MANAGEMENT SYSTEM
DCA109 : Practical based on DCA105
DCA110 : Practical based on DCA107

DCA106
Introduction to HTML

Course Outcomes

- Students learn the markup programming concepts
- It Explains basic programming concepts and definitions.
- Students learns to construct basics of GUI design.
- Students learns to code programs by window based GUI..
- Students learns Event Driven programs.

Unit -1 : Introduction and Basic Elements

Introduction to HTML Definition and purpose, Basic concepts and terminology, HTML Document Structure, Container and Empty Tags, Basic HTML Elements, Headings Tags, Paragraphs, Line breaks, Horizontal rules, Comments.

Unit - 2 : Text Formatting, Links and Lists
Text Formatting : Bold, Italic, Underline, Superscript and Subscript, Preformatted text, **Links: Hyperlinks and Navigation,** Anchor tag and **href** attribute, Opening links in new tabs (target="_blank"), **Lists :** Ordered lists, Unordered lists, Definition lists.

Unit - 3 : Images, Multimedia, and Tables
Image : Image tag, **src** and **alt** attributes, Image dimensions (**width** and **height**), **Multimedia:** Embedding audio and video, Using the **<iframe>** tag, **Tables :** Table tag, Tablerows, headers, and data, Table attributes (**border**, **cellpadding**, **cellspacing**).

Unit – 4 : Forms and Interactive Elements
Forms Basics : Form tag, **action** and **method** attributes, **Form Elements :** Text inputs, Password inputs, Radio buttons, Checkboxes, Submit and reset buttons, Text area, Select dropdown , Labels tag

Unit – 5 : Frame and Basics of CSS
Frames and Framesets tags, Inline frames, Meta Tags. **CSS** : Introduction to CSS, CSS Syntax,CSS Selectors, Ways to Insert CSS, Background image handling, Background color management using CSS, Text management using CSS, Font management using CSS, InternalCSS, External CSS, Inline CSS.

Recommend Books –

1. Introduction to HTML – By Kamlesh N. Agrawal, O. P. Vyas, Prateek A. Agrawal.
2. Introduction to HTML – By O.P. Vyas

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DCA107
INTERNET AND E-COMMERCE

Course Outcomes

- Analyze the impact of E-commerce on business models and strategy.
- Describe the major types of E-commerce.
- Explain the process that should be followed in building an E-Commerce presence.
- Identify the key security threats in the E-commerce environment.
- Describe how procurement and supply chains relate to B2B E-Commerce.

Unit 1: Introduction to the Internet and E-Commerce

Internet Basics, History and evolution of the Internet, How the Internet works (IP addresses, DNS, etc.), Key Internet protocols (HTTP, HTTPS, FTP, etc.), E-Commerce Basics : Definition and types of e-commerce (B2B, B2C, C2C, C2B), History and evolution of e-commerce, Advantages and disadvantages of e- commerce.

Unit 2: E-Commerce Business Models and Strategies

Business Models : Online retail (e-tailing), Marketplaces and platforms, Subscription services, Dropshipping, E-Commerce Strategies : Digital marketing (SEO, SEM, social media marketing), Customer relationship management (CRM), E-commerce analytics and data-driven decision making, Omni-channel strategies

Unit 3: Technology and Infrastructure for E-Commerce

E-Commerce Platforms : Choosing the right e-commerce platform (Shopify, Magento, WooCommerce, etc.), Custom vs. hosted solutions, Website Development : Basics of website design and user experience (UX), Importance of mobile responsiveness, Website security (SSL, HTTPS) Payment Systems : Payment gatewaysand processors (PayPal, Stripe, etc.), Security standards (PCI-DSS compliance), Handling multiple currenciesand payment methods

Unit 4: E-Commerce Operations and Supply Chain Management

Inventory Management : Inventory tracking and management systems, Just-in-time (JIT) inventory, Order Fulfillment : Order processing workflows, Shipping and logistics management, Handling returns and exchanges, Customer Service : Building and managing customer support teams, Implementing customer feedback systems, Enhancing customer experience and satisfaction.

Unit 5: Legal, Ethical, and Future Trends in E-Commerce

Legal and Ethical Issues : Data privacy and protection (GDPR, CCPA), Consumer protection laws, Intellectual property issues, Ethical considerations in e-commerce,

Future Trends in E-Commerce : AI and machine learning in e-commerce, Augmented reality (AR) and virtualreality (VR) applications, Blockchain and cryptocurrency, The role of big data and analytics, Sustainable and green e-commerce practices.

Text book:

- **E-Commerce: An Indian Perspective" by P T Joseph,**
- **E - Commerce: Strategy Technologies and Applications" by David Whiteley,**
- **Electronic Commerce: Framework, Technologies and Applications" by Bhasker**

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DCA108
DATABASE MANAGEMENT SYSTEM

Course Outcomes

- Students will be familiar with the concept of Databases.
- Students will able to differentiate between Databases and Worksheet.
- Students will also get knowledge about Database's security.
- Students will also learn about Database's constraints and normalization process.
- Student will know the importance of Data storage and its maintenance.

UNIT – I: Introduction To DBMS

Purpose of database systems, views of data, Data Modeling – Relational Model, Network Model, Hierarchical Model, Database Languages – Data definition Language, Data Manipulation Language, Data Control Language Transaction Management, Storage Management, Database Administrator and User, Database System Structure.

UNIT – II: E-R Model

Entity - Relationship model as a tool for conceptual design-entities, attributes and relationships. ER diagrams; Concept of keys; Case studies of ER modeling Generalization; specialization and aggregation. Converting an ER model into relational Schema

UNIT – III: Database Design

Relational algebra Basic operations like select, Project, Union, set difference, Cartesian product, rename and additional operations like Set intersection, Natural Join, Division, Join(Left, right and Full) Normalization concept in logical model; Pitfalls in database design, Anomalies – Insert, Update, Delete, Redundancy, Functional dependencies, Decomposition, Normal forms (1NF, 2NF, 3NF).

UNIT – IV: SQL – DDL and DML Commands

Introduction to my SQL language, Structure of my SQL statements & my SQL writing guidelines, Data Definition commands: Creating a Database, Show, Creating a Table ,Use, Altering the Database, Altering the Table, RENAME, DESCRIBE, Dropping the Database, Dropping the Table. SELECT statement that are described in (FROM, WHERE, GROUP BY, HAVING, ORDER BY), INSERT, UPDATE, DELETE, REPLACE.

UNIT – V: Database Functions and Security

Aggregate Function (AVG, COUNT, MAX, MIN, SUM). Defining primary keys, foreign keys, Unique Keys, CHECK constraints in a table, removing constraints from table. SQL Sub Queries. Views: What is Views, Create, Drop and Retrieving data from views. **Security**: - Management of Roles, Changing Password, Granting Roles & Privilege, with drawing privileges.

Recommended Books:

1. Data Base Systems : Silberschatz & Korth.
2. An Introduction to Data base System : C.J. Date
3. Data Base Management System : Raghu Ramakrishnan.
4. Data Base Management System : Elmasri & Nawathe.
5. Data Base Management System : Alexies & Mathews

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DCA109 : Practical based on DCA105

1 Scheme of Examination:-
Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows

Programme 1	-	15
Programme 2	-	15
Viva	-	10
[Practical Copy + Internal Record]	-	10
Total	-	**50**

2 In every program there should be comment for each coded line or block of code
3 Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
4 All the following programs or a similar type of programs should be prepared

HTML Practical Questions

HTML

Q.1. Write an HTML program to create the following table:

Class	Subject1	Subject2	Subject3
DCA I	Visual Basic	PC Software	Electronics
DCA II	C++	DBMS	English
DCA III	Java	Multimedia	CSA

Q.2. Write an HTML program to create the following lists:

- C
- C++
- Fortran
- COBOL

Q.3. Write an HTML program to create the following lists:

1. Java
2. Visual Basic
3. BASIC
4. COBOL

Q.4. Write an HTML program to demonstrate hyperlinking between two web pages. Create a marquee and also insert an image in the page.
Q.5. Write an HTML program to create frames in HTML with 3 columns (Width = 30%, 30% , 40%).
Q.6. Write an HTML program to create a web page with a blue background and the following text:

New Delhi

New Delhi, the capital and the third largest city of India is a fusion of the ancient and the modern. The refrains of the Muslim dynasties with its architectural delights, give the majestic ambience of the bygone era.

Q.7. Write an HTML program to create the following table:

Admission

Course	OC	BC	MBC	SC/ST	TOTAL
Computer science	9	18	5	5	37
Commerce	14	25	6	5	50
Grand total					87

Q.8. Write an HTML program to create the following table:

Car Price List

Maruti		Tata		Ford	
Model	**Price**	**Model**	**Price**	**Model**	**Price**
Maruti 800	2 Lac	Sumo	2 Lac	Ikon	5 Lac
Omni	3 Lac	Scorpio	3 Lac	Gen	2 Lac

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Q.09. Write an HTML program to create the following table:

Students Records

Name	Subject	Marks
Arun	Java	70
	C	80
Ashish	Java	75
	C	69

Q.10. Create an HTML document and embed a flash movie in it.

Q.11. Write the HTML coding to display the following table. Also insert an image in the web page.

Subject	Max	Min	Obtain
Java	100	33	75
Multimedia	100	33	70
Operating System	100	33	68
C++	100	33	73

Q.12. Write the HTML coding to display the following table:

Name		Rahul	
Roll No.		101	
Subject	Max	Min	Obtain
Java	100	33	75
Multimedia	100	33	70

Q.13. Write an HTML program to create a form as the following:

Enter Name: [ ]

Enter Roll No.: [ ]

Enter Age: [ ]

Enter DOB: [ ]

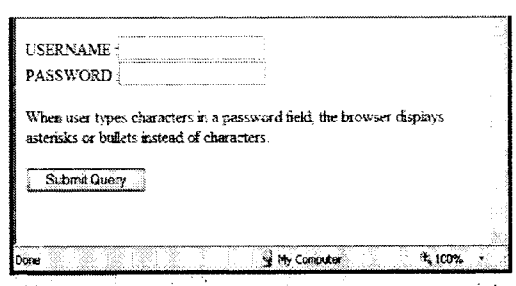
Q.14. Write an HTML program to create a web page with an image as background and the following text:

New Delhi

New Delhi, the capital and the third largest city of India is a fusion of the ancient and the modern. The refrains of the Muslim dynasties with its architectural delights, give the majestic ambience of the bygone era.

On the other side New Delhi, the imperial city built by British, reflect the fast paced present. The most fascinating of all is the character of Delhi which varies from the 13th present century mausoleum of the Lodi kings to ultra modern glass skyscrapers.

Q.15. Create the following HTML form.



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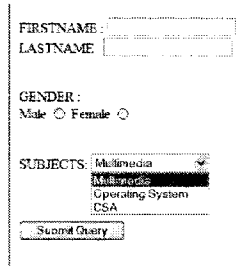
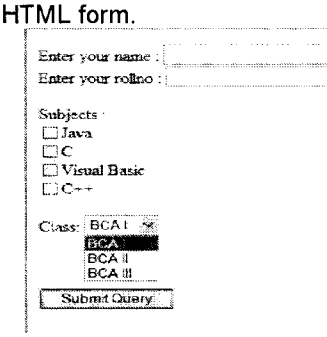
Q.16. Create the following HTML form.



Q.17. Create the following HTML form.



Q.18. Write the HTML coding for the following equations:

$C_2H_5OH+PCL_5=C_2H_5CL+POCL_3+HCL$

$4H_3PO_3=3H_3PO_4+PH_3$

$PCL_3+CL_2=PCL_5$

Q.19. Write the HTML code to display the following:

- Actors
    - Bruce Willis
    - Gerard Butler
    - Vin Diesel
    - Bradd Pitt
- Actress
    - Julia Roberts
    - Angelina Jolie
    - Kate Winslet
    - Cameron Diaz

Q.20. Write the HTML code to display the following:

1. Cricket Players
    A. Batsman
        i. Sachin Tendulkar
        ii. Rahul Dravid
        iii. Virendra Sehwag
    B. Bowler
        a) Kumble
        b) Zaheer Khan
        c) Balaji
    C. Spinner
        1) Harbhajan
        2) Kumble
        3) Kartik

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DCA110 : Practical based on DCA105 & DCA107

1 Scheme of Examination:-
Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows

Programme 1 (HTML)	-	15
Programme 2 (HTML)	-	15
Viva	-	10
[Practical Copy + Internal Record]	-	10
Total	-	**50**

2 In every program there should be comment for each coded line or block of code
3 Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
4 All the following programs or a similar type of programs should be prepared

List of DBMS Practical

1. Using the following database,
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)

Write SQL statements for the following –

a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. List the names of the teachers teaching computer subjects.
d. List the names and cities of all staff working in your college.
e. List the names and cities of all staff working in your college who earn more than 15,000
f. Find the staffs whose names start with 'M' or 'R' and ends with 'A' and/or 7 characters long.
g. Find the staffs whose date of joining is 2005.
h. Modify the database so that staff N1 now works in C2 College.
i. List the names of subjects, which T1 teaches in this session or all sessions.

2. Create the following database,
   Enrollment (enrollno, name, gender, DOB, address, phone)
   Admission (admno, enrollno, course, yearsem, date, cname)
   Colleges (cname, city, address, phone, afdate)
   FeeStructure (course, yearsem, fee)
   Payment (billno, admno, amount, pdate, purpose)
   (1) Create the above tables with the given specifications and constraints.
   (2) Insert about 10 rows as are appropriate to solve the following queries.
   (3) Get full detail of all students who took admission this year class wise
   (4) Get detail of students who took admission in Bhilai colleges.
   (5) Calculate the total amount of fees collected in this session
   i) By your college ii) by each college iii) by all colleges
   1. List the students who have not payed full fee
      i) in your college ii) in all colleges
   2. List the number of admissions in your class in every year.
   3. List the students in the session who are not in the colleges in the same city as they live in.
   4. List the students in colleges in your city and also live in your city.

3. Create the following database,
   Subjects (paperid, subject, paper, papername)

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Test (paperid, date, time, max, min)
Score (rollno, paperid, marks, attendence)
Students (admno, rollno, class, yearsem)

a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. List the students who were present in a paper of a subject.
d. List all roll numbers who have passed in first division.
e. List all students in BCA-II who have scored higher than average
   i) in your college ii) in every college
f. List the highest score, average and minimum score in BCA-II i) in your college ii) in every college

4. Using the following database
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)

   Write SQL statements for the following –

1. Create the above tables with the given specifications and constraints.
2. Insert about 10 rows as are appropriate to solve the following queries.
3. List the names of the teachers teaching computer subjects.
4. List the names and cities of all staff working in your college.
5. List the names and cities of all staff working in your college who earn more than 15,000

5. Using the following database
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)

1. Find the staffs whose names start with 'M' or 'R' and ends with 'A' and/or 7 characters long.
2. Find the staffs whose date of joining is 2005.
3. Modify the database so that staff N1 now works in C2 college.
4. List the names of subjects which T1 teaches in this session or all sessions.

6. Using the following database
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)

a. Find the classes that T1 do not teach at present session.
b. Find the college who have most number of staffs.
c. Find the staffs who earn a higher salary who earn greater than average salary of their college.
d. Find the colleges whose average salary is more than average salary of C2
e. Find the college that has the smallest payroll.
f. Find the colleges where the total salary is greater than the average salary of all colleges.
g. List maximum, average, minimum salary of each college

7. Using the following database
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)

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a. Find the classes that T1 do not teach at present session.
b. List the names of the teachers, departments teaching in more than one departments.
c. Acquire details of staffs by name in a college or each college.
d. Find the names of staff who earn more than each staff of C2 college.
e. Give all principals a 10% rise in salary unless their salary becomes greater than 20,000 in such case give 5% rise.
f. Find all staff who donot work in same cities as the colleges they work.
g. List names of employees in ascending order according to salary who are working in your college or all colleges.

8. Using the following database
Colleges (cname, city, address, phone, afdate)
Staffs (sid, sname, saddress, contacts)
StaffJoins (sid, cname, dept, DOJ, post, salary)
Teachings (sid, class, paperid, fsession, tsession)
Subjects (paperid, subject, paperno, papername)

a. Find the classes that T1 do not teach at present session.
b. Create a view having fields sname, cname, dept, DOJ, and post
c. Create a view consisting of cname, average salary and total salary of all staff in that college.
d. Select the colleges having highest and lowest average salary using above views.
e. List the staff names of a department using above views.

9. Enrollment (enrollno, name, gender, DOB, address, phone)
Admission (admno, enrollno, course, yearsem, date, cname)
Colleges (cname, city, address, phone, afdate)
FeeStructure (course, yearsem, fee)
Payment (billno, admno, amount, pdate, purpose)
a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. Get full detail of all students who took admission this year classwise
d. Get detail of students who took admission in Bhilai colleges.
e. Calculate the total amount of fees collected in this session
i) by your college ii) by each college iii) by all colleges

10. Enrollment (enrollno, name, gender, DOB, address, phone)
Admission (admno, enrollno, course, yearsem, date, cname)
Colleges (cname, city, address, phone, afdate)
FeeStructure (course, yearsem, fee)
Payment (billno, admno, amount, pdate, purpose)
a. List the students who have not payed full fee
i) in your college ii) in all colleges
b. List the number of admissions in your class in every year.
c. List the students in the session who are not in the colleges in the same city as they live in.
d. List the students in colleges in your city and also live in your city.

11. Subjects (paperid, subject, paper, papername)
Test (paperid, date, time, max, min)
Score (rollno, paperid, marks, attendence)
Students (admno, rollno, class, yearsem)
a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. List the students who were present in a paper of a subject.
d. List all roll numbers who have passed in first division.
e. List all students in MCA-II who have scored higher than average
i) in your college ii) in every college
f. List the highest score, average and minimum score in MCA-II
i) in your college ii) in every college

15-05-2025
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