

Govt. Shivalik College Naya Nangal

Teaching plan (2023-24)

Teacher Name: Rohit Kumar

Paper : C language

Class: PGDCA sem-1

Sr. No.	Dates	Topic
1	01/08/2023-10/08/2023	Programming Process: Problem definition, program design, coding, compilation and debugging; Program Development.
2	11/08/2023-20/09/2023	Basic Constructs: Identifiers, Keywords, Tokens, Data Types, Constants, Input and Output in C, Type Conversion, Operators and Expressions, Precedence Hierarchy of Operators, Associativity, Library functions.
3	21/08/2023-30/08/2023	Control Statements: Branching, Looping
4	01/09/2023-10/09/2023	Functions: Definition, Prototype, Different types of functions based on arguments and return type, parameter passing mechanisms, concept of recursive function.
5	11/09/2023-20/09/2023	Storage Classes Different Storage Classes (static, auto, extern, register), global and local variables
6	21/09/2023-30/09/2023	Arrays: Definition, accessing elements, initialization, passing to functions, multi-dimensional arrays,
7	01/10/2023-10/10/2023	String handling, Applications of linear arrays: linear and binary search, Bubble Sort and selection Sort
8	11/10/2023-20/10/2023	Pointers: address and dereferencing operators, declaration, assignment, passing addresses to functions, using pointer arrays to sort n strings.
9	21/10/2023-30/10/2023	Structure and Union: Variables, Accessing members, Nested structures, pointer to structures.
10	01/11/2023-10/11/2023	concept of self-referential structures, Difference between a union and structure.
11	11/11/2023-20/11/2023	File Handling in C: Processing a text file through C program; Concepts of Sequential File and Random File Text and Binary File.
12	21/11/23-30/11/23	, Formatted and Unformatted Files. (File Implementation is left out)

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Teaching plan (2023-24)

Teacher Name: Rohit Kumar

Paper : DBMS

Class: BCA sem-3

Sr. no.	Dates	Topic
1	01/08/2023-10/08/2023	Introduction: Database Approach, Characteristics of a Database Approach, Database
2	11/08/2023-20/09/2023	System Environment. Roles in Database Environment: Database Administrators, Database Designers, End Users, Application Developers
3	21/08/2023-30/08/2023	. Database Management Systems: Definition, Characteristics, Advantages of Using DBMS Approach, Classification of DBMSs
4	01/09/2023-10/09/2023	. Architecture: Data Models, Categories of Data Models- Conceptual Data Models, Physical data Models, Representational Data Models, such as, Object Based Models, Record Based Models
5	11/09/2023-20/09/2023	, Database Schema and Instance, Three Schema Architecture, Data Independence – Physical and Logical data Independence.
6	21/09/2023-30/09/2023	Database Conceptual Modelling by E-R model: Concepts, Entities and Entity Sets, Attributes, Mapping Constraints, E-R Diagram, Weak Entity Sets, Strong Entity Sets. Enhanced E-R Modelling: Aggregation, Generalization, Converting ER Diagrams to Tables
7	01/10/2023-10/10/2023	. Relational Data Model: Concepts and Terminology, Characteristics of Relations. Constraints: Integrity Constraints- Entity and Referential Integrity constraints, Keys- Super Keys, Candidate Keys, Primary Keys, Secondary Keys and Foreign Keys.
8	11/10/2023-20/10/2023	Relational Algebra: Basic Operations, Additional Operations, Example Queries.
9	21/10/2023-30/10/2023	Database Design: Informal Design Guidelines for Relation Schemas, Problems of Bad Database Design,
10	01/11/2023-10/11/2023	Normalization: Functional Dependency, Full Functional Dependency, Partial Dependency, Transitive Dependency, Normal Forms– 1NF, 2NF, 3NF, Boyce-Codd NF,
11	11/11/2023-20/11/2023	MS-ACCESS: introduction to MS-ACCESS, working with databases and tables, queries in Access, Applying integrity constraints, Introduction to forms, sorting and filtering, controls
12	21/11/23-30/11/23	Reports and Macro: creating reports, using Macros.

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Teaching plan (2023-24)

Teacher Name: Rohit Kumar

Paper : HTML

Class: BCA sem-5

Sr. no.	Dates	Topic
1	01/08/2023-10/08/2023	Introduction to HTML: Basic HTML concepts, an overview of HTML markup. What is good Web design; the process of Web publishing; implementation;
2	11/08/2023-20/09/2023	the phases of Web site development; HTML's role in the Web; and issues facing HTML and the Web.
3	21/08/2023-30/08/2023	HTML overview: the structure of HTML documents; document types; the <HTML> element; the <HEAD> element; the <BODY> element;
4	01/09/2023-10/09/2023	Links and Addressing: Linking basics; what are URLs; linking in HTML; anchor attributes; images and anchors; image maps; semantic linking with the <LINK> element; meta-information;
5	11/09/2023-20/09/2023	HTML and Images: The role of images on the Web; image preliminaries
6	21/09/2023-30/09/2023	image downloading issues; obtaining images; HTML image basics; images as buttons; and image maps.
7	01/10/2023-10/10/2023	Introduction to Layout: Backgrounds, Colors, and Text; design requirements; HTML approach to Web design; fonts; colors in HTML;
8	11/10/2023-20/10/2023	document-wide color attributes for <BODY>; and background images. Introduction to tables, LISTS; frames.
9	21/10/2023-30/10/2023	Style Sheets: style sheets basics; style sheet example; style sheet properties; positioning with style sheets
10	01/11/2023-10/11/2023	Basic Interactivity and HTML: Forms form preliminaries; the <FORM> element; form controls;
11	11/11/2023-20/11/2023	Introduction to Server-Side Programming: This chapter covers: overview of client/server programming on the Web; server-side programming; common gateway interface (CGI);
12	21/11/23-30/11/23	Dynamic HTML (DHTML): dynamic HTML and document object model; HTML and scripting access; rollover buttons; moving objects with DHTML; and ramifications of DHTML.

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Teaching plan (2023-24)

Teacher Name:Rohit Kumar

Paper : MANAGEMENT INFORMATION SYSTEM

Class: BCA sem-4

Sr. no.	Dates	Topic
1	7-11 Jan	Management Information system: Meaning and definition, Role of information system, Nature and scope of MIS.
2	13-18 Jan	Information and system concepts: Definition and types of information, Information quality,
3	20-25 Jan	dimensions of information, value of information, general model of human as an information processor
4	27 Jan - 1Feb	. System related concepts, elements of a system, and types of system.
5	3-8 Feb	Role and importance of Management: Introduction, levels and functions of management.
6	10-15 Feb	Structure and classification of MIS, Components of MIS,
7	17-22 Feb	Framework for understanding MIS: Robert Anthony's hierarchy of management activity,
8	24 Feb -1 Mar	Information requirements and levels of management.
9	3-8 Mar	Decision making concept, types of decisions, methods of choosing among alternatives, Role of MIS in decision making.
10	10-15 Mar	Simon's model of decision making, Structured and unstructured decisions.
11	17-22 Mar	Development of MIS: Stages in the development of MIS, System development approaches: Waterfall model, Prototyping,
12	24-29 Mar	Iterative enhancement model, Spiral model.
13	1 -5 April	Applications of information systems in Functional areas: Marketing MIS,
14	7-12 April	Financial MIS, Production MIS, Personnel MIS.
15	16-30 April	Decision Support Systems: Definition and characteristics, MIS versus DSS, Tools and Models for decision support

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Teaching plan (2023-24)

Teacher Name: Rohit Kumar

Class: BCA sem-2

Paper : DIGITAL ELECTRONICS

Sr. no.	Dates	Topic
1	7-11 Jan	Fundamental Concepts: Introduction to Analog and Digital Systems, Digital Signals, Basic Digital Circuits: AND, OR, NOT, NAND, NOR, XOR and XNOR gates
2	13-18 Jan	Boolean algebra theorems, Characteristics of Digital IC.
3	20-25 Jan	Number Systems: Positional and Non-positional number systems, Binary, Decimal, Octal and Hexadecimal
4	27 Jan - 1Feb	Base conversions,
5	3-8 Feb	Binary arithmetic: Addition and Subtraction, 1's complement, 2's complement,
6	10-15 Feb	subtraction using 1's complement and 2's complement.
7	17-22 Feb	Combinational Logic Design: SOP and POS Representation of Logic functions
8	24 Feb -1 Mar	K-Map representation and simplification up to 4 variable expressions, Don't care condition.
9	3-8 Mar	Multiplexers: 4X1, 8X1 and 16X1
10	10-15 Mar	De-multiplexers: 1 to 4, 1 to 8 and 1 to 16. BCD to Decimal decoder,
11	17-22 Mar	Decimal to BCD encoder. Parity generator and Parity checker. Design of Half adder and Full adder.
12	24-29 Mar	Flip-Flops: Introduction, Latch, Clocked S-R Flip Flop, Preset and Clear signals, D-Flip Flop, J-K Flip Flop, The race-around condition
13	1 -5 April	, Master Slave J-K Flip Flop. D-Flip-Flop, Excitation Tables of Flip Flops. Edge-Triggered Flip
14	7-12 April	Flops A/D and D/A Converters: Introduction, Digital to Analog Converters: Weighted-Register D/A converter, R-2R Ladder D/A converter.
15	16-30 April	Analog to Digital Converters: Quantization and encoding, Parallel-comparator A/D converter, Counting A/D converter.

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Teaching plan (2023-24)

Teacher Name: Rohit Kumar

Paper : WEB DESIGNING USING ASP.NET

Class: BCA sem-6

Sr. no.	Dates	Topic
1	7-11 Jan	Introduction to .net framework: - Genesis of.NET, Features, Advantages and disadvantages of .net framework. Common Language Runtime:-Common Type System, Common Language Specification, .Net binaries
2	13-18 Jan	, Microsoft Intermediate Language, Meta Data, .Net types and .net namespaces. Basics of ASP. NET: - Introducing ASP .NET– Creating ASP .NET applications using command line compiler and visual studio .net IDE.
3	20-25 Jan	Introduction to c#:- variables, Constants, Data Types, Operators, Control Structures and loops, Arrays, events.
4	27 Jan - 1Feb	Introduction to Classes and objects Web forms, Standard Controls: - Display information, Accepting user input, Submitting form data,
5	3-8 Feb	displaying images, using the panel control, using the hyperlink control.
6	10-15 Feb	Validation Controls: required field validation control, range validator Control, compare validator control, regular expression validator control, custom validator control, validation summary controls.
7	17-22 Feb	Rich Web Controls: -Accepting file uploads, displaying a calendar, Displaying advertisement,
8	24 Feb -1 Mar	displaying different page views, displaying a wizard. List Controls: Dropdown list control, Radio button, list controls.
9	3-8 Mar	Grid View Controls: Grid view control fundamentals, using field with the grid view control,
10	10-15 Mar	working with grid view control events extending the grid view control. Debugging, caching and deploying ASP .NET pages.
11	17-22 Mar	Master pages: - Designing Website with Master Pages: Creating master pages.
12	24-29 Mar	Modifying master page content
13	1 -5 April	ADO.NET:- Changes from ADO to ADO.NET, ADO .NET Managed Providers – OleDb and SQL Managed Providers – OleDb Data Adapter Type.
14	7-12 April	SQL Data Source Control: Creating database connections, executing database commands, Using ASP.NET parameters with the SQL data source controls,
15	16-30 April	programmatically executing SQL data source commands, Caching database data with the SQL data Source controls

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Teacher Name: Rohit Kumar

Class:PGDCA sem-2

Paper: Database Management of System

Sr. no.	Dates	Topic
1	7-11 Jan	Database Management System: Characteristics, Database: Definition,
2	13-18 Jan	components, definition,
3	20-25 Jan	, characteristics, advantages over traditional file processing system
4	27 Jan - 1Feb	User of database, DBA and its responsibilities,
5	3-8 Feb	Database schema, instance
6	10-15 Feb	DBMS architecture, data independence.
7	17-22 Feb	Database languages: DDL, DML, DCL. Database utilities, Data Models, Keys: Super, candidate, primary, unique, foreign
8	24 Feb -1 Mar	Entity relationship model: Concepts, mapping cardinalities
9	3-8 Mar	, entity relationship diagram, weak entity sets, strong entity set,
10	10-15 Mar	aggregation, generalization
11	17-22 Mar	, converting ER diagrams to tables
12	24-29 Mar	Database Design: Functional dependency, normalization (upto 3NF),
13	1 -5 April	data base recovery, database integrity, Definition and problems arising out of concurrency
14	7-12 April	Authentication, authorization, methods of implementing security.
15	16-30 April	SQL: Basic SQL Query, Creating Table and Views