Govt National College Sirsa

Lesson Plan Session 2025–2026(AUG to NOV)

Class: PGDCA-I, 1st Semester

Subject: PGDCA-104 (Database Management System)
Teacher: Ms. Mandeep Kour

Month	Week	Topic Covered
August	4th week 2025	Introduction to DBMS, File Systems vs DBMS, Characteristics of Database Approach, Database Users, Advantages & Disadvantages of DBMS, Responsibilities of Database Administrator
September	1st & 2nd week	Database System Concepts & Architecture: Data Models, Schemas & Instances, DBMS Architecture, Views of Data, Data Independence, Database Languages.
September	3rd & 4th week	Entity Relationship Model – Concepts: Entity, Attributes, Types of Attributes, Entity Set & Keys, Relationships, Relationship Set, Degree of Relationship, Roles & Structural Constraints. Assignment–1
October	1st & 2nd week	E-R Diagrams, Reduction of an E-R Diagram to Tables, Binary Representation, Cardinality, Participation Constraints. Mid-Term Exam.
October	3rd & 4th week (18–26 Holidays)	Relational Data Model – History, Terminology, Relational Database Relations, Properties of Relations, Keys, Domains.
November	1st & 2nd week	Integrity Constraints over Relations, Base Tables, Views. Introduction to SQL, Data Types in SQL,Assignment–2
November	3rd week	Common SQL Commands: Select, Insert, Update, Delete, Views in SQL. Relational Database Design – Functional Dependencies, Decomposition, Desirable Properties of Decomposition,
November	4th week	Normal Forms (1NF, 2NF, 3NF, BCNF). Revision of full syllabus with Q/Ans

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Lesson Plan Session 2025–2026(AUG to NOV)

Class: B.Sc 1st Year (Life Sc +Physical Sc) , Semester-I

Subject: CMMIC101-01(Information Technology Tools)
Teacher: Ms. Mandeep Kour

Month	Week	Topic Covered
August	4th week 2025	Introduction to Computers: Generations of Computers, Characteristics of computers, Limitations of Computers. Applications of computers, Block diagram of computer, functions of different units of computers.
September	1st & 2nd week	Operating System Concepts Need and Functions of Operating Systems, Type of OS: Batch Operating System
September	3rd & 4th week	Multi-programming and real time Operating System,Network and distributed OS. Assignment–1
October	1st & 2nd week	Word Processing: Introduction to Word Processing, Menus, Creating, Editing & Formatting Document, Spell Checking, Printing, Views, Tables, Word Art.
October	3rd & 4th week (18–26 Holidays)	Computer languages: Introduction to High Level Language, Low Level Language and Assembly Language, Compilers, Interpreters, Assemblers.
November	1st & 2nd week	Email – Sending mail to a number of people in a group, downloading an attachment.
November	3rd week	Networking and Internet ,Basic Concepts of Networking, Advantages of Networking, Types of Networks, Network Devices, www, IP addresses,

November	4th week	Revision of full syllabus with Q/Ans

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Lesson Plan Session 2025–2026(AUG to NOV)

Class: BCA 1st Semester
Subject: Programming in C
Teacher: Ms. Mandeep Kour

Month	Week	Topic Covered
August	4th week 2025	Introduction: Programming fundamentals, program planning tools (algorithms, flow charts, pseudo code). Programming translators – compiler, interpreter, assembler, debugger, linker & loader. Computer language types – Low Level & High-Level Language.
September	1st & 2nd week	Elements of C: Tokens in C (character set, identifiers, keywords, constants, variables), data types, formatted input/output, expressions. Operators in C: Arithmetic, relational, logical, bitwise, assignment, conditional operators. Operator hierarchy & associativity. Unary, binary & ternary operators.
September	3rd & 4th week	Control Structures: Sequential, selection (if-else, nested if-else, switch case). Looping (for, while, do-while, nested loops). Control statements (break, continue, goto). Assignment–1
October	1st & 2nd week	Arrays: Declaration, insertion, deletion, merging, searching, sorting (bubble, selection). 2D Arrays: Matrix addition, subtraction, transpose. Mid-Term Exam
October	3rd & 4th week (18–26 Holidays)	Strings: String declaration & operations.
November	1st & 2nd week	Introduction to Structure & Union: Declaration, structure with arrays, structure vs union. Functions in C: Definition, declaration, types (user-defined & library functions), call by value & call by reference.
November	3rd week	Pointers in C: Introduction, pointer operators, pointer & arrays, pointer & functions.

November	4th week	File Handling in C: Opening, closing, reading & writing files. Revision of full syllabus with Q/Ans

Govt National College Sirsa

Lesson Plan Session 2025–2026(AUG to NOV)

Class: BCA 1st Semester
Subject: Database Management System
Teacher: Ms. Mandeep Kour

Month	Week	Topic Covered
August	4th week 2025	Introduction to DBMS: Historical perspective, File system vs DBMS, Characteristics of DBMS, Database approach, Abstraction & Data integration, Database users, Advantages & disadvantages of DBMS.
September	1st & 2nd week	Database System Concepts & Architecture: Data models, schemas & instances, DBMS architecture, data independence, DBMS languages & interfaces, DBMS functions & component modules.
September	3rd & 4th week	Entity–Relationship Model: Entity types, entity sets, attributes, keys, relationships, relationship types, ER diagrams, Design of ER schema. Assignment–1
October	1st & 2nd week	Conventional Data Models: Overview of network & hierarchical models. Mid-Term Exam
October	3rd & 4th week (18–26 Holidays)	Relational Data Model: Concepts, integrity constraints over relations, relational algebra operations.
November	1st & 2nd week	Relational Database Design: Functional dependencies, decomposition, desirable properties of decomposition.
November	3rd week	Normalization: 1NF, 2NF.
November	4th week	Normalization: 3NF, BCNF. Revision of full syllabus with Q/Ans.

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Lesson Plan Session 2025–2026(AUG to NOV)

Class: MDC computer 3rd Sem (CMMDC201-02)
Subject: Microsoft PowerPoint with Animation
Teacher: Ms. Mandeep Kour

Month	Week	Topic Covered
August	4th week 2025	Introduction to PowerPoint: Overview, Features & Interface (Ribbon, Slides Pane, Notes). Creating, saving & opening presentations.
September	1st & 2nd week	Slide Management: Adding, deleting, duplicating slides. Slide layouts & themes. Working with Text & Objects. Formatting text (Font, Size, Styles). Inserting shapes, icons, SmartArt.
September	3rd & 4th week	Advanced Slide Design: Visual Enhancements, Inserting & formatting images, charts & tables. Background customization (Colors, Gradients, Pictures). Assignment–1
October	1st & 2nd week	Master Slides & Templates: Using Slide Master for consistent design, Custom templates & themes. Mid-Term Exam.
October	3rd & 4th week (18–26 Holidays)	Animations in PowerPoint: Entrance, Exit, Emphasis effects, Motion Paths, Timing adjustments.
November	1st & 2nd week	Advanced Animation Techniques: Trigger animations (On Click, With Previous), Animation Pane for fine-tuning.
November	3rd week	Slide Transitions: Applying & customizing transitions, Sound effects, Duration settings,Creating interactive navigation
November	4th week	Linking slides, websites, or files. Revision of full syllabus with Q/Ans.