

LESSON PLAN
SUBJECT- OBJECT ORIENTED PROGRAMMING USING C++
CLASS- B.C.A 2ND SEM 2025-26

WEEK 1 12-01-26 to 17-01-26	UNIT 1 :- Introduction to C++: About C++, Character Set, Keywords, Identifiers, Constants, Punctuators,
WEEK 2 19-01-26 to 24-01-26	Data Types: UserDefined, Built-in, Derived Data Types, Access Modifiers. Unformatted and Formatted I/O operations
WEEK 3 26-01-26 to 31-01-26	I/O using extraction and extraction operators, Type Conversion, Type Casting.
WEEK 4 02-02-26 to 07-02-26	UNIT TEST 1 UNIT 2:- Operators in C++: Arithmetic, Relational, Logical, Bitwise, Ternary,
WEEK 5 09-02-26 to 14-02-26	Control Structures: if statement, if-else statement, nested if, if-else-if ladder
WEEK 6 16-02-26 to 21-02-26	switch...case statement, break and continue, goto statement, nested switch...case
WEEK 7 23-02-26 to 28-02-26	Loops: while loop, do...while loop, for loop ASSIGNMENT 1
WEEK 8 09-03-26 to 14-03-26	MID TERM EXAM
WEEK 9 16-03-26 to 21-03-26	UNIT 3:- Arrays and strings: Array definition, initialization, multidimensional arrays, Manipulation of array elements,
WEEK 10 23-03-26 to 28-03-26	String declaration and initialization, Manipulations, String handing functions.
WEEK 11 30-03-26 to 04-04-26	Functions: Declaration and Definition, return values, arguments, passing
WEEK 12 06-04-26 to 11-04-26	Recursions, Inline and external linkage Functions, storage classes. UNIT TEST 2
WEEK 13 13-04-26 to 18-04-26	UNIT 4:- Object-Oriented Features of C++: Class and Objects, Data hiding & encapsulation, abstraction, constructors & destructors.
WEEK 14 20-04-26 to 25-04-26	Data Members and Member Functions, accessing class members, empty class, local
WEEK 15 27-04-26 to 02-05-26	Scope Resolution Operator and its Uses, Static Data Members, Static Member Functions, Structure vs Class. ASSIGNMENT 2
WEEK 16 04-05-26 to 09-05-26	REVISION

LESSON PLAN
SUBJECT- CLOUD COMPUTING SKILLS
CLASS- B.C.A 2ND SEM 2025-26

WEEK 1 12-01-26 to 17-01-26	UNIT 1 :- Basic Concepts of Cloud Computing Computer Network Basics.
WEEK 2 19-01-26 to 24-01-26	Concepts of Distributed Systems. Concepts of Cloud Computing and its Necessity
WEEK 3 26-01-26 to 31-01-26	Cloud Service Providers in use and their Significance UNIT TEST 1
WEEK 4 02-02-26 to 07-02-26	UNIT 2 :- Cloud Infrastructure Cloud Pros and Cons.
WEEK 5 09-02-26 to 14-02-26	Cloud Delivery Models
WEEK 6 16-02-26 to 21-02-26	Cloud Deployment Models. ASSIGNMENT 1
WEEK 7 23-02-26 to 28-02-26	REVISION OF UNIT 1 & 2
WEEK 8 09-03-26 to 14-03-26	MID TERM EXAM
WEEK 9 16-03-26 to 21-03-26	UNIT 3 :- Cloud Storage Management Concept of Virtualization and Load Balancing.
WEEK 10 23-03-26 to 28-03-26	Overview on Virtualization used for Enterprise Solutions. Key Challenges in managing Information
WEEK 11 30-03-26 to 04-04-26	Identifying the problems of scale and management in big data. UNIT TEST 2
WEEK 12 06-04-26 to 11-04-26	UNIT 4 :-Building Cloud Networks Designing and Implementing a Data Center-Based Cloud Installing Open Source Cloud service.
WEEK 13 13-04-26 to 18-04-26	Amazon Web Services (AWS). Google Cloud Platform. ASSIGNMENT 2
WEEK 14 20-04-26 to 25-04-26	REVISION
WEEK 15 27-04-26 to 02-05-26	REVISION
WEEK 16 04-05-26 to 09-05-26	REVISION

LESSON PLAN
SUBJECT- PRACTICAL OBJECT ORIENTED PROGRAMMING USING C++
CLASS- B.C.A 2ND SEM 2025-26

WEEK 1 12-01-26 to 17-01-26	Programs for showing use of different operators Programs for showing use of different operators	GROUP 1 GROUP 2
WEEK 2 19-01-26 to 24-01-26	Programs for showing use of different operators Programs for showing use of different operators	GROUP 1 GROUP 2
WEEK 3 26-01-26 to 31-01-26	Programs for showing use of different operators Programs for showing use of different operators	GROUP 1 GROUP 2
WEEK 4 02-02-26 to 07-02-26	Program for array Program for array	GROUP 1 GROUP 2
	SEMINAR 1	
	SEMINAR 1	
WEEK 5 09-02-26 to 14-02-26	Program for array Program for array	GROUP 1 GROUP 2
WEEK 6 16-02-26 to 21-02-26	Program for array Program for array	GROUP 1 GROUP 2
WEEK 7 23-02-26 to 28-02-26	Program for array Program for array	GROUP 1 GROUP 2
WEEK 8 09-03-26 to 14-03-26	MID TERM EXAM	
WEEK 9 16-03-26 to 21-03-26	Program for constructor and destructor Program for constructor and destructor	GROUP 1 GROUP 2
WEEK 10 23-03-26 to 28-03-26	Program for constructor and destructor Program for constructor and destructor	GROUP 1 GROUP 2
WEEK 11 30-03-26 to 04-04-26	Program for constructor and destructor Program for constructor and destructor	GROUP 1 GROUP 2
WEEK 12 06-04-26 to 11-04-26	Program for structure. Program for structure.	GROUP 1 GROUP 2
	SEMINAR 2	
	SEMINAR 2	
WEEK 13 13-04-26 to 18-04-26	Program for structure. Program for structure.	GROUP 1 GROUP 2
WEEK 14 20-04-26 to 25-04-26	Program for structure. Program for structure.	GROUP 1 GROUP 2
WEEK 15 27-04-26 to 02-05-26	REVISION	
WEEK 16 04-05-26 to 09-05-26	REVISION	

LESSON PLAN
SUBJECT- PRACTICAL CLOUD COMPUTING SKILLS
CLASS- B.C.A 2ND SEM 2025-26

WEEK 1 12-01-26 to 17-01-26	GROUP 1 GROUP 2
WEEK 2 19-01-26 to 24-01-26	GROUP 1 GROUP 2
WEEK 3 26-01-26 to 31-01-26	GROUP 1 GROUP 2
WEEK 4 02-02-26 to 07-02-26	GROUP 1 GROUP 2
WEEK 5 09-02-26 to 14-02-26	GROUP 1 GROUP 2
WEEK 6 16-02-26 to 21-02-26	GROUP 1 GROUP 2
WEEK 7 23-02-26 to 28-02-26	GROUP 1 GROUP 2
WEEK 8 09-03-26 to 14-03-26	GROUP 1 GROUP 2
WEEK 9 16-03-26 to 21-03-26	GROUP 1 GROUP 2
WEEK 10 23-03-26 to 28-03-26	GROUP 1 GROUP 2
WEEK 11 30-03-26 to 04-04-26	GROUP 1 GROUP 2
WEEK 12 06-04-26 to 11-04-26	GROUP 1 GROUP 2
WEEK 13 13-04-26 to 18-04-26	GROUP 1 GROUP 2
WEEK 14 20-04-26 to 25-04-26	GROUP 1 GROUP 2
WEEK 15 27-04-26 to 02-05-26	REVISION
WEEK 16 04-05-26 to 09-05-26	REVISION

LESSON PLAN
SUBJECT- CONCEPTS OF OPERATING SYSTEM
CLASS- B.C.A 2ND SEM 2025-26

WEEK 1 12-01-26 to 17-01-26	UNIT 1:- Introductory Concepts: Operating System Functions and Characteristics, Historical Evolution of Operating Systems, Operating System Structure
WEEK 2 19-01-26 to 24-01-26	Operating System Operations; Types of Operating System: Real time, Multiprogramming, Multiprocessing, Batch processing
WEEK 3 26-01-26 to 31-01-26	Operating System Services, Operating System Interface, Methodologies for Implementation of Operating System
WEEK 4 02-02-26 to 07-02-26	Service System Calls, System Programs. UNIT TEST 1
WEEK 5 09-02-26 to 14-02-26	UNIT 2:- Process Management: Process Concepts, Operations on Processes, Process States and Process Control Block.
WEEK 6 16-02-26 to 21-02-26	InterProcess Communication; Multithreaded Programming: Multithreading Models,
WEEK 7 23-02-26 to 28-02-26	Threading Issues; CPU Scheduling: Scheduling Criteria, Levels of Scheduling, Scheduling Algorithms,
WEEK 8 09-03-26 to 14-03-26	MID TERM EXAM
WEEK 9 16-03-26 to 21-03-26	Multiple Processor Scheduling; Algorithm Evaluation. ASSIGNMENT 1 UNIT 3:- Synchronization: Critical Section Problem, Peterson's Solution
WEEK 10 23-03-26 to 28-03-26	Synchronization Hardware, Semaphores, Classical Problem of Synchronization, Monitors, Atomic Transactions;
WEEK 11 30-03-26 to 04-04-26	Deadlocks: Deadlock Characterization, Methods for Handling Deadlocks,
WEEK 12 06-04-26 to 11-04-26	Deadlock Prevention, Deadlock Avoidance, Deadlock Detection and Recovery UNIT TEST 2 UNIT 4:- Memory Management Strategies: Memory Management of Single-User and Multiuser Operating System,
WEEK 13 13-04-26 to 18-04-26	Partitioning, Swapping, Contiguous Memory Allocation, Paging and Segmentation;
WEEK 14 20-04-26 to 25-04-26	Virtual Memory Management: Demand Paging,
WEEK 15 27-04-26 to 02-05-26	Page Replacement Algorithms, Thrashing, Memory Mapped Files. ASSIGNMENT 2
WEEK 16 04-05-26 to 09-05-26	REVISION

LESSON PLAN
SUBJECT- SOFTWARE TESTING
CLASS- B.C.A 4TH SEM 2025-26

WEEK 1 12-01-26 to 17-01-26	UNIT 1:-
WEEK 2 19-01-26 to 24-01-26	
WEEK 3 26-01-26 to 31-01-26	
WEEK 4 02-02-26 to 07-02-26	UNIT TEST 1
WEEK 5 09-02-26 to 14-02-26	UNIT 2:-
WEEK 6 16-02-26 to 21-02-26	
WEEK 7 23-02-26 to 28-02-26	
WEEK 8 09-03-26 to 14-03-26	MID TERM EXAM
WEEK 9 16-03-26 to 21-03-26	ASSIGNMENT 1 UNIT 3:-
WEEK 10 23-03-26 to 28-03-26	
WEEK 11 30-03-26 to 04-04-26	
WEEK 12 06-04-26 to 11-04-26	UNIT TEST 2 UNIT 4:-
WEEK 13 13-04-26 to 18-04-26	
WEEK 14 20-04-26 to 25-04-26	
WEEK 15 27-04-26 to 02-05-26	ASSIGNMENT 2
WEEK 16 04-05-26 to 09-05-26	REVISION