

**AMBALA COLLEGE OF ENGINEERING AND APPLIED
RESEARCH
DEPTT. OF AI &ML**

Lecture Plan: (B23-ESC-101)
Name of the Faculty : Er. Anjali Chauhan
Discipline : CSE&BT
Semester : 2nd
Subject : Programming for problem solving
Lesson Plan Duration: 15 weeks (JAN-MAY 2026)

**** Work (03 Lecture) per week (In Hours):Lecture -03 (Of One Section)**

Week	Lecture Day	Topic (including assignment/test) (In Each Section)	Practical No.	Topic include (viva voce)
1	1	Introduction to Programming	1	To familize with programming environment
	2	Introduction to components of a computer system		
	3	Disks, Memory,		
	4	Processor		
2	1	Operating System,	2	Problems involving if-then –else structures.
	2	Compilers		
	3	Algorithm Writting		
	4	Revision of above mentioned topics		
3	1	Flowchart,	3	Iterative problems(Sum of series).
	2	Pseudocode with examples		
	3	From algorithms to programs.		
	4	Revision of above mentioned topics		
4	1	Class test	4	1D Array manipulation
	2	C language variables and data types		
	3	Syntax and Logical Errors in compilation		
	4	object and executable code		
5	1	Operator (arithmetic, relational		INTERNAL VIVA
	2	Revision of above mentioned topics		
	3	Class test		
	4	Sessional 1		
6	1	Sessional-1	5	Matrix problems(Addition and multiplication)
	2	Sessional-1		
	3	Logical operator		
	4	logical, bitwise operator		
7	1	Precedence	6	String operations
	2	Conditional Branching and Loops		
	3	Revision of above mentioned topics		

	4	Class test		
8	1	Arrays	7	Simply function to add ,multiply etc.
	2	Arrays (1-D, 2-D)		
	3	Character arrays and Strings		
	4	Revision of above mentioned topics		
9	1	Class Test	8	Recursive function Factorial,Fibonacci series.
	2	Structures, Defining structures		
	3	Array of Structures		
	4	Pointers		
10	1	Idea of pointers		INTERNAL VIVA
	2	Class test		
	3	Sessional-2		
	4	Sessional-2		
11	1	Sessional-2	9	Pointers & structures
	2	Defining pointers		
	3	Use of Pointers in self- referential structures		
	4	Notion of linked list (no implementation)		
12	1	Function	10	File operations(Read from file &write into file)
	2	Functions (including using built in libraries)		
	3	Parameter passing in functions, call by value		
	4	call by value		
13	1	Idea of call by reference		INTERNAL VIVA
	2	Recursion, Recursion as a different way of solving problems		
	3	Class Test		
	4	Example programs, such as Finding Factorial		
14	1	such as Finding Factorial		INTERNAL VIVA
	2	Fibonacci series		
	3	File handling in different mode		
	4	Class Test		
15	1	Sessional 3		INTERNAL VIVA
	2	Sessional 3		
	3	Revision of all syllabus		
	4	Revision of all syllabus		