

**Name of Faculty : Varsha Rani (Assistt Prof. in CSE)**

**Discipline : CE**

**Semester : 1<sup>ST</sup> SEM**

**Subject : Programming for Problem Solving(ESC/3-T)**

**Lesson Plan Duration : 15 weeks (from July/August -2025 to Nov /Dec -2025)**

**Work Load (Lecture/Practical) per week (in hours): Lectures-03hours**

Theory		Topic Covered Date and Remarks		
Lecture Day	Topic (Including Assignment/Test)	Date	Hod	Director-principal
1	Introduction to programming Language			
2	Introduction to computer components			
3	Disk ,Memory,Processor, where a program store and executed			
4	Operatng system,Compiler / Basic structure of c program			
5	Number system(binary ,octal,hexadecimal)			
6	Tokens ,keywords, identifiers			
7	Algorithm and its Representation			
8	Flowchart/Pseudocode with example			
9	Source code,Variables and its declaration			
10	Syntax and logical error			
11	Object and executable code			
12	Airthmatic expressions and precedence			
13	Conditional Branching if , else			
14	Looping			
15	Introduction to array			
16	One dimensional array , two dimensional array			
17	Character Array			
18	Introduction to String with example			
19	Read and write operation on string			
20	Basic searching and sorting algorithm			
21	linear search with example			
22	Binary search with example			
23	Insertion sort algo with example			
24	Selection sort algorithm with example			
25	Bubble sort algorithm with example			
26	Function(including built in libraries)			
27	Parameter passing, in functions			
	-----Ist Minor Test-----			
28	Call by reference			
29	call by value			
30	Recursion example program			
31	<b>Finding factorial and Fibonacci series</b>			
32	Merge sort algorithm with example			
33	Quick sort algorithm with example			
34	Structure introduction			
35	Intalization and declaration of structure			
36	Array of structure with programming example			
37	Pointers, idea of pointers			
38	Defining and declaration pointer			
39	Use of pointer in self referential structure			
40	Notion of linked list			
41	File handling			
42	Read and write operation on file			
43	-----2nd Minor Test-----			
43				
44				

