Govt. Polytechnic Sundernagar
Lesson Plan (Theory)

Branch **Computer Engg** Semester **3rd**
Subject **Computer Programming using C**
Teacher **Komal Chaudhary**

sr. no.	No of lectures	UNIT	Detailed Content	Resources	Remarks	Signature
1	6hrs	Introduction to Programming	Program Design Tools - Algorithm, Flowchart, Pseudocode	R3,R4		
2			Evolution of Programming Languages,	R3,R4		
3			Programming Terminology - Program, Compiler, Interpreter,	R3,R4		
4			Linker, Source Code, Libraries,	R2,R3		
5			Syntax and Semantic Errors, Bugs.	R2,R3		
6			Doubt clearing and Revision			
7	7hrs	Introduction to C Language	Brief History of C Language, Features of C Language,	R1,R2		
8			Character Set, Identifier, Keywords,	R1,R2		
9			Literals, Variables, Constants,	R1,R2		
10			Structure of a 'C' Program, Comments, Preprocessor Directives,	R1,R2		
11			Data Types, Type Casting,	R1,R2		
12			Storage Classes	R1,R2		
13			Doubt clearing and Revision			
14	6hrs	Input/ Output	Standard Input, Standard Output,	R1,R2		
15			Standard Error, I/O Redirection,	R1,R2		
16			Unformatted I/O Functions - getchar(), putchar(), gets(), puts();	R1,R2		
17			Formatted I/O Functions - printf(), scanf(),	R1,R2,R3		
18			Format Specifier	R2		
19			Doubt clearing and Revision			
20	7hrs	Operators	Arithmetic Operators, Relational Operators,	R1,R2		
21			Logical Operators, Bitwise Operators,	R1,R2		
22			Assignment Operators,	R1,R2		
23			Conditional Operator, Special Operators,	R1,R2		
24			Expressions,	R1,R2		
25			Associativity and Order of Precedence of Operators	R1,R2,R3		
26			Doubt clearing and Revision			

27	8hrs	Flow Control Statements	Selection Statements: if, if...else,	R2		
28			Nested if, if...else if Ladder	R2		
29			switch...case;	R2		
30			Loops - while, do...while	R2		
31			for;	R2		
32			Jump Statements - goto, break, continue, return;	R2		
33			Nested Loops, Infinite Loops	R2		
34			Doubt clearing and Revision			
35	8hrs	Arrays, Structures, Unions and Pointers	Array, Memory Representation,	R1,R2		
36			One-Dimensional Arrays Declaration and Initialization;	R1,R2		
37			Two-Dimensional Arrays Declaration and Initialization;	R1,R2		
38			Enumeration, Strings, String Constants, Escape Sequences,	R1,R2		
39			Standard String Functions - srtlen(), strrev(), strcmp(), srtcpy(), strcat();	R1,R2		
40			Structures, Unions, Pointer - Declaration, Initialization	R1,R2		
41			Assignment; Dynamic Memory Allocation: malloc(), calloc(), free()	R1,R2		
42			Doubt clearing and Revision			
43	4hrs	Functions	Definition of Function, Function Prototype,	R1		
44			Formal and Actual Parameters,	R2		
45			Function Call, Call by Value and Call by Reference,	R2		
			Arrays as Function Arguments, Recursion	R2,R3		
46			Doubt clearing and Revision			

R1: Programming in ANSI C, E. Balagurusamy, Tata McGraw-Hill
R2: Outline of Programming with C, Byron Gottfried, Schaum, McGraw-Hill
R3: Problem Solving and Programming in C, R.S. Salaria, Khanna Publications
R4: Online Resources

H.O.D