Govt. Polytechnic Education Society, Manesar

Lesson Plan

NAME OF THE FACULTY : Pooja

DESCIPLINE : Computer Engineering

SEMESTER : 3rd

SUBJECT : Programming in C

DURATION OF LESSON PLAN : 15 weeks (from Aug- 2025 to Nov- 2025)

WORK LOAD (LECTURE/PRACTICAL) PER WEEK (IN HOURS):- LECTURE-03, PRACTICAL-04 PER GROUP

14/55/	THEORY			PRACTICAL			
WEEK S.N.	Lecture / Hrs.	TOPIC (Including Assignment/Test)	Practical /Hrs.		Lab Experiments		
1 st	1	UNIT I: Basics of C Programming Steps in development of a program, Flow charts.	Group-1	1-2-3-4	Programming exercises on executing and		
	2	Steps in development of a program, Flow charts.	p-2	3-4	editing a C program.		
	3	Algorithm development.	Group-2	1-2-3-4			
	4	Steps in development of Programme Debugging.	Group-1	1-2-3-4			
2 nd	5	I/O statements. Constants and variables.		1-2-3-4 1	Programming exercises on defining variables and assigning values to variables.		
	6	Data types.	Group-2				
	7	Operators & Expressions.	Group-1	1-2-3-4			
3 rd	8	Formatted and Unformatted IO Statements.			Programming exercises on arithmetic and relational operators.		
	9	Decision making with IF – statement, IF – Else and Nested IF.	Group-2	1-2-3-4			
	10	While and do-while, for loop, Break. Continue, goto and switch statements.		1-2-3-4			
4 th	11	UNIT II: Pointers and Functions Introduction to pointers.		1-2-3-4	Programming exercises on arithmetic expressions and their evaluation.		
	12	Address operator and pointers Declaring.					
5 th	13	Initializing pointers	Group-1	1-2-3-4			
	14	Declaring and Initializing Single pointer Assignment-1	- 7	1-2-3-4 1-	Programming exercises on formatting input/output using print f and scan f and their return type values.		
	15	Sessional Test-1	Group-				
	16	Introduction to functions.	Group-1	1-2-3-4	Programming exercises using if statement.		
6 th	17	Function Declaration.	Group-2 Gr				
	18	Function calling, definition Parameter Passing.		1-2-3-4			
7 th	19	Function Call - by value/reference, Global and Local Variables	Group-2 Group-1	1-2-3-4 1-2-3-4	- Programming exercises using if – Else.		
	20	UNIT III: Arrays and Strings Introduction to Arrays					
	21	Array Declaration, Length of array Single dimensional array.					

		THEORY	PRACTICAL			
WEEK S.N.	Lecture / Hrs.	TOPIC (Including Assignment/Test)	Practical /Hrs.		Lab Experiments	
8 th	22	Array Declaration, Length of array muti dimensional array.	Group-1	1-2-3-4	Programming exercises on switch statement.	
	23	Arrays of characters Introduction of Strings.		Group-2 G		
	24	String declaration and definition String related function.	Group			
	25	String related function i.e. strlen, strcpy, strcmp.	Group-1	1-2-3-4	Programming exercises on do – while, for statement.	
9 th	26	Passing an array to function		Group-2 Gi		
	27	Passing a Pointers to an array and strings.	Group			
	28	UNIT IV: Structures and Unions Introduction- Declaration of structures.	Group-1	1-2-3-4		
10 th	29	Accessing structure members. Assignment-2	-		Simple programs using pointers.	
	30	Sessional-2	Group-2	1-2-3-4		
	31	Structure Initialization.	Group-1	1-2-3-4		
11 th	32	Pointer to a structure.		Group-2 Gr	Programs on one-dimensional, two-dimensional array.	
	33	Introduction- Declaration of structures	Group-			
	34	Introduction- Union.	Group-1		Programs for comparing two strings.	
12 th	35	Declaration and accessing of Union Members.				
	36	Comparing Structure and Union.	Group-2			
13 th	37	UNIT V: File Handling Introduction	Group-1	1-2-3-4		
	38	Opening and Closing of File.			Simple programs using functions	
	39	Opening and Closing of File.	Groul	Group-2 1-2-3-4		
	40	Modes of Accessing Files.	Group-1	1-2-3-4		
14 th	41	Modes of Accessing Files.			Simple programs using structures and union.	
	42	Reading in the File	Group-2	1-2-3-4		
	43	Writing in the File	Group-1	1-2-3-4	Program on Reading and Writing data to a file	
15 th	44	Assignment-3				
	45	Sessional-3	Group-2	1-2-3-4		