

**Government Polytechnic,
Panchkula**

Lesson Plan (Odd Semester)

Name of the Faculty : Dr. Meenu Nain
Discipline : Computer Engineering
Department : Computer Engineering
Semester : 3rd
Subject : Programming in C
Lesson Plan Duration : 16 weeks (from september, 2022)

Work load (Lecture / Practical) per week(in hours): Lectures - 03, Practicals - 06

Week	Theory		Practical	
	Lecture day	Topic (Including assignment / test)	Practical Day	Topic
1 st	1	Steps in development of a program	1 st	Programming exercises on executing and editing a C program.
	2	Flow charts,		
	3	Algorithm development		
2 nd	4	Programme Debugging	2 nd	Programming exercises on defining variables and assigning values to variables
	5	I/O statements		
	6	Constants, variables		
3 rd	7	assign statements	3 rd	Programming exercises on arithmetic and relational operators
	8	data types		
	9	Operators and Expression		
4 th	10	Operators and Expression	4 th	Programming exercises on arithmetic expressions and their evaluation.
	11	Unformatted and Formatted IOS		
	12	Data Type Casting	5 th	Programming exercises on formatting input/output using printf and scanf and their return type values
5 th	13	Introduction to Control Structures	6 th	Programming exercises using if statement.
	14	Decision making with IF – statement		
	15	IF – Else	7 th	Programming exercises using if – Else.
6 th	16	Nested IF	8 th	Programming exercises on do – while, statement. Programming exercises on for – statement.
	17	While and do-while,		
	18	for loop		
7 th	19	Break. Continue, goto	9 th	Programming exercises on switch

	20	switch statements		statement.
	21	Introduction to pointers	10 th	Simple programs using pointers.
8 th	22	Address operator and pointers		
	23	Declaring pointers		
	24	Initializing Pointers		
9 th	25	Single pointer,	11 th	Simple programs using functions
	26	Introduction to functions		
	27	Global and Local Variables		
10 th	28	Function Declaration		
	29	Standard functions		
	30	Parameters and Parameter Passing		
11 th	31	Call - by value/reference	12 th	Programs on one-dimensional array.
	32	Introduction to Arrays		
	33	Array Declaration, Length of array		
12 th	34	Single Array.	13 th	Programs on two-dimensional array.
	35	Multidimensional Array		
	36	Arrays of characters		
13 th	37	Introduction of Strings	14 th	Programs for putting two strings together.
	38	String declaration and definition		
	39	String Related function i.e. strlen, strcpy		
14 th	40	String Related function i.e. strcmp	15 th	Programs for comparing two strings.
	41	Passing an array to function		
	42	Pointers to an array and strings.		
15 th	43	Pointers to an strings.	16 th	Simple programs using structures Simple programs using union.
	44	Declaration of structures		
	45	Accessing structure members		
16 th	46	Structure Initialization		
	47	Pointer to a structures,		
	48	Unions		