

**Government Polytechnic**  
**Panchkula**  
**Lesson Plan**

<b>Name of the Faculty</b>	<b>Ravinder Sheoran</b>
<b>Discipline</b>	<b>Computer Engineering</b>
<b>Department</b>	<b>Computer Engineering</b>
<b>Semester</b>	<b>Third</b>
<b>Subject</b>	<b>Programming in C</b>
<b>Lesson Plan Duration</b>	<b>15 weeks</b>

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

Week	THEORY		PRATICALS	
	Lecture day	Topic (Including assignment / test)	Practical Day	Topic
1st	1	Algorithm and Programming Development: Introduction	1st	Programming exercises on executing and editing a C program
	2	Steps in development of a program		
	3	Flow charts, Algorithm development , Programme Debugging	2nd	Programming exercises on executing and editing a C program
2nd	1	Algorithm and Flowchart writing for practical .	1st	Programming exercises on executing and editing a C program
	2	Algorithm and Flowchart writing for practical .		
	3	Practice of error detection and corrections in examples.	2nd	Programming exercises on executing and editing a C program
3rd	1	Keywords, assign statements	1st	Programming exercises on executing and editing a C program
	2	I/O statements:Printf and Scanf		
	3	Constants, variables and data types	2nd	Programming exercises on defining variables and assigning values to variables
4th	1	Unformatted and Formatted IOS	1st	Programming exercises on arithmetic and relational operators
	2	Data Type Casting		
	3	Basic Program writing and practice		Programming exercises on arithmetic expressions and their evaluation
		Revision of Unit II		
5th	1	Control Structures :Introduction and use	1st	Programming exercises on formatting input/output using printf and scanf and their return type values
	2	Decision making with IF – statement , IF – Else and Nested IF		
	3	Practice of IF statement with examples	2nd	Programming exercises using if statement, if – Else
6th	1	While and do-while, for loop	1st	Programming exercises on do – while, statement.
	2	Loop Practice and revision		
	3	Break. Continue statements	2nd	Programming exercises on switch statement.
7th	1	Revision of Unit III	1st	Programming exercises on for – statement
	2	Practice of Control structures using examples.		
	3	Class Test of III	2nd	Programming exercises on do – while, statement and for statement
8th	1	Address operator and pointers , Declaring and initializing pointers	1st	Simple programs using pointers
	2	Single pointer		
	3	Revision of Unit IV	2nd	Simple programs using pointers
9th	1	Functions:Introduction to functions Global and Local Variables	1st	Simple programs using functions
	2	Function Declaration, Standard functions		
	3	Parameters and Parameter Passing	2nd	Simple programs using functions
10th	1	Revision of functions and Parameter Passing	1st	Programs on one-dimensional array. Programs on two-dimensional array.
	2	Arrays and Strings:Introduction to Arrays, Array Declaration, Length of array		

	3	Single and Multidimensional Array, Arrays of characters	2nd	Programs on one-dimensional array. Programs on two-dimensional array.
11th	1	Examples of programs and Practice of array and functions	1st	(i) Programs for putting two strings together. (ii) Programs for comparing two strings
	2	Introduction of Strings: String declaration and definition, String Related function i.e.		
	3	Passing an array to function	2nd	Programs on functions using array as
		Programming examples of array passing as argument to a function		parameters
12th	1	Revision of arrays and functions with examples	1st	Programs on functions using array as parameters
	2	Pointers to an array and strings		
	3	Pointers to an array and strings detailed	2nd	Programs on functions ,Strings and parameter passing by reference
13th	1	Structures and Unions : Introduction ,Declaration of structures	1st	Simple programs using structures
	2	Accessing structure members		
	3	Structure Initialization	2nd	Simple programs using structures
14th	1	Unions: Introduction	1st	Simple programs using union
	2	Difference between Structures and unions		
	3	Program examples of structures and unions		Simple programs using union
15th	1	Revision of Pointers	1st	Programming exercises on do – while, statement and for statement
	2	Revision of Loops and Control Structures.		
	3	Class Test of Loops, Pointers and Control Structures	2nd	Programming exercises on do – while, statement and for statement