G. B. N. Govt.Polytechnic, Nilokheri

Lesson Plan

Name of the Faculty : Dr. Mansi Lather

Discipline : Computer Engineering

Semester : 3rd

Subject : Programming in C (PIC)

Lesson Plan Duration : 15 weeks (from August 2024 to November 2024)

Work Load (Lecture) per week (in hours): Lectures-02 and Lab-04

	Theory		Practical	
Week	Day	Topic (including assignment / test)	Day	Торіс
1 st	1	Steps in development of a program,	1	Program on executing and editing a C
	2	Flow charts, Algorithm development		program.
	3	Programme Debugging, I/O statements, Constants, variables	2	Program on defining variables and assigning values to variables.
2 nd	4	data types, Operators & Expressions,	3	Program on arithmetic and relational operators.
	5	Unformatted and Formatted IOS, Data Type Casting		
	6	Decision making with IF – statement, IF – Else and Nested IF	4	Hands on Practice
3 rd	7	While and do-while loop	5	Program on arithmetic expressions and their evaluation.
	8	for loop, Break, Continue statements		Program on formatting input/output using printf and scanf and their return type values.
	9	goto and switch statements	6	
4 th	10	Introduction to pointers, Address operator and pointers	8	Hands on Practice Program using if statement.
	11	Declaring and initializing pointers, Single pointer,		
	12	Introduction to functions		
5 th	13	Function Declaration, calling, definition	9	Program using if – Else. Program on switch statement.
	14	Parameter Passing, Call - by value/reference,		
	15	Global and Local Variables	10	
6 th	16	Revision	11	Hands on Practice
	17	Revision		
	18	Sessional 1	12	Hands on Practice
7 th	19	Introduction to Arrays, Array Declaration, Length of array	13	Program on do-while loop
	20	Single dimensional array	14	Program on for loop

	21	muti dimensional array		
8 th	22	Arrays of characters	15	Simple program using pointers.
	23	Introduction of Strings, String declaration and definition		
	24	String related function i.e. strlen, strcpy, strcmp	16	Program on one-dimensional array.
9 th	25	Passing an array to function	17	Hands on Practice
	26	Pointers to an array and strings.		Program on two-dimensional array.
	27	Declaration of structures, Accessing structure members	18	
10 th	28	Revision	19	Hands on Practice
	29	Revision		Hands on Practice
	30	Sessional 2	20	
11 th	31	Structure Initialization	21	Program for putting two strings together.
	32	Pointer to a structures,		Program for comparing two strings.
	33	Unions	22	
12 th	34	Class Test	23	Simple program using functions
	35	Opening of File		
	36	Closing of File	24	Hands on Practice
13 th	37	Modes of Accessing Files	25	Simple program using structures. Hands on Practice
	38	Reading the File		
	39	Writing in the File	26	
14 th	40	Class test	27	Simple program using union.
	41	Revision of Unit 1		Program on Reading and Writing
	42	Revision of Unit 2	28	data to a file.
15 th	43	Revision of Unit 3	29	Hands on Practice
	44	Revision of Unit 4	30	
	45	Sessional 3	30	Hands on Practice