Lesson Plan

Discipline : Computer Engg.

Semester : 3rd

Subject : **Programming in C**

Lesson Plan Duration : 15 weeks

Workload (Lecture / Practical) per week (in hours): Lectures-03, Practical-06

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical Day	Topic
1st	1st	Steps in development of a program	1 & 2	Programming exercises on executing and editing a C program
	2nd	Flow charts		
	3rd	Algorithm development, Program Debugging		
2nd	4th	I/O statements, assign statements	3 & 4	Programming exercises on defining variables and assigning values to variables.
	5th	Constants, variables and data types		
	6th	Operators and Expressions		
3rd	7th	Revision	5 & 6	Programming exercises on arithmetic and relational operators.
	8th	Unformatted and Formatted IOS		
	9th	Unformatted and Formatted IOS		
4th	10th	Data Type Casting	7 & 8	Programming exercises on arithmetic expressions and their evaluation.
	11th	Revision		
	12th	Introduction to Control Structures		
5th	13th	Decision making with IF – statement	9 & 10	Programming exercises on formatting input/output using printf and scanf and their return type values
	14th	IF – Else and Nested IF		
	15th	While and do-while, for loop		
6th	16th	While and do-while, for loop	11 & 12	Programming exercises using if statement. Programming exercises using if – Else.
	17th	Break. Continue, goto		
	18th	switch statements		
7th	19th	Introduction to pointers	13 & 14	Programming exercises on switch statement
	20th	Address operator and pointers		
	21st	Declaring and initializing pointers		

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	Lecture day	Topic (including assignment / test)	Practical Day	Topic .
8th	22nd	Single pointer,	15 & 16	Programming exercises on do – while, statement.
	23rd	Revision		
	24th	Revision		
9th	25th	Introduction to functions	17 & 18	Programming exercises on for – statement.
	26th	Global and Local Variables		
	27th	Function Declaration Standard functions		
10th	28th	Parameters and Parameter Passing	19 & 20	Simple programs using pointers.
	29th	Call - by value/reference		
	30th	Revision		
11th	31st	Array Declaration, Length of array Single and Multidimensional Array.	21 & 22	Programs on one-dimensional array. Programs on two-dimensional array.
	32nd	Arrays of characters		
	33rd	Revision		
12th	34th	Introduction of Strings	23 & 24	(i) Programs for putting two strings together. (ii) Programs for comparing two strings.
	35th	String declaration and definition		
	36th	Revision		
13th	37th	String Related function i.e. strlen, strcpy, strcmp	25 & 26	Simple programs using functions
	38th	Passing an array to function		
	39th	Pointers to an array and strings.		
14th	40th	Revision	27 & 28	Simple programs using structures.
	41st	Declaration of structures Accessing structure members		
	42nd	Unions		
15th	43rd	Revision	29 & 30	Simple programs using union.
	44th	Revision		
	45th	Revision		