

Lesson Plan

Name of the Faculty:	Er. Mamta
Discipline:	CSE
Semester:	2 nd
Subject:	Programming for problem solving
Lesson Plan Duration:	15 weeks
Work Load (Lecture/Practical) per week (In hours):	Lectures-03

Week	Theory		Practical	
	Lecture Day	Topic (Including Assignment/Test)	Practical Day	Topic
1	1	Introduction to components of a computer system	1	Write a program to find the sum of two positive integers.
	2	Algorithm: steps to solve logical and numerical problems. Representation of Algorithm: Flowchart/Pseudocode with examples		Write a program to find the simple interest.
	3	Algorithms/programs		
2	4	variables (with data types) variables and memory locations	2	Write a program to find the area of circle.
	5	Syntax and Logical Errors in compilation, object and executable code-		
	6	Arithmetic expressions and precedence		Write a program to find the percentage of student marks.
3	7	Arithmetic expressions and precedence	3	Write a program to find the average of n numbers
	8	Conditional Branching and Loops		Write a program to find the roots of a quadratic equation.
	9	Conditional Branching and Loops		
4	10	Conditional Branching and Loops	4	Write a program to generate all the prime numbers between 1 and n,
	11	Conditional Branching and Loops		
	12	Arrays Arrays (1-D)		Write a program to generate the first n terms of the Fibonacci series
	13	2-D Array		Implementation of operations on array

5	14	Character arrays	5	
	15	Strings		
6	16	Strings	6	Operations on string
	17	Linear Search		
	18	Binary Search		
7	19	Bubble Sort	7	Linear Search
	20	Insertion Sort		Binary Search
	21	Selection Sort		
8	22	Searching sorting comparisions	8	Bubble Sort
	23	complexity		Insertion Sort
	24	complexity		Selection Sort
9	25	Functions	9	Write a function to generate Pascal's triangle.
	26	Parameter passing in functions		
	27	Parameter passing in functions		Write a function to construct a pyramid of numbers.
10	28	Passing arrays to function	10	Call by value
	29	Recursion		
	30	Recursion		
11	31	Recursion	11	Call by reference
	32	Quick sort		
	33	Quick sort		Quick sort
12	34	Merge sort.	12	Merge sort.
	35	Merge sort.		
	36	Structures		

13	37	Structures	13	Operations on structures
	38	Structures		
	39	pointers		
14	40	pointers	14	Write a program to print the element of array using pointers
	41	pointers		
	42	linked list		
15	43	linked list	15	Write a program which copies one file to another.
	44	File handling		Write a program to reverse the first n characters in a file.
	45	File handling		