Lesson Plan

Name of the Faculty: Mr. VISHANT KUMAR (Theory & Practical)

Discipline: Department of Applied Sciences and Humanities.

Semester: 1st

Subject: Fundamentals Of Computer Programming (CSE-101E),Computer ProgrammingLab (CSE-103N)

Work Load (Lecture/ Practical) per week (in hours): Lectures -04hr, Practicals-02hr

Week	Theory		Practical	
	Lecture day	Topic (including assignment/test)	Practical day	Topic
1st	1st	**Overview of unit 1**	1st	Write a program to find the sum of individual digits of a positive integer.
	2nd	**Unit I: Overview of Computers:** Block diagram and its description		
	3rd	**Overview of Computers:** Number systems	2nd	**EXERCISE**
	4th	**Overview of Computers:** Arithmetic of number systems		
2nd	5th	**Overview of Computers:** Computer Hardware: Printers,	3rd	Write a program to generate the first n terms of the Fibonacci sequence.
	6th	**Overview of Computers:** Keyboard and Mouse		
	7th	**Overview of Computers:** Storage Devices, **Assignment**	4th	**EXERCISE**
	8th	**Introduction to programming language:** Different levels of PL: High Level language, **Assignment**		
3rd	9th	**Introduction to programming language:** Assembly language	5th	Write a program to generate all the prime numbers between 1 and n, where n is the input value given by the user.
	10th	**Introduction to programming language:**Machine language		
	11th	**Introduction to programming language:** Introduction to Compiler, Interpreter, Debugger	6th	**EXERCISE**
	12th	**Introduction to programming language:**Linker, Loader, Assembler, **Assignment**		
4th	13th	**Problem Analysis:** Problem solving techniques**,**	7th	Write a program to find the roots of a quadratic equation.
	14th	**Problem Analysis:** Algorithms		
			8th	**EXERCISE**

	15th	**Problem Analysis:**Flowchart representation		
	16th	**Unit 1 Test**		
5th	**17th**	**Overview of Unit II**	**9th**	Write a function to generate Pascal's triangle.
	18th	**Overview of Unit C:** Elements of C		
	19th	**Overview of Unit C:** Data types	**10th**	**EXERCISE**
	20th	**Overview of Unit C:**Storage classes in C		
6th	**21st**	**Overview of Unit C:**Operators: Arithmetic, relational	**11th**	Write a function to construct a pyramid of numbers.
	22nd	**Overview of Unit C:**logical, bitwise		
	23rd	**Overview of Unit C:**unary, assignment, **Assignment**	**12th**	**EXERCISE**
	24th	**Overview of Unit C:**conditional operators		
7th	**25th**	**Overview of Unit C:**precedence & associativity of operators.	**13th**	Write a C functions to find both the largest and smallest number of an array ofintegers.
	26th	**Input/output:** Unformatted I/O function in C, **Assignment**		
	27th	**Input/output:** formatted I/O function in C	**14th**	**EXERCISE**
	28th	**Control statements:** if statement, switch statement		
8th	**29th**	**Control statements:** Repetition: for, while, **Assignment**	**15th**	Write a program for addition of Two Matrices
	30th	**Control statements:** do-while loop		
	31st	**Control statements:** break, continue, goto statements.	**16th**	**EXERCISE**
	32nd	**Unit II test**		
9th	**33rd**	**Overview of Unit III**	**17th**	Write a program for Matrix multiplication by checking compatibility
	34th	**Arrays:** Definition, types		
	35th	**Arrays:** Processing an array.		
	36th	**Arrays:** String handling	**18th**	**EXERCISE**
10th	**37th**	**Functions:** Definition, prototype.	**19th**	Write a program To find the factorial of a given integer.
	38th	**Functions:** parameters passing techniques , **Assignment**		
	39th	**Functions:** parameters passing techniques .	**20th**	**EXERCISE**
	40th	**Functions:** recursion, built-in functions		
11th	**41st**	**Functions:** passing arrays to functions	**21st**	Write a program to explores the use of structures, union and other user defined
	42nd	**Functions:** returning arrays from functions		

				variables
	43rd	**Unit III test**	**22nd**	**EXERCISE**
	44th	**Overview of Unit IV**		
12th	**45th**	**Pointers:**Declaration	**23rd**	Write a program to print the element of array using pointers
	46th	**Pointers:** operations on pointers		
	47th	**Pointers:** pointers and arrays	**24th**	**EXERCISE**
	48th	**Pointers:** dynamic memory allocation, **Assignment**		
13th	**49th**	**Pointers:** pointers and functions	**25th**	Write a program to implement call by reference
	50th	**Pointers: pointers and strings**		
	51st	**Structure & Union:** Definition, processing, **Assignment**	**26th**	**EXERCISE**
	52nd	**Structure & Union:** Structure and pointers, **Assignment**		
14th	**53rd**	**Structure & Union:** passing structures to functions	**27th**	Write a program to print the elements of a structure using pointers
	54th	**Structure & Union:** use of union.		
	55th	**Data files:** Opening and closing a file	**28th**	**EXERCISE**
	56th	**Data files:** I/O operations on files.		
15th	**57th**	**Unit 4 Test**	**29th**	Write a program to concatenate two strings
	58th	**Problem Discussion & Revision**		
	59th	**Problem Discussion & Revision**	**30th**	**EXERCISE**
	60th	**Problem Discussion & Revision**		