

LESSON PLAN

Name of the Faculty: Gaytri Tanwar
Discipline : Computer Science
Semester : 4th
Subject : Object Oriented Programming Using Java
Lesson Plan Duration : 11 weeks

Work load (Lecture/Practical) per week : 3 lectures

Week	Theory		Practical	
	Lecture day	Topic	Practical day	Topic
1st	1	Fundamentals of object oriented programming – procedure oriented programming Vs. object oriented programming (OOP)	1st	Write a program in JAVA to print “Hello” using classes.
	2	Encapsulation, inheritance, polymorphism		
	3	Introduction of eclipse (IDE) for developing programs in Java		
2nd	4	Review of constructs of C used in JAVA, Variables,	2nd	Write a program to input using Scanner Class.
	5	Type and Type Declaration, Data Types		
	6	Increment and decrement operators, relational and logical operators,		
3rd	7	if then else clause	3rd	Write a program to print factorial of a Number.
	8	Conditional expressions, input using scanner class and output statement,		
	9	loops, Switch		
4th	10	arrays	4th	Write a program to create a Class and make objects of that class.
	11	methods		
	12	Creation, accessing class members		
5th	13	Private Vs Public Vs Protected Vs Default	5th	Create a class with data members Feet, Inches and add them.
	14	Constructors		
6th	15	Object & Object Reference	6th	Create a class using constructors.
	16	Definition of inheritance, protected data, private data, public data		
	17	Constructor chaining		
7th	18	Order of invocation	7th	Create a class and show the use of Single inheritance. Create a class and show the use of multiple inheritance.
	19	Types of inheritance, Single inheritance, Multilevel inheritance,		
	20	Hierarchical inheritance, Hybrid inheritance		
8th	21	Method & Constructor overloading,	8th	Create a class and show the use of Multi-level inheritance.
	22	Method overriding,		
	23	Up-casting and Down-casting.		
9th	24	Key points of Abstract class	9th	Create a class showing the use of Constructor Overloading.
	25	interface		
	26	Difference between an abstract class & interface		
10th	27	Implementation of multiple inheritance through interface.	10th	Create a program showing the use of Interfaces.
	28	Definition of exception handling,		
	29	implementation of keywords like Try Catch		
11th	30	finally, throw & throws.	11th	Create a program using Try and Catch Block
	31	Importance of exception handling in practical implementation of live Projects		