

**LESSON PLAN**

<b>Name of Faculty</b>	<b>Miss Neha Midha</b>			
<b>Discipline</b>	<b>Computer Engineering</b>			
<b>Semester</b>	<b>4th</b>			
<b>Subject</b>	<b>Object Oriented Programming using Java</b>			
<b>Duration</b>	<b>16 WEEKS</b>			
<b>Work Load</b>	<b>Lecture</b>	<b>3 Lecture per week (1 hour /day)</b>		
	<b>Practical</b>	<b>6 hours Lab per week (3 hours/day)</b>		
<b>Week</b>	<b>Theory</b>		<b>Practical</b>	
	<b>Day</b>	<b>Topic</b>	<b>Day</b>	<b>Topic</b>
1st	1st	Fundamentals of object oriented programming :procedure oriented programming Vs. object oriented programming (OOP)	1st	Creating Classes and Objects
	2nd	Object oriented programming concepts – Classes, object	2nd	Practice Classes and Objects
	3rd	object reference, abstraction, encapsulation, inheritance, polymorphism		
2nd	4th	Introduction of eclipse (IDE) for developing programs in Java	1st	Practice Classes and Objects
	5th	Review of constructs of C used in JAVA : variables, types and type declarations	2nd	Practice Classes and Objects
	6th	data types, pointers		
3rd	7th	Functions, structure and unions	1st	Practice Classes and Objects
	8th	increment and decrement operators,	2nd	Practice Classes and Objects
	9th	relational and logical operators		
4th	10th	if then else clause, conditional expressions	1st	Practice Classes and Objects
	11th	input using scanner class and output statement	2nd	Practice Classes and Objects
	12th	input using scanner class and output statement		
5th	13th	loops, switch case,	1st	Experiment 1 of Practical List
	14th	arrays, methods	2nd	Continue Previous Experiment
	15th	Creation of class and objects, accessing class members		
6th	16th	Private data members and functions	1st	Continue Previous Experiment
	17th	Public data members and functions	2nd	Practice Classes and Objects
	18th	Protected data members and functions ,Default data members and functions		

7th	19th	Comparison: Private Vs Public Vs Protected Vs Default	1st	Practice Classes and Objects
	20th	Constructors, Destructors	2nd	Experiment 2 of Practical List
	21st	Object & Object Reference		
8th	22nd	Definition of inheritance and its types	1st	Experiment 3 of Practical List
	23rd	protected data, private data, public data	2nd	Continue Previous Experiment
	24th	constructor chaining, order of invocation of constructors and destructors		
9th	25th	Class test of Inheritance of constructors and destructors	1st	Practice Inheritance examples
	26th	types of inheritance	2nd	Experiment 4
	27th	single inheritance, multilevel inheritance		
10th	28th	hierarchical inheritance	1st	Practice Inheritance examples
	29th	hybrid inheritance	2nd	Experiment 6
	30th	Class test of Inheritance		
11th	31st	Introduction to polymorphism and its types: Run-time and Compile Time	1st	Experiment 7
	32nd	Uses of Polymorphism	2nd	Experiment 8
	33rd	Method & constructor overloading, method overriding		
12th	34th	up-casting and down-casting	1st	Experiment 8
	35th	practicing polymorphsim examples	2nd	Practice Inheritance examples
	36th	Revision and problem		
13th	37th	Key points of Abstract class	1st	Practice abstract Class
	38th	Key points of Interface	2nd	Practice Interface
	39th	difference between an abstract class & interface		
14th	40th	Multiple inheritance in Java	1st	Experiment 9
	41st	Need of Interface	2nd	Experiment 9
	42nd	implementation of multiple inheritance through interface		
15th	43rd	Definition of exception handling	1st	Experiment 10
	44th	Why Exception handling needed?Introduction to try & catch	2nd	Experiment 10
	45th	implementation of keywords like try, catch		
16th	46th	implementation of finally, throw & throws	1st	Practice Exception handling programs
	47th	Revision of Try , Catch , Finally, Throw and throws	2nd	Practice Exception handling programs
	48th	importance of exception handling in practical implementation of live projects		