Computer Engineering Department

Session: 2025-26 (4th Semester)

Subject: OOPs using Java   **Work Load per Week: Lecture- 02, Practical-04**

WEEK	LECT. DAY	THEORY TOPIC	Practical TOPIC
1st	1	Fundamentals of object oriented programming, Procedure oriented programming V/S object oriented programming (OOP)	Write a program in JAVA to print "Hello" using classes.
	2	OOPS concepts–Classes ,object ,object reference	
2nd	1	Abstraction, encapsulation,	
	2	Inheritance, polymorphism	
3rd	1	Introduction of eclipse(IDE)for developing programs in Java,	Write a program to input using Scanner Class.
	2	Revision/ Test/ Assignment	
4th	1	Revision/ Test/ Assignment	Write a program to print factorial of a Number.
	2	Variables, Types and type declarations, Data types, Increment, Decrement operators Relational and logical operators	
5th	1	If then else clause; conditional expressions, switch case	To create a Class and make objects of that class.
	2	Input using scanner class and output statement, methods	
6th	1	Loops, arrays	Create a class with data members Feet, Inches and add them.
	2	Creation, Accessing class members, Private Vs Public Vs Protected Vs Default, Constructors	
7th	1	Definition of inheritance, Types of inheritance, Single inheritance Multilevel inheritance	Create a class using constructors.
	2	Hierarchical inheritance, Hybrid inheritance	
8th	1	Protected data, Public data, Constructor chaining, Order of invocation	Create a class and show the use of Single inheritance.
	2	Method overloading, Constructor overloading	
9th	1	Method overriding	Create a class and show the use of multiple inheritances.
	2	Up-casting, Down-casting	
10th	1	Revision/ Test/ Assignment	
	2	Revision/ Test/ Assignment	
11th	1	Key points of Abstract class	Create a class and show the use of Multi-level inheritance.
	2	Interface	
12th	1	Difference between an abstract class & interface	
	2	Implementation of multiple inheritance through interface	
13th	1	Definition of exception handling	Create a class showing the use of Constructor Overloading.
	2	Implementation of keywords like try, Catch, finally, Throw &Throws	
14th	1	Importance of exception handling	Create a program showing the use of Interfaces.
	2	Revision/ Test/ Assignment	
15th	1	Revision/ Test/ Assignment	Create a program using Try and Catch Block.
	2	Revision/ Test/ Assignment	

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Subject Incharge