

Computer Engineering Department

Session: 2024-25 (4th Semester)

Subject: OOPs using Java

Work Load per Week: Lecture- 02, Practical-04

WEEK	THEORY		Practical
1st	LECT. DAY	TOPIC	TOPIC
	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, Inheritance, polymorphism	
	2	Introduction of eclipse(IDE)for developing programs in Java	
3rd	1	Review of constructs of C used in JAVA: variables	Write a program to input using Scanner Class.
	2	Types and type declarations, Data types	
4th	1	Increment, Decrement operators Relational and logical operators	Write a program to print factorial of a Number.
	2	If then else clause; conditional expressions	
5th	1	Input using scanner class and output statement	To create a Class and make objects of that class.
	2	Loops, switch case, arrays, methods	
6th	1	Creation, Accessing class members	Create a class with data members Feet, Inches and add them.
	2	Private Vs Public Vs Protected Vs Default	
7th	1	Constructors	Create a class using constructors.
	2	Object, Object Reference	
8th	1	Definition of inheritance	Create a class and show the use of Single inheritance.
	2	Protected data, Public data, Constructor chaining	
9th	1	Order of invocation	Create a class and show the use of multiple inheritances.
	2	Types of inheritance, Single inheritance	
10th	1	Multilevel inheritance,	
	2	Hierarchical inheritance, Hybrid inheritance	
11th	1	Method overloading, Constructor overloading	Create a class and show the use of Multi-level inheritance.
	2	Method overriding	
12th	1	Up-casting, Down-casting	
	2	Key points of Abstract class	
13th	1	Interface, Difference between an abstract class & interface	Create a class showing the use of Constructor Overloading.
	2	Implementation of multiple inheritance through interface	
14th	1	Definition of exception handling	Create a program showing the use of Interfaces.
	2	Implementation of keywords like try, Catch, finally, Throw &Throws	
15th	1	Importance of exception handling	Create a program using Try and Catch Block.
	2	TEST	
16th	1	REVISION	Revision
	2	REVISION	

Sandeep Mudgil

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Subject Incharge

HOD