

KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN

Session (2022-2023)

Discipline: Computer Science & Engineering	Semester: 3rd, Winter/2022	Name of the Faculty: Sunil Kumar Sahoo, Lecturer Email ID: sunilfcs@kp.kiit.ac.in
Subject: Object Oriented Methodology	No. of Days/week: 04	Start Date: 14/09/2022 End Date: 21/01/2023

Week	Class Day	Theory/Practical Topics
1st	1st	<ul style="list-style-type: none">• UNIT-I: Object Oriented Programming• OOPS concepts and terminology
	2nd	<ul style="list-style-type: none">• Benefit of OOPS• Application of OOPS
	3rd	<ul style="list-style-type: none">• Discussion of Questions.
	4th	<ul style="list-style-type: none">• UNIT-II: INTRODUCTION TO JAVA• Execution Model of Java• The Java Virtual Machine• A First Java Program
2nd	1st	<ul style="list-style-type: none">• Variables, constants and Data types
	2nd	<ul style="list-style-type: none">• Casting and Type Casting• Widening and Narrowing Conversions
	3rd	<ul style="list-style-type: none">• Operators and Expressions

	4th	<ul style="list-style-type: none"> Arithmetic and Relational operators with example
3rd	1st	<ul style="list-style-type: none"> Logical , increment and decrement operators
	2nd	<ul style="list-style-type: none"> Bitwise operators
	3rd	<ul style="list-style-type: none"> Control Flow Statements(if,if-else,switch)
	4th	<ul style="list-style-type: none"> Loop(for,while,do-while)
4th	1st	<ul style="list-style-type: none"> Program using loops
	2nd	<ul style="list-style-type: none"> Arrays, Non-Primitive Data types
	3rd	<ul style="list-style-type: none"> String
	4th	<ul style="list-style-type: none"> UNIT-III: Objects And Classes Concept and Syntax of class
5th	1st	<ul style="list-style-type: none"> Defining a Class Defining Method & Access Control
	2nd	<ul style="list-style-type: none"> Creating an Object Accessing Class Members Instance Data and Class Data
	3rd	<ul style="list-style-type: none"> Constructors Types of constructor
	4th	<ul style="list-style-type: none"> Access specifiers Types of access specifier
6th	1st	<ul style="list-style-type: none"> Smart Class using NPTEL Reference
	2nd	<ul style="list-style-type: none"> UNIT-IV: String Builder and String Buffer
	3rd	<ul style="list-style-type: none"> Methods and Messages
	4th	<ul style="list-style-type: none"> Parameter Passing Comparing and Identifying Objects
7th	1st	<ul style="list-style-type: none"> Video content class using NPTEL Reference
		<ul style="list-style-type: none"> UNIT-V: Inheritance in Java Types of inheritance
	2nd	<ul style="list-style-type: none"> Single Inheritance(Example)

		<ul style="list-style-type: none"> • Multi-level Inheritance(Example)
	3rd	<ul style="list-style-type: none"> • Hierarchical Inheritance • Hybrid Inheritance
	4th	<ul style="list-style-type: none"> • Quiz Test-I
8th	1st	<ul style="list-style-type: none"> • UNIT-VI: Polymorphism • Types of Polymorphism
	2nd	<ul style="list-style-type: none"> • Method Overloading • Method Overriding
	3rd	<ul style="list-style-type: none"> • Run time Polymorphism
	4th	<ul style="list-style-type: none"> • UNIT-VII: Packages: putting classes together • Introduction to Java API Packages
9th	1st	<ul style="list-style-type: none"> • Using System Packages • Using a Package
	2nd	<ul style="list-style-type: none"> • Static Import • Naming Convention
	3rd	<ul style="list-style-type: none"> • Creating Packages • Accessing a Package
	4th	<ul style="list-style-type: none"> • Adding a Class to Package • Hiding Classes
10th	1st	<ul style="list-style-type: none"> • UNIT-VIII: Java files and i/o • What is a stream?
	2nd	<ul style="list-style-type: none"> • Reading and writing to files(only txt files)
	3rd	<ul style="list-style-type: none"> • Input and Output Stream
	4th	<ul style="list-style-type: none"> • Manipulating Input data
11th	1st	<ul style="list-style-type: none"> • Opening and Closing Streams
	2nd	<ul style="list-style-type: none"> • Predefined streams
	3rd	<ul style="list-style-type: none"> • File handling Classes and Methods

	4th	<ul style="list-style-type: none"> • UNIT-IX: Exceptions Overview • Types of exception
12th	1st	<ul style="list-style-type: none"> • Exception Keywords • Exceptions(program)
	2nd	<ul style="list-style-type: none"> • Catching Exceptions
	3rd	<ul style="list-style-type: none"> • Using Finally Statement
	4th	<ul style="list-style-type: none"> • Exception Methods
13th	1st	<ul style="list-style-type: none"> • Defining and throwing exceptions
	2nd	<ul style="list-style-type: none"> • Errors and Runtime Exceptions
	3rd	<ul style="list-style-type: none"> • Errors and Runtime Exceptions program
	4th	<ul style="list-style-type: none"> • Handling of exception
14th	1st	<ul style="list-style-type: none"> • Try, throw and catch program
	2nd	<ul style="list-style-type: none"> • Using finally statement
	3rd	<ul style="list-style-type: none"> • Throwing our own exceptions
	4th	<ul style="list-style-type: none"> • Quiz Test-II
15th	1st	<ul style="list-style-type: none"> • Revision test after syllabus coverage
	2nd	<ul style="list-style-type: none"> • Assignment Evaluation
	3rd	<ul style="list-style-type: none"> • Discussing previous year question paper after finishing the syllabus
	4th	<ul style="list-style-type: none"> • Class Test