NM Institute Of Engineering and Technology, Bhubaneswar
DEPARTMENT:CSE

LESSON PLAN: Academic Year 2023-24 (Odd Semester)   COURSE: DIPLOMA   SEMESTER: 3th

Subject/Code: OBJECT ORIENTED METHODOLOGY   Faculty Name: Hiren Kumar Praharaj

Sl. No.	Name of the Topic to Cover	Text Book	Teaching Method	Course Progress	Remark
1	Programming Languages	T1	P		
2	Object Oriented Programming	T3	G		
3	OOPS concepts and terminology	T2	P		
4	Benefit of OOPS ,Application of OOPS	T2	G		
5	What is Java ?	T2	G		
6	Execution Model of Java The Java Virtual Machine	T3	G		
7	A First Java Program	T2	P		
8	Variables and Data types Primitive Datatypes & Declarations	T1	G		
9	Numeric and Character Literals String Literals	T1	G		
10	Arrays, Non-Primitive Datatypes	T3	P		
11	Casting and Type Casting	T1	G		
12	Widening and Narrowing Conversions	T2	P		
13	Operators and Expressions,	T3	G		
14	Control Flow Statements	T2	G		
15	Concept and Syntax of class	T2	G		
16	Defining a Class	T1	G		
17	Concept and Syntax of Methods	T3	P		
18	Defining Methods	T1	G		
19	Creating an Object	T3	G		
20	Accessing Class Members	T2	G		
21	Instance Data and Class Data	T3	G		
22	Constructors	T2	P		
23	Access specifiers ,Access Modifiers	T3	G		

24	Access Control ,	T2	G		
25	String Builder and String Buffer	T1	G		
26	Methods and Messages,	T1	G		
27	Parameter Passing	T2	P		
28	Comparing and Identifying Objects	T2	P		
29	Inheritance in Java	T1	G		
30	Use of Inheritance	T3	G		
31	Types of Inheritance,Single Inheritance,	T2	G		
32	Multi-level Inheritance	T1	G		
33	Hierarchical Inheritance	T3	G		
34	Hybrid Inheritance	T3	P		
35	Types of Polymorphism,	T2	P		
36	Method Overloading	T1	G		
37	Run time Polymorphism,	T3	G		
38	Method Overriding	T3	G		
39	Introduction,Java API Packages	T3	P		
40	Using System Packages, Naming Convention	T2	P		
41	Creating Packages,	T1	G		
42	Accessing a Package	T2	G		
43	Using a Package, Adding a Class to Package	T3	G		
44	Hiding Classes	T1	G		
45	Static Import	T2	P		
46	Performance Testing, Error seeding	T1	P		
47	General issues associated with testing	T3	G		
48	Software Reliability,	T3	P		
49	Different reliability metrics	T2	P		
50	Reliability growth modeling	T1	G		
51	Software quality	T2	P		

52	**Software Quality Management System**	T1	P		
53	Exceptions Overview	T2	G		
54	Exception Keywords	T1	P		
55	Catching Exceptions	T2	P		
56	Using Finally Statement	T1	G		
57	Exception Methods	T3	P		
58	Declaring Exceptions	T1	P		
59	Defining and throwing exceptions	T1	G		
60	Errors and Runtime Exceptions	T2	G		
		Method of Teaching			
		G: Green Board Teaching			
		P: Power Point Teaching			
Faculty Signature					

At the end of this course, students will be able to:

Understand the concepts of OOPs, their advantages and applications

Comprehend the features of Java

Know to create classes, objects, methods

Know the concepts and advantages of overloading methods and type conversions

Appreciate the concepts of inheritance and the various types of inheritance.

Understand the use of Interfaces and system packages

TEXT BOOKS:

E. Balagurusami Programming With Java A Primer The McGraw-Hill Companies

Patric Naughton Herbert Schildt JavaTM 2: The Complete Reference Tata McGraw-Hill Publishing Company

Rashmi Kanta Das Core Java For Beginners Vikas Publishing