

Lesson Plan

Lecture No.	Topic	Sub Topic	Pedagogy (PPT/Chalk and Board/Video Recording /Activity/Case Study)
1	Introduction to Java	Features of Java, JVM, JDK, JRE	Chalk and Board
2	Structure of Java Program	Basic structure, main method	Chalk and Board
3	Running Java Programs	Compilation & Execution	Chalk and Board
4	Classes and Objects	Defining classes & creating objects	Chalk and Board
5	Constructors	Types of constructors	Chalk and Board
6	Methods in Java	Method declaration & calling	Chalk and Board
7	Access Modifiers	public, private, protected, default	Chalk and Board
8	Data Types	Primitive & Non-primitive	Chalk and Board
9	Type Casting	Widening & Narrowing	Chalk and Board
10	Operators	Arithmetic, Relational, Logical	Chalk and Board
11	Looping Constructs	for, while, do-while	Chalk and Board
12	Control Statements	break, continue, nested loops	Chalk and Board
13	Interfaces	Introduction & Basics	Chalk and Board

14	Implementing Interfaces	Syntax & examples	Chalk and Board
15	Extending Interfaces	Multiple inheritance with interfaces	Chalk and Board
16	Packages	Introduction & importance	Chalk and Board
17	Creating Packages	Steps to create user-defined packages	Chalk and Board
18	Accessing Packages	Importing & using packages	Chalk and Board
19	System Packages	java.lang, java.util	Chalk and Board
20	User-Defined Packages	Example program	Chalk and Board
21	Exception Handling	Basics & need	Chalk and Board
22	try-catch	Syntax & examples	Chalk and Board
23	throw & throws	Usage & difference	Chalk and Board
24	finally block	Use of finally	Chalk and Board
25	Nested try	Multiple try blocks	Chalk and Board
26	Multiple catch	Handling multiple exceptions	Chalk and Board
27	User-Defined Exceptions	Creating custom exceptions	Chalk and Board
28	File Handling	Introduction to I/O	Chalk and Board
29	Byte Stream Classes	FileInputStream, FileOutputStream	Chalk and Board
30	Character Stream Classes	FileReader, FileWriter	Chalk and Board
31	File I/O Basics	read(), write() methods	Chalk and Board

32	File Operations	Create, delete, modify	Chalk and Board
33	AWT Introduction	GUI basics, Components	Chalk and Board
34	AWT Class Hierarchy	Containers & Components	Chalk and Board
35	Event Handling Basics	Introduction to events	Chalk and Board
36	Event Sources	Event classes & sources	Chalk and Board
37	Event Listeners	Types of listeners	Chalk and Board
38	Delegation Event Model	Source-Listener relationship	Chalk and Board
39	GUI Applications	Creating simple GUI using AWT	Chalk and Board
40	Mini Project / Revision	Combining AWT + File Handling + Exceptions	Chalk and Board