

**GOAPAL KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**GOURAHARI VIHAR, PO: RANIPUT, JEYPORE – 764 005**

**LESSON PLAN**

**Name of the Subject: CSPC2003 OBJECT ORIENTED PROGRAMMING**

**Session : 2025-26**

**Name of the Faculty: AMOD KUMAR BAGH**

**Semester: 3rd**

**Branch: Computer Sc. & Engg.**

**Semester From: JULY**

**No. of Weeks: 13 Weeks**

Week	Day	THEORY TOPICS	Classes
		<b><u>Module-I</u></b> (10 Hrs)	<b>10Hrs</b>
1	1	<b><u>Chapter 1:</u></b> An Introduction to Programming. Different types of Programming languages	50Min
	2	Differences between Compiler and Interpreter. Advantages of Object Oriented Programming	50Min
	3	Features of Object Oriented Programming.	50Min
	4	<b><u>Chapter 2 :</u></b> Introduction to Java. What is Java? Why Java? History behind Java. Different versions of Java. Difference between C/C++ and Java.	50 Min
2	5	Features of Java, First Java Program Prerequisites Before start writing a java program, writing the program, Compiling the program, Executing the program	50Min
	6	JVM and its significance, Architecture of JVM	50Min
	7	<b><u>Chapter 3 :</u></b> Understanding First Java program, Java Tokens, Datatypes, Operators, Different types of operators, Type casting, Control Structures and Arrays	50Min
	8		50Min
3	9	different types of control structures , Conditional Statements, Loops/Iterators, Jumping statements, Java Arrays, Multidimensional Arrays , Taking input from keyboard , Command Line Arguments, Using Scanner Class, Using Buffered Reader Class.	50Min
	10		50Min
	<b><u>Module-II</u></b>		<b>08 Hrs</b>
	11	<b><u>Chapter 1:</u></b> Introduction to Classes and Objects. Classes, Methods, Objects	50Min
	12	Description of Data Hiding and Data Encapsulation, Constructors, use of Static keyword in Java	50Min
	13	Use of This keyword in Java, Array of Objects	50Min
		Concept of Access Modifiers (Public, Private, Protected, Default).	
	14	<b><u>Chapter 2:</u></b> Inheritance Understanding Inheritance, Types of Inheritance and Java Supported Inheritance, Significance of Inheritance, Constructor call in inheritance, Use of Super keyword in Java,	50Min
	15	Polymorphism, understanding polymorphism, Types of Polymorphism, Significance of Polymorphism in Java, Method Overloading, Constructor overloading, Method overriding, Dynamic Method Dispatching.	50 Min

	16	<b>Chapter 3 :</b> String Manipulations. Introduction to different classes, String Class, String Buffer, String Builder, String Tokenizer	50Min
5	17	Concept of Wrapper Classes, Introduction to Wrapper Classes, Different predefined wrapper classes,	50 Min
	18	predefined constructors for the wrapper classes , conversion of types from one type(Object) to another type (Primitive) and vice versa, concept of Auto boxing and Unboxing.	50 Min
<b><u>Module-III</u></b>			<b>09 Hrs</b>
	19	<b>Chapter 1:</b> Data Abstraction Basics of Data Abstraction, Understanding Abstract classes	
	20	Understanding Interfaces, Multiple Inheritance using Interfaces, Packages, Introduction to Packages, Java API Packages, User Defined Packages, Accessing Packages	50Min
6	21	Error and Exception Handling , Introduction to error and exception , Types of exceptions and difference between the types, Run Time Stack Mechanism	50Min
	22	Hierarchy of Exception Classes , Default Exception Handling in Java, User defined/ Customized Exception Handling	50 Min
	23	Understanding different Keywords( try,catch,finally,throw,throws), User defined exception classes, Commonly used Exceptions and their details.	50 Min
	24		50 Min
7	25	<b>Chapter 2:</b> Multithreading Introduction to Multithreading / Multitasking, Ways to define a Thread in Java , Thread naming and priorities,	50 Min
	26	Thread execution prevention methods, (yield(),join(),sleep()), Concept of Synchronisation, Linear Thread communication, Basics of Deadlock	50 Min
	27	Demon Thread, Improvement in Multithreading, Inner Classes , Introduction,	50 Min
	28	Member Inner Class, Static Inner Class, Anonymous Inner Class.	50 Min
9	<b><u>Module-IV</u></b>		<b>10Hrs</b>
	29	<b>Chapter 1:</b> IO Streams (java.io package) Introduction, Byte Stream and Character Stream, Files and Random Access files, Serialization	50Min
	30	Collection Frame work (java. util), Introduction	50Min
	31	Util Package Interface, List, Set, Map etc, List Interfaces and Classes, Setter Interface and its Classes.	50 Min
	32	<b>Chapter 2:</b> Applet Introduction, Life Cycle of an Applet,	50 Min
10	33	GUI with an Applet, Abstract Window Toolkit(AWT),	50Min
	34	Introduction to GUI, Description of Components and Containers, Components/Container hierarchy	50Min
	35	Event Handling, Different mechanism of Event Handling	50Min
	36	Understanding different Components /Container Classes and their Constructors	50 Min
11	37	Event Handling, Different mechanism of Event Handling	50Min

	38	Listener Interface, Adapter Classes.	50Min
		<b><u>Module-V</u></b>	<b>8Hrs</b>
	39	<b><u>Chapter 1:</u></b> Swing(JFC) Introduction Difference b/w AWT and swing	50Min
	40	Components Hierarchy, Panes, Individual Swings	50Min
12	41	Components, JLabel, JButton, JTextField, JTextArea.	50Min
	42		50Min
	43	<b><u>Chapter 2:</u></b> JavaFX Getting started with JavaFX, Graphics, User Interface Components,	50Min
	44	Effects, Animation, and Media, Application Logic, Interoperability	50Min
13	45	JavaFX Scene Builder 2, Getting started with Scene Builder.	50Min
	46	Working with Scene Builder.	50Min
	47	Revision	50Min
	48		50Min