



# Government Girls Polytechnic Bilaspur

## Department of Computer Science & Engineering

**LESSON PLAN**  
**SESSION: Jul-Dec 2024**

**Subject: Java Programming**

**Subject Code: 2022572(022)**

**Semester: V**

**Name of the Subject Teacher: Mr Nuresh Kumar Dewangan**

Unit	Topics/Subtopics to be covered	No. of periods planned
<b>Unit-1 Introduction of Java &amp; Programming Structure</b>	1.1 History of Java, JVM, JDK, JRE, Java Compilation & Interpretation	1
	1.2 Object Oriented paradigm – Encapsulation, Polymorphism, Inheritance	1
	1.3 Programming Structure – Data Type, Variable, Constant, Operator and its precedence	1
	1.4 Control Structure – if-else, switch, while, for, break & continue	1
	1.5 Input from Keyboard – Scanner class, Command line argument	1
	<b>Revision – Unit 1</b>	1
	<b>Unit-2 Class, Object &amp; Inheritance</b>	2.1 Class & Object – Definition, Access modifiers, methods, Constructor, this keyword
2.2 Method Overloading, Constructor Overloading, Object as Parameter		1
2.3 Array – 1D, 2D, Wrapper Class		1
2.4 Inheritance – types, super keyword, sub class constructor		1
2.5 Multilevel Inheritance, Method Overriding, Dynamic Method Dispatch		1
<b>Revision – Unit 2</b>		1
<b>Quiz – 1 (Units 1 &amp; 2)</b>		1
<b>Unit-3 Packages, Interfaces &amp;</b>	3.1 Abstract Class & its Method	1
	3.2 Interface – Define, implement & apply	1
	3.3 Package – Create, access, import	1

<b>Exception Handling</b>	3.4 Exceptional Handling – Try & Catch, finally, multiple catch, throw, throws	1
	3.5 User defined exception	1
	<b>Revision – Unit 3</b>	1
	<b>Quiz – 2 (Unit 3)</b>	1
<b>Unit-4 Multi-Threading, String &amp; Swing</b>	4.1 Multi-Threading – Introduction, Thread Life Cycle, Creation of Thread	1
	4.2 Thread Priority, Thread Synchronization, Inter-thread Communication	1
	4.3 String – String, StringBuffer, StringBuilder	1
	4.4 Swing – JFrame, JButton, JTextField, JLabel, JCheckBox, JRadioButton	1
	4.5 Layout Manager – FlowLayout, GridLayout, BorderLayout	1
	<b>Revision – Unit 4</b>	1
<b>Unit-5 Event Handling &amp; JDBC</b>	5.1 Event Handling – ActionListener, MouseListener, KeyListener	1
	5.2 JDBC – Introduction, Driver types, Register driver, getConnection()	1
	5.3 createStatement(), executeQuery(), closing()	1
	<b>Revision – Unit 5</b>	1
	<b>Quiz – 3 (Units 4 &amp; 5)</b>	1
	<b>FULL SYLLABUS REVISION</b>	2
	<b>Total Class</b>	<b>33</b>