

# BALASORE SCHOOL OF ENGINEERING, BALASORE

## LESSON PLAN/SEMESTER-3<sup>rd</sup>/CSE

SUBJECT- Object Oriented Methodology (JAVA) THEORY-4 NAME OF THE FACULTY-P.K. GIRI

| SL. No. | Month /No. of academic days available for the subject | Chapter   | DATE       | TOPICS TO BE COVERED  | No. of class Available As per Syllabus | No. of class Available As per lesson plan |
|---------|---|-----------|------------|---|--|---|
| 01      | SEPT/12   | Chapter-1 | 15/09/2022 | <b>1 OBJECT ORIENTED PROGRAMMING (OOPS) CONCEPTS</b><br>1.1 Programming Languages | 05                                     | 03  |
|         |   |           | 16/09/2022 | 1.2 Object Oriented Programming<br>1.3 OOPS concepts and terminology              |  |   |
|         |   |           | 19/09/2022 | 1.4 Benefit of OOPS<br>1.5 Application of OOPS                                    |  |   |
|         |   | Chapter-2 | 21/09/2022 | <b>2 INTRODUCTIONS TO JAVA 10</b><br>2.1 What is Java?                            | 10                                     | 13  |
|         |   |           | 22/09/2022 | 2.2 Execution Model of Java   |  |   |
|         |   |           | 23/09/2022 | 2.3 The Java Virtual Machine  |  |   |
|         |   |           | 24/09/2022 | 2.4 A First Java Program<br>2.5 Variables and Data types                          |  |   |
|         |   |           | 26/09/2022 | 2.5 Variables and Data types  |  |   |
|         |   |           | 27/09/2022 | 2.6 Primitive Datatypes & Declarations  |  |   |
|         |   |           | 28/09/2022 | 2.7 Numeric and Character Literals<br>2.8 String Literals                         |  |   |
|         |   |           | 29/09/2022 | 2.9 Arrays, Non-Primitive Datatypes   |  |   |
|         |   |           | 30/09/2022 | 2.10 Casting and Type Casting   |  |   |

| SL. No. | Month /No. of academic days available for the subject | Chapter    | DATE       | TOPICS TO BE COVERED   | No. of class Available As per Syllabus | No. of class Available As per lesson plan |
|---------|---|------------|------------|--|--|---|
| 02      | OCT/15  | Chapter-2  | 10/10/2022 | 2.11 Widening and Narrowing Conversions                          | 130                                    |   |
|         |   |            | 12/10/2022 | 2.12 Operators and Expressions                                   |  |   |
|         |   |            | 13/10/2022 | 2.13 Control Flow Statements                                     |  |   |
|         |   |            | 14/10/2022 | 2.13 Control Flow Statements                                     |  |   |
|         |   | Chapter-3  | 15/10/2022 | <b>OBJECTS AND CLASSES</b><br>3.1 Concept and Syntax of class    | 08                                     | 08  |
|         |   |            | 17/10/2022 | 3.2 Defining a Class   |  |   |
|         |   |            | 19/10/2022 | 3.3 Concept and Syntax of Methods<br>3.4 Defining Methods        |  |   |
|         |   |            | 20/10/2022 | 3.5 Creating an Object 3.6 Accessing Class Members               |  |   |
|         |   |            | 21/10/2022 | 3.7 Instance Data and Class Data                                 |  |   |
|         |   |            | 22/10/2022 | 3.8 Constructors   |  |   |
|         |   |            | 26/10/2022 | 3.8 Constructors<br>3.9 Access specifiers                        |  |   |
|         |   |            | 27/10/2022 | 3.10 Access Modifiers<br>3.11 Access Control                     |  |   |
|         |   |            | Chapter-4  | 28/10/2022   |  |   |
|         |   | 29/10/2022 |            | 4.1 String Builder and String Buffer<br>4.2 Methods and Messages |  |   |
|         |   | 31/10/2022 |            | 4.3 Parameter Passing<br>4.4 Comparing and Identifying Objects   |  |   |

| SL. No. | Month /No. of academic days available for the subject | Chapter   | DATE       | TOPICS TO BE COVERED   | No. of class Available As per Syllabus | No. of class Available As per lesson plan |
|---------|---|-----------|------------|--|--|---|
| 03      | NOV/15  | Chapter-5 | 02/11/2022 | 5 INHERITANCE 5.1 Inheritance in Java<br>5.2 Use of Inheritance 5.3 Types of Inheritance | 08                                     | 04  |
|         |   |           | 03/11/2022 | 5.4 Single Inheritance<br>5.5 Multi-level Inheritance 5.6 Hierarchical Inheritance       |  |   |
|         |   |           | 04/11/2022 | 5.7 Hybrid Inheritance   |  |   |
|         |   |           | 05/11/2022 | REVISION   |  |   |
|         | NOV/15  | Chapter-6 | 09/11/2022 | 6 POLYMORPHISMS<br>6.1 Types of Polymorphism   | 08                                     | 03  |
|         |   |           | 10/11/2022 | 6.2 Method Overloading   |  |   |
|         |   |           | 11/11/2022 | 6.3 Run time Polymorphism  |  |   |
|         | NOV/15  | Chapter-7 | 12/11/2022 | 7 PACKAGES: PUTTING CLASSES TOGETHER 06<br>7.1 Introduction 7.2 Java API Packages        | 06                                     | 05  |
|         |   |           | 21/11/2022 | 7.3 Using System Packages<br>7.4 Naming Convention                                       |  |   |
|         |   |           | 23/11/2022 | 7.5 Creating Packages<br>7.6 Accessing a Package   |  |   |
|         |   |           | 24/11/2022 | 7.7 Using a Package<br>7.8 Adding a Class to Package                                     |  |   |
|         |   |           | 25/11/2022 | 7.9 Hiding Classes   |  |   |
|         | NOV/15  | Chapter-8 | 26/11/2022 | 8 JAVA FILES AND I/O 05<br>8.1 What is a stream?   |  |   |
|         |   |           | 28/11/2022 | 8.2 Reading and writing to files (only txt files)  |  |   |
|         |   |           | 30/11/2022 | 8.3 Input and Output Stream  |  |   |



| SL. No. | Month /No. of academic days available for the subject | Chapter   | DATE       | TOPICS TO BE COVERED  | No. of class Available As per Syllabus | No. of class Available As per lesson plan |
|---------|---|-----------|------------|---|--|---|
| 04      | DEC/08  | Chapter-8 | 01/12/2022 | 8.4 Manipulating Input data   | 05                                     | 06  |
|         |   |           | 02/12/2022 | 8.5 Opening and Closing Streams<br>8.6 Predefined streams                       |  |   |
|         |   |           | 03/12/2022 | REVISION  |  |   |
|         |   | Chapter-9 | 05/12/2022 | 9 EXCEPTION HANDLING<br>9.1 Exceptions Overview 9.2<br>Exception Keywords       | 04                                     | 05  |
|         |   |           | 07/12/2022 | 9.3 Catching Exceptions<br>9.4 Using Finally Statement                          |  |   |
|         |   |           | 08/12/2022 | 9.5 Exception Methods<br>9.6 Declaring Exceptions                               |  |   |
|         |   |           | 09/12/2022 | 9.7 Defining and throwing<br>exceptions<br>9.8 Errors and Runtime<br>Exceptions |  |   |
|         |   |           | 10/12/2022 | REVISION  |  |   |

Brief Summary of the Plan

| Sl. no | Month | Units/Chapter To be Covered | Percentage of Coverage |
|--------|-------|-----------------------------|------------------------|
| 1      | SEPT  | Chepter-1, (2.1-2.10)       | 25%                    |
| 2      | OCT   | Chapter-(2.11-2.13),3,4     | 35%                    |
| 3      | NOV   | Cheptar-5,6,7, (8.1-8.3)    | 30%                    |
| 4      | DEC   | Chapter-(8.4-8.9),9         | 10%                    |

Signature of the Faculty

Date

*P. U. Rini*  
13/09/22

Signature of the Principal

Date

*P. Randa*  
13/9/22