

**BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT**

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

USN									
-----	--	--	--	--	--	--	--	--	--

Course Code	<b>22CS/AI/CA/CD36</b>
-------------	------------------------

Third Semester B.E. Degree Examinations, September 2024

**OBJECT ORIENTED PROGRAMMING WITH JAVA**

(Common to CSE, AIML, CSE- AI, CSE- DS)

Duration: 3 hrs

Max. Marks: 100

**Note:** 1. Answer any FIVE full questions choosing ONE full Question from each Module.

2. Missing data, if any, may be suitably assumed

<u>Q. No</u>	<u>Question</u>	<u>Marks</u>	<u>(RBTl:CO:PI)</u>
<b><u>Module-1</u></b>			
1.	a. List and explain different types of primitive data types used in Java.	08	(2 : 1 : 2.1.3)
	b. What is an Array? How arrays are declared and initialized in Java. Explain with suitable examples.	06	(2 : 1 : 2.1.3)
	c. Explain ternary operator with an example. Write a Java program to find the biggest of three numbers using ternary operator.	06	(3 : 1 : 2.1.3)
<b>(OR)</b>			
2.	a. List different types of operators and discuss any three types of operators with suitable examples.	08	(2 : 1 : 2.1.3)
	b. List and explain different iteration statements used in Java with suitable examples.	06	(2 : 1 : 2.1.3)
	c. Explain for-each loop. Write a Java Program to find the sum and average of following array elements {10, 20, 30, 40, 50} using for each loop.	06	(3 : 1 : 2.1.3)
<b><u>Module-2</u></b>			
3.	a. What are constructors? Explain two types of constructors with an example.	08	(2 : 2 : 2.1.3)
	b. Write a short note on use of 'final' keyword.	06	(2 : 2 : 2.1.3)
	c. Discuss method overloading. Write a Java Program to overload a method area () of a triangle and circle.	06	(3 : 2 : 2.1.3)
<b>(OR)</b>			
4.	a. What is inheritance? Discuss different types of inheritance with suitable example.	08	(2 : 2 : 2.1.3)
	b. Mention and explain the use of "super" keyword in Java.	06	(2 : 2 : 2.1.3)
	c. Write a Java program to demonstrate method overriding.	06	(3 : 2 : 2.1.3)
<b><u>Module-3</u></b>			
5.	a. Define package. What are the steps involved in creating user defined package with an example.	08	(2 : 3 : 2.1.3)
	b. Describe thread priority. Write a program to assign and get thread priority.	06	(2 : 3 : 2.1.3)

**Note:** (RBTl - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI- Performance Indicator)

c. Differentiate between abstract class and interface. **06** (2 :3 : 2.1.3)

**(OR)**

6. a. What is an exception? Explain the different exception handling mechanism with an example. **08** (2 :3 : 2.1.3)

b. Explain the concept of try and catch block to handle multiple exceptions. **06** (2 :3 : 2.1.3)

c. What is a thread? Explain the two ways of creating a thread in Java. **06** (2 :4 : 2.1.3)

**Module-4**

7. a. What are events, event source and event listener? Explain delegation event model used to handle events in Java. **10** (2 :4 : 2.1.3)

b. Write a short notes on event class and explain any three event class with syntax. **10** (2 :4 : 2.1.3)

**(OR)**

8. a. List and explain any three event listener interfaces with the general forms of their methods. **10** (2 :4 : 2.1.3)

b. Write a Java program to demonstrate mouse events handling. **10** (3 :4 : 2.1.3)

**Module-5**

9. a. What are swings? Describe the key features of swings. **06** (2 :5 : 2.1.3)

b. Explain the components and containers used in swings. **06** (2 :5 : 2.1.3)

c. Write a Java program to create a button named “INDIA”, on clicking which display “VOTE! FOR BETTER FUTURE” **08** (2 :5 : 2.1.3)

**(OR)**

10 a. Explain the following with suitable code : **10** (2 :5 : 2.1.3)  
(i) JLabel (ii) JTextField

b. Write a Java Program to create table with column heading as Name, Branch and RegNo. Insert five Record in the table and display. **10** (3 :5 : 2.1.3)

**\*\* \*\* \***