

**BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT**

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

USN Course Code          

Sixth Semester B.E. Degree Examinations, September/October 2024

**PROGRAMMING IN JAVA**

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. Explain the java buzzwords in detail.	07	(2:1:1.6.1)
	b. List and explain the three OOP principles.	07	(2:1:1.6.1)
	c. Explain different lexical issues in JAVA.	06	(2:1:1.6.1)
<b>(OR)</b>			
2.	a. What are the different data types available? List and explain primitive data types.	07	(2:1:1.6.1)
	b. Explain the scope and lifetime of variables with an example.	07	(2:1:1.6.1)
	c. Explain the type conversion in JAVA with example.	06	(2:1:1.6.1)
<b><u>Module-2</u></b>			
3.	a. What are different types of operators in JAVA? Explain them.	08	(2:2:1.6.1)
	b. Write a program to find biggest among three numbers using ternary operator.	06	(3:2:2.7.1)
	c. Discuss for-each loop with an example.	06	(3:2:1.6.1)
<b>(OR)</b>			
4.	a. List and explain different iteration statement used in JAVA.	08	(2:2:1.6.1)
	b. Explain switch case with an example.	06	(3:2:1.6.1)
	c. Demonstrate the use of break, continue and return keywords in JAVA.	06	(3:2:2.6.2)
<b><u>Module-3</u></b>			
5.	a. Explain the following with example : (i) Class           (ii) Object           (iii) this keyword	06	(3:3:1.6.1)
	b. What are constructors? Explain with an example.	07	(3:3:1.6.1)
	c. Explain the super keyword and list its usage at various levels with examples.	07	(3:3:2.6.2)

**(OR)**

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|----|----|---|-----------|--------------------|
| 6. | a. | What is inheritance? Discuss the different types of inheritance with suitable example.      | <b>06</b> | <b>(3:3:1.6.1)</b> |
|    | b. | Mention and explain the use of final keyword in JAVA.                                       | <b>07</b> | <b>(3:3:2.6.2)</b> |
|    | c. | Distinguish between method overloading and method overriding in JAVA with suitable example. | <b>07</b> | <b>(3:3:2.6.2)</b> |

**Module-4**

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|----|----|---|-----------|--------------------|
| 7. | a. | Define package. What are the steps involved in creating user defined package with an example. | <b>08</b> | <b>(3:4:1.6.1)</b> |
|    | b. | Briefly explain the role of interfaces while implementing multiple inheritance.               | <b>08</b> | <b>(3:4:1.6.1)</b> |
|    | c. | Differentiate between abstract class and an interface.  | <b>04</b> | <b>(2:4:2.6.2)</b> |

**(OR)**

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|----|----|---|-----------|--------------------|
| 8. | a. | What is an exception? Explain the five keywords associated with exception handling. | <b>08</b> | <b>(3:4:1.6.1)</b> |
|    | b. | Write a program to demonstrate how an arithmetic exception is handled in Java.      | <b>08</b> | <b>(3:4:2.6.2)</b> |
|    | c. | Write a syntax of try and catch block to handle multiple exceptions. Explain.       | <b>04</b> | <b>(3:4:1.6.1)</b> |

**Module-5**

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|----|----|---|-----------|--------------------|
| 9. | a. | What are enumerations? Discuss values() and valueOf() methods with a suitable examples. | <b>10</b> | <b>(3:5:1.6.1)</b> |
|    | b. | Write a program to read data from keyboard and to store it into a file.                 | <b>10</b> | <b>(3:5:2.6.2)</b> |

**(OR)**

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|----|----|---|-----------------|----------------------|
| 10 | a. | List and explain any five constructors of string class with suitable example. | <b>10</b>       | <b>(2:5:1.6.1)</b>   |
|    | b. | Write a notes on following String class methods:                              |                 |                      |
|    |    | (i) substring()   | (ii) replace(): | (iii) concat()       |
|    |    | (iv) equals() and equalsIgnoreCase()  |                 | (v) regionMatches(): |
|    |    |   | <b>10</b>       | <b>(2:5:1.6.1)</b>   |

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