

**October 2025**  
**B.A./B.Sc.**  
**Fifth Semester**  
**CORE – 11**  
**COMPUTER SCIENCE**  
*Course Code: CSC 5.11*  
**(Internet Technologies)**

*Total Mark: 70*  
*Time: 3 hours*

*Pass Mark: 28*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. (a) Write four features of Java. 4  
(b) What are objects and classes in Java? What are the steps to create an object in Java? 2+3=5  
(c) Write a Java program demonstrating the use of “this” keyword. 5
  
2. (a) Write the three common ways to declare and initialize an array in Java. 6  
(b) Explain arraylist in Java. Write a Java program to loop through an arraylist using the for-each loop. 3+5=8

**UNIT-II**

3. (a) Write three advantages and three disadvantages of JavaScript. 6  
(b) Explain the two ways in which JavaScript can be added to HTML with examples each. 8
  
4. (a) Explain an event in JavaScript with an illustration. 5  
(b) What is event handling and event handler? Explain any one mouse event handler with an example program. 4+5=9

**UNIT-III**

5. (a) What is JDBC? Explain the JDBC architecture with a diagram. 1+5=6

- (b) Explain all the four types of JDBC drivers with an illustration each. 8
6. (a) Write a program to connect a Java application to a database using JDBC. 10
- (b) Explain the callable statement in JDBC with its syntax. 4

#### UNIT-IV

7. (a) What is JSP? Write three differences between JSP and servlet. 1+3=4
- (b) Explain the four major phases of a JSP life cycle with the help of a diagram. 10
8. (a) Explain the three scripting elements in JSP. 3
- (b) Write a program demonstrating exception handling in JSP by the elements of page directive. 11

#### UNIT-V

9. (a) What is JavaBean? Write the five standards of a JavaBean. 1+5=6
- (b) Explain getPropertyNames() and setPropertyName() with an example program. 8
10. (a) Write three features of JavaBean. 3
- (b) What is a JAR file? Write the syntax to create, extract, and update a JAR file. 1+3=4
- (c) What is introspection? Explain the three methods used in BeanInfo interface. 1+6=7