

END TERM EXAMINATION

SECOND SEMESTER [BCA] JUNE 2025

Paper Code: BCA-104T Subject: Object Oriented Programming Using Java
(BATCH 2024 ONWARDS)

Time: 3 Hours

Maximum Marks: 60

Note: Attempt five questions in all including Q.No.1 which is compulsory.
Select one question from each unit.

- Q1 Attempt **any Four** of the following questions (4x5=20)
- a) What is 'this' keyword? How is it different from 'super' keyword.
 - b) Difference between super class and sub class.
 - c) What do you understand by garbage collection in java?
 - d) Discuss the uses of 'throw' and 'throws' keywords.
 - e) What is an interface? How is it different from an abstract class?
 - f) What is exception handling? Mention any two exception types.
 - g) Explain the four main principles of Object-Oriented Programming with examples in Java.
 - h) Describe the difference between compile-time and run-time polymorphism with suitable examples.

UNIT-I

- Q2 What is a package in Java? How do you create and use a user-defined package? (10)

OR

- Q3 Discuss exception handling in Java with the use of **try**, **catch**, and **finally** blocks. (10)

UNIT-II

- Q4 Differentiate between **String** and **StringBuffer** classes with examples. (10)

OR

- Q5 Write a Java program to demonstrate the use of interfaces. (10)

UNIT-III

- Q6 Describe the difference between compile-time and run-time polymorphism with suitable examples. (10)

OR

- Q7 Write a Java application using file handling that reads from a text file and writes the content to another file with all text in uppercase. Include exception handling. (10)

UNIT-IV

- Q8 Explain the concept of multithreading in Java. Write a Java program that creates two threads:
one for printing even numbers and another for odd numbers from 1 to 20. (10)

OR

- Q9 Design a Java class Bank Account with fields for account number, account holder name, and balance. Include methods for deposit, withdraw, and display. Write a test class to demonstrate all functionalities. (10)
