

# END TERM EXAMINATION

FOURTH SEMESTER [B.TECH] JUNE 2025

Paper Code: CIC-212

Subject: Programming in Java

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 all (5x4= 20)
- a) Why java is called a pure object oriented programming language.
  - b) Differentiate between grid layout and border layout managers.
  - c) What is a thread? Describe the complete life cycle of thread.
  - d) Describe the uses of final and super keywords with respect to inheritance.
  - e) Differentiate between Array List and Vector.

## UNIT-I

- Q2
- a) Explain in detail about Garbage Collector in Java. (5)
  - b) Discuss the security architecture of Java in detail. (5)
- Q3
- a) Describe the features of Java Programming Language that justifies its popularity. (5)
  - b) Explain sandbox security model with diagram in detail. (5)

## UNIT-II

- Q4
- a) Describe run time polymorphism in java with a suitable example. (4)
  - b) Demonstrate the wrapper classes in java. (3)
  - c) Discuss in detail about Abstract Classes in Java. (3)
- Q5
- a) Write a program to illustrate the use of multiple catch blocks for a try block. (4)
  - b) Can we have an empty catch block? Justify. (3)
  - c) What is the use of String Tokenizer class? (3)

## UNIT-III

- Q 6
- a) Define Daemon Threads? Explain with an example (5)
  - b) Write a java program to develop Login Window using AWT. (5)
- Q.7
- a) Write a Java program that creates three threads. First thread displays "Hello!" every one second, the second thread displays "Wear Mask !" every two seconds and "Use Sanitizer !" every 5 seconds (5)
  - b) Discuss the event delegation model in Java. Also explain the basic components of it. (5)

## UNIT-IV

- Q8
- a) Describe different types of JDBC drivers. (5)
  - b) Explain the random access file operations with a suitable program. (5)
- Q9
- a) What support is provided by File class for file management? Illustrate with suitable scenarios. (5)
  - b) Write a program to store the names of bank depositors and their current balances using hash tables. (5)

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