2011000104030001
B.C.A. S.Y (Sem – IV)
Examination November - 2023
Java Programming Language

Seat No:

[Time: Three hours]   [Max. marks: 70]

Instructions   **(1) All questions are compulsory.**
                         (2) Figures to the right indicate full marks.

Student's Signature

Q.1   Answer in short. (Any 5)   10
   1. What is JVM?
   2. What is right shift with zero fill? Give example.
   3. Give use of this keyword.
   4. Give difference between checked and unchecked exception.
   5. Explain garbage collection.
   6. List methods of Graphics class.

Q.2   Answer the following. (Any 2)   14
   1. Explain features of Java.
   2. Explain Java program structure.
   3. Explain static keyword.

Q.3   Answer the following. (Any 2)   14
   1. Explain runtime polymorphism using interface.
   2. Give difference between String and StringBuffer. Explain any 4 methods of String class.
   3. Explain try, catch and finally keywords.

Q.4   Answer the following. (Any 2)   14
   1. What is thread? Explain thread lifecycle.
   2. What is a package? Explain package creation and import in detail with example.
   3. What is <applet>? How can we pass parameters to an applet? Give example.

Q.5   **Do as directed. (Any 3)**   **18**

1. What is method overriding? Differentiate overloading and overriding giving an example.
2. Explain bitwise operators.
3. What is singly linked list? Write a program to create and display a Singly Linked List.
4. Write a program to accept a number from the command line and raise a user defined exception if it is negative number.