QP CODE

C1063

Enrollment Number: ……

Name: ……

B.C.A DEGREE EXAMINATIONS, JULY 2025
Third Semester
B.C.A
B21CA01SE – Programming in Java
(2024 January admissions)

Time: 3 Hours **Max Marks: 70**

Section A

Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.

1. Expand IDE in Java.
2. Name any one non-primitive data type in Java.
3. What does the JDK used in Java applications?
4. What is the use of *final* method in Java?
5. Why is the *import* statement used in Java?
6. What does a method signature in Java consist of?
7. Which interface allows the OutputStream to flush its data?
8. State the purpose of using method overriding in Java
9. Define an interface in Java.
10. Identify the output of the following code:

```
String str = "Java";
System.out.println(str.charAt(2));
```

11. What is the technique used to handle runtime errors in Java?
12. State the default priority of a thread in Java.
13. Identify the object that describes a change in the state of a source in Java.
14. Name the package in Java used for creating Applet.
15. What is the purpose of JDBC?

(1X10=10)

Section B

Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.

16. List any four data types in Java and their sizes.
17. Write short note on data abstraction.
18. Mention four access modifiers in Java and state their levels of accessibility.

19. Name four key subclasses of InputStream in Java and state their uses**.**
20. Mention the purpose of JVM in Java.
21. Write a Java program to find area of a circle.
22. Name any two commonly used methods of the StringBuffer class in Java and mention their purpose.
23. How can you initialize a 2-D array?
24. List any two key differences between an abstract class and an interface in Java.
25. Write short note on compile time polymorphism.

(2X5=10)

Section C

Answer any five of the following questions in one page each. Each question carries 4 marks.

26. Explain how to compile and execute java programs.
27. Illustrate the concept of packages in Java and describe its types with examples.
28. What are the key features of JDBC?
29. Write a java program that reads ten integer values from the user and displays them.
30. Discuss inheritance in Java and explain its types with examples.
31. Explain method overloading in Java. Describe the different ways to overload a method with examples.
32. Differentiate between equals(), equalsIgnoreCase(), and compareTo() methods in Java Strings with example.
33. Discuss exception handling in Java. Mention its importance and key keywords with suitable examples.
34. Define a thread in Java. Illustrate two ways to create and start a thread with suitable examples.
35. Describe the life cycle of an applet in Java.

(4X5=20)

Section D

Answer any two of the following questions in three pages each. Each question carries 15 marks.

36. Explain constructors in Java. Discuss its types with suitable examples.
37. Discuss various features of Java programming language.
38. Write an essay on Delegation Event Model in Java. Describe its key components and types of event classes with suitable examples.
39. Explain stored procedures in detail. Discuss why stored procedures are used, and outline the steps involved in using stored procedures through JDBC.

(15X2=30)