BCA-16

June - Examination 2026
BCA (Part-III) Examination
PROGRAMMING IN JAVA
Paper : BCA-16

[*Time: **3** Hours*] [*Maximum Marks: **70***]

Note :- The question paper is divided into three Sections A, B and C. Write answers as per the given instructions in each section.

Section-A **7×2=14**

(Very Short Answer Type Questions)

Note :- Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries **2** marks.

1. (i) What is a Java Virtual Machine (JVM)?
   (ii) Define Constructor in Java.
   (iii) What is Method Overloading?
   (iv) Differentiate between Checked and Unchecked Exceptions.
   (v) What is Multithreading?
   (vi) Define Applet.
   (vii) What is Swing?

Section-B **4×7=28**

(Short Answer Type Questions)

Note :- Answer **any four** questions. You have to delimit your each answer maximum up to **200** words. Each question carries **7** marks.

2. Explain various data types in Java. Discuss type conversion and type casting with examples.
3. What are operators in Java? Explain arithmetic, relational and logical operators with suitable examples.
4. Explain inheritance in Java. Discuss different types of inheritance with examples.
5. Define Exception Handling. Explain try, catch, finally, throw and throws keywords with examples.
6. What is a Thread? Explain the methods of thread creation in Java.
7. Explain the concept of Java GUI. Discuss the features of AWT and Swing.

8. What is an I/O Stream? Differentiate between byte stream and character stream with suitable examples.

9. Describe the features of Java in detail. Explain the architecture of Java and the role of JVM.

Section-C

2×14=28

(Long Answer Type Questions)

Note :- Answer **any two** questions. You have to delimit your each answer maximum up to **500** words. Each question carries **14** marks.

10. What is a constructor? How does it differ from methods? Explain constructor overloading with suitable examples.

11. Define Inheritance. Explain various types of inheritance in Java. How are members accessed in inheritance?

12. Explain Graphical User Interface (GUI) programming in Java. Discuss the following GUI components with suitable examples :
    (a) Container
    (b) Panel
    (c) Frame
    (d) Canvas

13. What is an Applet? Explain the life cycle of an applet with a suitable example. Also discuss the use of applet methods.
