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# FIFTH SEMESTER (CBCSS-UG) DEGREE EXAMINATION, NOVEMBER 2024

#### **BCA**

### BCA 5B 08—JAVA PROGRAMMING

(2019 Admission onwards)

Time: Two Hours

Maximum: 60 Marks

#### Section A - Short Answer Type Questions

All questions can be answered.

Each correct answer carries a maximum of 2 marks.

(Ceiling 20 Marks).

- 1. Define objects in Java.
- 2. Write the use of the static keyword in Java.
- 3. Write the process of dynamic method dispatch in Java.
- 4. Discuss the difference between abstract class and interface in Java.
- 5. Explain the purpose of the final keyword when applied to a class.
- 6. Define polymorphism in object-oriented programming.
- 7. Discuss the steps to create a thread by extending the thread class.
- 8. Write the function of the repaint method in applets.
- 9. Write the role of the statement interface in JDBC.
- 10. What are the differences between BufferedReader and FileReader in Java?
- 11. What are the different types of event listeners in AWT?
- 12. Discuss the methods used to pass parameters to an applet.

(Ceiling 20 marks)

### Section B - Paragraph/ Problem Type Questions

All questions can be answered. Each question carries 5 marks. (Ceiling 30 Marks).

- 13. Define inheritance and explain its advantages.
- 14. Describe the structure and components of a Java class.
- 15. Explain the use of interfaces in Java with an example.

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- 16. Explain the process of executing SQL queries using JDBC.
- 17. Describe exception handling with try-catch-finally blocks in Java.
- 18. Discuss the differences between daemon threads and user threads.
- 19. Write a Java program that demonstrates exception handling with custom exceptions.

(Ceiling 30 marks)

## **Section C - Essay Type Questions**

Answer any **one** of the following questions.

The question carries 10 marks.

- 20. Explain the concept of encapsulation and how it is implemented in Java.
- 21. Discuss the Java 1/0 system and its main classes.

 $(1 \times 10 = 10 \text{ marks})$