



24CS-BCAP-MA-04-08001

Seat No. _____

BACHELOR OF COMPUTER APPLICATION-CS Examination

BCA - CS SEMESTER-4 APRIL 2026 (NEP) APRIL - 2026

CS-22: PROGRAMMING WITH JAVA

Faculty Code : 11

Subject Code : 24CS-BCAP-MA-04-08001

Time : 2 Hours]

[Total Marks : 50

- Q.1 Attempt the following. 3
- (A) (1) What is JVM?
(2) Give the full form of JCL.
(3) Java original name was _____.
- Q.1 Attempt any one of the following. 2
- (B) (1) What is type casting?
(2) What is the main() method in Java?
- Q.1 Attempt any one of the following. 5
- (C) (1) Explain data types in Java with examples.
(2) Explain the difference between class and object with examples.
- Q.2 Attempt the following. 3
- (A) (1) What are the two categories of packages in Java?
(2) In which package is the Object class present?
(3) Which access modifier provides the widest scope?
- Q.2 Attempt any one of the following. 2
- (B) (1) What is an Interface in Java?
(2) Give the rules for Method Overriding.
- Q.2 Attempt any one of the following. 5
- (C) (1) What are Wrapper classes? Discuss their use and the concepts of Autoboxing and Unboxing.
(2) Discuss the Java Collection framework components: Vector, LinkedList, and Stack.
- Q.3 Attempt the following. 3
- (A) (1) Which keyword is used to handle an exception?
(2) Which method is used to start the execution of a thread?
(3) What is the function of the flush() method?

- Q.3 Attempt any one of the following. 2
(B) (1) What is Synchronization and why is it needed?
(2) What are 'Bridge Classes' in Java I/O?
- Q.3 Attempt any one of the following. 5
(C) (1) Explain the Life Cycle of a Thread with a state transition diagram.
(2) Explain the StringTokenizer class and its various constants.
- Q.4 Attempt the following. 3
(A) (1) JavaFX stands for _____.
(2) HSB stands for _____.
(3) RGBA stands for _____.
- Q.4 Attempt any one of the following. 2
(B) (1) Explain the Life Cycle methods of a JavaFX application.
(2) What is Property Binding? Name two types of bindings available in JavaFX.
- Q.4 Attempt any one of the following. 5
(C) (1) Describe the Event Handling mechanism in JavaFX.
(2) Discuss the types of animations available in JavaFX.
- Q.5 Attempt the following. 3
(A) (1) Which JavaFX package contains the UI control classes.
(2) Which method is used to set placeholder text in a TextField?
(3) Which class is required to visually display video content in JavaFX?
- Q.5 Attempt any one of the following. 2
(B) (1) Explain the difference between TextField and TextArea.
(1) Explain the purpose of a CellFactory in a ListView.
- Q.5 Attempt any one of the following. 5
(C) (1) Describe the different types of JavaFX Properties.
(2) Explain the Labeled class as a common superclass. Discuss its key features such as text, graphics, and CSS styling.

... **END OF EXAM** ...