

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course	: BSCCS	Date	: 20/07/2026
Subject Code	: BSCCS-401	Time	: 03:00pm to 05:15pm
Subject Name	: Object Oriented Programming using Java	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. What is JVM? Discuss the features of Java in detail.
2. Explain the Concept of Interface with example.
3. Explain Classes and Objects in Java. Discuss Constructors and Methods with examples.
4. Explain the concept of Inheritance in detail.
5. Explain Multithreading in Java. Discuss Thread Life Cycle and Thread Synchronization.

Section B

Answer the following (Attempt any four) (20)

1. Differentiate between Compiler and Interpreter.
2. Explain Structure of Java Program in brief.
3. Explain ArrayList and its advantages over Arrays.
4. Explain Linked Data Structures and Linked Lists.
5. Explain Input/Output Streams and File Handling in Java.
6. Explain Event Delegation Model and its components.

Section C

Part – A (Multiple Choice Questions) (10)

1. JVM stands for:
A) Java Variable Method B) Java Virtual Machine
C) Java Visual Machine D) Java Vendor Machine
2. Which method is the entry point of a Java application?
A) start() B) run()
C) main() D) init()
3. Which keyword is used to create an object in Java?
A) class B) object
C) create D) new
4. Which concept allows one class to acquire properties of another class?
A) Encapsulation B) Polymorphism
C) Inheritance D) Abstraction
5. Which interface is implemented to create a thread?
A) ActionListener B) Runnable
C) Serializable D) Comparable
6. Which collection class provides a dynamic array?
A) LinkedList B) Vector
C) ArrayList D) Stack

7. Which package contains classes related to input and output streams?

- A) java.net
- B) java.io
- C) java.awt
- D) java.util

8. Which AWT control is used to accept a single line of text input?

- A) TextArea
- B) Label
- C) Button
- D) TextField

9. Which method is automatically invoked when a button is clicked?

- A) mouseClicked()
- B) keyPressed()
- C) actionPerformed()
- D) itemStateChanged()

10. Which class is used for drawing graphics in Java?

- A) Graphics
- B) Paint
- C) Draw
- D) Shape

Part – B (State whether the following statements are true or false)

(10)

- 1 Java programs are compiled into bytecode.
- 2 JVM makes Java platform independent.
- 3 An object is an instance of a class.
- 4 Java supports multiple inheritance through classes.
- 5 Interfaces can be implemented by classes.
- 6 ArrayList can grow dynamically in size.
- 7 Linked List stores elements in contiguous memory locations.
- 8 FileInputStream is used for reading data from a file.
- 9 Event Delegation Model is used for event handling in Java.
- 10 Graphics class is used to draw shapes and text.
