

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

Course	: PGDCA	Date	: 26-Feb-2026
Subject Code	: PGDCA-102	Time	: 11:30am to 01.45pm
Subject Name	: Object Oriented Concepts	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Define Flowchart. Explain various flowchart symbols with their uses.
2. What is a class in Java? Explain the general form of a class with example.
3. Define Constructor. Explain constructor overloading in Java.
4. What is an Interface? How is it different from a class?
5. Explain the concept of Inheritance in Java. State its advantages.

Section B

Answer the following (Attempt any four) (20)

1. What is JVM? Explain its architecture and role in Java platform independence.
2. Discuss different Java Editions: J2SE, J2EE and J2ME.
3. Explain JDK. Describe its important tools.
4. Write steps to create, compile and execute a Java program.
5. Explain Exception Handling in Java. Describe try, catch, throw and throws.
6. Explain String class in Java. Describe how strings are created and manipulated.

Section C

Part – A (Multiple Choice Questions) (10)

- 1) Which of the following is a single-line comment in Java?
A) `/* comment /`
B) `/* comment */`
C) `// comment`
D) `<!-- comment -->`
- 2) Which of the following is NOT a primitive data type in Java?
A) `int`
B) `float`
C) `String`
D) `boolean`
- 3) Java was originally named:
A) Pine
B) Oak
C) Cedar
D) Maple
- 4) Which keyword is used to inherit a class in Java?
A) `implement`
B) `extends`
C) `inherit`
D) `super`
- 5) Which keyword is used to implement an interface?
A) `extends`
B) `interface`
C) `implements`
D) `abstract`
- 6) Which operator is used for equality comparison?
A) `=`
B) `==`
C) `!=`
D) `:=`

- 7) The main method in Java must be declared as:
A) public void main() B) static void main()
C) public static void main(String[] args) D) void main(String args)
- 8) Which keyword is used to create an object?
A) create B) object
C) new D) make
- 9) Which operator is used for logical AND?
A) & B) &&
C) || D) !
- 10) In OOP, objects are created from:
A) Methods B) Variables
C) Classes D) Packages

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

(10)

- 1 An efficient algorithm minimizes time and cost while solving a problem.
- 2 In a flowchart, a rectangle symbol represents a decision-making step.
- 3 Java was initially developed for improving Internet connectivity only.
- 4 The keyword `extends` is used to derive a subclass from a superclass in Java.
- 5 The `main()` method is the starting point of execution in a Java application.
- 6 A local variable in Java is accessible throughout the entire program.
- 7 J2ME is specially designed for embedded and handheld devices.
- 8 The assignment operator in Java evaluates expressions from left to right only.
- 9 Java supports single-line, multi-line, and documentation comments.
- 10 Bytecode files in Java are saved with the extension `.java`.
