

TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)(044)/
BACHELOR OF SCIENCE (COMPUTER APPLICATIONS)(750)/
SPECIALIZATION IN CYBER SECURITY (CS)(464)/
BACHELOR OF SCIENCE (CYBER SECURITY) (760)

EXAMINATION : MAY - 2026

SEMESTER - IV

Sub: Java Programming

(BCA- 440-20/BSC24-402/BCA-CS-440-20/BCA23-402/BCAC23-402/BSCC24-402)

Date : 26/05/2026

Total Marks : 60

Time: 2.00 pm to 4.30 pm

Instructions:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labeled diagrams wherever necessary.

Q.1. Fill in the blanks

(5)

- _____ is the technique of binding both data and functions together.
a) Class
b) Array
c) Encapsulation
d) None
- The smallest meaningful element of a Java program is called as.....
a) Token
b) class
c) object
d) array
- The _____ method is used to wait for a thread to complete its execution.
a) join()
b) stop()
c) sleep()
d) wait()
- _____ are actions that occur in response to user interactions.
a) Events
b) Triggers
c) Interfaces
d) Classes
- The index of the first element in an array is _____.
a) 1
b) -1
c) Value stored at first location
d) 0

O.2. State True/False

(5)

1. Streams are used for reading and writing data.
2. In Java, super keyword is used for to call the constructor of the parent class.
3. IDE stands for integrated deployment environment
4. JRE is responsible for converting Byte code to the machine-specific code.
5. In Java a thread can be in only one state at a time.

Q.3. Answer the following (Solve any 5)

(10)

1. Define the terms JDK and JRE in Java.
2. List the steps of setting up the Java environment.
3. What is the difference between byte streams and character streams?
4. What is Java BufferedReader class? Write Syntax.
5. What is the use of this keyword in java?
6. What is constructor? List types of constructors in Java.

Q. 4. Answer the following in detail (Solve any 6)

(30)

1. Explain any four key features of Java.
2. Define Inheritance. Explain Multilevel inheritance with suitable example.
3. Define Thread. Explain Thread life cycle in detail.
4. Define Exception? Explain Java Exception handling with suitable example.
5. Explain different access specifiers used in Java.
6. What is Java Swing? Explain any two Swing components with example.
7. Explain structure of Java main() with suitable example.

Q. 5. Answer the following in detail (Solve any 1)

(10)

1. Write Java Program to find Area of Square, Rectangle and Circle using Method Overloading.
2. Define Abstraction. Explain why Java doesn't support Multiple inheritance with example.
