



# RAN-2411001003022001

## B. Sc. (Comp. Sci.) (Sem.-III) Examination November - 2025 Major-2- CS 304-Java Programming - I

Time: 1 Hour ]

[ Total Marks: 25

### સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
Fill up strictly the above details on your answer book

Seat No.:

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Student's Signature

### Q.1. Answer the following.

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#### A. Answer any four. (MCQs)

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- Which of the following creates an immutable string in Java?
  - StringBuilder
  - StringBuffer
  - String
  - char[]
- What is the purpose of a constructor in Java?
  - To define abstract methods
  - To initialize objects
  - To destroy objects
  - To declare constants
- Which method in an Applet is called only once when the applet is first loaded?
  - paint()
  - init()
  - start()
  - stop()
- Which keyword is used to implement an interface in Java?
  - extends
  - implements
  - inherit
  - interface
- Which of the following is not a valid way to create a thread in Java?
  - Extending the Thread class
  - Implementing the Runnable interface
  - Using Executor Service
  - Declaring a thread as static

#### B. Answer any four, (objective type questions)

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- Which package contains the String class in Java?
- What is the purpose of a constructor in Java?
- Which method of Applet is used to redraw the output?
- By default, methods in an interface are of which type?
- Which method is used to start the execution of a thread?
- Which keyword in Java is used to prevent method overriding?

### Q.2. Answer the following

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- A. Explain the Applet lifecycle methods in Java. Write a simple applet program that displays a message.

OR

- A. What are thread priorities in Java? How do they affect thread scheduling? Illustrate with an example.
- B. Explain process of create a thread by two different mechanisms. Also explain thread Life cycle.

**Q.3. Answer the followings any one.**

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- A. What is Java constructor? Why it is created and how it is use explain with example.
  - B. Define an abstract class. How is it different from an interface? Write a program to illustrate.
  - C. Explain the different uses of the final keyword in Java with suitable examples.
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