

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(MID SEMESTER EXAMINATION)**

**CLASS: BCA  
BRANCH: BCA**

**SEMESTER: III  
SESSION: MO/2025**

**SUBJECT: CN201 JAVA PRORAMMING**

**TIME: 02 Hours**

**FULL MARKS: 25**

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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|--------|----------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| Q.1(a) | Differentiate between procedure-oriented programming and object-oriented programming.                                                  | [2] | 2 2 |
| Q.1(b) | Describe the operators in Java (arithmetic, relational, logical, assignment, increment/decrement, ternary, and bitwise) with examples. | [3] | 3 3 |
| Q.2(a) | Describe the structure of a simple Java program with an example.                                                                       | [2] | 2 2 |
| Q.2(b) | Discuss Java control structures in detail with syntax and examples.                                                                    | [3] | 3 3 |
| Q.3(a) | What is the difference between expression and null statements?                                                                         | [2] | 1 1 |
| Q.3(b) | Describe exception handling in Java. Write a program using try-catch-finally.                                                          | [3] | 3 3 |
| Q.4(a) | Explain the usage of break, continue, and return statements.                                                                           | [2] | 1 1 |
| Q.4(b) | Write a program using arrays to perform matrix addition.                                                                               | [3] | 3 3 |
| Q.5(a) | Explain declaration, definition, and calling of functions in Java with example.                                                        | [2] | 1 1 |
| Q.5(b) | Explain different ways of passing arguments to methods in Java with example.                                                           | [3] | 2 2 |

:::16/09/2025 :::E