



# CBCS SCHEME

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18CS653

## Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024 Programming in Java

Time: 3 hrs.

Max. Marks: 100

**Note:** Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Explain the primitive data types in Java. (10 Marks)  
b. What is an array? How single dimensional and multi dimensional arrays defined in Java with an example. (10 Marks)

OR

- 2 a. Explain scope and lifetime of variables with an example. (08 Marks)  
b. Explain Java class Libraries. (04 Marks)  
c. Explain the blocks of code. (08 Marks)

### Module-2

- 3 a. Explain selection statements in Java with an example. (10 Marks)  
b. Explain jump statements in Java with an example. (10 Marks)

OR

- 4 a. Explain bitwise logical operators in Java with an example. (08 Marks)  
b. Explain ternary operator in Java with an example. (04 Marks)  
c. Explain switch statements in Java with an example. (08 Marks)

### Module-3

- 5 a. Explain the use of static and final keywords in Java with an example. (10 Marks)  
b. Explain the process of creating multilevel hierarchy with an example program. (10 Marks)

OR

- 6 a. What is inheritance? Explain the types of inheritance with an example program. (08 Marks)  
b. Explain overloading the constructor with an example program. (08 Marks)  
c. Explain dynamic method dispatch in Java. (04 Marks)

### Module-4

- 7 a. What is an exception? Describe the working of nested try block with an example. (08 Marks)  
b. Explain check and unchecked exceptions. (08 Marks)  
c. Explain chained exception with an example program. (04 Marks)

OR

- 8 a. Illustrate the following :  
i) Access protection  
ii) Importing packages. (10 Marks)  
b. Explain throw, throws and finally keywords in Java with example program. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

**Module-5**

- 9 a. With examples, illustrate the following operations on strings :
- i) String comparison
  - ii) String search
  - iii) Modifying string
  - iv) Changing the case of characters. (10 Marks)
- b. Explain StringBuffer and StringBilder class in Java. (10 Marks)

**OR**

- 10 a. What is an applet? Explain the program in an applet with a skeleton code. (10 Marks)
- b. What is stream? Explain the types of stream along with their specific classes and methods. (10 Marks)

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