



CBCS SCHEME

21CS654

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025 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. What are the three fundamental principles of Object Oriented Programming (OOP)? (10 Marks)
- b. Illustrate the difference between type conversion and type casting with examples. (10 Marks)

OR

- 2 a. What is meant by scope of a variable? Explain the importance of scope operator with example. (10 Marks)
- b. Write a java code to read two numbers and display their sum, product and difference. (10 Marks)

Module-2

- 3 a. Explain two looping statements available in Java with examples. (10 Marks)
- b. Explain where ladder if-else statements would be more appropriate than switch statement with an example. (10 Marks)

OR

- 4 a. Demonstrate with an example the use of 'continue' and 'break' statements in while loop. (10 Marks)
- b. Explain the use of switch statement with an example. Also emphasise on the significance of 'default' case in switch statement. (10 Marks)

Module-3

- 5 a. Explain the concept of reference passing when using objects as parameters, with an example. (10 Marks)
- b. What is the use of static keyword in Java explain with an example. (10 Marks)

OR

- 6 a. What is method over loading? Explain with example. (10 Marks)
- b. What is a stack? Implement a stack in Java with push, pop and peep methods. (10 Marks)

Module-4

- 7 a. How do you create a user defined package in Java? Explain with an example. (10 Marks)
- b. What is the purpose of 'try' block in exception handling? Also explain the role of finally block in exception handling. (10 Marks)

OR

- 8 a. What is an Interface? How do you define an interface in Java? Explain with example. (10 Marks)
- b. What is exception hierarchy in Java? Explain with an example. (10 Marks)

Module-5

- 9 a. Explain the following :
(i) Enumeration
(ii) Type wrappers (10 Marks)
- b. What is string literal and how is it treated in Java? Why does Java automatically create string objects from string literals? (10 Marks)

OR

- 10 a. What is the difference between string buffer and string builder? Explain with an example. (10 Marks)
- b. List and explain any four string method which can be used to modify a given string. (10 Marks)
