



II Semester B.C.A. Examination, June/July 2025
(SEP)

24 BCA 22 : OBJECT ORIENTED PROGRAMMING USING JAVA

Time : 3 Hours

Instruction : Answer all questions.

SECTION – A

I. Answer **any eight** of the following : **(2×8=16)**

- 1) Define object-oriented programming.
- 2) What are wrapper classes in Java ?
- 3) Write differences between C and Java.
- 4) What is method overloading ?
- 5) List any two built-in packages in Java.
- 6) What is type casting ?
- 7) What is the use of 'this' keyword in Java ?
- 8) Differentiate between applet and application.
- 9) Name any two event listener interfaces in Java.
- 10) What is a checked exception ? Give an example.

SECTION – B

II. Answer **any four** of the following : **(6×4=24)**

- 11) Explain different operators in Java with examples.
- 12) Explain types of inheritance supported in Java with examples.
- 13) What is an interface ? Explain with an example.
- 14) Illustrate with an example the use of try-catch-finally for exception handling.
- 15) Explain life cycle of a thread with a diagram.
- 16) What are the different types of I/O streams in Java ?



SECTION – C

III. Answer any five of the following : (8x5=40)

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| 17) a) Explain the structure of a basic Java program with an example. | 4 |
| b) Describe any four methods of string class. | 4 |
| 18) a) Write a Java program to demonstrate branching using if-else. | 4 |
| b) Explain different types of loops in Java with examples. | 4 |
| 19) a) What are packages in Java ? Explain their advantages. | 4 |
| b) How do you create and import a user-defined package in Java ? | 4 |
| 20) a) Explain any two layout managers in Java with examples. | 4 |
| b) Describe the use of buttons and labels in Java GUI programming. | 4 |
| 21) a) Explain the applet life cycle methods with their significance. | 5 |
| b) Write a simple Java applet code to display “Hello, Java Applet”. | 3 |
| 22) a) Differentiate between multithreading and multitasking. | 4 |
| b) Explain how synchronization is implemented in Java with an example. | 4 |
| 23) a) What is generic programming in Java ? Give an example. | 4 |
| b) Discuss the importance of Java Beans in Java Programming. | 4 |