

CBCS SCHEME - Make-Up Exam

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BIS402

Fourth Semester B.E/B.Tech. Degree Examination, June/July 2025

Advanced Java

Max. Marks:100



Time: 3 hrs

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

| Module – 1 | | | M | L | C |
|------------|----|---|----|----|-----|
| 1 | a. | What is collection framework? Explain any four methods defined by the collection interface. | 8 | L1 | CO1 |
| | b. | Demonstrate ArrayList class for collection with an example. | 6 | L2 | CO1 |
| | c. | Write the syntax declaration of Queue interface and explain any four methods defined by Queue. | 6 | L2 | CO1 |
| OR | | | | | |
| 2 | a. | Explain the constructors of TreeSet with example. | 6 | L1 | CO1 |
| | b. | Explain Hashmap with example. | 6 | L2 | CO1 |
| | c. | What is Legacy classes? Explain the different legacy classes with a java program. | 8 | L2 | CO1 |
| Module – 2 | | | | | |
| 3 | a. | What is string in Java? Explain the different constructors of string class. | 8 | L2 | CO2 |
| | b. | Explain the difference between equals and == with example. | 4 | L2 | CO2 |
| | c. | Explain the string comparison function with suitable example. | 8 | L2 | CO2 |
| OR | | | | | |
| 4 | a. | Explain the following StringBuffer methods with an example : (i) append () (ii) insert () (iii) remove () (iv) replace () | 8 | L2 | CO2 |
| | b. | Write a java program to sort names in bubble sort. | 6 | L3 | CO2 |
| | c. | Write a program to remove duplicate characters from a given string and display the resultant string. | 6 | L3 | CO2 |
| Module – 3 | | | | | |
| 5 | a. | What are the two key swing features? Explain. | 4 | L2 | CO3 |
| | b. | Write a simple swing application contains JFrame and JLabel and explain each line. | 10 | L2 | CO3 |
| | c. | Describe delegation event model. Write a program to demonstrate event handling in a swing. | 6 | L3 | CO3 |

| OR | | | | | |
|------------|----|--|----|----|-----|
| 6 | a. | Describe the different types of swing buttons. | 10 | L2 | CO3 |
| | b. | What is difference between swing and AWT? | 4 | L2 | CO3 |
| | c. | Write a program to demonstrate a check boxes and Radio Button. | 6 | L3 | CO3 |
| Module – 4 | | | | | |
| 7 | a. | Explain the Life Cycle of Servlet. | 6 | L2 | CO4 |
| | b. | Write a Servlet program to accept parameter from HTML (username and password) and display. | 8 | L3 | CO4 |
| | c. | Describe the core interfaces that are provided in Jakarta.Servlet.http. package. | 6 | L2 | CO4 |
| OR | | | | | |
| 8 | a. | What is JSP? Explain the various types of JSP tags with example. | 6 | L2 | CO4 |
| | b. | Describe the various steps in JDBC with code snippets. | 8 | L2 | CO4 |
| | c. | Explain sessions and cookies in JSP. | 6 | L2 | CO4 |
| Module – 5 | | | | | |
| 9 | a. | What is JDBC? Explain the different JDBC driver types. | 10 | L2 | CO5 |
| | b. | What is statement object in JDBC? Explain the following statement objects with example : (i) Prepared statement (ii) Callablestatement | 10 | L2 | CO5 |
| OR | | | | | |
| 10 | a. | What is Connection pooling? Explain connection pooling with neat diagrams with code snippets. | 10 | L2 | CO5 |
| | b. | Write a note on : (i) Transaction Processing in JDBC. (ii) Types of Exceptions occurred in JDBC. | 10 | L2 | CO5 |
