

USN BIS402

Fourth Semester B.E./B.Tech. Degree Supplementary Examination, June/July 2024

Advanced Java

Time: 3 hrs.

Max. Marks: 100

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 |
|-----|----|---|----|----|-----|
| Q.1 | a. | What is collection framework? Explain the methods defined by the collection interface with an example. | 10 | L2 | C01 |
| | b. | Implement a java program to illustrate storing user defined classes in collection. | 10 | L3 | COI |
| | | OR | | | |
| Q.2 | a. | What are comparators? Develop a java program to demonstrate the working of a comparator. | 10 | L3 | CO1 |
| | b. | Explain any four legacy collection in framework. | 10 | L2 | COI |
| | | Module – 2 | | | |
| Q.3 | a. | What is a string? Explain the string constructors with suitable programming example. | 10 | L2 | CO2 |
| | b. | Write a java program to remove duplicate characters from a given string "JAVA J2EE" and display the resultant string. | 10 | L3 | CO2 |
| | - | OR • | | | |
| Q.4 | a. | Implement a java program to illustrate the use of different types of StringBuffer methods. | 10 | L3 | CO2 |
| | b. | Explain the following string methods with an example: i) getChars() ii) regionMatches() iii) Concat() iv) CompareTo() v) LastIndexOf() | 10 | L2 | CO2 |
| | 1 | Module – 3 | | | |
| Q.5 | a. | What are Swings in Java? Explain two key swing features and also explain MVC architecture. | 10 | L2 | CO3 |
| | b. | Demonstrate a swing event handling application that creates 2 buttons Alpha and Beta and displays the text "Alpha pressed" when alpha button is clicked and "Beta pressed" when beta button is clicked. | 10 | L3 | CO3 |
| | | 1 of 2 | | | |

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| | | OR | | | |
| Q.6 | a. | Explain the following with example: i) JLabel and ImageIcon ii) JTextField. | 10 | L3 | CO3 |
| | b. | What is the difference between checkboxes and radiobuttons? Create a simple application that enables a user to select one of the following items: i) Radio1 ii) Radio2 iii) Radio3 iv) Radio4. | 10 | L2 | CO3 |
| | | Module – 4 | | | |
| Q.7 | a. | What is servlet? Explain the life cycle of servlets. | 8 | L2 | CO4 |
| | b. | Write a Java servlet program that demonstrates how parameters can be accessed from HTML. | 12 | L3 | CO4 |
| | | OR | | | |
| Q.8 | a. | What is JSP? Explain the various types of JSP tags with example. | 10 | L2 | CO4 |
| | b. | A Java program to create and read the cookie for the given cookie name as "EMPID" and its value as "AN2356". | 10 | L3 | CO4 |
| | | Module – 5 | | | |
| Q.9 | a. | Explain the different steps involved in JDBC with code snippets. | 10 | L2 | CO5 |
| | b. | Explain the four types of JDBC driver types. | 10 | L2 | CO5 |
| | | OR | | | |
| Q.10 | a. | Write a java program to insert data into student DATABASE and retrieve information based on particular queries (Explain update, delete, search). | 10 | L3 | COS |
| | b. | Write a short notes on: i) Resultset ii) Transaction processing. | 10 | L2 | COS |

