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| **ANSWER ALL QUESTIONS**  **Part – A (10 x 02 = 20 Marks)** | | **BT** | **CO** | **Marks** |
| 1 | Demonstrate the purpose of the finally block in Java exception handling. Provide an example scenario where the finally block would be useful. | AN | C3O1.2 | 2 |
| 2 | Difference between HashSet and TreeSet in the Java Collection framework. | U | C3O1.2 | 2 |
| 3 | Demonstrate the significance of the hashCode() and equals() methods when working with HashMap? | U | C3O1.2 | 2 |
| 4 | What is multithreading, and why is it important in concurrent programming? | R | C3O1.3 | 2 |
| 5 | What are the different states in the thread life cycle in Java. | R | C3O1.3 | 2 |
| 6 | How can you create a JButton in a Swing application, and what role does it play in user interactions? | R | C3O1.3 | 2 |
| 7 | Write the different methods of session tracking. | U | C3O1.4 | 2 |
| 8 | What is the purpose of the web.xml file in a servlet-based web application ? | U | C3O1.4 | 2 |
| 9 | Explain the steps to load a JDBC driver in a Java program and establish a connection to a database using the DriverManager class. | U | C3O1.5 | 2 |
| 10 | Interpret the concept of a JDBC URL, and how is it used to specify the database connection details in a Java program? | AP | C3O1.5 | 2 |