

1. What will happen in the following hibernate code, if account a with id=100 exists in DB, with balance=5000?

Correct Answer:

Balance will be 7000

Explanation: The balance is set to 7000 before committing the transaction, and the commit will persist the changes. The second change to 8000 will not be persisted since the transaction is already committed.

2. How many ServletConfig & ServletContext objects will be created by the web container?

Correct Answer:

One per servlet & one per web application

Explanation: ServletConfig is created per servlet, while ServletContext is created per web application.

3. Which of the following attributes are inherently thread-unsafe?

Correct Answer:

Session-scoped attributes and Application-scoped attributes

Explanation: These scopes are shared across different users/requests and hence are not thread-safe.

4. What will happen in the following code, when you bootstrap hibernate?

Correct Answer:

Table will be created with only id and code columns.

Explanation: The `@Transient` annotation ensures that `stockDesc` will not be mapped to a column in the database.

5. If you want to delete user details using JDBC API, which of the following is correct?

Correct Answer:

PreparedStatement with `executeUpdate()`

Explanation: To delete records, you use `executeUpdate()` with `PreparedStatement` for safe execution.

6. What can be said regarding the `saveOrUpdate` method of Hibernate?

Correct Answer:

A & B (It can cause a transition from transient to persistent entity, and it can cause a transition from detached to persistent entity)

Explanation: The `saveOrUpdate` method in Hibernate can handle both transient and detached entities.

7. While using request chaining scenario in page navigation, which should be the minimum scope of server-side attributes?

Correct Answer:

Request scope

Explanation: Request-scoped attributes are passed when forwarding requests via request dispatchers. Session scope would not be necessary for this use case.

8. Which default fetching policy does JPA use for one-to-one & one-to-many?

Correct Answer:

Eager & Lazy

Explanation: By default, JPA uses eager fetching for OneToOne associations and lazy fetching for OneToMany associations.

9. Which of the following is true in a redirect or forward scenario?

Correct Answer:

In request dispatcher scenario, minimum scope of attributes must be session scope.

Explanation: For forwarding between JSPs, session scope is required to persist attributes across requests.

10. Consider the following code with JSPs:

Correct Answer:

Age: 25, Height: 160cm

Explanation: The requestScope.age will not be available after redirect because the request scope is cleared during redirect. However, the sessionScope.height will still be available.

11. Which of the following is deprecated API?

Correct Answer:

SingleThreadModel

Explanation: SingleThreadModel is deprecated in servlet API because it's not recommended for scalable web applications.

12. Which of the following is vulnerable to SQL Injection attack?

Correct Answer:

Statement

Explanation: Statement is vulnerable to SQL injection because user input is directly concatenated into the query. PreparedStatement is safe against this.

13. Which of the following is not directly accessible via EL syntax?

Correct Answer:

Session

Explanation: sessionScope can be accessed via EL, but the session object itself is not directly accessible.

14. Which of the following will be the output if a request is sent to test1.jsp?

Correct Answer:

Age: 25, Height: 160cm

Explanation: requestScope.age will be available in test1.jsp while sessionScope.height will be available in test2.jsp after redirection.

15. How many times will the TestBean be instantiated if 10 clients access index.jsp?

Correct Answer:

1 time

Explanation: The TestBean is stored in the application scope, which is shared across all sessions. It will be instantiated only once.

16. What will happen if account a with id=100 exists in DB with balance=5000 and the balance is updated?

Correct Answer:

Balance will be 7000

Explanation: The commit happens before setting the balance to 8000. Thus, the transaction is already finalized, and the balance remains at 7000.

17. Which default fetching policy does JPA use for one-to-one & one-to-many?

Correct Answer:

Eager & Lazy

Explanation: OneToOne is eager by default, while OneToMany is lazy by default.

18. Which of the following attributes are inherently thread-unsafe?

Correct Answer:

Session-scoped attributes and Application-scoped attributes

Explanation: Session and application scoped attributes are shared across threads and requests, making them thread-unsafe.

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19. What will happen if client sends the following request to test1.jsp?

Correct Answer:

Age: 25, Height: 160cm

Explanation: requestScope.age will be available in test1.jsp, and sessionScope.height will be available in test2.jsp after the redirect.

20. Which of the following is true about Hibernate cache?

Correct Answer:

L1 Cache is implicitly enabled in Hibernate.

Explanation: L1 cache is enabled by default for each session in Hibernate, whereas L2 and query cache need to be explicitly enabled.