

1.ResultSet is Updatable by default(true or false)

- A) true
- B) false

2.Which isolation level prevents only dirty read in JDBC, connection class.

- A) TRANSACTION_READ_UNCOMMITTED
 - B) TRANSACTION_READ_COMMITTED
 - C) TRANSACTION_SERIALIZABLE
 - D) TRANSACTION_REPEATABLE_READ
- A) A
B) B
C) C
D) D

3.Which of the following is correct about rs.absolute(5) ,
where rs is a reference of ResultSet?

- A) Move cursor to fifth row from the end of the resultset
- B) Move cursor to the fifth row
- C) Move cursor to the sixth row
- D) runtime error

4.Re arrange the steps in a correct order to execute a ResultSet?

- A. Processing the ResultSet
- B. Connecting to database
- C. Executing the SQL Query
- D. Registering the driver

- A) C--->B--->D--->A
- B) C--->A--->B--->A
- C) D--->B--->C--->A
- D) B--->D--->C--->A

5.For executing a sql query multiple times, PreparedStatement provides better performance than Statement object?

- A) true
- B) false

6.Which Statement method allows us to execute dynamic sql queries, and returns boolean value.

- A. executeUpdate();
 - B. executeQuery();
 - C. execute();
- A) A
B) B
C) C

7.Determine output

```
public class JDBCdemo {
public static void main(String[] args) {
String sql = "select * from employee";
try{
Class.forName("oracle.jdbc.driver.OracleDriver");
Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE","HR","HR");
Statement st = con.createStatement();
ResultSet rs = st.executeQuery(sql);
while(rs.next()){
System.out.println(rs.getInt(0));
}
}
catch(ClassNotFoundException |SQLException e){
System.out.println(e.getMessage());
}
}
```

```
}  
A) null  
B) No Data Found  
C) Compilation fails  
D) Invalid column index
```

8. Which Exceptions should be replaced by ? for the code to compile?

```
class Test{  
public static void main(String args[]) throws {  
try{  
Class.forName("oracle.jdbc.OracleDriver");  
Connection con = DriverManager.getConnection(  
"jdbc:oracle:oci8:@localhost:1521/XE", "hr", "hr");  
}
```

```
catch(? e){ }  
catch(? e){ }  
}  
}
```

A) ClassNotFoundException, SQLException
B) ClassCastException, SQLException
C) Exception, SQLException
D) ClassCastException, ClassNotFoundException

9. What happens if you call the method close() on a ResultSet object?

[A] the method close() does not exist for a ResultSet. Only Connections can be closed.
[B] the database and JDBC resources are released
[C] you will get a SQLException, because only Statement objects can close ResultSets
[D] the ResultSet, together with the Statement which created it and the Connection from which the Statement was retrieved, will be closed and release all database and JDBC resources

A) A
B) B
C) C
D) D

10. Which of the following Interface provides method for finding the maximum number of connections that a specific driver can obtain?

A. Database
B. Connection
C. DatabaseMetaData
D. ResultSetMetaData

A) A
B) B
C) C
D) D

11. How can you execute a stored procedure in the database?

A) Call method execute() on a CallableStatement object
B) Call method executeProcedure() on a Statement object
C) Call method execute() on a StoredProcedure object
D) Call method run() on a ProcedureCommand object

12. Which type of Statement can execute parameterized queries?

A) PreparedStatement
B) ParameterizedStatement
C) ParameterizedStatement and CallableStatement
D) All kinds of Statements

13.DriverManager.getConnection(_____)?

Fill up the blank.

- A) getConnection(String url)
- B) getConnection(String url, Properties info)
- C) getConnection(String url, String user, String password)
- D) All of the above mentioned

14.setAutoCommit(boolean autoCommit) is method of _____ Interface

- A) ResultSet
- B) Connection
- C) Statement
- D) HttpSession

15.Which result set generally does not show changes to the underlying database that are made while it is open. The membership, order, and column values of rows are typically fixed when the result set is created?

- A) TYPE_FORWARD_ONLY
- B) TYPE_SCROLL_INSENSITIVE
- C) TYPE_SCROLL_SENSITIVE
- D) ALL MENTIONED ABOVE

16.Which type of ResultSet can be navigated in both directions and will reflect the changes made to the underlying data in the Database?

- A) TYPE_FORWARD_ONLY
- B) TYPE_SCROLL_INSENSITIVE
- C) TYPE_SCROLL_SENSITIVE
- D) ALL MENTIONED ABOVE

17.If conn is the Connection Object, What will happen if the following line of code gets executed:

conn.setAutoCommit(false);

- A) SQL statement is treated as a transaction and is automatically committed
- B) SQL statement is treated as a transaction and manually needs to be committed
- C) both a & b
- D) none of the above

18.AutoCommit, rollback,Savepoint all this methods belong to _____

- A) DriverManager
- B) Connection Interface
- C) Statement
- D) ResultSet

19.Which method of ResultSet can be used to jump to the third row in the database"

- A) rs.next(3)
- B) rs.moveTo(3)
- C) rs.getXXX(3)
- D) rs.absolute(3)
- E) none of the above

19.How to get Warning from Statement?

- A) getWarnings()
- B) getWarningsFromStatement()
- C) getNextWarning()
- D) None of the above mentioned

20.Choose the incorrect option for Singleton pattern

- A) Provide a default Private constructor.
 - B) Define a static Private object instance.
 - C) The client should be independent of how the products are created
 - D) Make the access method synchronized to prevent Thread problems.
 - E) Override the object clone method to prevent cloning.
- A) A
B) B

- C) C
- D) D
- E) E

21. Choose the incorrect statement about SingleThreadModel.

- A. It is used to ensure that servlet can handle only one request at a time.
 - B. It is a marker interface
 - C. It solves all the thread-safety issues
- A) A
 - B) B
 - C) C

22. Design Pattern in which we separate abstraction and its implementation?

- A) Decorator Pattern
- B) Adapter Pattern
- C) Bridge Pattern
- D) Creational Pattern

23. In the Publish-Subscribe messaging model, the subscribers register themselves in a topic and are notified when new messages arrive to the topic. Which pattern does most describe this model?

- A) Adapter
- B) Notifier
- C) Observer
- D) State

24. It is known as Action or Transaction and is used to encapsulate a request as an object to support rollback,

logging, or transaction functionality

- A) Chain of Responsibility Pattern
- B) Command Pattern
- C) Observer Pattern
- D) Strategy Pattern

25. Iterator Pattern is a type of _____

- A) Creational Patterns
- B) Behavioral Patterns
- C) Structural Patterns

26. What are the consequences of applying the abstract factory pattern?

- A. it will be much easier to introduce new family of products
 - B. it makes it easier for a certain family of objects to work together
 - C. it makes it easier for the client to deal with tree-structured data
 - D. it makes the designed product families exchangeable
- A) A,C
 - B) C,D
 - C) B,D
 - D) D,A

27. When would you use the Singleton design pattern?

- A. to limit the class instantiation to one object
 - B. to provide global access to one instance across the system
 - C. to ensure that a certain group of related objects are used together
 - D. to abstract steps of construction of complex objects
- A) A
 - B) A,B
 - C) A,B,C
 - D) A,B,D

28. Which Design Pattern provides a way to access the elements of an aggregate object sequentially without exposing its underlying representation.

- A) Iterator
- B) Command
- C) Observer
- D) Strategy

29. Which design pattern would you use to decouple the creation procedure of a complex object from its concrete instance to be able to apply that procedure on a variety of implementations.

- A) Factory builder design pattern
- B) Method Builder design pattern
- C) Builder design pattern
- D) Factory method design pattern

30. Which design pattern would you use to limit the class instantiation to one object?

- A) Builder design pattern
- B) Factory Method Design Pattern
- C) Prototype design pattern
- D) Singleton design pattern

31. Which of the following patterns works as a bridge between two incompatible interfaces?

- A - Builder Pattern
 - B - Adapter Pattern
 - C - Prototype Pattern
 - D - Filter Pattern
- A) A
 - B) B
 - C) C
 - D) D

32. You want to create families of related objects, to be used interchangeably to configure your application. What is the most appropriate pattern to use?

- A) Factory
- B) Builder
- C) Abstract Factory
- D) Composite

33. Which is incorrect about AbstractFactory Pattern?

- A. Application should be configured with one of the multiple families of products.
 - B. To be compatible, objects should be created as a set.
 - C. These are concerned with how to form larger structures by composing classes and objects.
 - D. You want to provide a collection of classes, and reveal just their contracts, and relationships, not their implementations.
- A) A
 - B) B
 - C) C
 - D) D

34. Which type of driver provides JDBC access via one or more ODBC drivers?

- (a) Type 1 driver
- (b) Type 2 driver
- (c) Type 3 driver
- (d) Type 4 driver

35. How can you execute DML statements (i.e. insert, delete, update) in the database?

- (a) By making use of the InsertStatement, DeleteStatement or UpdateStatement classes

- (b) By invoking the execute(...) or executeUpdate(...) method of a normal Statement object or a sub-interface object thereof
- (c) By invoking the executeInsert(...), executeDelete(...) or executeUpdate(...) methods of the DataModificationStatement object
- (d) By making use of the execute(...) statement of the DataModificationStatement object

36. How do you know in your Java program that a SQL warning is generated as a result of executing a SQL statement in the database?

- (a) You must catch the checked SQLException which is thrown by the method which executes the statement
- (b) You must catch the unchecked SQLWarningException which is thrown by the method which executes the statement
- (c) You must invoke the getWarnings() method on the Statement object (or a sub interface thereof)
- (d) You must query the ResultSet object about possible warnings generated by the database

37. What is, in terms of JDBC, a DataSource?

- (a) A DataSource is the basic service for managing a set of JDBC drivers
- (b) A DataSource is the Java representation of a physical data source
- (c) A DataSource is a registry point for JNDI-services
- (d) A DataSource is a factory of connections to a physical data source

38. What is the meaning of ResultSet.TYPE_SCROLL_INSENSITIVE

- (a) This means that the ResultSet is insensitive to scrolling
- (b) This means that the ResultSet is sensitive to scrolling, but insensitive to updates, i.e. not updateable
- (c) This means that the ResultSet is sensitive to scrolling, but insensitive to changes made by others
- (d) The meaning depends on the type of data source, and the type and version of the driver you use with this data source

39. Are ResultSets updateable?

- (a) Yes, but only if you call the method openCursor() on the ResultSet, and if the driver and database support this option
- (b) Yes, but only if you indicate a concurrency strategy when executing the statement, and if the driver and database support this option
- (c) Yes, but only if the ResultSet is an object of class UpdateableResultSet, and if the driver and database support this option
- (d) No, ResultSets are never updateable. You must explicitly execute DML statements (i.e. insert, delete and update) to change the data in the underlying database

40. How can you start a database transaction in the database?

- (a) By asking a Transaction object to your Connection, and calling the method begin() on it
- (b) By asking a Transaction object to your Connection, and setting the autoCommit property of the Transaction to false
- (c) By calling the method beginTransaction() on the Connection object
- (d) By setting the autoCommit property of the Connection to false, and execute a statement in the database

41. What is the meaning of the transaction isolation level

TRANSACTION_REPEATABLE_READ

- (a) Dirty reads, non-repeatable reads and phantom reads can occur
- (b) Dirty reads are prevented; non-repeatable reads and phantom reads can occur
- (c) Dirty reads and non-repeatable reads are prevented; phantom reads can occur

(d) Dirty reads, non-repeatable reads and phantom reads are prevented

42. What statements are correct about positioned updates (i.e. cursor updates) in ResultSets? (2 correct answers)

- [a] Using the cursor technique is currently the only possible way to change the data in the current row of a ResultSet
- [b] Insert statements are only supported when using scrollable cursors.
- [c] Only scrollable updateable ResultSets can use this approach to change the data in the current row of a ResultSet
- [d] The name of the cursor is specified by the setCursorName(String name) method the Statement object.

43. How can you execute a stored procedure in the database?

- (a) Call method execute() on a CallableStatement object
- (b) Call method executeProcedure() on a Statement object
- (c) Call method execute() on a StoredProcedure object
- (d) Call method run() on a ProcedureCommand object

44. What happens if you call the method close() on a ResultSet object?

- (a) the method close() does not exist for a ResultSet. Only Connections can be closed.
- (b) the database and JDBC resources are released
- (c) you will get a SQLException, because only Statement objects can close ResultSets
- (d) the ResultSet, together with the Statement which created it and the Connection from which the Statement was retrieved, will be closed and release all database and JDBC resources

45. What statements are correct about batched insert and updates? (2 answers)

- [a] To create a batch of insert and update statements, you create an object of type Batch, and call the method addStatement(String statement) for each statement you want to execute in the batch
- [b] Batch insert and updates are only possible when making use of parameterized queries.
- [c] To do a batched update/insert, you call addBatch(String statement) on a Statement object for each statement you want to execute in the batch
- [d] To execute a batched update/insert, you call the executeBatch() method on a Statement object

46. What is correct about DDL statements (create, grant,...)?

- (a) DDL statements are treated as normal SQL statements, and are executed by calling the execute() method on a Statement (or a sub interface thereof) object
- (b) To execute DDL statements, you have to install additional support files
- (c) DDL statements can not be executed by making use of JDBC, you should use the native database tools for this.
- (d) Support for DDL statements will be a feature of a future release of JDBC

47. The JDBC-ODBC Bridge supports multiple concurrent open statements per connection?

- a. True
- b. False

48. Which of the following allows non repeatable read in JDBC Connection?

- a. TRANSACTION_READ_UNCOMMITTED
- b. TRANSACTION_READ_COMMITTED
- c. TRANSACTION_SERIALIZABLE
- d. TRANSACTION_REPEATABLE_READ

49. Which of the following statements is false as far as different type of statements is

concern in JDBC?

- a. Regular Statement
- b. Prepared Statement
- c. Callable Statement
- d. Interim Statement

50. To execute a stored procedure “totalStock” in a database server, which of the following code snippet is used?

- a. `Statement stmt = connection.createStatement();stmt.execute("totalStock()");`
- b. `CallableStatement clbstmt = con.prepareCall("{call totalStock}");cs.executeQuery();`
- c. `StoreProcedureStatement`
`stmt=connection.createStoreProcedure("totalStock()");spstmt.executeQuery();`
- d. `PreparedStatement pstmt = connection.prepareStatement("totalStock()");pstmt.execute();`

51. Which driver is efficient and always preferable for using JDBC applications?

- a. Type – 4
- b. Type – 1
- c. Type – 3
- d. Type – 2

52. JDBC facilitates to store the java objects by using which of the methods of `PreparedStatement`

`setObject ()` 2. `setBlob()` 3. `setClob()`

- a. 1, 2
- b. 1,2,3
- c. 1,3
- d. 2,3

53. Which statement is static and synchronized in JDBC API?

- a. `executeQuery()`
- b. `executeUpdate()`
- c. `getConnection()`
- d. `prepareCall()`

54. The JDBC-ODBC bridge is

- a. Three tiered
- b. Multithreaded
- c. Best for any platform
- d. All of the above

55. The class `java.sql.Timestamp` has its super class as

- a. `java.sql.Time`
- b. `java.util.Date`
- c. `java.util.Time`
- d. None of the above

56. Which of the following methods finds the maximum number of connections that a specific driver can obtain?

- a. `Database.getMaxConnections`
- b. `Connection.getMaxConnections`
- c. `DatabaseMetaData.getMaxConnections`
- d. `ResultSetMetaData.getMaxConnections`

57. Are prepared statements actually compiled?

- a. Yes, they compiled
- b. No, they are bound by the JDBC driver

58. When the message “No Suitable Driver” occurs?

- a. When the driver is not registered by `Class.forName()` method
- b. When the user name, password and the database does not match
- c. When the JDBC database URL passed is not constructed properly
- d. When the type 4 driver is used

59. Which driver is called as thin-driver in JDBC?

- a. Type-4 driver
- b. Type-1 driver
- c. Type-3 driver
- d. Type-2 driver

60. How many transaction isolation levels are defined in java.sql.Connection interface?

- a. 4
- b. 3
- c. 5
- d. 2