

# 15 Lecture - CS506

## Important Mcqs

Certainly, here are 10 multiple-choice questions (MCQs) related to advanced concepts in Java Database Connectivity (MoreOnJDBC), along with their solutions and multiple options:

**\*\*Question 1: What is connection pooling in JDBC used for?\***

- a) Reducing the number of database connections
- b) Increasing database security
- c) Enabling parallel query execution
- d) Implementing multi-threading

**\*\*Solution: a) Reducing the number of database connections\*\***

**\*\*Question 2: Which statement best describes a JDBC transaction?\***

- a) It is a database schema modification
- b) It is an atomic unit of work on the database
- c) It is a database connection
- d) It is an SQL statement

**\*\*Solution: b) It is an atomic unit of work on the database\*\***

**\*\*Question 3: Which interface is used to manage transactions in JDBC?\***

- a) TransactionManager
- b) TransactionHandler
- c) TransactionControl
- d) Connection

**\*\*Solution: d) Connection\*\***

**\*\*Question 4: How does a prepared statement differ from a regular statement in JDBC?\*\***

- a) Prepared statements are executed without parameters
- b) Prepared statements are pre-compiled
- c) Prepared statements can only execute SELECT queries
- d) Regular statements offer better performance

**\*\*Solution: b) Prepared statements are pre-compiled\*\***

**\*\*Question 5: What is the purpose of using batch processing in JDBC?\*\***

- a) To execute multiple SQL statements together
- b) To execute complex stored procedures
- c) To optimize database schema
- d) To establish multiple connections

**\*\*Solution: a) To execute multiple SQL statements together\*\***

**\*\*Question 6: Which method is used to add a batch of parameters to a prepared statement in JDBC?\*\***

- a) setBatchParameters()
- b) addBatch()
- c) setBatchValues()
- d) addValues()

**\*\*Solution: b) addBatch()\*\***

**\*\*Question 7: How do stored procedures enhance database security in JDBC?\*\***

- a) They prevent SQL injection attacks

- b) They require complex passwords
- c) They encrypt database connections
- d) They execute queries on the client-side

**\*\*Solution: a) They prevent SQL injection attacks\*\***

**\*\*Question 8: In JDBC, which interface is used to call stored procedures?\*\*\***

- a) CallableStatement
- b) PreparedStatement
- c) CallableProcedure
- d) Statement

**\*\*Solution: a) CallableStatement\*\***

**\*\*Question 9: What is the purpose of ResultSetMetaData in JDBC?\*\*\***

- a) It contains the actual data retrieved from the database
- b) It provides metadata about the ResultSet, like column names and types
- c) It executes SQL queries on the database
- d) It manages the database connection pool

**\*\*Solution: b) It provides metadata about the ResultSet, like column names and types\*\***

**\*\*Question 10: What is the significance of using PreparedStatement for parameterized queries in JDBC?\*\*\***

- a) It improves database performance
- b) It prevents SQL injection attacks
- c) It reduces the need for a database connection
- d) It replaces the need for the Connection interface

**\*\*Solution: b) It prevents SQL injection attacks\*\***