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) I	t prevents SQI	<mark>L injection at</mark>	tacks