

CS304

Database System Concepts

04/17/2012

Quiz 6

1. Transaction has ACID property. What does ACID stand for?

- a) Atomicity, Consistency, Independent, Durability
- b) Atomicity, Correct, Independent, Durability
- c) Atomicity, Consistency, Isolation, Durability
- d) Atomicity, Correct, Isolation, Durability

2. Which two instructions don't conflict?

- a) $I_1 = \text{read}(Q)$ $I_2 = \text{write}(Q)$
- b) $I_1 = \text{write}(Q)$ $I_2 = \text{write}(Q)$
- c) $I_1 = \text{write}(Q)$ $I_2 = \text{read}(Q)$
- d) $I_1 = \text{read}(Q)$ $I_2 = \text{read}(Q)$

3. Which statement about the schedule in the figure is **NOT** correct?

- a) It's view serializable
- b) It's conflict serializable
- c) It contains blind write
- d) It's view equivalent to a serial schedule

T_{27}	T_{28}	T_{29}
read (Q)	write (Q)	write (Q)
write (Q)		

4. If only committed records can be read, and repeated reads of same record must return same value. Which level of consistency does above statement indicate?

- a) Serializable
- b) Repeatable read
- c) Read committed
- d) Read uncommitted

5. If all locks are held till commit/abort, then the locking protocol is:

- a) Two-Phrase Locking Protocol
- b) Strict Two-Phrase Locking Protocol
- c) Rigorous Two-Phrase Locking Protocol
- d) None of above

6. Which lock mode isn't IS compatible with?

- a) IS
- b) IX
- c) SIX
- d) X

7. In wait-die scheme, what will older transaction do if some item held by younger transaction?

- a) rollback itself
- b) wound younger transaction
- c) wait for younger transaction
- d) None of above

8. In multiple granularity locking scheme, what lock mode shall the parent have if we want to lock its children by S lock?

- a) IX or IS
- b) IX or SIX
- c) S or X
- d) None of above

9. In timestamp-based protocol, what will happen if $TS(T_i) < R\text{-timestamp}(Q)$ and T_i issues write(Q)?

- a) the write operation is executed
- b) T_i rolls back
- c) R-timestamp(Q) is updated
- d) W-timestamp(Q) is updated

10. How many phases is in validation-based protocol?

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