Database Management Systems

UNIT-05_(MCQ)

1. Transaction is defined as ……
   - **A. Collection of operation that form a single logical unit of work**
   - B. Collection of operation that form a multiple logical unit of work
   - C. a unit of program execution that not accesses and possibly updates various data items.
   - D. Collection of operation that form a two logical unit of work

2. Atomicity is referred to……
   - **A. Either all operations of the transaction are reflected properly in the database or none are.**
   - B. All operations are not reflected properly in the database
   - C. all operations of the transaction are isolation from each other
   - D. Both A & B

3. Which is not a state of transaction:
   - A. Committed
   - B. Failed
   - C. Aborted
   - **D. Partially Active**

4. Which is not an advantage of concurrent execution:
   - A. Increase the processor and disk utilization
   - B. Increase throughput
   - C. Reduce average response time
   - **D. Reduce throughput**

5. Concurrency control is used……..
   - A. Achieve isolation
   - B. Main consistency of database
   - C. Disk utilization
   - **D. Both A & B**

6. A serializable schedule is one that …….
   - A. Always take the database in the consistency state
   - **B. Always leaves the database in the consistency state**
   - C. Both A&B
   - D. None of the above

7. Stable storage implementation includes……..
   - **A. Maintaining multiple copies of each block in separate disk**

B. Maintaining a single copy of each book in a single disk
C. Maintaining a multiple copies of each book in a single disk
D. Maintaining a single copy of each book in a separate disk

8. Dirty read problems occur at …….
   A. **When one transaction updates an item of a database transaction fails before getting rollback**.
   B. When one transaction delete an item of a database transaction fails before getting rollback
   C. When one transaction create an item of a database transaction fails before getting rollback
   D. When one transaction insert an item of a database transaction fails before getting rollback
9. Exclusive-lock transactions can…….
   A. Read
   B. Write
   C. Both read and write
   D. None of the above
10. When a deadlock occurs……..
   A. when a set of processes are in a wait state
   B. two or more transactions are waiting for one another to give up locks
   C. when two (or more) processes lock the separate resource
   D. All of the above

11. What are the two phases in two phase locking protocol
   A. Growing phase
   B. Shrinking phase
   C. Both a & b
   D. None of the above
12. Lock table is used for……..
   A. Record granted locks and pending requests
   B. Releases all locks held by the aborted transaction.
   C. Deleting the record for that data item in the linked list corresponding to that transaction.
   D. All of the above

13. What are the two timestamp based deadlock prevention mechanism
   A. Wait-die scheme
   B. Wound-wait scheme
   C. Wait-die scheme & Wound-wait scheme
   D. Timeout-Based Schemes

14. Buffer blocks……..
    A. Residing temporarily in main memory
    B. Residing temporarily in disk
    C. The area of memory where blocks reside temporarily.
    D. None of the above
15. Fuzzy checkpoints…….
    A. checkpoint where transactions are allowed to perform updates even while buffer blocks are being written out.
    B. reduce the time it takes to checkpoint the database.
    C. undo all incomplete transactions.
    D. Both A&B
16. Redo phase operation of system recovery……
    A. replay updates of all transactions, whether they committed, aborted, or are incomplete.
    B. undo all incomplete transactions.
    C. Scan log backwards from end
    D. None of the above