

1. Which operation transfers the data item from the database to a local buffer belonging to the transaction (a) Read (b) Atomicity (c) Write (d) Durability
2. Overlapping I/O and CPU activity reduces the amount of time disks and processors are idle and increase (a) System Time (b) System Throughput (c) Delay (d) Execution Time
3. A transaction holds an exclusive lock on when it wants to modify (a) Object (b) Block (c) Method (d) Client
4. Writing a page to disk is an action in atomic writes (a) Duplicate (b) Redundancy (c) Atomic (d) Read
5. WAL stands for (a) With Ahead Log (b) Write Among Loss (c) Write Ahead Log (d) Write Ahead Loss
6. A schedule is conflict serializable if it is to some serial schedule (a) Conflict serializable (b) View serializable (c) Conflict equivalent (d) View equivalent
7. Exclusive lock can be applicable to operation (a) Read (b) Changes (c) Modified (d) Write
8. Which one can be used to ensure that at most one transaction is in its Validation/Write phases at any time (a) Subsection (b) Critical section (c) Mutual section (d) Primary section
9. The compensation log record also contains a field called (a) Undo (b) Redo next LSN (c) Redo (d) Undo next LSN
10. Which of the following is the LSN of the next log record that is to be undone for the transaction that wrote update record (a) recLSN (b) lastLSN (c) undonextLSN (d) prevLSN
11. The number of steps that a checkpointing in ARIES has (a) two (b) three (c) four (d) one
12. Which layer of DBMS architecture implements file of records (a) Query evaluation (b) File & access method layer (c) Buffer Manager (d) Disk Space Management
13. Alternative (3) for what to store as a data entry in an index is (a) A data entry k^* is an actual data record (with search key value k) (b) A search key value. (c) A data entry is a $\langle k, rid \rangle$ pair, where rid is the record id of a data record with search key value k . (d) A data entry is a $\langle k, rid\text{-list} \rangle$ pair, where $rid\text{-list}$ is a list of record ids of data records with search key value k .

14. In B+trees, all leaf pages are maintained in (a) Linked list (b) Stack (c) Arrays (d) Doubly Linked list
15. The cost (in terms of execution time) of scan operation in heap file is Where B=The number of data pages when records are packed on top pages with no wasted space R=The number of records per page D=The average time to read or write a disk page C=The average time to process a record (a) $C+D$ (b) $B(D+RC)$ (c) $0.5B(D+RC)$ (d) $2D+C$
16. Which key index can support a broad range of queries because it matches more selection conditions (a) secondary key index (b) null index (c) foreign key index (d) composite key index
17. The slowest class of storage devices is (a) Primary storage (b) Secondary storage (c) Archival storage (d) Tertiary storage
18. The buffer manager manages the available main memory by partitioning it into a collection of pages which we collectively refer to as (a) Disk blocks (b) Frames (c) Sectors (d) Buffer pool
19. The difference between leaf pages and non leaf pages in ISAM is (a) Leaf pages contain index entries. Non leaf pages contain index entries (b) Leaf pages contain data entries Non leaf pages contain index entries (c) Leaf pages contain data entries Non leaf pages contain data entries (d) Leaf pages contain index entries. Non leaf pages contain data entries
20. Which scheme uses a clever policy for creating new buckets and supports Inserts & Deletes efficiently without the use of a directory (a) Indexing (b) Linear Hashing (c) Static Hashing (d) Extendable Hashing

ANS:- A, B, A, C, C, C, D, B, D, C, B, B, D, D, B, D, D, D, B, B,