1. **A system is in a \_\_\_\_\_\_ state if there exists a set of transactions such that every transaction in the set is waiting for another transaction in the set.**

a) Idle b) Waiting c) Deadlock d) Ready

1. **The deadlock state can be changed back to stable state by using \_\_\_\_\_\_\_\_\_\_\_\_\_** statement.

a) Commit b) Rollback c) Savepoint d) Deadlock

1. **The deadlock in a set of transaction can be determined by**

a) Read-only graph b) Wait graph

c) Wait-for graph d) All of the mentioned

1. **Selecting the victim to be rollbacked to the previous state is determined by the minimum cost. The factors determining cost of rollback is**

a) How long the transaction has computed, and how much longer the transaction will compute before it completes its designated task.

b) How many data items the transaction has used.

c) How many more data items the transaction needs for it to complete and how many transactions will be involved in the rollback.

d) All of the above

1. **Which of the following occurs when a transaction rereads data it has previously read and finds modification or deletions caused by a committed transaction?**

a) Nonrepeatable read b) Phantom read

c) Dirty read d) Consistent read

1. **Transaction management ensures \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ properties.**

a) Atomicity and Intigrity b) Atomicity and Durability

c) Atomicity and Abstraction d) None of these

1. **How non clustered index point to the data?**

a) It never points to anything b) It points to a data row

c) It is used for pointing data rows containing key values

d) None of the mentioned

1. **Which one is true about clustered index?**

a) Clustered index is not associated with table  
b) Clustered index is built by default on unique key columns  
c) Clustered index is not built on unique key columns  
d) None of the mentioned

1. **The index which has an entry for every key value is classified as:**

a) Linear index b) dense index

c) Sparse index d) Cluster index

1. **The type of multilevel index which leaves space for inserting new entries in its blocks is called:**

a) A dynamic multilevel index b) Static multilevel index

c) Non-dense multilevel index d) dense multilevel index

1. **The kind of index in which the records have fixed length with only two fields is classified as:**

a) Anchor index b) Cluster index

c) Primary index d) Secondary index

1. **What is the responsibility of the buffer manager?**

a) Fetching data from disk storage into main memory, and deciding what data to cache in main memory.

b) Allocation of space on disk storage and the data structures used to represent information stored on disk.

c) Storing details such as how many users, which user has which permissions etc.

d) None of the above

1. **How many primary key can a table in database have?**  
   a) Only one b) At least one

c) More than one d) Any number of

1. **Abbreviate ACID.**

a. Atomicity, Consistency, Isolation, Durability

b. Atomicity, Concurrency, Isolation, Duplicity

c. Aggregation, Consistency, Isolation, Durability

d. Atomicity, Consistency, Identity, Durability

1. **Which type of lock does a record or page get locked immediately?**  
   a. Pessimistic locking b. Optimistic locking

c. Both A & B d. None of the above

1. **Issuing which type of savepoint will cause the named savepoint to be discarded? (Database)**  
   a. TRUNCATE SAVEPOINT b. DELETE SAVEPOINT

c. DISCARD SAVEPOINT d. RELEASE SAVEPOINT

1. **Which type of clustering index is defined on the fields?**

a. Non-key and non-ordering

b. Non-key and ordering

c. Key and non-ordering

d. Key and Ordering

1. **What do you mean by atomicity?**

a. When an update occurs to a database, either all or none of the update becomes available to anyone

b. It determines how the transaction integrity will be visible to the other users and systems

c. The transactions have been committed and will survive permanently

d. All of the above

1. **Which of the following may lead to an irrecoverable error in a database system?**

a. A transaction reads a data item after it is written by an uncommitted transaction

b. A transaction reads a data item after it is written by a committed transaction

c. A transaction reads a data item after it is read by an uncommitted transaction

d. A transaction writes a data item after it is read by an uncommitted transaction

1. **Number of rows is returned by the attribute** \_\_\_\_\_\_\_\_\_\_

a) insertIID b) rows

c) rowsAffected d) length

1. **Which attribute is used for getting an individual row?**

a) results.rows.item(i) b) insertId

c) rowAffected d) length