

Question No: 1

Difference between Commit and Rollback. (Marks 2)

Answer:- [Click here for detail](#)

in sql commit is used for saving the changes made in database and roll back is to roll back them , changes will not get saved in the database

Question No:2

Commonality between RAID technology and Tape Drive (Marks 2)

Answer:-

Commonality between RAID technology and Tape Drive that they both are used for backup.

Question No: 3

Read the statement if incorrect rewrite in correct form.

“Hashing provides slow, time consuming data retrieve from sequential files”. (Marks 2)

Answer:- (Page 265)

Hashing provides rapid, non-sequential, direct access to records.

Question No: 4

How do you explain Cross Reference Matrix? (Marks 2)

Answer:- (Page 65)

This is a tool available in the data dictionary and helps us in finding entities of the database and their associations.

Question No: 5

Explain Redundant Data. How Data Redundancy work in sequence file. (Marks 3)

Answer:- (Page 14)

It means if different systems of an organization are using some common data then rather than storing it once and sharing it, each system stores data in separate files. This creates the problem of redundancy or wastage of storage and on the other hand the problem on inconsistency.

Question No: 6

State the basic difference between Inner join and Left Outer Join. . (Marks 3)

Answer:- (Page 226 & 229)

Inner Join : Only those rows from two tables are joined that have same value in the common attribute while In a left outer join, PROGRAM rows without a matching COURSE row appear in the result left table (i.e. the one that precedes in SQL statement) regardless of the existence of matching records in the right table.

Question No: 7

Give one example of Deadlock. (Marks 3)

Answer:- [Click here for detail](#)

A simple computer-based example is as follows. Suppose a computer has three CD drives and three processes. Each of the three processes holds one of the drives. If each process now requests another drive, the three processes will be in a deadlock. Each process will be waiting for the "CD drive released" event, which can be only caused by one of the other waiting processes. Thus, it results in a circular chain.

Question No: 8

Create unique index on "IndexNum" on Cust_Name attribute of Customer table.. (Marks 3)

Answer:- [Click here for detail](#)

CREATE INDEX IndexNum
ON Customer (Cust_Name)

Question No: 9

Relate column 1 with column 2.. (Marks 5)

Column 1	Column 2
1. Sigma	A. Procedural DML lang
2. Table	B. Project operator
3. Relational Algebra	C. Select operator
4. Π	D. Relational Data Model
5. Intersection operator	E. Binary operation

Answer:-

- | | |
|--------------------------|-------------------------------|
| 1. Sigma | C. Select operator (Page 149) |
| 2. Table | D. Relational Data Model |
| 3. Relational Algebra | A. Procedural DML lang |
| 4. Π | B. Project operator |
| 5. Intersection operator | E. Binary operation |

Question No: 10

Crater a VIEW INSTRUCTOR_LIST which shows the list of instructor table with Inst_Nam and City of these instructors belong to ISLAMABAD or KARACHI.

INSTRUCTOR (Inst_ID, Imst_Name, City) (Marks 5)

Question No: 11

If a table 1 and table 2 have same entity and the table 1 is 20 index and the table 2 14 index. Then the sequential file access use these operations (Insertion, updation or selection) on both table. Keep in mind the above scenario and mark the below given statements correct or incorrect. **(Marks 5)**

- I. Insertion in table 1 take greater time than table 2
- II. Updation in table 2 take greater time then table 1
- III. Retrieving a record from table 1 take lesser time than table 2.

Question No: 12

Analyze the below given statements and mark as correct and incorrect and also explain. **(Marks 5)**

1. Deadlock occurs when one transaction wants to read more than on object at same time.
2. The mechanism "Wait for Graph" is used to apply join on multiple.

Answer:- (Page 320)

1. Deadlock occurs when one transaction wants to read more than on object at same time. **(Incorrect)**

Explanation: - A deadlock occurs when the first transaction has locks on the resources that the second transaction wants to modify, and the second transaction has locks on the resources that the first transaction intends to modify.

2. The mechanism "Wait for Graph" is used to apply join on multiple. **(Incorrect)**

Explanation: - It is used for the detection of deadlock. It consists of nodes and links. The nodes represent transaction, whereas arrowhead represents that a transaction has locked a particular data item.

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Question No: 1

Name two types of anomalies?

Answer:- (Page 162)

Two type of anomalies are:

1. Insertion
2. Deletion

Question No: 2

Name types of views?

Answer:- (Page 283)

• Materialized View • Simple Views • Complex View • Dynamic Views

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Question No: 3

Analyze the below given statements and mark as correct and incorrect and also explain.

1. Deadlock occurs when one transaction wants to read more than on object at same time.

Answer:- (Page 320)

The given statement is incorrect. The correct statement is A deadlock occurs when the first transaction has locks on the resources that the second transaction wants to modify, and the second transaction has locks on the resources that the first transaction intends to modify.

Question No: 4

2. The mechanism “Wait for Graph” is used to apply join on multiple.

Answer:- (Page 320)

The statement is incorrect and correct statement is

Wait – for Graph: It is used for the detection of deadlock

Question No: 1

How many ways to create a new view in your data base? (Marks 2)

Answer:- (Page 283)

There are two ways to create a new view in your database. You can: • Create a new view from scratch. • Or, make a copy of an existing view and then modify it.

Question No: 2

Write any two similarities between Materialized views and indexes? (Marks 2)

Answer:- (Page 290)

Materialized views are similar to indexes in several ways:

- They consume storage space.
- They must be refreshed when the data in their master tables changes.

Question No: 3

Which method is in DBMS to detect Deadlock? Briefly explain (Marks 3)

Answer:- (Page 300)

The lock manager maintains a structure called a waits-for graph to detect deadlock cycles.

Question No: 4

Create new view as Product_list from the table PRODUCT including all the columns of the table PRODUCT? (Marks 5)

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Question No: 5

Given two tables DOCTOR (D_ID,D_CONTACT) , MEDICINE(M- CODE, Description)

(i) Create unique index D_ID on DOCTOT

(ii) Create unique index on both M-CODE, Description (Marks 5)

Answer:- [Click here for detail](#)

(i) CREATE UNIQUE INDEX D_ID
ON DOCTOT (D_ID,D_CONTACT)

Answer:-

(ii) CREATE UNIQUE INDEX D_ID
ON MEDICINE (M- CODE, Description)

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