End Term Exam

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19BCS103

2) DDL is important in defining database structure in DBMS because it is used to describe data structure and modify data.

DML is used to add, delete and modify data; it is not important for creating database schema.

3) True.
A DBMS is typically shared among many users. Transactions from these users can be interleaved to improve the execution time of users queries. By interleaving queries, users do not have to wait for other user's transaction to complete fully before their own transaction begins without interleaving, if user 'X' begins a transaction that will take 20 seconds to complete and user 'Y' wants to begin a transaction, user 'Y' would have to wait an additional

seconds for user X's transaction
completes before the database would
begin processing user Y's request

5(a) To ensure consistency user has to guarantee that operations in transactions are performed accurately, correctly and with validity with respect to the application semantics.

The user also has to guarantee that database constraints are not violated, particularly once a transaction commits.

(b) To ensure that consistency DBMS should guarantee that any transactions started in the future necessarily see the effects of other transactions committed in the past. And also to preserve the consistency of database, the execution of transaction should take place in isolation. that means no other transaction should run concurrently when there is a transaction already running.

6) Keys in DBMS is an attribute or set of attributes which helps you to identify a row in a relation. They allow you to find the relation between two tables. Key helps to uniquely identify a row in a table by a combination of one or more columns in that table. They are mainly seven different keys in DBMS and each key has its different function abilies that's why it is not possible to determine all the this key given only one instance of the relation. It is possible to determine some key using only one instance of a relation. For example we can easily determine primary key, candidate key etc using only one instance of relation but not all the keys.

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6) → Create table Student {
Student_ID int,
StudentName Varchar(50) primary key,
email Varchar(50),
Age int
}

insert into Student (email)
values (Jaya@xyz.com)
insert into Student (email)
values (Krishna@pqr.com)
insert into Student (email)
values (Null)
insert into Student (email)
values (Jh@xyz.com)

→ ~~All the rows will~~ be
~~displayed because~~

→ Rows with StudentID 1005, 1030, 1020 will be ~~displayed~~ selected.

1) Select P.pid from Parts p, Catalog C, Suppliers S_1, Suppliers S_2 where P.pid = C.pid and C.sid = S_1.sid and C.sid = S_2.sid and S_1.sid <> S_2.sid.

↳ ~~sql query~~

~~π_{pid} (Parts)~~

$\pi_{P.pid}$ (~~Parts p~~ ⋈ Catalog C ⋈ Suppliers S_1 ~~⋈ Suppliers S_2~~)

$\pi_{P.pid}$ (Parts p ⋈ Catalog C ⋈ Suppliers S_1 ⋈ Suppliers S_2 $\sigma_{P.pid = C.pid \text{ and } C.sid = S_1.sid \text{ and } C.sid = S_2.sid \text{ and } S_1.sid <> S_2.sid}$)

2)

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8) Supplier

Cid	Sname	address
1	ABC	India
2	FGH	USA

Parts

Pid	Pname	color
1	KG	Red
2	MG	Blue

Catalog

Sid	Pid	cost
1	1	56
2	2	102

Ans → ABC

9> ~~Create view update~~ AS
~~set~~ u

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9> Create View updatetable
AS Select eid, ename, age, salary
From emp
where condition;

~~exc~~

~~upad update~~

example:-

UPDATE updatetable
SET ename = 'ABC'
where eid = 12;

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1) ~~Yes~~ Yes, we can do this by making the required column as primary key. For example for the first statement we can make empname field as primary key then it will will automatically get clustered as empname. So Yes it is possible to do this by using different clustering method and one of the simplest method of doing this is by using primary key.