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**Art’s, Science & Commerce Sangamner -422605, Dist-A.nagar**

**DEPARTMENT OF BBA[COMPUTER APPLICATION]**

Question Bank

Name of Subject –RDBMS

1) Define RDBMS?

2) Define Database?

3) Write syntax for Nested if statement in PLSQL with example.

4) What is PLSQL Block?

5) Define serializability?

6) What is schedule? List types of schedule

7) What is transaction?

8) What is procedure?

9) What is trigger?

10) Define upgrading and downgrading?

11) Explain difference between DBMS and RDBMS in detail.

12) What is deadlock? Explain methods to prevent deadlock.

13) What is exception handling? Explain predefined exceptions.

14) Explain two-phase locking protocol in detail.

15) Explain RDBMS packages in detail.

16) What is function? Explain with an example.

17) List and explain properties of transaction.

18) Explain % type and % row type with an example.

19) Explain failure classification in detail.

20) What is log? Explain log based recovery.

21) Consider the following relational database.

Customer (cno, cname, city.

Account (ano, acc-type, balance, cno)

Define a trigger that restricts insertion or updation of account having

balance less than 100.

22) Consider the following transaction. Give two non-serial schedules that

the serializable:

|  |  |
| --- | --- |
| T1 | T2 |
| Read(X) | Read(Z) |
| X=X+100 | Read(X) |
| Write(X) | X=X-Z |
| Read(Y) | Write(X) |
| Read(Z) | Read(Y) |
| Y=Y+Z | Y=Y-100 |
| Write(Y) | Write(Y) |

23) Following is the list of events in an interleaved execution of set T1, T2,

T3 and T4. Assuming 2PL (Two Phase Lock). Is there a deadlock? If

yes, which transactions are involved in deadlock?

|  |  |  |
| --- | --- | --- |
| Time | Transaction | Code |
| T1 | T1 | Lock(A,X) |
| T2 | T2 | Lock(B,S) |
| T3 | T3 | Lock(A,S) |
| T4 | T1 | Lock(C,X) |
| T5 | T2 | Lock(D,X) |
| T6 | T1 | Lock(D,S) |
| T7 | T2 | Lock(C,S) |

24) Consider following relational database

Doctor (dno, dname, dcity)

Hospital (hno, hname, hcity)

Doct-Hosp (dno, hno)

Write a function to return count of number of hospitals located in Mumbai

City

25) Consider the following relational database:

Customer (cno, cname, city)

Loan (lno, lamt, no\_of\_years, cno)

Write a procedure to display total loan amount from Mumbai City.

26) Functions in PLSQL.

27) Concurrent Execution.

28) Control Statements in PLSQL.

29) What is difference between DBMS and RDBMS?

30) What is timestamp?

31) Define Transaction.

32) What is cursor?

33) Define serializability.

34) What is deadlock?

35) What is atomicity?

36) What is procedure?

37) What is trigger?

38) What are operators in PLSQL?

39) Explain % type and % row type with an example.

40) List and explain properties of transaction.

41) What is deadlock? Explain methods to prevent deadlock.

42) Explain two-phase locking protocol in detail.

43) Explain RDBMS packages in detail.

44) What is function? Explain with an example.

45) What is exception handling? Explain predefined exceptions.

46) Explain PL SQL block in detail.

47) Explain failure classification in detail.

48) What is log? Explain log based recovery.

49) Consider following relational database.

Doctor (dno, dname, dcity)

Hospital (hno, hname, hcity)

Doct-Hosp (dno, hno)

Write a function to return count of number of hospitals located in Kolkatta

City.

50) Consider the following transaction. Give two non-serial schedules that

the serializable :

|  |  |
| --- | --- |
| **`11** | **T2** |
| **Read(A)** | **Read(B)** |
| **A=A-1000** | **B=B+100** |
| **Write(A)** | **Write(B)** |
| **Read(B)** | **Read(C)** |
| **B=B=100** | **C=C+100** |
| **Write(B)** | **Write(C)** |

51) Consider the following relational database :

Customer (cno, cname, city)

Account (ano, acc-type, balance, cno)

Define a trigger that restricts insertion or updation of account having

balance less than 100.

52) Consider the following related database :

Customer (cno, cname, city)

Loan (lno, lamt, no\_of\_ years, cno)

Write a procedure to display total loan amount from Delhi City.

53) Following is the list of events in an interleaved execution of set T1,T2,

T3 and T4. Assuming 2PL (Two Phase Lock). Is there a deadlock? If

yes, which transactions are involved in deadlock?

|  |  |  |
| --- | --- | --- |
| **Time** | **Transaction** | **Code** |
| **T1** | **T1** | **Lock(A,X)** |
| **T2** | **T2** | **Lock(B,S)** |
| **T3** | **T3** | **Lock(C,X)** |
| **T4** | **T4** | **Lock(A,S)** |
| **T5** | **T5** | **Lock(D,X)** |
| **T6** | **T6** | **Lock(D,S)** |
| **T7** | **T7** | **Lock(C,S)** |

54) Characteristics of RDBMS.

55) Control Statements in PLSQL.

56) Concurrent Execution.

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