22416

24225

3 Hours / 70 Marks Seat No.

Instructions – (1) All Questions are *Compulsory.*

(2) Answer each next main Question on a new page.

(3) Illustrate your answers with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Assume suitable data, if necessary.

(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any FIVE of the following :** **10**

a) Write use of truncate command.

b) Enlist states of transaction.

c) List Data types in SQL.

d) List types of database users.

e) Write types of group functions.

f) List types of cursors in PL/SQL.

g) Define synonym.

Marks

2. **Attempt any THREE of the following :** 12

   a) List types of set operators in SQL and explain any two set operators with example.

   b) Describe advantages of PL/SQL.

   c) Explain use of primary key and not null with suitable example.

   d) Explain simple view with example.

3. **Attempt any THREE of the following :** 12

   a) Describe ACID properties of transaction.

   b) Explain simple index and composite index with suitable example.

   c) Differentiate between drop and delete.

   d) Explain group by and order by with suitable example.

4. **Attempt any THREE of the following :** 12

   a) Consider following schema

     emp. (empno, ename, sal, hiredate, job, loc)

     Write SQL queries for the following :

     i)   Display employees whose salary is more than 15000.

     ii) Change the location of Rahul to Mumbai.

     iii) Display employees whose job contains "MAN".

     iv) Display employee name and salary for all employees.

   b) Write PL/SQL program to print whether number is negative or positive.

   c) Write a syntax to create sequence. Create a sequence that starts from 100 and ends at 1000.

   d) Describe various types of database failures. Create synonyms for 'class' table. Write steps to create synonyms.

5. Attempt any <u>TWO</u> of the following :   **12**

   a) Consider following schema

      emp (empno, ename, job, deptno, sal, hiredate, loc)

      Write SQL queries for the following

      i)   Add a column name "Comm"

      ii)   Display average salary of employees.

      iii) Rename employee table to emp_DMS.

   b) Write SQL queries for following schema

      Student (rollno, sname, loc, dob)

      i)   Create a view called st by taking all columns

      ii)   Change the location of Anil to Pune in the given view

      iii) Drop view named st

   c) Write a PL/SQL code to create a procedure square-number (square-number) to calculate square of a number and also have another PL/SQL code to call this procedure.

6. Attempt any <u>TWO</u> of the following :   **12**

   a) Write SQL commands for the following :

      i)   Create user 'ABC' with password 'IF41'.

      ii)   Grant privilege of select, delete on table EMP to user.

      iii) Take back privilege of delete from user 'ABC' on relation emp.

   b) Write syntax and example of the following

      i)   between

      ii)   left join

      iii) pattern matching - like

   c) Write PL/SQL code for the following

      i)   Print largest of three numbers

      ii)   Print odd numbers from 1 to 10

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