Que:1   Answer the following. 5

    1. A vertical fragmentation is followed by horizontal and vice versa, is called _____.

    2. Define DDBMS.

    3. What is the use DBMS_OUTPUT.PUT_LINE procedure?

    4. What do you mean by cursor?

    5. Write use of symbol := in PL/SQL.

Que:2   (A) Explain PL/SQL block structure with diagram and example. 3

    (B) Explain advantages of PL/SQL over SQL. 2

OR

    (B) Explain the use of %type and %rowtype in PL/SQL.

Que:3   Consider the following tables. 5

    Employee(EmpId,EmpName,EmpAddr)

    Department(DeptId,DeptName)

    Transaction(EmpId,DeptId,Salary)

    Display the EmpId, EmpName, Salary for SALES Department using CURSOR in PL/SQL block.

OR

Define curor attributes with its working using example.

Que:4   What is an Exception? Write any four built-in exception in oracle with its working. 5

OR

Explain use of Exception_init and RAISE_APPLICATION_ERROR function with an example.

Que:5   Explain function and procedure subprograms in PL/SQL with an example of each. 5

OR

Explain peer to peer architecture of distributed database system.

ALL THE BEST

Que:1   Answer the following.   **5**
      1. Write the full form of ROLAP and HOLAP.
      2. Which system table stored the subprogram syntax?
      3. The three predicates of triggers are_____.
      4. List three types of data sources of DW.
      5. List four purity levels of package.

Que:2   (A) Write a syntax of subprogram and briefly explain it.   **3**
      (B) List three advantages of data warehousing.   **2**

        OR

      (B) Differentiate between dimension table and fact table.

Que:3   Explain Rollup, Drill down and "Slice & Dice" operations with figure.   **5**

            OR

      What is Exception? Write a script to implement user defined exception to handle an error.

Que:4   Write code to create a procedure to display empno, ename, sal from emp   **5**
      table whose salary is more than 5000. Also write code to use this procedure in PL/SQL block.

            OR

      What is DML trigger? Write PL/SQL script to create a trigger which will restrict DML operations on SUNDAY.

Que:5   Explain Package specification and package body with an example and list   **5**
      any two advantages of it.

            OR

      What is Native Dynamic SQL? Explain query with execute immediate command in PL/SQL script with an example.

ALL THE BEST

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1. Attempt following questions.   [10]

   (a)   Give full form of GCS in terms of distributed database.

   (b)   How can we comment multiple lines in PL/SQL?

   (c)   List any two methods of concurrency control in distributed database.

   (d)   DDBMS stands for _____.

   (e)   Set serveroutput on is used for _____.

   (f)   What is the use of raise_application_error function?

   (g)   Which cursor attribute is used to retrieve total number of rows fetched from the cursor?

   (h)   OLTP stands for _____.

   (i)   Which symbol is used to assign a value to the variable in PL/SQL?

   (j)   OLAP stands for _____.

2. (A) Attempt following questions.   [05]

   (i)   Executable section is mandatory in PL/SQL block. [true/false]

   (ii)   We can refer an implicit cursor using SQL keyword. [true/ false]

   (iii)   The WHEN clause is valid only for row level triggers. [true/false]

   (iv)   PL/SQL is a procedural extension of SQL. [true/ false]

   (v)   BULK COLLECT cannot be used for CURSOR. [true/false]

2.(B) Attempt following questions.   [05]

   (i)   List and explain four cursor attributes for explicit cursor.

   (ii)   Write advantages of PL/SQL over SQL.

<div align="center">OR</div>

   (i)   Explain cursor for loop with suitable example.

   (ii)   Explain the use of exception_init pragma with suitable example.

3. Attempt following questions.   [10]

   (a)   Explain exception propagation when exception is raised from executable section of a PL/SQL block.

   (b)   Explain Query optimization in Distributed database system.

<div align="center">OR</div>

   (a)   Explain DML trigger with suitable example.

   (b)   Explain concurrency control in Distributed database system.

4. Attempt following questions. [10]
    (a)   List and explain three modes of parameter with suitable example.

    (b)   Explain any five collection methods.

OR

    (a)   Explain explicit cursor with suitable example.

    (b)   How package can be created and used in PL/SQL?

5. Attempt following questions. [10]
    (a)   List and explain three triggering predicates with suitable example.

    (b)   Explain Nested table with suitable example.

OR

    (a)   What is a native dynamic sql? Explain the use of DBMS_SQL package.

    (b)   Explain user defined exception with suitable example.

_____ *** _____ *** _____ *** _____ ***_____ *** _____ *** _____

Instructions:
1. All questions are compulsory and carry equal weight.
2. Figures to the right indicate full marks.
3. Indicate clearly, the options you attempt along with its respective question number.
4. Rough work is done in the last page of main answer-book.

1. Answer the following questions.   [10]

(a) SQLCODE function returns the number code of the most recent exception. [true / false]

(b) Which symbol is used to concatenate the string?

(c) The WHEN clause is valid only for row level triggers. [true / false]

(d) GCS stands for _____.

(e) How can we comment a single line in PL-SQL?

(f) The references clause is used to specify a different name for :old and :new. [true / false]

(g) _____ cursor attribute gives the count of total no of rows fetched from the cursor.

(h) DDBMS stands for Direct Database Management System. [true / false]

(i) List three collection types exist in PL/SQL.

(j) What is a Package?

2. (A) Answer the following questions.   [05]

(i) In Distributed systems, Operations of a transaction may be distributed. [true / false]

(ii) OLAP stands for _____.

(iii) What is the use of ROLLUP in Group by Clause?

(iv) Which keyword is used to refer an implicit cursor in a program?

(v) What is the use of NOCOPY keyword?

2. (B) Answer the following questions.   [05]

(i) Write advantages of PL/SQL over SQL.

(ii) Explain four cursor attributes.

OR

(i) Explain PL/SQL block structure.

(ii) Explain the use of %ROWTYPE with suitable example.

3. Answer the following questions.   [10]

(a) Explain client/server DDBMS architecture.

(b) Explain cursor for loop using suitable example.

OR

(a) List typical OLAP operations. Explain any four of them.

(b) List some predefined exceptions. Explain any four of them.

4. Answer the following questions. [10]

(a) Write a PL/SQL code to calculate the sum of two numbers using user defined function.

(b) What is an Exception? How explain is handled when it is raised from the executable section of the PL/SQL block?

OR

(a) Write a PL/SQL code to display emp_no and emp_name of all employees using cursor.

(b) Explain three triggering predicates with suitable example.

5. Answer the following questions. [10]

(a) Explain the use of package with suitable example.

(b) Differentiate between NestedTable, Varray and Index-by Table.

OR

(a) Explain Concurrency control in Distributed database management system.

(b) Explain following five collection methods.
Extend, Exists, Prior, Last and Delete.

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