(1) - (2)

N.B.: (1) All questions are compulsory.

       (2) All questions carry equal marks.

       (3) Figures to the right indicate marks to a sub-question.

Q. 1   Attempt all (5 marks each)   (15)

Q. 1 A)   Choose correct alternatives.

     1. _____ is not a PL/SQL unit.
   a. Table
   b. Type
   c. Trigger
   d. Package

     2. Which of the following statements can be used to terminate a PL/SQL loop?
   a. GOTO
   b. EXIT WHEN
   c. CONTINUE WHEN
   d. KILL

     3. Which is a simple or compound symbol that has a special meaning to PL/SQL?
   a. Delimiters
   b. Identifiers
   c. Literals
   d. Comments

     4. Which of the following is TRUE about PL/SQL Trigger?
   a. When certain conditions are met, a trigger stored in a database is triggered.
   b. A trigger is an application that executes or fires automatically when a certain event occurs.
   c. Both A. and B.
   d. None of the above

     5. Whenever a specified event occurs, the _____ is automatically triggered by the Oracle engine.
   a. Cursor
   b. Trigger
   c. Exception
   d. View

Q.1 B) Fill in the blanks (%type, exit when, currval , ||, rowid,)
   a. In Sequence, the current value is seen by -----.
   b. In SQL, ___ values contain information necessary to locate a row.
   c. -------attribute allows to declare a constant, variable, field of the same data type to a previously declared variable, field of the table.
   d. To terminate the loop..end loop statement, ___ statement is used.
   e. Compound symbol -------- are used in dbms_output.put_line as a seprator.

Q.1 c) Answer in 1 – 2 sentences.
   e. Write a syntax to generate a trigger.
   b. Write on the terms in hashing in short: Bucket and Hash function.
   c. State the use of %type in PL/SQL.
   d. State the SQL command used to lock the table.
   e. How and where to use commit and rollback?

Q. 2 **Attempt the following (Any THREE)** (15)

a. Generate the trigger to generate the primary key values for order id in the orders (ord id, ord date) table and display the values in the table.

b. Explain the hashed file organization.

c. What is sequence? How to create, alter and drop a sequence?

d. Employees of the testing department in the Perpetual Systems does testing of the
   a. software and result is taken as test-id, test-name, date of testing, test result.
   b. Execute the procedure to insért the values in the table "test specifications".

e. Define index. Write the commands for creating, altering and dropping an index.

f. Write a short note on using DML statements used in trigger using before/áfter clause by giving an example.

Q. 3 **Attempt the following (Any THREE)** (15)

a. Explain the role of Null values in PL/SQL block.

b. Write a pl/sql block to store the details of flat in flat details(flat type, no of rooms). Accept the no of rooms from the table. If the no of rooms > 5 then store flat_type as BIG, if no of rooms > 3 and less than 5 then store flat_type as SPACIOUS. If no of_rooms Al and less than or equal to 2 then flat type is STUDIO. Store the flat type by Case structure

c. Write on the role of exit when statement in loop . .. end loop with an example

d. State how to write, call and execute the function from a PL/SQL block along with an example.

e. Write PL/SQL block to calculate the simple interest when the values of Principal :urount, mite and duration is accepted from the user.

f. Write down how Case structure in PL/SQL is different from if, . . else statement.

Q. 4 **Attempt the following (Any THREE)** (15)

a. What is ACID? What does each property say with respect to the execution of

b. What is lock? Explain locking commands in context with SQL along with its types.

c. Define log. What are the contents of log record'?

d. Explain two phase commit protocol.

e. Describe Aries Algorithm

f. Write a short note on Write Ahead Log Protocol.

Q. 5 **Attempt the following (Any THREE)** (15)

a. Write a short note on PL/SQL Data type.

b. Write a PL/SQL to satisfy following conditions, refer employee tbi (emp id, enap nance, crnp salary, job).
   i. If job is clerk then increase the salary by Rs. 2000.
   ii. If job is manager then increase the salary by Rs. 1000().
   Other-wise, if job is other than above two categories, then block should show an eri'or message 'No change in salary'.

c. Write the commands for the following —

d. Refer a table products (prodid, pname, quantity, price, type).
   i. Insert 2 records into the same table.
   ii. Save the contents.
   iii. Delete the record which is recently inserted.
   iv. Rollback the transaction.
   v. Save the changes done till this point by the name as T1.

e. Explain Time Stamp Based Protocol.

f. What is the meaning of the error "exact letc h returns more than one row" which occurs when executing PL/SQL block'?