

[Time: 2:30 Hours]

Please check whether you have got the right question paper.

- N.B:
- 1) All questions are compulsory.
  - 2) Figures to the right indicate marks.
  - 3) Illustrations, in-depth answers and diagrams will be appreciated.
  - 4) Mixing of sub-questions is not allowed.

Q.1 Attempt the following (any THREE):

- A) What are features of PL/SQL?
- B) Write short note on sequences.
- C) Explain concept of %type attribute and bind variable in PL/SQL.
- D) Briefly explain PL/SQL block structure.
- E) Explain different comparison and logical operators used in PL/SQL.
- F) Write PL/SQL block to generate odd numbers within given range.

(15)

Q.2 Attempt the following (any THREE):

- A) Briefly explain any five PL/SQL data types.
- B) Explain To\_CHAR, TO\_NUMBER and TO\_DATE conversion functions in PL/SQL.
- C) Write short note on: i) FOR Loop ii) While Loop in PL/SQL.
- D) Explain %ROWTYPE attribute with any one example.
- E) Explain jump and exit statements in PL/SQL with example.
- F) Write PL/SQL blocks to accept total marks and obtained marks and print grade A, B, C, D and F depending on obtained marks using selector case expression.

(15)

Q.3 Attempt the following (any THREE):

- A) Define term Exception Handling in PL/SQL with its two types.
- B) Explain simple procedure with its syntax and one example.
- C) What is function in PL/SQL? Write simple function to calculate square of given number with help of function parameters.
- D) Write simple function to count total number of customers from Table Customer.
- E) Explain any five user defined exceptions with its error code.
- F) Briefly explain concept of RAISE exception with any one example.

(15)

Q.4 Attempt the following (any THREE):

- A) Briefly explain term Cursor with its types.
- B) Define implicit cursor attributes: %FOUND, %NOTFOUND, %ROWCOUNT, and %ISOPEN.
- C) Write PL/SQL block to update table Employee by increase in salary by 5000 and by using concept of cursor find total number of rows updated.
- D) Define Cursor FOR LOOP with any one example.
- E) Explain in short term Collection in PL/SQL with its type.
- F) Briefly explain concept of Nested table with its syntax.

(15)

Q.5 Attempt the following (any THREE):

- A) Explain concept of NULL values in PL/SQL
- ✓ B) Explain concept of Index By Table method in PL/SQL.
- ✓ C) Create simple procedure to find minimum number from two numbers using IN and OUT parameters.
- ✓ D) Briefly explain Explicit cursor with its working steps.
- E) Write PL/SQL block to determine the salary increment of given employee based on the hire date of the employee.
- F) Explain Commit, Rollback and Savepoint in PL/SQL transaction.

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