

(2 ½ Hours)

[Total Marks:75]

- 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.

**\*\*\* Consider table emp with structure specified as follows:  
 (eno number(4),name varchar(20),dept varchar(10),desig varchar(10),  
 ,sal number(6) )  
 For questions referring emp table.**

**Q1. Attempt the following (any THREE): (15)**

- (A) Explain the concept of PL/SQL identifiers & declare section.
- (B) Explain anonymous block with example.
- (C) Discuss various scalar data types in PL/SQL with example.
- (D) Write note on Sequence.
- (E) With nested block explain scope of variables.
- (F) Write a PL/SQL code to read radius of circle. Print area & circumference of circle.

**Q2. Attempt the following (any THREE): (15)**

- (A) Explain data conversion functions with example.
- (B) Write note on CASE statement.
- (C) Write a PL/SQL block to display total salary paid and total employees of specified department.
- (D) With syntax explain how to create Varray. How to use it.
- (E) Write a program to print all odd numbers divisible by 5 greater than 10 but less than 100.
- (F) Write a PL/SQL code to add new employee in emp table mentioned above. Salary will be set afterwards. Make this change permanent after taking confirmation from user otherwise discard the changes.

**Q3. Attempt the following (any THREE): (15)**

- (A) How PL/SQL works with user defined exceptions?
- (B) Explain the types of parameters used in stored procedure with example.
- (C) What is cursor? Explain its use.
- (D) Define function to increase salary of specified employee, by checking designation as follows: 1000 for officer, 2000 for Manager & for others 500 Rs. Test this function.
- (E) Write a PL/SQL code to display total salary paid to employees of specified designation, provide proper exception handling for void designation.
- (F) How to save & discard transactions?

**Q4. Attempt the following (any THREE): (15)**

- (A) Discuss types of cursors, with example.
- (B) Explain the steps required to handle cursor.
- (C) What is the use of 'where Current' clause? Explain with example.
- (D) Write a PL/SQL code to display employee details department wise with names in alphabetic order.
- (E) Write a note on 'Index by table'.
- (F) Explain 'cursor for loop' with its advantages.

**Q5. Attempt the following (any THREE): (15)**

- (A) Explain the use of %Type & % Rowtype attribute with example.
- (B) State the types of loop construct in PL/SQL. Explain any one with example.
- (C) Explain any 3 predefine exceptions in PL/SQL.
- (D) Discuss explicit cursor attributes.
- (E) Write a PL/SQL code to display employee names from employee table using nested table.
- (F) Write a PL/SQL code to read users complete name, then display as follows: i.e if name is RAM

RAM  
RA  
R