## Test 2

## PL/SQL

Duration: 1 Hr. Max Marks: 50

Q1. In each of the following assignments, determine the data type of the resulting expression.

[6]

- a. email := firstname || to\_char(empno);
- b. confirm := to date('20-JAN-1999', 'DD-MON-YYYY');
- c. sal := (1000\*12) + 500
- d. test := FALSE;
- e. temp := temp1 < (temp2/3);
- f. var := sysdate;
- Q2. Write a PL/SQL block to accept a year and check whether it is a leap year. For example, if the year entered is 1900, the output should be "1900 is not a leap year." Or if the year entered is 2000, the output should be "2000 is a leap year."
- Q3. Write a PL/SQL block to declare a variable called sal to store the salary of an employee. In the executable part of the program, do the following: [9]
  - a. Store an employee name in a substitution variable.
  - b. Store his or her salary in the v sal variable.
  - c. If the salary is less than 3,000, give the employee a raise of 500 and display the message "<Employee Name>'s salary updated" in the window.
  - d. If the salary is more than 3,000, print the employee's salary in the format, "<Employee Name> earns ....."
- Q4. Create a PL/SQL block that declares a cursor called DATE\_CUR. Pass a parameter of the DATE data type to the cursor and print the details of all the employees who have joined after that date. [8]

DEFINE B HIREDATE = 08-MAR-00

- Q5. Query the employees table to find out whether the number of years that the employee has been with the organization is greater than five; and if the salary is less than 3,500, raise an exception.
  - Handle the exception with an appropriate exception handler that inserts the following values into the analysis table: employee last name, number of years of service, and the current salary. Otherwise display Not due for a raise in the window. [10]
- Q6. Create and invoke the Q\_JOB function to return a job title.

[12]

- a. Create a function called Q\_JOB to return a job title to a host variable.
- b. Compile the code; create a host variable G\_TITLE and invoke the function with job ID SA\_REP. Query the host variable to view the result.

## OR

Create a function called ANNUAL\_COMP to return the annual salary by accepting two parameters: an employee's monthly salary and commission. The function should address NULL values.

- a. Create and invoke the function ANNUAL\_COMP, passing in values for monthly salary and commission. Either or both values passed can be NULL, but the function should still return an annual salary, which is not NULL. The annual salary is defined by the basic formula:
  - (sal\*12) + (commission\_pct\*salary\*12)
- b. Use the function in a SELECT statement against the EMPLOYEES table for department 80.

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