**Evaluation 3 for R1 Batch (SQL)**

**Total Marks:- 10 Date:-13-02-2017**

**Note: 1) All questions carry equal marks.**

**Note: 2) Some questions needs no schema at all.**

**Schema 1:-**

1. Suppose, a newspaper distributer want to distribute the newspaper in five houses. He started his journey from house H1 with following constraints.

The order in which he does so is something he does not care about, as long as he has to visit each one during his journey, and finishes where he was at first. Newspaper distributer has to visit nearest house from the current position. Each house is connected to other houses by road. The newspaper distributer wants to keep the distance he travels as low as possible. The following matrix shows the distance between the houses.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| House | H1 | H2 | H3 | H4 | H5 |
| H1 | 0 | 2 | 4 | 5 | 7 |
| H2 | 1 | 0 | 4 | 6 | 8 |
| H3 | 9 | 7 | 0 | 6 | 5 |
| H4 | 5 | 6 | 7 | 0 | 4 |
| H5 | 8 | 7 | 5 | 3 | 0 |

Using PL/SQL program, find out the total distance travelled by newspaper distributer to distribute all the newspapers.

1. Write PLSQL program for the following

Using collection print Eigen values of 3x3 matrix (Take user input instead of hard coded values for matrix).

1. Write a pl/sql block to provide statistics about employees in following form

Low\_Salary High\_Salary Count

0 999 0

1000 1999 5

2000 2999 0

3000 3999 2

Print all ranges of low and high salary. If there is no employee in some salary range then display 0 in the ‘Count’.

**Schema 2:-**

Write PLSQL function/procedure for the following( solve using cursors only)

1. Print the number of courses where specified student got less than his/her average marks.

2. Print the number of courses which student has registered for registration number = 2. If such courses more than 4 then delete the course registration for the course having maximum registration for registration number 2.

3. Print the number of DC courses passed by specified student and number of registrations, if the ratio is less than 3 then insert his roll\_number in Warning table.

4. For each student print the data as follows:

Roll\_number # DC #OC #HM #DE Number\_of\_registrations

5. For each course print the data as follows

Coursecode, number of students registered , number of FF grades

6 . Print the numbers of occurrences of each character in string ‘MISSISSIPPI’.

**Schema 3:-**

1. Using cursor find the ratio of amount spent in 2 days trips to the amount spent in 4 days trips and vice versa and also print total amount spent in 2 days and 4 days trip.
2. Create a stored procedure which will accept user inputted hotel id and use cursor in stored procedure to fetch the rows for the hotel id inputted by user and print it on console and also print number of rows fetched.
3. Assume that multiple users are working on same set of records and are trying to update them simultaneously. At the end, the changes made by a user should be visible to other concurrent users. Use suitable PL-SQL construct and cursor to update the product description to ‘C language’ in the product table for the product id supplied by user.

**Sets :-**

**A(Schema1 (1), Schema2(1,4), Schema3(1))**

**B(Schema1 (2), Schema2(2,5), Schema3(2))**

**C(Schema1 (3), Schema2(3,6), Schema3(3))**