## COMPUTER SCIENCE DEPARTMENT MILITARY COLLEGE OF SIGNALS, NUST DATABASE SYSTEMS BESE 15 B

**Exam**: Midterm Instructor: Shahela Saif

Type of Paper: Regular Total Marks: 20

Semester: Fall 2010 Time Allowed: 120 min

## Note:

1. Use of course work slides or other helping material is not allowed.

- 2. Submit your work in the assignments folder as other regular assignments.
- 3. Copied submissions will be cancelled altogether.

Question .No.1 (0.5 x 10)

Write the function / clause used to perform the following tasks in SQL. Write the function format where applicable.

- a. To arrange records based on value of a particular field.
- b. To cluster records based on value of a particular field.
- c. To find a character within a string.
- d. To implement conditional logic.
- e. To specify century other than the current one.
- f. To display structure of table.
- g. To replace NULL values.
- h. For adding literal strings in displayed columns.
- i. For matching given/current value to every value returned by subquery.
- j. To match a character pattern.

Question .No.2 (1.25 x 12)

Write the queries to:

a. Display all the data from the customers table. Separate each column by a comma. Name the output column THE OUTPUT.

- b. Select all records from customers table that have last names after Chris and before Sandlers including Chris and Sandlers.
- c. Select records of all customers who placed their order on 12<sup>th</sup> July, 05.
- d. Display records of all customers and the products they have purchased.
- e. Display records of all customers where products purchased value more than 20,000. First and last names joined together and displayed in capitals, product names in initial capitals.
- f. Create list of all transactions that occurred after 1998.
- g. Assign priorities to customers. If they have done transaction of more than 40,000, assign priority High. If more than 25,000, assign priority Medium. For the others assign priority Low.
- h. Calculate the total amount of money spent by each customer.
- i. Display all customers and their respective orders. Also display customers that haven't placed any order yet.
- j. Display record of person who did the first transaction using subquery.
- k. Display records of all customers who have bought products from supplier with id 9 using subquery.
- 1. Use subquery to display records of all customers that have ordered Wall Unit.