

**Question 1: Multiple Choice****(10 marks)**

- 1) In the SQL SELECT command, the search arguments that limit the rows involved in the query are specified in the ____ clause.
 - a) SELECT
 - b) FROM
 - c) WHERE
 - d) Order BY
- 2) Which of the SQL statements is **correct**?
 - a) `SELECT Username AND Password FROM Users`
 - b) `SELECT Username, Password FROM Users`
 - c) `SELECT Username, Password WHERE Username = 'user1'`
 - d) None of these
- 3) The ____ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple.
 - a) Select
 - b) Join
 - c) Union
 - d) Intersection
- 4) The SQL SELECT **LIKE** operator _____.
 - a) involves looking for numeric values close to a specified numeric value
 - b) involves numeric values in between two specified numeric values
 - c) involves the use of pattern match
 - d) None of the above.
- 5) Which of the following is **SQL aggregate** function?
 - a) LEFT
 - b) JOIN
 - c) SUM
 - d) LEN
- 6) Which SQL keyword is used to **sort** the result-set?
 - a) SORT BY
 - b) ORDER
 - c) ORDER BY
 - d) SORT
- 7) The SQL SELECT **GROUP BY** clause is designed to _____.
 - a) group together the rows of a table that have a common attribute value
 - b) group together the columns of a table that have a common attribute value
 - c) group together the attributes of a table that have a common domain of values
 - d) None of the above
- 8) The SQL SELECT built-in function that **return the highest** value of a specified set of data is _____.
 - a) MIN
 - b) COUNT
 - c) MAX
 - d) SUM
- 9) The SQL SELECT **HAVING** clause limits the output of a GROUP BY operation based on ___.
 - a) individual attribute values in the groups
 - b) calculated values of the built-in functions
 - c) the arrangement of rows specified by the ORDER BY clause
 - d) the query's output conforming to the range specified by the BETWEEN operator
- 10) The command to **remove rows** from a table 'CUSTOMER' is:
 - a) `DROP FROM CUSTOMER ...`
 - b) `UPDATE FROM CUSTOMER ...`
 - c) `DELETE FROM CUSTOMER WHERE ...`
 - d) `REMOVE FROM CUSTOMER ...`

Question 2:**(14 marks)**

Consider the following relational database that Best Airlines uses to keep track of its mechanics, their skills, and their airport locations.

- Mechanic number (MECHNUM) and airport name (AIRNAME) are all unique fields.
- SIZE is an airport's size in acres (فدان).

MECHANIC Table				
<u>MECHNUM</u>	MECHNAME	AGE	SALARY	<u>AIRNAME</u>

AIRPORT Table				
<u>AIRNAME</u>	CITY	STATE	SIZE	YEAROPENED

Write SQL SELECT commands to answer the following queries:

- List the names and ages of all the mechanics whose names begin with the letter "C".
- List the airports in California (California is a state) that are at least 20 acres in size and have been open since 1935. Order the results from smallest to largest airport.
- List the names of the mechanics who work in California.
- How many airports have been open in each state?
- Increase the salary of all mechanics whose ages from 40 to 50 years by 2.7%.
- Insert a new record with the following details into the **Airport** table:

<u>AIRNAME</u>	CITY	STAT	Size	YEAROPEN
MDR Airport	Loomis	California	120	2010

Question 3: Answer all questions.**(6 marks)**

- List all types of SQL **JOINS**.
- What is the difference between the **WHERE** and **HAVING** clauses?
- Describe the Rules of INSERT statement.

I wish you great success