



## Question 1: Multiple Choice

(15 marks)

1) The <b>FROM SQL</b> clause is used to ____.	a) specify what table we are selecting or deleting data FROM	b) specify range for search condition	c) specify search condition	d) None of these
2) Which of the SQL statements is <b>correct</b> ?	a) <code>SELECT Username AND Password FROM Users</code>	b) <code>SELECT Username, Password FROM Users</code>	c) <code>SELECT Username, Password WHERE Username = 'user1'</code>	d) None of these
3) In SQL, which command is used to <b>eliminate</b> duplicated rows.	a) <code>SELECT DISTINCT</code>	b) <code>SELECT UNIQUE</code>	c) <code>SELECT DIFFERENT</code>	d) All of the above
4) Which operator performs <b>pattern matching</b> ?	a) BETWEEN operator	b) LIKE operator	c) EXISTS operator	d) None of these
5) Which of the following is a <b>SQL aggregate</b> function?	a) LEFT	b) AVG	c) JOIN	d) LEN
6) Which of the following are the five built-in functions provided by SQL?	a) SUM, AVG, MIN, MAX, MULT	b) SUM, AVG, MULT, DIV, MIN	c) SUM, AVG, MIN, MAX, NAME	d) COUNT, SUM, AVG, MAX, MIN
7) Which SQL keyword is used to <b>sort</b> the result-set?	a) SORT BY	b) ORDER	c) ORDER BY	d) SORT
8) What is the <b>output</b> of the following SQL statement: <code>SELECT SUBSTRING('123456789', 6, 4) FROM Table1</code>	a) 6789	b) 2345	c) 1234	d) 456789
9) The SQL SELECT <b>GROUP BY</b> 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
10) The SQL SELECT built-in function that <b>return the highest</b> value of a specified set of data is ____.	a) MIN	b) COUNT	c) MAX	d) SUM

11) The SQL SELECT <b>HAVING</b> clause limits the output of a GROUP BY operation based on__.
<ul style="list-style-type: none"> <li>a) individual attribute values in the groups</li> <li>b) calculated values of the built-in functions</li> <li>c) the arrangement of rows specified by the ORDER BY clause</li> <li>d) the query's output conforming to the range specified by the BETWEEN operator</li> </ul>
12) A <b>subquery</b> can be used in place of a(n) ____.
<ul style="list-style-type: none"> <li>a) GROUP BY</li> <li>b) JOIN</li> <li>c) HAVING</li> <li>d) ORDER BY</li> </ul>
13) Which of the following SQL commands can be used to <b>add</b> data to a database table?
<ul style="list-style-type: none"> <li>a) Add</li> <li>b) Update</li> <li>c) Append</li> <li>d) Insert</li> </ul>
14) The command to <b>remove rows</b> from a table 'CUSTOMER' is:
<ul style="list-style-type: none"> <li>a) DROP FROM CUSTOMER ...</li> <li>b) UPDATE FROM CUSTOMER ...</li> <li>c) DELETE FROM CUSTOMER WHERE ...</li> <li>d) REMOVE FROM CUSTOMER ...</li> </ul>
15) Which of the following SQL statement find all the tuples having <b>temperature greater than 'Paris'</b> ?
<ul style="list-style-type: none"> <li>a) SELECT * FROM weather WHERE temperature &gt; (SELECT temperature FROM weather WHERE city = 'Paris')</li> <li>b) SELECT * FROM weather WHERE temperature &gt; (SELECT * FROM weather WHERE city = 'Paris')</li> <li>c) SELECT * FROM weather WHERE temperature &gt; (SELECT city FROM weather WHERE city = 'Paris')</li> <li>d) SELECT * FROM weather WHERE temperature &gt; 'Paris' temperature</li> </ul>

**Question 2: (20 marks)**

Consider the **Members and Attendance** tables below and write SQL statements for the following queries:

**Members**

<u>MNo</u>	Name	DOB	Address	Email	Date Of Joining
1	Martin	Feb 27, 1972	1 The Avenue, NY	martin@some.com	Jan 10, 2005
2	Jane	Dec 12, 1967	33 Some Road, Washington	Jane@server.net	Feb 12, 2005
3	Kim	May 22, 1980	19 The Road, New Townsville	kim@mail.com	May 23, 2005

**Attendance**

<u>Ano</u>	<u>Mno</u>	MeetingDate	Location	Attendance
10	1	Mar 30, 2005	Lower West Side, NY	Y
10	2	Mar 30, 2005	Lower West Side, NY	N
10	3	Mar 30, 2005	Lower West Side, NY	Y
11	1	April 28, 2005	Lower North Side, NY	Y
11	2	April 12, 2005	Upper North Side, NY	Y
11	3	April 09, 2005	Upper North Side, NY	Y

- a) List name, address, and email of members who held meetings on Mar 30, 2005.
- b) List in descending order the name and address of members who did not attend meeting number 10 (**Ano = 10**).
- c) Find the total number of meetings for each member, the result should include member name.
- d) List the total number of members who had attended meeting in each location.
- e) Insert a new record with the following details into the **Members** table:

<b>Mno</b>	<b>Name</b>	<b>DOB</b>	<b>DateOfJoining</b>	<b>Email</b>
4	Adam	Jan 07, 1982	Feb 11, 2009	adam@yahoo.com

**Question 3: Answer Three (3) questions only.**

**(15 marks)**

a) List all types of SQL **JOINS**.

b) What is the difference between the **WHERE** and **HAVING** clauses?

c) What is wrong with this SQL query? Correct it so it executes properly.

```
SELECT Id, YEAR(BillingDate) AS BillingYear  
FROM Invoices  
WHERE BillingYear >= 2010;
```

d) Describe the Rules of **INSERT** statement.

I wish you great success