# CMIS563: Oracle SQL for Business Analytics

# Sample Exam Questions

**Multiple choice:** Circle the **BEST** answer that completes or answers the following statements or questions.

1. Which of the following is an accurate representation of the order of various clauses in an SQL query:
   1. Select, From, Where, Group By, Having, Order By.
2. Select, Where, From, Group By, Having, Order By.
3. Select, From, Group By, Where, Having, Order By.
4. Select, From, Where, Order By, Having, Group By.
5. None of the above.
6. When employing the SELECT command in SQL to retrieve data from a database, the keyword FROM is
   1. always required
   2. sometimes used
   3. never used

e. used for clarification only

1. The SQL query shown below will yield SELECT COUNT(\*)

FROM STUDENT;

* 1. all the columns and all the rows in the STUDENT table
  2. the total number of records in the STUDENT table
  3. a numbered listing of all students in the STUDENT table
  4. an error message

1. Aggregate functions in an SQL query are executed the execution of the WHERE clause.
   1. after
   2. before
   3. at the same time as the
   4. never after the
2. Which SQL feature causes the processing of the inner query to depend on data from the outer query? (Exam2)
   1. outer join subquery
   2. regular subquery
   3. correlated subquery
   4. ORDER BY
   5. GROUP BY
3. If you have the GROUP BY clause then in an SQL (Oracle) query then you must have an aggregate function in the SELECT clause in the query, else the query will not be executed.
   1. True
   2. False
4. If your SQL query is *displaying* data from four different tables then your query must have at least

join conditions in the WHERE clause.

* 1. one
  2. two
  3. three
  4. none; WHERE clause is an optional clause in SQL

QUESTIONS 8-11

PILOT TABLE

PILOTNO PILOTLNAME PILOTFNAME CITY

| 2314 | SMITH | GEORGE | DALLAS |
| --- | --- | --- | --- |
| 3941 | JONES | KAY | CHICAGO |
| 4839 | ROGERS | JIM | ATLANTA |

PILOTLOG TABLE

PILOT# PLANE# DATE-FLOWN HOURS-FLOWN

| 2314 | 110 | 04/09/19 | 2.5 |
| --- | --- | --- | --- |
| 2314 | 221 | 04/10/19 | 5.8 |
| 3941 | 221 | 08/10/19 | 2.5 |
| 3941 | 110 | 08/06/19 | 2.1 |
| 4839 | 550 | 08/11/19 | 8.5 |
| 4839 | 110 | 04/09/19 | 1.1 |
| 4839 | 110 | 05/09/19 | 1.2 |

AIRCRAFT TABLE

PLANE# TYPE SEATCAPACITY

| 110 | B747 | 310 |
| --- | --- | --- |
| 221 | L1011 | 230 |
| 550 | B767 | 100 |

1. Which SQL statement below will return the pilot's last name, first name, and total number of hours each pilot has flown?
   1. SELECT PILOTLNAME, PILOTFNAME, SUM(HOURSFLOWN) FROM PILOT, PILOT-LOG

WHERE PILOTNO=PILOT#

GROUP BY PILOTLNAME, PILOTFNAME;

* 1. SELECT PILOTLNAME, PILOTFNAME, COUNT(HOURSFLOWN) FROM PILOT, PILOTLOG WHERE

PILOT NO=PILOT #

GROUP BY PILOTLNAME, PILOTFNAME;

* 1. SELECT PILOTLNAME, PILOTFNAME, HOURSFLOWN FROM PILOT, PILOTLOG

WHERE COUNT(HOURS-FLOWN) > 0;

* 1. SELECT PILOTLNAME, PILOTFNAME, SUM(HOURSFLOWN) FROM PILOT, PILOTLOG

WHERE PILOT.PILOTNO=PILOTLOG.PILOT#

GROUP BY PILOT.PILOT-NO;

1. What will be the result of the following query?

SELECT PILOTLNAME

FROM PILOT

WHERE CITY LIKE ‘%a%’;

* 1. Smith
  2. Jones
  3. Rogers
  4. Smith, Jones, Rogers
  5. None of the above

1. What will the result of the following query (Exam2). Provide your own answer.

SELECT PILOTLNAME

FROM PILOT P, PILOTLOG PL1 WHERE PILOTNO=PILOT# AND HOURSFLOWN =

(SELECT MIN(HOUR-FLOWN) FROM PILOTLOG PL2

WHERE PL1.PLANE# = PL2.PLANE#);

1. What will be the result of the following query (Exam2)?

SELECT PILOTLNAME

FROM PILOT, PILOTLOG

WHERE PILOTNO = PILOT #

GROUP BY PILOTLNAME

HAVING COUNT(\*) = (SELECT MAX(COUNT(\*))

FROM PILOTLOG

GROUP BY PILOTLNAME);

* 1. Smith
  2. Jones
  3. Rogers
  4. Smith, Jones, Rogers
  5. None of the above