

Each question is worth 1 point unless noted otherwise. Total points = 20. You may use your book, but not the computer. Choose the best answer. Some questions ask you to choose 2 answers.

1. Evaluate this SELECT statement:

```
SELECT employee_id, last_name, &col_of_choice
FROM employees
WHERE &&condition
```

Which statement regarding the execution of this statement is true?

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---  
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- A. The user will be prompted for the condition in the WHERE clause each time the statement is executed in a session.
- ☒ B. The user will be prompted for the condition in the WHERE clause only the first time the statement is executed in a session.
- C. An error will occur when executing this statement because substitution variables are NOT allowed in a WHERE clause.
2. Evaluate the following statements. They are executed individually.

```
DEFINE col_of_choice = salary
```

```
SELECT employee_id, last_name, &col_of_choice
FROM employees
```

Which statement regarding the execution of this statement is true?

- A. The user will be prompted for the col\_of\_choice each time the statement is executed in a session.
- B. The user will be prompted for the col\_of\_choice only the first time the statement is executed in a session.
- ☒ C. The user will never be prompted for the col\_of\_choice unless **UNDEFINE col\_of\_choice** is executed in the session.
- D. An error will occur when executing this statement

3. The INVENTORY table contains these columns:

ID_NUMBER	NUMBER	PK
DESCRIPTION	VARCHAR2(30)	
SUPPLIER_ID	NUMBER	

You want to create a query that for each session allows the user to input a value for DESCRIPTION each time the query runs. You want the query to retrieve matching values regardless of the case used when inputting the substitution variable value.

Which SELECT statement should you use?

- A. SELECT id\_number, supplier\_id  
FROM inventory  
WHERE description = UPPER(&description);
- ☒ B. SELECT id\_number, supplier\_id  
FROM inventory  
WHERE LOWER(description) = LOWER('&description');
- C. SELECT id\_number, supplier\_id  
FROM inventory  
WHERE LOWER(description) = '&description';
- D. SELECT id\_number, supplier\_id  
FROM inventory  
WHERE description = UPPER('&&description');

☒ 4. In which clauses of a SELECT statement can substitution variables be used?

- A. the SELECT, FROM, and WHERE clauses only
- ☒ B. the SELECT and FROM clauses, but NOT the WHERE clause
- C. the SELECT, FROM, WHERE, GROUP BY, ORDER BY, and HAVING clauses
- ☒ D. the SELECT, WHERE, GROUP BY, and ORDER BY clauses, but NOT the FROM clause

5. The JOBS table contains these columns:

Name	Null?	Type
JOB_ID	NOT NULL	VARCHAR2(10)
JOB_TITLE	NOT NULL	VARCHAR2(35)
MIN_SALARY		NUMBER(6)
MAX_SALARY		NUMBER(6)

Which insert statements will execute successfully? (2 pts) **(Choose two)**

- A. INSERT INTO jobs(job\_id, job\_title, min\_salary, max\_salary)  
VALUES( PT\_CLERK, Part-time Clerk, 1500, 2000);
- ☒ B. INSERT INTO jobs(job\_id, job\_title, min\_salary, max\_salary)  
VALUES( 'PT\_CLERK', 'Part-time Clerk', 1500, 2000);
- ☒ C. INSERT INTO jobs(job\_id, job\_title, min\_salary, max\_salary)  
VALUES( 'PT\_CLERK', 'Part-time Clerk', 1500);
- D. INSERT INTO jobs(job\_id, job\_title, min\_salary, max\_salary)  
VALUES( PT\_CLERK, NULL, 1500, 2000);

6. The PRODUCT table contains these columns:

PRODUCT_ID	NUMBER	NOT NULL
PRODUCT_NAME	VARCHAR2(25)	
SUPPLIER_ID	NUMBER	
LIST_PRICE	NUMBER(7,2)	
COST	NUMBER(7,2)	

You need to increase the list price of products supplied by Global Imports, Inc. by 5.5 percent. The SUPPLIER\_ID for Global Imports, Inc. is 105. Which statement should you use?

- A. UPDATE product  
SET list\_price = 55 percent  
WHERE supplier\_id = 105;
- B. UPDATE product  
COLUMN list\_price = list\_price \* 1.055  
WHERE supplier\_id = 105;
- ☒ C. UPDATE product  
SET list\_price = list\_price \* 1.055  
WHERE supplier\_id = 105;
- D. UPDATE suppliers  
SET list\_price = list\_price + 1.055  
WHERE supplier\_id LIKE 'Global Imports, Inc.';

7. The following statements are executed individually in the same session.

```
DEFINE country_num = 'UK';
```

```
SELECT country_id, country_name  
FROM countries  
WHERE country_id = '&country_num';
```

Which of the following statements is true?

- A. The user will be prompted for the country number each time the select statement is executed.
- ☒ B. The SELECT statement will execute with the value of 'UK' substituted for &country\_num.
- C. The SELECT statement will not execute because substitution variables cannot be defined with a DEFINE statement.
- D. The user will not be prompted for the country number the first time the SELECT statement is executed, but will be prompted if the SELECT is executed more than once during a session.

8. Which statement will delete all of the rows in the REGIONS table. (assume there are no constraint violations)

- A. REMOVE ALL  
FROM regions;
- B. DELETE TABLE  
FROM regions;
- ☒ C. DELETE  
FROM regions;
- D. DELETE ROWS  
FROM regions;

9. Which statement updates the CITY field to Kingman and the STATE\_PROVINCE field to Arizona for only LOCATION\_ID 1400 in the LOCATIONS table?

- A. UPDATE TABLE locations  
SET city = 'Kingman', SET state\_province = 'Arizona'  
WHERE location\_id = 1400;
- B. UPDATE locations  
SET city = 'Kingman',  
state\_province = 'Arizona';
- C. UPDATE locations  
SET city = 'Kingman', state\_province = 'Arizona'  
FOR location\_id = 1400;
- ☒ D. UPDATE locations  
SET city = 'Kingman',  
state\_province = 'Arizona'  
WHERE location\_id = 1400;

10. How many rows can be added to a table per execution of the INSERT INTO...VALUES command?

- ☒ A. 1
- B. 2
- C. 3
- D. unlimited

11. Which of the following commands can be used to suppress the display of old and new values when executing a command containing substitution variables?

- A. SUPPRESS ON
- B. SET VERIFY ON
- ☒ C. SET VERIFY OFF
- D. SET MESSAGE OFF

12. Which of the following clauses cause the following query to return an error message? Assume you cannot alter the subquery.

```
SELECT last_name
from employees
WHERE salary >
      (SELECT AVG(salary)
       from employees
       GROUP BY department_id)
```

*returning more than one value*

A. SELECT last\_name

☒ B. WHERE salary >

C. from employees

13. Which of the following statements will update all of the rows in the JOBS table? The JOBS table has these columns:

Name	Null?	Type
JOB_ID	NOT NULL	VARCHAR2(10)
JOB_TITLE	NOT NULL	VARCHAR2(35)
MIN_SALARY		NUMBER(6)
MAX_SALARY		NUMBER(6)

A. UPDATE TABLE jobs  
SET min\_salary = 1000

B. UPDATE jobs  
SET min\_salary = 1000  
WHERE job\_id = 'SA\_MAN'

C. UPDATE TABLE jobs  
SET min\_salary = 1000  
WHERE job\_id = 'SA\_MAN'

☒ D. UPDATE jobs  
SET min\_salary = 1000

14. Assuming that the commission\_pct column can contain NULL values, which of the following queries will display how many employees in the company currently earn a commission? (2 pts) (Choose 2).

- ☒ A. select COUNT(commission\_pct)  
FROM employees
- B. select COUNT(commission\_pct)  
FROM employees  
where commission\_pct IS NULL
- ☒ C. select COUNT(\*)  
FROM employees  
where commission\_pct IS NOT NULL
- D. select COUNT(\*)  
FROM employees  
where commission\_pct IS NULL

15. Please write a query that displays the name of the department in which employee Taylor works. Use a subquery. (2 pts)

```
SELECT department_name  
FROM departments  
WHERE department_id = (SELECT department_id  
FROM employees  
WHERE last_name = 'Taylor');
```

16. Please write a query that displays the number of different job\_ids in the EMPLOYEES table. (2 pts)

```
SELECT COUNT (SELECT DISTINCT job_id  
FROM employees)  
FROM employees;
```

```
SELECT COUNT (DISTINCT job_id)  
FROM employees;
```

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NAME: Chris Tjon

## CIS119DO: Reviewing CH 8 - DML Statements

1. Insert a new department 55 into the DEPARTMENTS table. This new department is called HR but has not been assigned a location or manager yet. Verify.

```
INSERT INTO departments
VALUES ('55', 'HR', NULL, NULL);
```

2. Insert a new employee, Homer Simpson, into the EMPLOYEES table. The employee has been assigned to department 55 and has an employee number 9999. His email address is HSIMPSON, his hire date is today, and his job id is ST\_CLERK. Verify.

```
INSERT INTO employees (employee_id, last_name, first_name, email, hire_date,
job_id, department_id) VALUES ('9999', 'Simpson', 'Homer', 'HSIMPSON', SYSDATE,
'ST_CLERK', '55');
```

3. Now assign Homer to department 20. Verify.

```
UPDATE employees SET department_id = '20'
WHERE employee_id = '9999';
```

4. Now assign Homer to department 56. What happens? Why?

Constraint violation

dept 56 does not exist *yes*

5. Remove department 55 from the DEPARTMENTS table. Verify.

```
DELETE FROM departments WHERE department_id = '55';
```

6. Remove department 20 from the DEPARTMENTS table. What happens?

Constraint error

20 used by other records *yes*