COMP 2417
Quiz 2 – Questions Book

CST – BCIT - BBY

Duration: 40 Minutes

Notes:

- This is a **closed-book** exam.
- Any use of Slack or Discord or any communication tools during the exam is considered plagiarism. (Please make sure to close them before starting the quiz)

- **Please use the answer sheet** provided to enter your answers.

- There are **15** questions in this quiz.

- Since this is a quiz and a short exam, **no question will be answered during the exam.** If you find something unclear and/or wrong, please write it in your answer sheet or make your own assumptions and answer the question.

- All questions are multiple-choice questions. For some questions there is only one correct answer and for some other there might be multiple correct answers.

    - **Circle means (1 correct answer)**
    - **Square means (1 or more correct answers)**

- **This is an individual exam**. No conversation is allowed over Slack, Discord or any other media.

Question1:

Using the Orders table, which of the following tuples is returned by the query below?

Orders:

orderID	orderDate	orderPrice	customer
1	11/3/2020	1000	Bush
2	23/4/2020	1600	Carter
3	12/8/2020	500	Bush
4	15/1/2021	300	Bush
5	23/3/2021	2000	Adams
6	05/4/2021	100	Carter

```
SELECT customer, SUM(orderPrice)
FROM Orders
WHERE (customer='Bush' OR customer='Adams') AND orderPrice>=500
GROUP BY customer
HAVING SUM(orderPrice)>=1500
ORDER BY SUM(orderPrice) ASC;
```

A.

customer	SUM(orderPrice)
Adams	2000
Bush	1500

B.

customer	SUM(orderPrice)
Bush	1500
Adams	2000

C.

customer	SUM(orderPrice)
Adams	2000
Bush	1800

D.

customer	SUM(orderPrice)
Bush	1800
Adams	2000

Question 2:

Which of the following answers would successfully delete only the second row of the Album table?

Artists

ArtistId	ArtistName	Desc
1	AC/DC	One of t...
2	U2	Another...
3	Nelly	When y...
4	Lorde	From N...

Albums

AlbumId	AlbumName	ArtistId
1	NellyVille	3
2	Black Ice	1
3	Ballbreaker	1
4	October	2

Ratings

RatingId	AlbumId	Rating
1	2	5
2	1	3.5
3	4	3
4	3	4

A.

```
DELETE FROM Album
WHERE ArtistID = 1;
```

B.

```
ALTER TABLE Album
DROP WHERE AlbumID = 2;
```

C.

```
DELETE FROM Album
WHERE AlbumID = 2;
```

D.

```
ALTER TABLE Album
DELETE ROW WHERE AlbumID(2);
```

Question 3:

Which SQL Query will return the tuple containing Dave Smith's information from the below Employee database?

Employee

ID	fName	lName	Salary
1	Dave	Smith	50000
2	Mike	Michaels	60000
3	John	Leonard	70000
4	Edward	Smith	80000

A.

```
SELECT *
FROM Employee
WHERE Employee.Salary > 50000
```

B.

```
SELECT *
FROM Employee
WHERE Employee.Name = 'Dave Smith'
```

C.

```
SELECT *
FROM Employee
WHERE Employee = 1
```

D.

```
SELECT *
FROM Employee
WHERE Employee.fName = 'Dave' AND Employee.lName = 'Smith'
```

Question 4:

What is the correct SQL syntax to remove the constraint called "empMgrFK" from the table called "Employees"?

○ A.	DROP CONSTRAINT Employees.empMgrFK;
○ B.	ALTER TABLE Employees UNLINK CONSTRAINT empMgrFK;
○ C.	UPDATE IN Employees DROP CONSTRAINT empMgrFK;
○ D.	ALTER TABLE Employees DROP CONSTRAINT empMgrFK CASCADE;

Question 5:

Read the following information and answer the question.

Student [StudentID, name, age, sex, major]

CourseGrade [CourseID, StudentID, year, CourseName, grade]

CourseGrade.StudentID references Student.StudentID

Which SQL is right to find the student name who gets the lowest grade?

◯ A.	SELECT name FROM Student, CourseGrade WHERE grade = MIN(grade)
◯ B.	SELECT name FROM Student, CourseGrade WHERE CourseGrade.StudentID = Student.StudentID AND grade = MIN(grade)
◯ C.	SELECT name FROM Student, CourseGrade WHERE CourseGrade.StudentID = Student.StudentID AND grade = (SELECT MIN(grade) FROM CourseGrade)
◯ D.	None of above

Question 6:

Which one of the following **cannot** be done with a SQL query?

- A. Querying the database
- B. Creating a table
- C. Taking user input and storing it
- D. Storing data in a table

Question 7:

if we need to delete a table "X" in SQL, how do we write?

○ A.	DELECT TABLE X
○ B.	DROP TABLE X
○ C.	DELECT X
○ D.	DROP X

Question 8:

Which query will return the number of employees in the EMPLOYEE table?

○ A.	SELECT SUM(*) FROM EMPLOYEE
○ B.	SELECT COUNT(*) FROM EMPLOYEE
○ C.	SELECT DISTINCT Employee_DOB FROM EMPLOYEE
○ D.	SELECT * FROM EMPLOYEE WHERE Name='UNIQUE'

Question 9:

What is the result of the SQL query that is based on the following relation?

Athlete[id, aName, sport, age]

```
SELECT DISTINCT A1.aName, A1.age
FROM Athlete A1, Athlete A2
WHERE A1.age < A2.age
```

○ A.	The name and age of all of the youngest athlete(s)
○ B.	The name and age of all athletes that are younger than the oldest athlete(s)
○ C.	The name and age of one of the oldest athlete(s)
○ D.	The name and age of all of the oldest athlete(s)
○ E.	The name and age of one of the youngest athlete(s)

Question 10:

Database _____ which is the logical design of the database, and the database _____ which is a snapshot of the data in the database at a given instant in time.

○ A.	Instance, Schema
○ B.	Relation, Schema
○ C.	Relation, Domain
○ D.	Schema, Instance

Question 11:

A nested query is a query within a query (somewhat like Christoper Nolan's 2010 film Inception). Select all *true* statements regarding nested queries.

☐ A.	Superquery is another term for nested query.
☐ B.	Attributes with the same name referenced in correlated queries must be aliased.
☐ C.	The inner query depends on the outer query in a non-correlated query.
☐ D.	A correlated query will typically have a longer runtime than a non-correlated query.

Question 12:

What kind of join is the following statement describing.

This join will return filling NULLs when joining two tables of tuples if there is no matching information based on the joining condition after the ON. All the information from the table directly following the FROM operator will be included in the result whereas the table after the JOIN may have NULLs and may have some tuples not present in the result.

○ A.	Equi Join
○ B.	Full Outer Join
○ C.	Left Join
○ D.	Right Join

Question 13:

Which SQL query below will only return user's name that ends with "el"?

A.

```
SELECT name
FROM Student
WHERE name = "el"
```

B.

```
SELECT name
FROM Student
WHERE name LIKE "%el_"
```

C.

```
SELECT name
FROM Student
WHERE name LIKE "%el"
```

D.

```
SELECT name
FROM Student
WHERE name LIKE "_el_"
```

Question 14:

Which statement(s) is correct?

○ A.	A non-correlated subquery is executed multiple times.
○ B.	A correlated subquery is executed only once.
○ C.	A non-correlated subquery depends upon the outer query.
○ D.	A correlated subquery needs examination in the inner subqueries for each row of the outer query.

Question 15:

Student[name]

Tutor[name]

Which query below will return the name of all students that are NOT also tutors?

○ A.	SELECT name FROM Student UNION SELECT name FROM Tutor
○ B.	SELECT name FROM Student UNION ALL SELECT name FROM Tutor
○ C.	SELECT name FROM Student INTERSECT SELECT name FROM Tutor
○ D.	SELECT name FROM Student EXCEPT SELECT name FROM Tutor