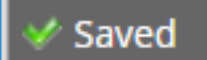## Question 1

The set of allowable values for one or more attributes:

- 🔘 Domain of attribute
- ⭕ Tuple
- ⭕ None of the answers
- ⭕ Degree of relation

⚠ Moving to the next question prevents changes to this answer.

1 points ✓ Saved

A NULL represents:

○ All of the answers

◉ Absence of a value

○ Spaces

○ Zeros

⚠ Moving to the next question prevents changes to this answer.
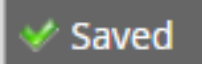
This query:

SELECT   studentD, fName, lName, Address

ORDER BY   studentID ASC;

FROM   Student

Is:

○ True   ◉ False

⚠ Moving to the next question prevents changes to this answer.

In this query:

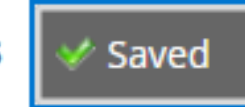*SELECT BranchNo, COUNT(staffNo)*

FROM Branch_Staff

GROUP BY BranchNo

ORDER BY BranchNo;

The processing order of clauses is:

○ SELECT, FROM, GROUP BY, then ORDER BY

⦿ FROM, GROUP BY, SELECT, then ORDER BY

○ FROM, SELECT, ORDER BY, then GROUP BY

○ FROM, SELECT, GROUP BY, then ORDER BY

⚠ Moving to the next question prevents changes to this answer.

Question **4** of **37** ›

Question 5

An alias can be used for a table named in the WHERE clause, where the alias is separated from the table name with a space.

○ True ● False

⚠ Moving to the next question prevents changes to this answer.

This query:

SELECT   studentD, fName, lName, Gender

FROM   Student

HAVING Gender='F';

Is:

○ True   ⦿ False

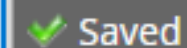⚠ Moving to the next question prevents changes to this answer.

Question 7

To retrieve all records from Employee table sorted by FirstName in a descending order, we write:

- ○ SELECT * FROM Employee ORDER FirstName DESC;

- ○ SELECT * FROM Employee SORT BY 'FirstName' DESC;

- ○ SELECT * FROM Employee SORT 'FirstName' DESC;
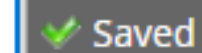
- ◉ SELECT * FROM Employee ORDER BY FirstName DESC;

⚠ Moving to the next question prevents changes to this answer.

HAVING clause cannot be used without GROUP BY clause in a SELECT statement.

● True ○ False

⚠ Moving to the next question prevents changes to this answer.

1 points ✔ Saved
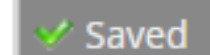
The goal of database normalization is to decompose relations with anomalies in order to produce smaller, unstructured relations.
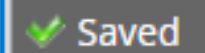
○ True
◉ False

⚠ Moving to the next question prevents changes to this answer.

When non key attribute depends on only part of the primary key not on the whole primary key, this is called:

○ Repeating groups

○ None of the answers

◉ Partial dependency

○ Transitive dependency

1 points ✔ Saved

A relational database table is often described as "normalized" if it is:
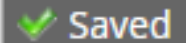
○ In the Second Normal Form (2NF)

⦿ In the Third Normal Form (3NF)

○ None of the answers

○ In the First Normal Form (1NF)

⚠ Moving to the next question prevents changes to this answer.

Question 12

The database will be in 1NF if every attribute in every row can contain only one single (atomic) value and there are no repeating groups in the table.
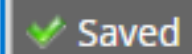
- ◉ True
- ○ False

⚠ Moving to the next question prevents changes to this answer.

In the design of a relational database management system (RDBMS), the process of organizing data to minimize redundancy is called:

○ Requirements analysis

● Normalization

○ Design of conceptual model

○ Mapping to relational model

⚠ Moving to the next question prevents changes to this answer.

When any non-key attribute depends on any other non-key attribute in a given relation ,this is

○ None of the answers

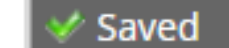○ Partial dependency

● Transitive dependency

○ Repeating groups

⚠ Moving to the next question prevents changes to this answer.

1 points   ✔ Saved

The projection operation acts like a filter on a relation by returning only a certain number of tuples.

○ True   ◉ False

⚠ Moving to the next question prevents changes to this answer.
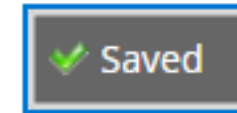
Question 16

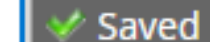Intersection operation produces all combinations of tuples from two relations.

○ True ● False

⚠ Moving to the next question prevents changes to this answer.

Question 17

The result of difference operation (R-S) is a relation with tuples from S but not from R.

○ True ⦿ False

⚠ Moving to the next question prevents changes to this answer.
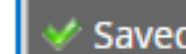
Question 18

Attributes of relations need not be identical to perform union, intersection and difference operations.

- ◉ True   ○ False

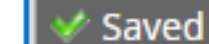⚠ Moving to the next question prevents changes to this answer.

Question 19

Projection is binary operator that limits the attributes that will be returned from the original relation.

○ True   ● False

⚠ Moving to the next question prevents changes to this answer.

Question **19** of **37** ›

Question 20

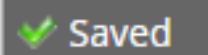Relational Algebra is a collection of operations on Relations.

○ True   ○ False

⚠ Moving to the next question prevents changes to this answer.

_____ relation exists when one instance of the first entity (parent) can relate to many instances of the second entity (child), and one instance of the second entity can relate to many instances of the first entity
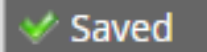
- ◉ M – to – M
- ○ M – to – 1
- ○ 1 – to – 1
- ○ 1 – to – M

⚠ Moving to the next question prevents changes to this answer.

The number of instances of one entity type that may be associated with each instance of the other entity type:

- ○ Ternary relationship
- ○ Binary relationship
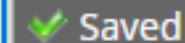- ◉ Cardinality of relationship
- ○ None of the answers

⚠ Moving to the next question prevents changes to this answer.

Question **22** of **37** >

Question 24

In Logical Database Design Phase, there are two design strategies: top-down and bottom-up.
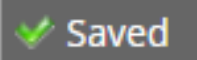
○ True
◉ False

⚠ Moving to the next question prevents changes to this answer.

Question **24** of **37** ›

In the database development process, business rules are clarified in _____ Phase.

○ **Requirement Analysis**
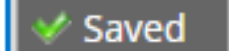
○ Physical Design

○ Logical Design

○ Conceptual Design

⚠ Moving to the next question prevents changes to this answer.

The following clauses are mandatory in the SELECT statements:

○ WHERE

◉ None of the answers

○ ORDER BY

○ GROUP BY

⚠ Moving to the next question prevents changes to this answer.
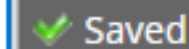
This part of SELECT statement can determine which rows will be displayed in the result:

○ HAVE

○ SELECT

◉ WHERE

○ FROM

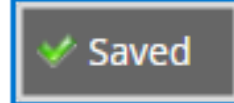⚠ Moving to the next question prevents changes to this answer.

To delete the records where the FirstName is "Ahmad" in the Employee Table, we write:

🔘 DELETE FROM Employee WHERE FirstName = 'Ahmad'

⚪ DELETE FirstName = 'Ahmad' FROM Employee

⚪ DELETE FROM Employee FirstName = 'Ahmad'
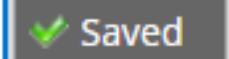
⚪ DELETE ROW FirstName = 'Ahmad' FROM Employee

⚠ Moving to the next question prevents changes to this answer.

Question 29

This SQL statement:

INSERT INTO Student(studentID, name, city)

VALUES (1234, 'Ahmad');

is:

○ True   ◉ False

⚠ Moving to the next question prevents changes to this answer.
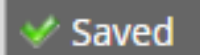
Question 30

The query:

SELECT employeeID

FROM Employee

WHERE bonus BETWEEN 40 AND 80;

contains search condition of type:

○ None of the answers

○ Comparison

○ Set membership

◉ Range

⚠ Moving to the next question prevents changes to this answer.

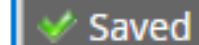The query:

SELECT branchNo, branchAddress

FROM   BranchData

WHERE   branchAddress   IN ('Makkah', 'Jeddah');

contains search condition of type:

○ Range

⦿ Set membership

○ Comparison

○ None of the answers

⚠ Moving to the next question prevents changes to this answer.

Question 32

DROP TABLE Employee; remove table Employee but does not remove its data.

○ True   ● False

⚠ Moving to the next question prevents changes to this answer.
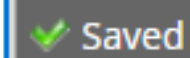
The SQL command that removes all the referencing tuples in the child table:

- ⦿ ON DELETE CASCADE
- ○ None of the answers
- ○ ON DELETE SET NULL
- ○ ON DELETE REMOVE CHILD

⚠ Moving to the next question prevents changes to this answer.

Question **33** of **37** ▷

The output of:

SELECT DATE_FORMAT(SYSDATE( ), ' %Y/%m/%d ')

FROM DUAL;

is:
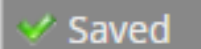
○ 2020/23/12

◉ 2020/12/23

○ 12/23/2020

○ None of the answers

ALTER   TABLE   Student

ADD   (Address VARCHAR(30));

is used to change the definition of Table Student by adding a new column.

- ◉ True
- ○ False

⚠ Moving to the next question prevents changes to this answer.

The child table must be created first, so that the parent table will reference an existing child table when it is created.
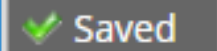
○ True
◉ False

⚠ Moving to the next question prevents changes to this answer.

Question 37

Data type **VARCHAR(n)** is flexible and saves space more than **CHAR(n)**

⦿ True ◯ False

⌐⟶ ⚠ Click **Submit** to complete this assessment.

Question **37** of **37**

Save and Submit