

QUIZ

Started on	Thursday, 24 August 2023, 6:03 PM
State	Finished
Completed on	Thursday, 24 August 2023, 6:30 PM
Time taken	26 mins 32 secs
Marks	35.00/40.00
Grade	17.50 out of 20.00 (87.5%)

Question 1

Correct

Mark 1.00 out of 1.00

Which of the following is NOT a step in logical database design?

- ☐ a. Normalizing tables
- ☐ b. Defining attributes for each entity
- ☒ c. Designing user interfaces ✓
- ☐ d. Identifying entities and their relationships

The correct answer is: Designing user interfaces

Question 2

Correct

Mark 1.00 out of 1.00

The full form of RDBMS is_____

- ☒ a. Relational database management system ✓
- ☐ b. Regular database management system
- ☐ c. Regional district management system
- ☐ d. Regular district machine system

The correct answer is: Relational database management system

Question 3

Correct

Mark 1.00 out of 1.00

You want to find all records in a database where a certain word starts with "abc" followed by any two characters. Which wildcard combination would you use?

- ☐ a. abc%
- ☐ b. abc**
- ☐ c. abc%%
- ☒ d. abc__ ✓

The correct answer is: abc__

Question 4

Correct

Mark 1.00 out of 1.00

What does the CASCADE option do when used in conjunction with a DELETE operation on a parent table with a CASCADE DELETE foreign key constraint?

- ☒ a. It deletes the parent table and all associated child records. ✓
- ☐ b. It restricts the deletion of the parent table if child records exist.
- ☐ c. It prevents the deletion of records in the parent table if child records exist.
- ☐ d. It updates the foreign key values in child records to NULL.

The correct answer is: It deletes the parent table and all associated child records.

Question 5

Correct

Mark 1.00 out of 1.00

Minimal super keys are known as _____

- ☒ a. candidate keys ✓
- ☐ b. schema keys
- ☐ c. domain keys
- ☐ d. attribute keys

The correct answer is: candidate keys

Question 6

Incorrect

Mark 0.00 out of 1.00

Which statement is valid?

- ☒ a. ALTER TABLE EMPLOYEE CHANGE (last_name CHAR2(2000)); ❌
- ☐ b. ALTER TABLE EMPLOYEE MODIFY (last_name CHAR2(2000));
- ☐ c. ALTETABLE EMPLOYEE CHANGE (last_name VARCHAR2 (2000));
- ☐ d. ALTER TABLE EMPLOYEE MODIFY (last_name VARCHAR2 (2000));

The correct answer is: ALTER TABLE EMPLOYEE MODIFY (last_name VARCHAR2 (2000));

Question 7

Correct

Mark 1.00 out of 1.00

In which model, the basic logical structure is represented as a tree?

- ☐ a. Network
- ☐ b. E-R model
- ☒ c. Hierarchical ✔️
- ☐ d. Relational

The correct answer is: Hierarchical

Question 8

Correct

Mark 1.00 out of 1.00

Which of this statement will produce an error?

- ☐ a. INSERT INTO employee VALUES(0223, Tom,2400)
- ☒ b. INSERT INTO employee VALUES(0323,Rose,) ✔️
- ☐ c. All the above
- ☐ d. INSERT INTO employee VALUES(0123,Mark,0)

The correct answer is: INSERT INTO employee VALUES(0323,Rose,)

Question 9

Correct

Mark 1.00 out of 1.00

Given relations $r(w, x)$ and $s(y, z)$, the result of `select distinct w, x from r, s` is guaranteed to be same as r , provided

- ☒ a. r has no duplicates and s is non-empty ✓
- ☐ b. r and s have no duplicates
- ☐ c. r and s have the same number of tuples
- ☐ d. s has no duplicates and r is non-empty

The correct answer is: r has no duplicates and s is non-empty

Question 10

Correct

Mark 1.00 out of 1.00

Which of the following is true about entity-relationship diagrams (ERDs) used in logical database design?

- ☐ a. They are used primarily for user interface design.
- ☒ b. They represent the logical relationships between data entities ✓
- ☐ c. They depict the actual table structures and their relationships.
- ☐ d. They focus on the physical storage details of the database.

The correct answer is: They represent the logical relationships between data entities

Question 11

Correct

Mark 1.00 out of 1.00

This order describe the best steps to build database application

- ☐ a. Queries –> Requirements modeling –> Schema design –> Implementation
- ☐ b. Schema design –> Implementation –> Queries –> Requirements modeling
- ☒ c. Requirements modeling –> Schema design –> Implementation –> Queries ✓
- ☐ d. Schema design –> Requirements modeling –> Implementation –> Queries

The correct answer is: Requirements modeling –> Schema design –> Implementation –> Queries

Question 12

Correct

Mark 1.00 out of 1.00

A relation has 45 tuples & 5 attributes, what will be the Degree & Cardinality of that relation?

- ☒ a. Degree 5, Cardinality 45 ✓
- ☐ b. Degree 50, Cardinality 45
- ☐ c. Degree 45, Cardinality 5
- ☐ d. Degree 50, Cardinality 225

The correct answer is: Degree 5, Cardinality 45

Question 13

Correct

Mark 1.00 out of 1.00

Which of the following is/are correct?

- ☐ a. SQL permits attribute names to be repeated in the same relation
- ☒ b. None of the above ✓
- ☐ c. An SQL query will not work if there are no indexes on the relations
- ☐ d. An SQL query automatically eliminates duplicates

The correct answer is: None of the above

Question 14

Correct

Mark 1.00 out of 1.00

_____ is the attribute or group of attributes that uniquely identify the occurrence of each entity.

- ☒ a. Primary key ✓
- ☐ b. Foreign key
- ☐ c. All of these
- ☐ d. Super key

The correct answer is: Primary key

Question 15

Correct

Mark 1.00 out of 1.00

Consider a scenario where you want to match words that start with "cat" followed by exactly two characters, and then any sequence of characters. Which wildcard combination would you use

- ☐ a. Cat?*
- ☒ b. Cat__% ✓
- ☐ c. Cat?%
- ☐ d. cat__

The correct answer is: Cat__%

Question 16

Incorrect

Mark 0.00 out of 1.00

Consider a scenario where you need to match entries with a specific pattern, where the pattern includes a single character, then "x", and then any number of characters. Which wildcard combination would you use?

- ☐ a. _x
- ☐ b. x%
- ☒ c. _x% ✗
- ☐ d. %x

The correct answer is: _x

Question 17

Correct

Mark 1.00 out of 1.00

The predicate in where clause can involve Boolean operations such as AND. The result of true and unknown is _____, false and unknown is _____ while unknown and unknown is _____

- ☐ a. True, unknown, unknown
- ☒ b. Unknown, Unknown, False ✓
- ☐ c. True, false, unknown
- ☐ d. Unknown, false, unknown

The correct answer is: Unknown, Unknown, False

Question 18

Correct

Mark 1.00 out of 1.00

Which of the data type is used to store movie and image file?

- ☐ a. Clob
- ☐ b. Binary
- ☐ c. Image
- ☒ d. Blob ✓

The correct answer is: Blob

Question 19

Correct

Mark 1.00 out of 1.00

What is concurrency control in a database management system?

- ☐ a. The technique of compressing data to reduce storage space
- ☒ b. The ability to execute transactions concurrently without conflicts ✓
- ☐ c. The process of serializing transactions to ensure isolation
- ☐ d. The practice of allowing only one transaction to execute at a time

The correct answer is: The ability to execute transactions concurrently without conflicts

Question 20

Correct

Mark 1.00 out of 1.00

Which of the following is not a type of database management system?

- ☐ a. Hierarchical
- ☐ b. Relational
- ☒ c. Sequential ✓
- ☐ d. Network

The correct answer is: Sequential

Question 21

Correct

Mark 1.00 out of 1.00

We use _____ operator with select for condition based on pattern matching

- ☒ a. Like ✓
- ☐ b. IS
- ☐ c. BETWEEN
- ☐ d. IN

The correct answer is: Like

Question 22

Correct

Mark 1.00 out of 1.00

What is the purpose of an index in a database?

- ☐ a. To store a copy of the entire table
- ☐ b. To create a backup of the data
- ☐ c. To prevent unauthorized access to the data
- ☒ d. To speed up data retrieval operations ✓

The correct answer is: To speed up data retrieval operations

Question 23

Correct

Mark 1.00 out of 1.00

Which of these best describe database schema in SQL database systems?

- ☐ a. A collection of data stored in a single table.
- ☐ b. A graphical representation of data relationships
- ☒ c. A blueprint that defines the structure of a database, including tables, columns, and relationships ✓
- ☐ d. A set of SQL statements used to retrieve data from a database.

The correct answer is: A blueprint that defines the structure of a database, including tables, columns, and relationships

Question 24

Correct

Mark 1.00 out of 1.00

You're tasked with finding entries in a database where a certain word can have alternate spellings. The word can be spelled as "color" or "colour". Which SQL query with the correct wildcard usage would accomplish this?

- ☐ a. `SELECT * FROM table WHERE word LIKE 'col%ur';`
- ☐ b. `SELECT * FROM table WHERE word LIKE 'col*our';`
- ☐ c. `SELECT * FROM table WHERE word LIKE 'col_r';`
- ☒ d. `SELECT * FROM table WHERE word LIKE 'col_r' OR word LIKE 'col%ur';` ✓

The correct answer is: `SELECT * FROM table WHERE word LIKE 'col_r' OR word LIKE 'col%ur';`

Question 25

Incorrect

Mark 0.00 out of 1.00

To display the detail of an employee having „e“ in their name in descending order of salary, the correct SQL statement is:

- ☐ a. `SELECT * FROM emp WHERE ename LIKE 'e%' ORDER BY SAL ;`
- ☐ b. `SELECT * FROM emp WHERE ename LIKE '%e%' ORDER BY SAL DESC`
- ☒ c. `SELECT * FROM emp WHERE ename LIKE '%e%' ORDER BY SAL DESC;` ✗
- ☐ d. `SELECT * FROM emp WHERE ename LIKE '%e%' ORDER BY DESC SAL;`

The correct answer is: `SELECT * FROM emp WHERE ename LIKE 'e%' ORDER BY SAL ;`

Question 26

Not answered

Marked out of 1.00

Which of the following relational database schemes is a correct representation (via the mapping steps from the text) for the following ER diagram?

- ☐ a. `INSTRUCTOR(SSN,NAME) DEGREES(SSN,TITLE,YEAR)`
- ☐ b. `INSTRUCTOR(SSN, NAME) DEGREEA(SSN,TITLE) DEGREEB(SSN,YEAR)`
- ☐ c. None of the above
- ☐ d. `INSTRUCTOR(SSN,NAME,TITLE,YEAR)`

The correct answer is: None of the above

Question 27

Correct

Mark 1.00 out of 1.00

Which property of a transaction ensures that once a transaction is completed, its changes become permanent?

- ☒ a. Durability ✓
- ☐ b. Consistency
- ☐ c. Isolation
- ☐ d. Atomicity

The correct answer is: Durability

Question 28

Correct

Mark 1.00 out of 1.00

The clause which sorts data of a table is _____

- ☐ a. Where Clause
- ☒ b. Order by Clause ✓
- ☐ c. Group by clause
- ☐ d. Having clause

The correct answer is: Order by Clause

Question 29

Correct

Mark 1.00 out of 1.00

Which of the following commands should be used to create a database named "student"?

- ☐ a. DATABASE student
- ☐ b. CREATE? I student
- ☒ c. CREATE DATABASE student ✓
- ☐ d. DATABASE/student

The correct answer is: CREATE DATABASE student

Question 30

Correct

Mark 1.00 out of 1.00

You want to match records that could start with any vowel followed by any three characters. Which wildcard combination should you use?

- ☐ a. [aeiou]%%
- ☐ b. [aeiou]__
- ☒ c. [aeiou]___ ✓
- ☐ d. [aeiou]_

The correct answer is: [aeiou]___

Question 31

Correct

Mark 1.00 out of 1.00

A non-key attribute, whose values are derived from the primary key of some other table.

- ☐ a. Primary
- ☐ b. Alternate key
- ☒ c. Foreign key ✓
- ☐ d. Super Key

The correct answer is: Foreign key

Question 32

Correct

Mark 1.00 out of 1.00

What is the main purpose of SQL?

- ☒ a. To manage and manipulate databases. ✓
- ☐ b. To develop mobile applications
- ☐ c. To analyze data trends
- ☐ d. To create websites

The correct answer is: To manage and manipulate databases.

Question 33

Correct

Mark 1.00 out of 1.00

Which SQL statement will not generate any error message?

- ☐ a. All of the above
- ☒ b. `SELECT * FROM EMP WHERE COMM IS NOT NULL;` ✓
- ☐ c. `SELECT * FROM EMP WHERE SAL BETWEEN 3000 TO 15000;`
- ☐ d. `SELECT * FROM EMP WHERE EMPNO LIKE (1,2,3,4);`

The correct answer is: `SELECT * FROM EMP WHERE COMM IS NOT NULL;`

Question 34

Correct

Mark 1.00 out of 1.00

A row of relation generally referred to as _____ and column of a relation is _____

- ☐ a. Attribute & Tuple
- ☐ b. Domain & Attribute
- ☐ c. Attribute & Domain
- ☒ d. Tuple & Attribute ✓

The correct answer is: Tuple & Attribute

Question 35

Correct

Mark 1.00 out of 1.00

Select the statement that shows the medium population density of each region.

- ☐ a. `SELECT region, COUNT(population)/COUNT(area) AS density FROM bbc GROUP BY region`
- ☐ b. `SELECT region, SUM(population)/SUM(area) AS density FROM bbc GROUP BY region`
- ☐ c. `SELECT region, SUM(population)/COUNT(area) AS density FROM bbc GROUP BY region`
- ☒ d. `SELECT region, AVG(population/area) AS density FROM bbc` ✓

The correct answer is: `SELECT region, AVG(population/area) AS density FROM bbc`

Question 36

Correct

Mark 1.00 out of 1.00

Which SQL statement is used to create an index?

- ☐ a. ALTER TABLE
- ☐ b. CREATE TABLE
- ☒ c. CREATE INDEX ✓
- ☐ d. ADD INDEX

The correct answer is: CREATE INDEX

Question 37

Incorrect

Mark 0.00 out of 1.00

Which of the following is a potential issue in a multi-user database system without concurrency control?

- ☐ a. Isolation
- ☒ b. Inconsistency ✗
- ☐ c. Deadlocks
- ☐ d. Redundancy

The correct answer is: Deadlocks

Question 38

Correct

Mark 1.00 out of 1.00

In which situation would you use a multi-column (composite) PRIMARY KEY constraint?

- ☒ a. When you want to enforce uniqueness across multiple columns together. ✓
- ☐ b. When you want to specify the order of rows in the table
- ☐ c. When you want to define a relationship between two tables.
- ☐ d. When you want to ensure that a column cannot have NULL values.

The correct answer is: When you want to enforce uniqueness across multiple columns together.

Question 39

Correct

Mark 1.00 out of 1.00

The USE command ____

- ☒ a. Should be used to choose the database you want to use once you've connected to MySQL ✓
- ☐ b. Is a pseudonym for the SELECT command
- ☐ c. Has been deprecated and should be avoided for security reasons
- ☐ d. Is used to load code from another file

The correct answer is: Should be used to choose the database you want to use once you've connected to MySQL

Question 40

Correct

Mark 1.00 out of 1.00

In a database query, which of the following wildcard combinations matches either "cat" or "cot"?

- ☐ a. c*
- ☐ b. c%
- ☐ c. c_t
- ☒ d. c[a,o]t ✓

The correct answer is: c[a,o]t