Contestant Number:

Time:

Rank:

SQL DATABASE

FUNDAMENTALS

(345)

REGIONAL – 2019

**Multiple Choice:**

Multiple Choice (50 @ 10 points each) (500 points)

***TOTAL POINTS (500 points)***

**Failure to adhere to any of the following rules will result in disqualification:**

1. **Contestant must hand in this test booklet and all printouts. Failure to do so will result in disqualification.**
2. **No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests or facsimile (handwritten, photocopied, or keyed) are allowed in the testing area.**
3. **Electronic devices will be monitored according to ACT standards.**

No more than sixty (60) minutes testing time

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*Workplace Skills Assessment Program* competition.

**MULTIPLE CHOICE**

Identify the letter of the choice that best completes the statement or answers the question. Mark A if the statement is true. Mark B if the statement is false.

1. What does SQL stand for?
   1. Standard Question Language
   2. Safe Query Language
   3. Structure Query Language
   4. Strong Question Language
2. The command to remove rows from a table 'CUSTOMER' is:
   1. DELETE FROM CUSTOMER WHERE
   2. DROP FROM CUSTOMER
   3. UPDATE FROM CUSTOMER
   4. REMOVE FROM CUSTOMER
3. Which SQL statement is used to extract data from a database
   1. Select
   2. Delete
   3. Join
   4. Group By
4. Keys may include:
   1. Primary keys
   2. Nonunique secondary keys
   3. Unique secondary keys
   4. All of the above
5. How do you select all the columns from a table named “Addresses”?
   1. SELECT FROM Addresses
   2. SELECT \* FROM Addresses
   3. SELECT all FROM Addresses
   4. SELECT Addresses
6. A table is:
   1. A collection of rows
   2. A collection of rows and columns
   3. A collection of data types
   4. A collection of keys, indexes, and columns
7. Which SQL keyword is used to filter records from a table?
   1. Delete
   2. Select
   3. Having
   4. Where
8. Which SQL keyword is used to bring back a specific number of records?
   1. Select Top
   2. Select Max
   3. Select Min
   4. Select Count
9. Which SQL keyword enables you to add records to a table?
   1. Insert Into
   2. Update
   3. Select Into
   4. Where
10. Which SQL keyword enables you to be able to change columns within a table?
    1. Delete
    2. Change
    3. Alter
    4. Update
11. What would be the effect of the following UPDATE statement?  
      
    UPDATE Address  
    SET AddressCity = ‘Columbus’  
    1. The statement will have no effect
    2. The statement will change all the records in the table to set city as Columbus
    3. The statement will change just one record to Columbus
    4. None of the above
12. The OR operator displays a record if ANY conditions listed are true. The AND operator displays a record if ALL of the conditions listed are *true*.
    1. True
    2. False
13. A table column within common database terminology is also considered as a(n):
    1. Data
    2. Row
    3. Record
    4. Field
14. Which range of values defines mediumint?
    1. Integer data from 0 to 512
    2. Integer data from 0 to 756
    3. Integer data from 0 to 256
    4. Integer data from 0 16777215
15. What does the SQL clause ORDER BY SalesAmount DESC do?
    1. Order the salespeople by sales amount lease to greatest
    2. Order the salespeople by the number of digits in the sales amount
    3. Order the salespeople by sales amount greatest to lease
    4. None of the above
16. The acronym ETL stands for Entry, Transform, Load:
    1. True
    2. False
17. Which acronym refers to the major functions within relational database applications?
    1. Create, Read, Update, Delete (CRUD)
    2. Select, Alter, Insert, Delete (SAID)
    3. Select, Execute, Alter, Write (SEAW)
    4. Consistency, Availability, Partition tolerance (CAP)
18. Each table within a database must have:
    1. A unique name
    2. A primary key
    3. An index
    4. At least one record
19. A primary key:
    1. Contains two or more fields
    2. Cannot contain null values
    3. Must contain a unique value for each row of data
    4. Both b and c
20. A foreign key:
    1. Establishes a relationship between two or more tables within two databases
    2. Is a numeric field that increments automatically per record
    3. Links between a field in one table to a field in another table
    4. Is a value that never changes
21. The acronym RDBMS stands for Rational Database Managerial System:
    1. True
    2. False
22. Which of the following is *not* a character string data type in SQL Server?
    1. Tinytext
    2. Text
    3. Nvarchar
    4. Binary
23. Which of the following is *not* a Date and Time data type within SQL Server?
    1. Dateoffset
    2. Timestamp
    3. Smalldatetime
    4. Datetime2
24. Which of the following is *not* a numeric data type within SQL Server?
    1. Smallmoney
    2. Real
    3. Money
    4. Varbinary
25. The definition of a Domain is:
    1. The possible values of an attribute, i.e. column
    2. A collection of records
    3. A set of data records
    4. The possible values of an attribute, i.e. row
26. Which of the following should be considered when making a table within SQL?
    1. Primary keys
    2. Default values
    3. Data types
    4. All of the above
27. Which of the following are characteristics of an RDBMS?
    1. Tables are linked by common data known as keys
    2. Data are organized in a series of two-dimensional tables each of which contains records for one entity
    3. Keys may be unique or have multiple occurrences in the database
    4. All of the above.
28. What is the name of the item that can store data from various databases to be used as a fast table in memory to read and write data from?
    1. Data Source
    2. Data Set
    3. Query
    4. Data connection
29. A database schema:
    1. Defines the tables, the fields in each table, and the relationships between fields and tables.
    2. Is the structure of a database system
    3. Is described in a formal language supported by the database management system
    4. All of the above
30. The acronym GUID stands for Global User Interface Device:
    1. True
    2. False
31. SQL commands are generally grouped into four different categories. Which of the following is *not* a category of SQL commands?
    1. DAC (Data Administration Commands)
    2. TCC (Transactional Control Commands)
    3. DAL (Data Abstraction Language)
    4. DQL (Data Query Language)
32. When representing a 1:M relationship in a relational database design, \_\_\_\_\_\_:
    1. Both tables need a primary key, and the foreign key needs to be placed in the table that is referencing the other table
    2. Both tables must have the same primary key
    3. An Intersection table gets the key from both relations
    4. One table needs to have a primary key while the other needs a foreign key
33. Primary key constraints ensure:
    1. Referential integrity
    2. User-defined integrity
    3. Domain integrity
    4. Entity integrity
34. Which of the following is *not* a category of data integrity?
    1. Attribute integrity
    2. Referential integrity
    3. Domain integrity
    4. User-defined integrity
35. The UPDATE command is used to insert records into tables:
    1. True
    2. False
36. The DROP command is used to either drop a database or table from the server:
    1. True
    2. False
37. In order to create a table named “Orders” with a primary key named “orderID”, use the following MS SQL syntax (assuming there are several more fields):
    1. CREATE TABLE orders (PRIMARY KEY = orderID INT NOT NULL PRIMARY KEY,)
    2. CREATE TABLE NAME = orders (PRIMARY KEY = orderID)
    3. CREATE TABLE orders (orderID INT NOT NULL PRIMARY KEY,)
    4. CREATE TABLE NAME = orders (orderID INT NULL PRIMARY KEY,)
38. What does the SQL code in the following SQL clause define?

PRIMARY KEY (Name, Address)

* 1. A composite key
  2. A primary key
  3. A foreign key
  4. None of the above

1. RDBMS is the basis for SQL, and for all modern database systems *except*:
   1. MariaDB
   2. MySQL
   3. SQLite
   4. MongoDB
2. Which of the following is an example of a DML command?
   1. GRANT
   2. CREATE
   3. DROP
   4. INSERT
3. A stored program that is attached to a table or view is called a \_\_\_\_\_\_:
   1. Trigger
   2. Function
   3. Stored Procedure
   4. View
4. Which of the following is *not* removed by the DROP TABLE in SQL Server?
   1. Triggers
   2. Permissions
   3. Views
   4. Stored Procedures
5. Which of the following is inconsistent with Domain information?
   1. Bitwise constraints
   2. Length
   3. Data type
   4. Default value if any
6. Aggregate functions can be used as expressions in the select list of a SELECT statement:
   1. True
   2. False
7. What are the two common wildcard characters within SQL?
   1. Period (.); Semi-Colon (;)
   2. Semi-Colon (;); Percent Sign (%)
   3. Period (.); Underscore (\_)
   4. Percent Sign (%); Underscore (\_)
8. SQL query and modification commands make up a(n) \_\_\_\_\_\_:
   1. DML
   2. XML
   3. HTML
   4. DQL
9. The language available in SQL Server that adds programming constructs to the SQL language is known as \_\_\_\_\_\_:
   1. INTERACT-SQL
   2. VB
   3. TRANSACT-SQL
   4. C#
10. In MS SQL the parameter added to a field in order to auto increment that field is:
    1. ADD 1
    2. IDENTITY
    3. INCREMENT 1
    4. None of the above is a correct parameter
11. The identifier of the entity becomes the \_\_\_\_\_\_ of the corresponding table:
    1. Foreign Key
    2. Primary Key
    3. Default Value
    4. None of the above
12. A table's Permissions are a set of defined levels of access to a securable and are applied individually or collectively to a securable:
    1. True
    2. False