WORKSHEET 7 SQL

Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question.

1. The primary key is selected from the
   A. Composite keys
   B. Candidate keys
   C. Foreign keys
   D. Determinants
   Answers – B) **Candidate keys**

2. Which is/are correct statements about primary key of a table?
   A. Primary keys can contain NULL values.
   B. Primary keys cannot contain NULL values…
   C. A table can have only one primary key with single or multiple fields….
   D. A table can have multiple primary keys with single or multiple fields.

   Answer – B) **Primary keys cannot contain NULL values…**

Q3 to Q10 have only one correct answer. Choose the correct option to answer your question.

3. Which SQL command is used to insert a row in a table?
   A. Select
   B. Create
   C. Insert
   D. Drop
   Answer – C) **Insert**

4. Which one of the following sorts rows in SQL?
   A. SORTBY
   B. ALIGNBY
   C. ORDERBY
   D. GROUPBY

   Answer – C) **ORDERBY**

5. The SQL statement that queries or reads data from a table is
   A. QUERY
   B. READ
   C. SELECT
   D. QUERY

   Answer- C) **SELECT**

6. Which normal form is considered adequate for relational database design?
   A. 1NF
   B. 2NF
   C. 3NF

D. 4NF

Answer – C) **3NF**

7. SQL can be used to
   A. Create database structures only
   B. Modify database data only
   C. All of the above can be done by SQL
   D. Query database data only

Answer – B) **Modify database data only**

8. SQL query and modification commands make up
   A. DDL
   B. DML
   C. HTML
   D. XML
   Answer – B) **DML**

9. The result of a SQL SELECT statement is a(n).
   A. File
   B. Table
   C. Report
   D. Form
   Answer – B) **Table**

10. Second normal form should meet all the rules for
    A. 1 NF
    B. 2 NF
    C. 3 NF
    D. 4 NF
    Answer – B) **2 NF**

Q11 to Q15 are subjective answer type questions, Answer them briefly.

11. What are joins in SQL?

Answer - JOINS clause is used to combine rows from two or more tables, based on a related column between them.

12. What are the different types of joins in SQL?

Answer - Different Types of SQL JOINs

- (INNER) JOIN: Returns records that have matching values in both tables
- LEFT (OUTER) JOIN: Returns all records from the left table, and the matched records from the right table
- RIGHT (OUTER) JOIN: Returns all records from the right table, and the matched records from the left table
- FULL (OUTER) JOIN: Returns all records when there is a match in either left or right table

13. What is SQL Server?

Answer - SQL Server is a relational database management system, or RDBMS, developed and marketed by Microsoft.

Similar to other RDBMS software, SQL Server is built on top of SQL, a standard programming language for interacting with relational databases. SQL Server is tied to Transact-SQL, or T-SQL, the Microsoft's implementation of SQL that adds a set of proprietary programming constructs.

SQL Server works exclusively on the Windows environment for more than 20 years. In 2016, Microsoft made it available on Linux. SQL Server 2017 became generally available in October 2016 that ran on both Windows and Linux.

14. What is primary key in SQL?

    Answer – The PRIMARY KEY constraint uniquely identifies each recod in a table . Primary Keys must contain UNIQUE values, and cannot contain NULL values. A table can have only ONE primary key ; and in the table, this primary key can consist of single or multiple columns (fields).

15. What is ETL in SQL?

    Answer - ETL, which stands for extract, transform and load, is a data integration process that combines data from multiple data sources into a single, consistent data store that is loaded into a data warehouse or other target system.

    As the databases grew in popularity in the 1970s, ETL was introduced as a process for integrating and loading data for computation and analysis, eventually becoming the primary method to process data for data warehousing projects.

    ETL provides the foundation for data analytics and machine learning workstreams. Through a series of business rules, ETL cleanses and organizes data in a way which addresses specific business intelligence needs, like monthly reporting, but it can also tackle more advanced analytics, which can improve back-end processes or end user experiences. ETL is often used by an organization to:

    Extract data from legacy systems

    Cleanse the data to improve data quality and establish consistency

    Load data into a target database