

**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 (B)
  - A. Composite keys
  - B. Candidate keys
  - C. Foreign keys
  - D. Determinants
2. Which is/are correct statements about primary key of a table? (B, C)
  - 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.

**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? (C)
  - A. Select
  - B. Create
  - C. Insert
  - D. Drop
4. Which one of the following sorts rows in SQL? (C)
  - A. SORTBY
  - B. ALIGNBY
  - C. ORDERBY
  - D. GROUPBY
5. The SQL statement that queries or reads data from a table is (C)
  - A. QUERY
  - B. READ
  - C. SELECT
  - D. QUERY
6. Which normal form is considered adequate for relational database design? (C)
  - A. 1NF
  - B. 2NF
  - C. 3NF
  - D. 4NF
7. SQL can be used to (C)
  - 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

8. SQL query and modification commands make up (B)
  - A. DDL
  - B. DML
  - C. HTML
  - D. XML
9. The result of a SQL SELECT statement is a(n). (B)
  - A. File
  - B. Table
  - C. Report
  - D. Form
10. Second normal form should meet all the rules for (A)
  - A. 1 NF
  - B. 2 NF
  - C. 3 NF
  - D. 4 NF

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

**11. What are joins in SQL?**

Ans) SQL Join statement is used to combine data or rows from two or more tables based on a common field between them. Different types of Joins are as follows:

INNER JOIN  
LEFT JOIN  
RIGHT JOIN  
FULL JOIN

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

Ans) Different Types of SQL JOINS

Here are the different types of the JOINS in SQL:

(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

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### **13. What is SQL Server?**

**Ans)** 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?**

**Ans)** The PRIMARY KEY constraint uniquely identifies each record 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?**

**Ans)** ETL stands for extract, transform and load. It 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.

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.

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- > Cleanse the data to improve data quality and establish consistency.
- > Load data into a target database.