Name of the Assignment: SQL (Worksheet-7)

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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

Ans: 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.

Ans: B&C

Q3 to Q10 have only one correct answer.

3. Which SQL command is used to insert a row in a table?

A. Select B. Create C. Insert D. Drop

Ans: C. Insert

4. Which one of the following sorts rows in SQL?

A. SORTBY B. ALIGNBY C. ORDERBY D. GROUPBY

Ans: C. ORDERBY

5. The SQL statement that queries or reads data from a table is

A. QUERY B. READ C. SELECT D. QUERY

Ans: C. SELECT

6. Which normal form is considered adequate for relational database design?

A. 1NF B. 2NF C. 3NF D. 4NF

Ans: 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

Ans: C. All of the above can be done by SQL

8. SQL query and modification commands make up

A. DDL B. DML C. HTML D. XML

Ans: B. DML

9. The result of a SQL SELECT statement is a(n).

A. File B. Table C. Report D. Form

Ans: B. Table

10. Second normal form should meet all the rules for

A. 1 NF B. 2 NF C. 3 NF D. 4 NF

Ans: A. 1 NF

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

11. What are joins in SQL?

Ans: By using joins, you can retrieve data from two or more tables based on logical relationships between the tables. Joins indicate how SQL Server should use data from one table to select the rows in another table.

A join condition defines the way two tables are related in a query by:

- Specifying the column from each table to be used for the join. A typical join condition specifies a foreign key from one table and its associated key in the other table.
- Specifying a logical operator (for example, = or <>,) to be used in comparing values from the columns.
- 12. What are the different types of joins in SQL?

Ans: The different types of joins in SQL are:

- INNER JOIN
- LEFT [OUTER] JOIN
- RIGHT [OUTER] JOIN
- FULL [OUTER] JOIN
- CROSS JOIN

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.

As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which may run either on the same computer or on another computer across a network (including the Internet).

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, which is a process used to collect data from various sources, transform the data depending on business rules/needs and load the data into a destination database. The need to use ETL arises from the fact that in modern computing business data resides in multiple locations and in many incompatible formats. For example business data might be stored on the file system in various formats (Word docs, PDF, spreadsheets, plain text, etc), or can be stored as email files, or can be kept in a various database servers like MS SQL Server, Oracle and MySQL for example. Handling all this business information efficiently is a great challenge and ETL plays an important role in solving this problem.