WORKSHEET 6 SQL

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

1. Which of the following are TCL commands?
   A. Commit
   B. Select
   C. Rollback
   D. Savepoint
2. Which of the following are DDL commands?
   A. Create
   B. Select
   C. Drop
   D. Alter

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

3. Which of the following is a legal expression in SQL?
   A. SELECT NULL FROM SALES;
   B. SELECT NAME FROM SALES;
   C. SELECT * FROM SALES WHEN PRICE = NULL;
   D. SELECT # FROM SALES**;**
4. DCL provides commands to perform actions like-
   A. Change the structure of Tables
   B. Insert, Update or Delete Records and Values
   C. Authorizing Access and other control over Database
   D. None of the above
5. Which of the following should be enclosed in double quotes?
   A. Dates
   B. Column Alias
   C. String
   D. All of the mentioned
6. Which of the following command makes the updates performed by the transaction permanent in the database?
   A. ROLLBACK
   B. COMMIT
   C. TRUNCATE
   D. DELETE
7. A subquery in an SQL Select statement is enclosed in:
   A. Parenthesis - (...).
   B. brackets - [...].
   C. CAPITAL LETTERS.
   D. braces - {...}.
8. The result of a SQL SELECT statement is a :-
   A. FILE
   B. REPORT
   C. TABLE
   D. FORM

9. Which of the following do you need to consider when you make a table in a SQL?
   A. Data types
   B. Primary keys
   C. Default values
   D. All of the mentioned
10. If you don't specify ASC and DESC after a SQL ORDER BY clause, the following is used by___?
   A. ASC
   B. DESC
   C. There is no default value
   D. None of the mentioned

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

11. What is denormalization?

Ans :- Denormalization is a strategy that database managers use to increase the performance of a database infrastructure. It involves adding redundant data to a normalized database to reduce certain types of problems with database queries that combine data from various tables into a single table. The definition of denormalization is dependent on the definition of normalization, which is defined as the process of organizing a database into tables correctly to promote a given use.

12. What is a database cursor?

Ans :- A database is an organized collection of data stored and accessed electronically. Small databases can be stored on a file system, while large databases are hosted on computer clusters or cloud storage. The design of databases spans formal techniques and practical considerations, including data modeling, efficient data representation and storage, query languages, security and privacy of sensitive data, and distributed computing issues, including supporting concurrent access and fault tolerance.

13. What are the different types of the queries?

Ans :- There are five types of query in Access. They are:

- Select queries
- Action queries
- Parameter queries
- Crosstab queries
- SQL queries.

1.Select Queries - Select query is the simplest and the most common type of query. It retrieves data from one or more tables depending on what is needed and displays the result in a datasheet. Select query also use to group records and calculate sums, counts, averages, and other types of totals.

2.Action Queries - Database undergoes a specific action depending on what was specified in the query itself is known as action query. This can include such things as creating new tables, deleting rows from existing ones and updating records or creating entirely new ones. Action queries are very popular in data management because they allow for many records to be changed at one time.

3.Parameter query- A useful feature of the parameter query is that it can be saved and used again and again whenever we want to ask the same question.

4.Crosstab Queries -You use crosstab queries to calculate and restructure data for easier analysis of your data. Crosstab queries calculate a sum, average, count, or other type of total for data that is grouped by two types of information one downs the left side of the datasheet and another a cross the top.

5. SQL query - An SQL query is created by using an SQL statement. When you create query in query Design view, Access constructs the equivalent SQL statements behind the scenes for you. In fact, most query properties in the property sheet in query Design view have equivalent clauses and options available in SQL view. If you want, you can view or edit the SQL statement in SQL view. However, after you make changes to a query in SQL view, the query might not be displayed the way it was previously in Design view.

14. Define constraint?

Ans :- Constraints are used to limit the type of data that can go into a table. This ensures the accuracy and reliability of the data in the table.

Constraints can be column level or table level. Column level constraints apply to a column, and table level constraints apply to the whole table.

The following constraints are commonly used in SQL:

NOT NULL - Ensures that a column cannot have a NULL value
UNIQUE - Ensures that all values in a column are different
PRIMARY KEY - A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table
FOREIGN KEY - Prevents actions that would destroy links between tables
CHECK - Ensures that the values in a column satisfies a specific condition
DEFAULT - Sets a default value for a column if no value is specified
CREATE INDEX - Used to create and retrieve data from the database very quickly

15. What is auto increment?

Ans :- Auto-increment allows a unique number to be generated automatically when a new record is inserted into a table. Often this is the primary key field that we would like to be created automatically every time a new record is inserted.