**WORKSHEET-3**

SQL

**Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question. (Correct answers are market in yellow)**

1. Which of the following is/are DDL commands in SQL?

A) Create B) Update

C) Delete D) ALTER

2. Which of the following is/are DML commands in SQL?

A) Update B) Delete

C) Select D) Drop

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

3. Full form of SQL is:

A) Strut querying language B) Structured Query Language

C) Simple Query Language D) None of them

4. Full form of DDL is:

A) Descriptive Designed Language B) Data Definition Language

C) Data Descriptive Language D) None of the above.

5. DML is:

A) Data Manipulation Language B) Data Management Language

C) Data Modeling Language D) None of these

6. Which of the following statements can be used to create a table with column B int type and C float type?

A) Table A (B int, C float) B) Create A (b int, C float)

C) Create Table A (B int,C float) D) All of them

7. Which of the following statements can be used to add a column D (float type) to the table A created above?

A) Table A ( D float) B) Alter Table A ADD COLUMN D float

C) Table A( B int, C float, D float) D) None of them

8. Which of the following statements can be used to drop the column added in the above question?

A) Table A Drop D B) Alter Table A Drop Column D

C) Delete D from A D) None of them

9. Which of the following statements can be used to change the data type (from float to int ) of the column D of table A created in above questions?

A) Table A (D float int) B) Alter Table A Alter Column D int

C) Alter Table A D float int D) Alter table A Column D float to int

10. Suppose we want to make Column B of Table A as primary key of the table. By which of the following statements we can do it?

A) Alter Table A Add Constraint Primary Key B B) Alter table (B primary key)

C) Alter Table A Add Primary key B D) None of them

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

11. What is data-warehouse?

Ans:A data warehouse is a large collection of business data used to help an organization make decisions. A data warehouse is constructed by integrating data from multiple sources that support analytical reporting, structured and/or ad hoc queries, and decision making

12. What is the difference between OLTP VS OLAP?

Ans: OLAP stands for Online Analytical Processing, it consists of a type of software tools that are used for data analysis for business decisions. OLAP provides an environment to get insights from the database retrieved from multiple database systems at one time. Example- Any type of Data warehouse system is an OLAP system. Uses of OLAP are as follows: 1. Netflix movie recommendation

OLTP stands for Online transaction processing, it supports transaction-oriented applications in a 3-tier architecture. OLTP administers day to day transaction of an organization.Example: Online banking, Online airline ticket booking.

Key Differences:

.OLAP creates a single platform for all type of business analysis needs which includes planning, budgeting, forecasting, and analysis while OLTP is useful to administer day to day transactions of an organization.

.OLAP is characterized by a large volume of data while OLTP is characterized by large numbers of short online transactions.

.In OLAP, data warehouse is created uniquely so that it can integrate different data sources for building a consolidated database whereas OLTP uses traditional DBMS.

13. What are the various characteristics of data-warehouse?

Ans: A data warehouse is a subject-oriented, integrated, time-variant and non-volatile collection of data in support of management’s decision making process.

So the Characteristics of data warehouse are:

.Subject-Oriented: A data warehouse can be used to analyze a particular subject area. For example, “sales” can be a particular subject.

.Integrated: A data warehouse integrates data from multiple data sources. For example, source A and source B may have different ways of identifying a product, but in a data warehouse, there will be only a single way of identifying a product.

.Time-Variant: Historical data is kept in a data warehouse. For example, one can retrieve data from 3 months, 6 months, 12 months, or even older data from a data warehouse. This contrasts with a transactions system, where often only the most recent data is kept. For example, a transaction system may hold the most recent address of a customer, where a data warehouse can hold all addresses associated with a customer.

.Non-volatile: Once data is in the data warehouse, it will not change. So, historical data in a data warehouse should never be altered.