**WorkSheet1- SQL**

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

1.A) Create, D) ALTER

2. A) Update B) Delete

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

3. B) Structured Query Language

4. B) Data Definition Language

5. A) Data Manipulation Language

6. C) Create Table A (B int,C float)

7. B) alter Table A ADD COLUMN D float

8. B) alter Table A drop Column D

9. B) Alter Table A Alter Column D int

10. A) Alter Table A Add Constraint Primary Key B

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

11. What is data-warehouse?

Ans. **Data warehousing** is the electronic storage of a large amount of information by a business or organization. A **data warehouse** is designed to run query and analysis on historical **data** derived from transactional sources for business intelligence and **data** mining purposes.

12. . What is the difference between OLTP VS OLAP?

Ans. OLAP is online analytical processing. The OLAP systems are specially designed for analytical purposes that is they are deigned to analyze data efficiently. The queries used in these systems are generally complex as these are used to do complex operations to analyze the data. The space required for these systems is also greater than OLTP systems as these systems hold historical data.

OLTP is online transactions processing systems. The OLTP systems are used to handle large number of short online transactions. The OLTP systems are mainly designed to do fast query processing. The queries used in OLTP systems are generally simple. The space required for these systems is comparatively smaller than OLAP systems

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

Ans:- Simply put, data warehouses are repositories of high-volume information. They are centralized stores of all the data a company may generate, formed by relational databases and designed for query and analysis. Data warehouses allow for quick, accurate access to structured data via predefined queries.

There are three prominent data warehouse characteristics:

* **Integrated**: The way data is extracted and transformed is uniform, regardless of the original source.
* **Time-variant**: Data is organized via time-periods (weekly, monthly, annually, etc.).
* **Non-volatile**: A data warehouse is not updated in real-time. It is periodically updated via the uploading of data, protecting it from the influence of momentary change.

14. What is Star-Schema?

Ans. 14. A star schema is the one in which a central fact table is surrounded by dimensional tables. A star schema can be further of two types – simple and complex star schema. A simple star schema has one fact table while a complex star schema may have multiple facts table.

15. What do you mean by SETL?

Ans. 15. SETL are the operations of Select Extract Transform Load. Select operation means selecting the data which we want to analyze. Extract operation includes connecting to the data source and pulling out the data. Transform operation includes converting the data into a standard form before pushing the data in to an schema. Load means loading the data into data warehouse.