# SQL WORKSHEET – 1

1. Question -1 - Answer - **D**
2. Question -2 - Answer - **B**
3. Question -3 - Answer - **A**
4. Question -4 - Answer - **B**
5. Question -5 - Answer **- A**
6. Question -6 - Answer - **C**
7. Question -7 - Answer - **B**
8. Question -8 - Answer - **B**
9. Question -9 - Answer - **B**
10. Question -9 - Answer - **C**

**11.** A Data warehousing is process for collecting and managing data from varied sources to provide meaningful business insights. A Data Warehouse is typically used to connect and analyze business data from heterogeneous sources. The data warehouse is the core of the BL system which is built for data analysis and reporting. It is a blend of technologies and components which aids the strategic use of data. It is electronic storage of a large amount of information by a business which is designed for query and analysis instead of transaction processing. It is a process of transforming data into information and making it available to users in a timely manner to make differences.

The decision support database is maintained separately from the organization's operational database. However, the data warehouse is not a product but an environment. It is an architectural construct of an information system which provides users with current and historical decision support information which is difficult to access or present in the traditional operational data store.

Data Warehouse is also known by the following names:

1. Decision Support system.
2. Executive Information System.
3. Management information system.

**12.**

| SR NO. | OLTP | OLAP |
|---|---|---|
| BASIC | It is an online transactional system & manages database modification. | It is an online data retrieving and data analysis system. |
| FOCUS | Insert, update, and delete information from the database. | Extract data for analyzing that helps in decision making |
| DATA | OLTP and its transaction are the original source of data. | Different OLAP database become the source of data for OLAP |
| TRANSACTION | OLTP has short transactions. | The processing time of a transaction is comparatively more in OLAP |
| QUARIES | Simple Queries | Complex queries |
| NORMALIZATION | Table in OLTP database are normalized. | Tables in OLAP database are not normalized |
| INTEGRITY | ILTP database must maintain data integrity constraint | OLAP database does not get frequently modified. Hence data integrity is not affected |

## 13. CHARACTERSTICS OF DATA-WAREHOUSE :

1. **Subject oriented** - a data warehouse is always a subject oriented as it delivers information about a theme instead of organizations current positions. It can be achieved on specific theme. That means the data warehousing process is processed to handle specific themes which are more defined. These themes can be sale, distribution, marketing etc. Data warehousing never put an emphasis only on current operations instead it focuses on demonstrating and analyzing data to make various decisions.

2. **Integrated -** it is somewhere same as subject orientation which is made in reliable format integration means founding a shared entity to scale the all similar data from the different database. Data also required to be recited into various data warehouse in shared and generally generated manner.

3. **Time Variant** - In this data is mentioned via different intervals of time such as weekly, monthly, or annually etc. It founds various time limits which are structured between the large data sheets and are held in online transaction process. The time limits for data warehouse are wide range then that of operation systems.

4. **Non volatile** - The data resided in data warehouse is permanent. it also means that that is not erased or deleted when new data is inserted it includes the amount quantity of data that is inserted into modification between the selected quantity on logical business it evaluates analysis within technology of mechanism.

**14.** A **star schema** is the elementary form of a dimensional model, in which data are organized into facts and dimensions. A fact is an event that is counted or measured, such as a sale or log in. A dimension includes reference data about the fact, such as date, item, or customer. A star schema is a relational schema where a relational schema whose design represents a multidimensional data model. The star schema is the explicit data warehouse schema. It is known as star schema because the entity-relationship diagram of this schema simulates a star, with points, diverge from a central table. The center of the schema consists of a large fact table, and the points of the star are the dimension tables.

**15. SETL :**

1. (SET Language) is a very high level programming language based on the mathematical theory of sets.
2. SETL Evaluation of teaching and learning.
3. SETL provides two basic aggregate data types: 1. Unordered sets 2. Sequences
   The elements of sets and types can be of any arbitrary types, including sets and tuples themselves.
4. SETL provides quantified Boolean expressions constructed using the universal and existential quantifiers of first order predicate logic.
5. SETL provides several iterate produce a variety of loops over aggregate data structures.