WORKSHEET 1 SQL

Q.1) A, D

Q.2) A, B

Q.3) A

Q.4) B

Q.5) A

Q.6) C

Q.7) B

Q.8) B

Q.9) B

Q.10) C

Q.11) A **Data Warehouse** is a relational database that is designed for query and analysis rather than transaction processing. It includes historical data derived from transaction data from single and multiple sources. It provides integrated, enterprise-wide, historical data and focuses on providing support for decision-makers for data modeling and analysis.

Q.12) OLTP: It is optimized for processing a massive number of transactions. OLTP systems are designed for use by frontline workers (e.g., cashiers, bank tellers, hotel desk clerks) or for customer self-service applications (e.g., online banking, e-commerce, travel reservations).

OLAP: It is optimized for conducting complex data analysis for smarter decision-making. OLAP systems are designed for use by data scientists, business analysts and knowledge workers, and they support business intelligence (BI), data mining and other decision support applications.

Q.13) Characteristics of Data Warehouse are:

1. Subject-oriented – A data warehouse is a subject-oriented approach. Because, it provides information on a specific topic rather than information about an organization's ongoing operations.

2. Integrated – In a data warehouse, integration entails establishing a standard unit of measurement from various databases for all similar data. Within it, you must store data in a simple and universally acceptable manner.

3. Time-variant – In comparison to operating systems, the data warehouse has a relatively long-time horizon. The data stored in a data warehouse is acknowledged over time and provides historical information.

4. Non-volatile – The data warehouse is also non-volatile, which means that you cannot erase the previous data. The data is read-only and is only updated regularly.

Q.14) A **Star Schema** is a database organizational structure optimized for use in a data warehouse or business intelligence that uses a single large fact table to store transactional or measured data, and one or more smaller dimensional tables that store attributes about the data.

Q.15) **SETL (SET Language)** is a very high-level programming language based on the mathematical theory of sets.