

1. What does ETL stand for?
 - A) Extract, Transform, Load
 - B) Enter, Translate, Load
 - C) Extract, Translate, Link
 - D) Execute, Transfer, Log
 - **Answer: A**

2. In ETL, what is the purpose of the "Extract" step?
 - A) To retrieve data from various sources
 - B) To modify data into a new format
 - C) To load data into the destination system
 - D) To analyze the extracted data
 - **Answer: A**

3. What is a "Fact Table" primarily used for?
 - A) Storing data related to measurement of business metrics
 - B) Storing descriptive attributes
 - C) Storing the database schema
 - D) Storing user permissions
 - **Answer: A**

4. Which of these is a characteristic of "Dimension Tables"?
 - A) Contains measurements or metrics
 - B) Contains descriptive attributes
 - C) Stores quantitative information
 - D) Is used for calculations
 - **Answer: B**

5. What type of data does a "Fact Table" contain?
 - A) Descriptive text
 - B) Quantitative metrics
 - C) Database rules
 - D) Data model definitions
 - **Answer: B**

6. What is the primary purpose of normalization in database design?
 - A) To duplicate data for backup
 - B) To minimize data redundancy
 - C) To maximize data redundancy
 - D) To simplify user access
 - **Answer: B**

7. Which is a common method to improve query performance on large datasets?

- A) Data duplication
- B) Denormalization
- C) Continuous normalization
- D) Removing indexes

- **Answer: B**

8. What is "DDL" short for in database contexts?

- A) Data Definition Language
- B) Data Duplication Logic
- C) Data Design Language
- D) Data Deletion Language

- **Answer: A**

9. "DML" is an acronym for what?

- A) Data Manipulation Language
- B) Data Management Logic
- C) Data Model Layout
- D) Data Mapping Language

- **Answer: A**

10. What is the role of the "Load" step in ETL?

- A) To retrieve data from the source
- B) To insert data into the target system
- C) To transform data into the desired format
- D) To analyze the loaded data

- **Answer: B**

11. In the context of ETL, what does "Transform" involve?

- A) Cleaning data and getting it ready for analytics
- B) Extracting data from source systems
- C) Loading data into a data warehouse
- D) Normalizing data for storage

- **Answer: A**

12. What does "ELT" stand for, and how is it different from ETL?

- A) Extract, Load, Transform; it changes the order of operations
- B) Enter, Link, Translate; it's a different process
- C) Execute, Load, Transfer; it's not data-related
- D) Extract, List, Tag; it involves tagging data

- **Answer: A**

13. Which type of table typically stores metrics such as sales revenue?

- A) Fact table

- B) Dimension table
- C) Schema table
- D) Control table
- **Answer: A**

14. What kind of schema is characterized by normalized dimension tables?

- A) Star Schema
- B) Snowflake Schema
- C) Flat Schema
- D) Cube Schema
- **Answer: B**

15. What is a typical use of dimension tables in data warehousing?

- A) Storing metrics
- B) Storing descriptive data
- C) Storing transactional data
- D) Storing control information
- **Answer: B**

18. What kind of schema uses large fact tables surrounded by smaller dimensional tables?

- A) Star Schema
- B) Snowflake Schema
- C) Cube Schema
- D) Flat Schema
- **Answer: A**

20. What is the primary key used for in a dimension table?

- A) To uniquely identify each record
- B) To summarize data
- C) To connect to the fact table
- D) To store measurements
- **Answer: A**

21. Which measure can be summed across all dimensions?

- A) Additive measure
- B) Non-additive measure
- C) Semi-additive measure
- D) Dimensional measure
- **Answer: A**

22. What type of measure cannot be added across any dimensions?

- A) Additive
- B) Non-additive
- C) Semi-additive
- D) Compound
- **Answer: B**

23. What type of measure is additive across some dimensions but not others?

- A) Additive
- B) Non-additive
- C) Semi-additive
- D) Universal
- **Answer: C**

28. In a snowflake schema, dimensions are:

- A) Not normalized
- B) Partially normalized
- C) Fully normalized
- D) Denormalized
- **Answer: C**

1. **What is the first step in creating a data model for a data warehouse?**

- A) Define business requirements and processes.
- B) Design the physical database.
- C) Identify key data sources.
- D) Implement data cleaning techniques.
- **Answer: A**

12. **What role do surrogate keys play in a data warehouse?**

- A) To link fact and dimension tables.
- B) To encrypt sensitive data.
- C) To decrease query performance.
- D) To duplicate data for backup.
- **Answer: A**

15. **In data modeling, what does 'grain' refer to?**

- A) The size of the database file.
- B) The lowest level of detail stored in a fact table.
- C) The highest level of detail in a dimension table.
- D) The processing speed of queries.
- **Answer: B**

