

Introduction to Database Modelling Concepts

Information Technology · Practice Test · 15 Questions

1. What is considered raw data without context?

- A) A processed report
- B) 1, John, 25, USA
- C) A structured table
- D) A database schema

2. Which of the following is a characteristic of good data?

- A) Subjectivity
- B) Redundancy
- C) Accuracy
- D) Complexity

3. What does a database schema define?

- A) The hardware specifications
- B) The structure and organization of data
- C) The user password policy
- D) The network speed

4. Which diagram is used to represent entities and their relationships graphically?

- A) Flowchart
- B) ER Diagram
- C) Venn Diagram
- D) Pie Chart

5. What is a primary key in a database?

- A) A non-unique attribute
- B) A foreign link to another table
- C) A unique identifier for an entity
- D) A type of database index

6. Which of the following is an example of an M:M relationship?

- A) One student to one ID
- B) One employee to one department
- C) Many students to many courses
- D) One customer to one order

7. What is the primary goal of database normalization?

- A) To increase data storage
- B) To reduce redundancy and anomalies
- C) To change data types
- D) To delete all data

8. Which anomaly occurs when adding new data leads to issues due to missing values?

- A) Insertion Anomaly
- B) Update Anomaly
- C) Deletion Anomaly
- D) Retrieval Anomaly

9. What is the purpose of hashing in databases?

- A) To encrypt user passwords
- B) To improve data retrieval efficiency
- C) To create new tables
- D) To delete duplicates

10. Which type of index is built on the primary key of a table?

- A) Secondary Index
- B) Multilevel Index
- C) Primary Index
- D) Heap Index

11. Which database type stores data in a non-tabular form?

- A) Relational
- B) NoSQL
- C) SQL
- D) Schema-based

12. What does the CRUD acronym stand for in DBMS operations?

- A) Create, Read, Update, Delete
- B) Calculate, Report, Understand, Distribute
- C) Compile, Run, Undo, Debug
- D) Construct, Retrieve, Use, Delete

13. What is a collection of similar entities called?

- A) Entity Set
- B) Schema
- C) Hash
- D) Index

14. Which normal form requires the elimination of transitive dependencies?

- A) 1NF
- B) 2NF
- C) 3NF
- D) BCNF

15. What is the function of a foreign key?

- A) To uniquely identify a row
- B) To link entities together
- C) To sort the database
- D) To store image data