1. A collection of data designed to be used by different people is called a/an  
a) Organization  
b) Database  
c) Relationship  
d) Schema

Answer: b  
Explanation: Database is a collection of related tables.

2. Which of the following is the oldest database model?  
a) Relational  
b) Deductive  
c) Physical  
d) Network

Answer: d  
Explanation: The network model is a database model conceived as a flexible way of representing objects and their relationships.

3. Which of the following schemas does define a view or views of the database for particular users?  
a) Internal schema  
b) Conceptual schema  
c) Physical schema  
d) External schema

Answer: d  
Explanation: An externally-defined schema can provide access to tables that are managed on any PostgreSQL, Microsoft SQL Server, SAS, Oracle, or MySQL database.

4. Which of the following is an attribute that can uniquely identify a row in a table?  
a) Secondary key  
b) Candidate key  
c) Foreign key  
d) Alternate key

Answer: b  
Explanation: A Candidate Key can be any column or a combination of columns that can qualify as unique key in database.

5. Which of the following are the process of selecting the data storage and data access characteristics of the database?  
a) Logical database design  
b) Physical database design  
c) Testing and performance tuning  
d) Evaluation and selecting

Answer: b  
Explanation: The physical design of the database optimizes performance while ensuring data integrity by avoiding unnecessary data redundancies.

6. Which of the following terms does refer to the correctness and completeness of the data in a database?  
a) Data security  
b) Data constraint  
c) Data independence  
d) Data integrity

Answer: d  
Explanation: ACID property is satisfied by transaction in database.

7. The relationship between DEPARTMENT and EMPLOYEE is a  
a) One-to-one relationship  
b) One-to-many relationship  
c) Many-to-many relationship  
d) Many-to-one relationship

Answer: b  
Explanation: One entity department is related to several employees.

8. A table can be logically connected to another table by defining a  
a) Super key  
b) Candidate key  
c) Primary key  
d) Unique key

Answer: c  
Explanation: A superkey is a combination of attributes that can be uniquely used to identify a database record.

9. If the state of the database no longer reflects a real state of the world that the database is supposed to capture, then such a state is called  
a) Consistent state  
b) Parallel state  
c) Durable state  
d) Inconsistent state

Answer: d  
Explanation: SQL data consistency is that whenever a transaction is performed, it sees a consistent database.

10. Ensuring isolation property is the responsibility of the  
a) Recovery-management component of the DBMS  
b) Concurrency-control component of the DBMS  
c) Transaction-management component of the DBMS  
d) Buffer management component in DBMS

Answer: b  
Explanation: Concurrency control ensures that correct results for concurrent operations are generated while getting those results as quickly as possible.