

## Your grade: 80%

Your latest: 76.66% • Your highest: 80% • To pass you need at least 80%. We keep your highest score.

Next item →

1. Data types define the type of data that can be stored in which part of a database table?

1 / 1 point

- ☐ Rows
- ☐ Schemas
- ☐ Index
- ☒ Columns

✓ **Correct**  
Correct! Data types define the type of data stored in columns.

2. Which of the following is an open-source database?

1 / 1 point

- ☒ PostgreSQL
- ☐ Oracle
- ☐ BigQuery
- ☐ Db2

✓ **Correct**  
Correct! PostgreSQL is an open source database.

3. Which statement regarding the data access layer in a database management system software (DBMS) is true?

1 / 1 point

- ☐ The client typically directly accesses it.
- ☒ It contains an engine that compiles queries, retrieves data, and returns a result set.
- ☐ It encapsulates the application and business logic.
- ☐ It is the place for storing the data.

✓ **Correct**  
Correct! The database server contains an engine that compiles queries, retrieves and processes the data, and returns the result set.

4. Which NoSQL functionality does PostgreSQL help to store hierarchical data?

0 / 1 point

- ☐ JSON
- ☐ EDB
- ☒ Objects
- ☐ HSTORE

✗ **Incorrect**  
Incorrect. Review the PostgreSQL video.

5. Which statement is true about an entity-attribute model regarding a movie?

1 / 1 point

- ☒ The movie is an entity.
- ☐ The movie is a column.
- ☐ The movie is an attribute.
- ☐ The movie is a primary key.



Correct

Correct! An entity is the subject of focus.

6. Which statement best describes the Db2 Warehouse deployment model?

0 / 1 point

- ☐ A public cloud model offers it.
- ☐ The on-premises model offers it.
- ☐ A hybrid cloud model offers it.
- ☒ A private cloud model offers it.



Incorrect

Incorrect. Review the Db2 video.

7. What is the function of a foreign key?

1 / 1 point

- ☐ It is a unique value that identifies a table
- ☒ It defines the relationship between tables
- ☐ It is used to access a row of data in a table
- ☐ It is a unique value in a table



Correct

Correct! A foreign key is a column in a table that contains the same information as the primary key in another table.

8. Which of the following is an advantage of indexing?

1 / 1 point

- ☒ Indexing quickly locates rows and reduces the need to sort the data
- ☐ Indexing works well with unstructured data
- ☐ Indexing quickly sorts data in a table
- ☐ Indexing increases the performance of INSERT and UPDATE queries



Correct

Correct! Indexing reduces the need to sort data by storing pointers to each row in the table so that when you request a particular row, the SQL processor can use the index to quickly locate the row.

9. Which constraint specifies the permissible values for a given attribute?

1 / 1 point

- ☐ Entity integrity constraint
- ☐ Unique constraint
- ☒ Domain constraint
- ☐ Semantic integrity constraint



Correct

Correct! A domain constraint defines the allowable values for a specific attribute.

10. In which situation is it most appropriate to partition a database?

1 / 1 point

- ☐ When there are many tables in an instance
- ☐ When an instance requires both user schemas and system schemas
- ☐ When it's necessary to store user access permissions in a table
- ☒ For optimizing queries for data warehousing with large volumes of data



Correct

Correct! Partitioning is often used with very large data sets.

11. Which services can you use to manage MySQL in the cloud?

0 / 1 point

- ☐ MariaDB
- ☒ MySQL Workbench
- ☐ phpMyAdmin
- ☐ Azure

✗ **Incorrect**

Incorrect. Review the Getting Started with MySQL video.

12. Which of the following options enables you to create a MySQL database? [Select two]

0.5 / 1 point

- ☐ Use the CREATE TABLE command from a command line interface
- ☒ Use the MySQL GUI tool

✗ **This should not be selected**

Incorrect. Review the Creating Databases and Tables in MySQL video.

- ☐ Use an API call
- ☒ Use the CREATE DATABASE command from a command line interface

✓ **Correct**

Correct! As with many RDBMSs, you can create a database with the CREATE DATABASE command using a command line interface.

13. What does the “-u root” option in this command do?

1 / 1 point

`mysqldump -u root employees > employeebackup.sql`

- ☒ Specifies the username “root” when connecting to the server
- ☐ Uses the root directory to back up the database on the server
- ☐ Uses the root directory to find the database file that is to be backed up
- ☐ Lists users who have access to the root directory

✓ **Correct**

Correct! The -u option allows you to specify a username, in this case, “root.”

14. What open-source graphical user interface (GUI) can you utilize to connect to a Postgres database?

1 / 1 point

- ☐ Navicat
- ☐ PostgreSQL
- ☒ pgAdmin
- ☐ phpAdmin


✓ **Correct**

Correct! pgAdmin is both a GUI and an open source tool that connects to a Postgres database.

15. Why would you refresh a materialized view in a PostgreSQL database before you use it?

1 / 1 point

- ☒ The materialized view stores the data, so if you need to use the most current data, you should refresh the view first
- ☐ The materialized view only stores the data in memory, so it needs to be refreshed to reflect current data
- ☐ You need to refresh a materialized view so you can edit the data
- ☐ Materialized views are not used in PostgreSQL

 Retreshing a materialized view increases performance



**Correct**

Correct! This is one of the key differences between materialized views and regular views. You must refresh it to reflect the most current data.