

Final Quiz

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

1 / 1 point

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

✓ **Correct**

Data types define the type of data that is stored in columns.

2. Question 2: Popularity of cloud databases has more than doubled in the past decade. Which cloud service model is driving this?

1 / 1 point

- ☐ Infrastructure as a Service (IaaS)
- ☐ Platform as a Service (PaaS)
- ☐ Commercial databases
- ☒ Software-as-a-Service (SaaS)

✓ **Correct**

Software-as-a-Service model is driving the rise in popularity of cloud databases.

3. Question 3: The DBMS on the server in a 2-tier environment includes multiple layers. Which layer is also referred to as the persistence layer?

1 / 1 point

- ☒ Database Storage layer
- ☐ Data Access layer
- ☐ Transmission layer
- ☐ Database Engine layer

✓ **Correct**

The database storage or persistence layer is where the data is stored, either locally or on network storage.

4. Question 4: Which NoSQL functionality does PostgreSQL use to store non-hierarchical data?

1 / 1 point

- ☐ Functions
- ☐ Replication
- ☐ JSON
- ☒ HSTORE

✓ **Correct**

It uses the functionality of NoSQL HSTORE for non-hierarchical data.

5. Question 5: How can the Entity Relationship Diagram (ERD) model be used?

1 / 1 point

- ☒ The ERD model helps you to define entities and their attributes, and map them to tables, and identify the relationships between the tables.
- ☐ The ERD model helps you map data types to existing columns and rows.
- ☐ The ERD model helps you to design a database with a single table.
- ☐ The ERD model helps you to define the data in each row of a table.

✓ Correct

The ERD model helps you to define entities and their attributes, and map them to tables, and identify the relationships between the tables. Rather than being used as a model on its own, the ER Model is used as a tool to design relational databases.

6. Question 6: Which of the following sources is **NOT** supported by the Db2 Web Console for loading data?

1 / 1 point

- ☐ S3 object storage (AWS)
- ☐ Delimited text files (local computer)
- ☐ Cloud Object Storage (IBM)
- ☒ Python code

✓ Correct

The Load Data utility does not load data stored in Python code.

7. Question 7: When creating a foreign key, how can you define an action to take if a parent table row is updated?

1 / 1 point

- ☐ Use the CREATE TABLE command
- ☐ Use the ON DELETE CASCADE clause
- ☒ Use the rule clause
- ☐ Use the ALTER TABLE command

✓ Correct

Use the rule clause to define what action to take if a parent table row is updated or deleted.

8. Question 8: Which of the following is a disadvantage of using Indexes?

1 / 1 point

- ☐ Reduce need to sort data
- ☐ Guarantees uniqueness of rows
- ☒ Uses disk space
- ☐ Enhances SELECT query performance

✓ Correct

This is like adding an index to books, it adds more pages.

9. Question 9: Which of the following constraints limits the values accepted by an attribute?

1 / 1 point

- ☐ Unique constraint
- ☐ Domain constraint
- ☐ Null constraints
- ☒ Check constraint

✓ Correct

This constraint enforces domain integrity by limiting values that are accepted by attributes.

10. Question 10: What is the difference between system schemas and user schemas?

1 / 1 point

- ☐ System schemas contain partitions and user schemas contain metadata.
- ☒ System schemas store configuration information and metadata.
- ☐ Both schemas contain the same objects.
- ☐ Neither schema contains database objects.

✓ Correct

System schemas store configuration information and metadata, while user schemas store the actual data.

11. Question 11: Which MySQL tool can you use to visually design a MySQL database?

1 / 1 point

- ☐ mysql
- ☒ MySQL Workbench
- ☐ phpMyAdmin
- ☐ mysqladmin

✓ Correct

MySQL Workbench is a visual database design tool that integrates SQL development, administration, and database design, creation, and maintenance.

12. Question 12: When creating a MySQL database using phpMyAdmin, at which point in the process do you define the length of the data in a column?

1 / 1 point

- ☐ When you name the new database.
- ☒ When you define the columns in the table.
- ☐ When you add tables to the database.
- ☐ When you are shown a summary of the structure of the new table.

✓ Correct

When you define the columns in a table, you can specify the name, data type, and length (if relevant) for each column.

13. Question 13: What is the maximum size of a data file you can import with phpMyAdmin?

1 / 1 point

- ☐ 3 megabytes
- ☐ 1 megabyte
- ☒ 2 megabytes
- ☐ Unlimited

✓ Correct

You can import up to 2 megabytes of data at a time using phpMyAdmin.

14. Question 14: On which operating systems can you install PostgreSQL?

1 / 1 point

- ☐ UNIX, UNIX like, or UNIX-based systems
- ☐ You cannot install PostgreSQL locally, it must be Cloud-based
- ☒ macOS, Microsoft Windows, UNIX
- ☐ macOS only

✓ Correct

You can download and install PostgreSQL on your own servers, on a range of operating systems such as macOS, Windows, UNIX and UNIX-based or UNIX like systems.

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

1 / 1 point

- ☐ You need to refresh a materialized view so you can edit the data.
- ☐ The materialized view only stores the data in memory, so it needs to be refreshed to reflect current data.
- ☐ Refreshing a materialized view increases performance.
- ☒ The materialized view stores the data, so if you need to use the most current data you should refresh the view first.

✓ **Correct**

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