### Quiz: Database

1. What does SQL stand for?

- A) Structured Query Language

- B) Simple Query Language

- C) Structured Questioning Logic

- D) None of the above

2. What is the purpose of SQL?

- A) To communicate with and manipulate databases

- B) To write computer programs

- C) To create websites

- D) None of the above

3. What is a database management system (DBMS)?

- A) Software that interacts with the end user, applications, and the database itself to capture and analyse the data

- B) A system for organizing and storing data in a database

- C) A program for creating websites

- D) None of the above

4. What is the most common type of DBMS?

- A) The object-oriented database management system (OODBMS)

- B) The relational database management system (RDBMS)

- C) The hierarchical database management system (HDBMS)

- D) None of the above

5. What is a relational database?

- A) A database management system based on the object-oriented model

- B) A database management system based on the relational model

- C) A database management system based on the hierarchical model

- D) None of the above

6. What is a table in a relational database?

- A) A system for storing data in a database

- B) A program for organizing data in a database

- C) A collection of data organized into rows and columns

- D) None of the above

7. What is a primary key in a relational database table?

- A) A column in a relational database table

- B) A unique identifier for each row in a relational database table

- C) A system for storing data in a database

- D) None of the above

8. What is the syntax to select all columns from a table named "customers"?

- A) SELECT \* FROM customers;

- B) SELECT ALL FROM customers;

- C) SELECT customers;

- D) None of the above

9. How do you execute an SQL query in Python using mysql-connector library?

- A) cursor.query("SELECT \* FROM customers")

- B) cursor.execute("SELECT \* FROM customers")

- C) cursor.run("SELECT \* FROM customers")

- D) None of the above

10. How do you retrieve the result of an SQL query in Python using the mysql-connector library?

- A) result = cursor.retrieve()

- B) result = cursor.fetchone()

- C) result = cursor.fetchall()

- D) None of the above

### Answers

1. \*\*A) Structured Query Language\*\*

- SQL stands for Structured Query Language.

2. \*\*A) To communicate with and manipulate databases\*\*

- SQL is used to communicate with and manipulate databases.

3. \*\*A) Software that interacts with the end user, applications, and the database itself to capture and analyse the data\*\*

- A DBMS is software that interacts with the end user, applications, and the database to capture and analyze data.

4. \*\*B) The relational database management system (RDBMS)\*\*

- The most common type of DBMS is the relational database management system (RDBMS).

5. \*\*B) A database management system based on the relational model\*\*

- A relational database is based on the relational model.

6. \*\*C) A collection of data organized into rows and columns\*\*

- A table in a relational database is a collection of data organized into rows and columns.

7. \*\*B) A unique identifier for each row in a relational database table\*\*

- A primary key is a unique identifier for each row in a relational database table.

8. \*\*A) SELECT \* FROM customers;\*\*

- The syntax to select all columns from a table named "customers" is `SELECT \* FROM customers;`.

9. \*\*B) cursor.execute("SELECT \* FROM customers")\*\*

- In Python using the mysql-connector library, you execute an SQL query with `cursor.execute("SELECT \* FROM customers")`.

10. \*\*C) result = cursor.fetchall()\*\*

- To retrieve the result of an SQL query in Python using the mysql-connector library, you use `result = cursor.fetchall()`.