

## Homework 6: Databases in Cloud Computing

**Correct answers are labeled red bold.**

Some necessary explanations are labelled blue.

Q1: Which of the following is NOT a NoSQL database?

- A. MySQL.**
- B. Redis. (key-value store NoSQL)
- C. MongoDB. (document store NoSQL)
- D. Cassandra. (a columnar NoSQL)

Q2: Which of the following is a NoSQL database type?

- A. SQL.
- B. Document store database.**
- C. JSON.
- D. All of the above.

Q3: Which of the following statement is WRONG?

- A. NoSQL databases require schemas before you can add data.** (NoSQL databases don't require schemas)
- B. NoSQL databases are built to allow the insertion of data without a predefined schema.
- C. Transaction properties (ACID) in the traditional relational databases are not suitable to be a set of properties to describe distributed NoSQL databases.
- D. All of the above.

Q4: \_\_\_\_\_ stores are used to store information about networks, such as social connections.

- A. Key-value
- B. Wide-column
- C. Document
- D. Graph**

Q5: NoSQL databases are used MAINLY for handling large volumes of \_\_\_\_\_ data.

- A. Unstructured**
- B. Structured
- C. Both structured and unstructured
- D. None of the above

Q6: In NoSQL databases, where the implementation options consider CAP (Consistency, Availability, and Partition Tolerance) criteria, which one of the following options is not possible to be satisfied?

- A. CA.
- B. AP.
- C. CP.
- D. CAP.** (NoSQL databases cannot achieve all three criteria at the same time according to CAP Theorem.)