

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF COMPUTER APPLICATIONS
(Specialization in Data Science)
EXAMINATION : JANUARY - 2025
SEMESTER - III
Sub: No SQL Databases (MCDS23-303)

Date : 09/01/2025

Total Marks :60

Time: 10.00 am to 12.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

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- Q.1. Answer the following in 2-3lines. (Any 5) (10)**
1. Define RDBMS.
 2. Define NoSQL Database.
 3. What is CAP theorem?
 4. Define Sharding.
 5. Define Columnar Database.
 6. Define ACID.
 7. Define Triple Store.
- Q. 2. Answer the following in short. (Any 4) (20)**
1. What are the advantages and disadvantages of NoSQL Database?
 2. What are the Business Drivers for NoSQL adoption?
 3. Define BASE. Explain its properties.
 4. Write a short note on Search Engines.
 5. Define Visualizing NoSQL. And what are the challenges on Visualizing NoSQL?
 6. Define Data Replication. Explain the types of Data Replication.
- Q. 3. Answer the following in detail. (Any 3) (30)**
1. Explain all different data types.
 2. What is polyglot persistence and its characteristics. Write the advantages and disadvantages of polyglot persistence
 3. Write a short note on Technical Evaluation.
 4. Write a short note on Key Value based Database.
 5. How can we construct a key in key-value stores with examples.
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