

M.Sc.(IT & CA) Semester - 1 (CBCS) Examination
Feb/Mar. -2021 (NEW COURSE)
NoSQL DATABASE: MongoDB(CORE)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any three of the following questions.

Q.1(A) Objective Type Questions, Attempt all questions. (03)

1. How is MongoDB?
2. Document database is a NoSQL Database type? True or False
3. _____NoSQL data model are used to store information about networks,such as social connections.

Q.1(B) Answer in brief: (Any Two out of Four) (06)

1. Explain advantages of MongoDB.
2. Explain the Data Model and working with data in detail.
3. Define importance of NoSQL.
4. What column-family model? Explain it.

Q.1(C) Write a note on: (Any One out of Two) (05)

1. Write a note on Flexible schema in MongoDB?
2. Define CAP theorem and explain all its property.

Q.2(A) Objective Type Questions, Attempt all questions. (03)

1. How to generate a list of database in MongoDB?
2. How to create a database in MongoDB?
3. Which function is used to display all the information about php configuration and its driver on web page?

Q.2(B) Answer in brief: (Any Two out of Four) (06)

1. How to find single document using PHP script.
2. What is an embedded document?
3. Explain upsert() function in MongoDB with example.
4. Explain skip() function in MongoDB with example.

Q.2(C) Write a note on: (Any One out of Two) (05)

1. Explain Seq and Sne in conditional queries with example.
2. Explain Normalized Data models in context with MongoDB.

Q.3(A) Objective Type Questions, Attempt all questions. (03)

1. Session variables are with the PHP global variable: _____.
2. List out any four Magic constant in PHP.
3. _____returns only the name of the function.

- Q.3(B) Answer in brief: (Any Two out of Four) (06)
1. Define isset() and unset().
 2. List out any four Magic constant in PHP.
 3. _____returns only the name of the function.
- Q.3(C) Write a note on: (Any One out of Two) (05)
1. Explain session_set_save_handler in detail.
 2. How to implement Authentication and Authorization in Php? Explain with suitable example.
- Q.4(A) Objective Type Questions, Attempt all questions. (03)
1. Map-reduce cannot have a finalize stage to make final modifications to the result. True or False?
 2. What would be the maximum document size for results of mapreduce operation?
 3. Map-reduce uses custom_____functions to perform the mapand reduce operations.
- Q.4(B) Answer in brief: (Any Two out of Four) (06)
1. Difference between mapreduce v/s group() in MongoDB.
 2. Define require() and require_once() in php.
 3. What is .INC file in PHP?
 4. Explain real time analytics using MongoDB.
- Q.4(C) Write a note on: (Any One out of Two) (05)
1. Write a note on Aggregation using group().
 2. Write a PHP code for count number of employees per department with use of mapreduce in mongodb.
- Q.5(A) Objective Type Questions, Attempt all questions. (03)
1. What is horizontal scaling?
 2. GridFS by default store a file in two separate collections:_____and_____.
 3. What is sharding?
- Q.5(B) Answer in brief: (Any Two out of Four) (06)
1. Explain Optimization concept in MongoDB.
 2. Write a code for reading files from GridFS.
 3. Explain Replication in MongoDB.
 4. What is a MongoDB Shard?
- Q.5 (C) Write a note on: (Any One out of Two) (05)
1. Write a program for storing files in GridFS.
 2. Explain mongorestore with all options.
