

M.Sc.(IT & CA) Semester - 1 (CBCS) Examination**Oct/Nov. -2019 - [NEW COURSE]****NoSQL DATABASE: MongoDB (CORE)****Time: 2:30 Hours****Marks:70****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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- Que-1 (A) Attempt the following. (03)
1. Which of the following command can be used in mongo shell to show all the databases in your MongoDB instance?
 2. What is column base database?
 3. What is Graph base database?
- (B) Answer the following. (any two) (06)
1. Explain concept of data modeling.
 2. Write characteristics of NoSQL.
 3. How to install mongoDB? Write down steps.
 4. Diferenctiate : SQL & NoSQL.
- (C) Answer the following. (05)
1. What is NoSQL? Explain benefit of NoSQL.
 2. Explain database, collection and document.
- Que-2 (A) Attempt the following. (03)
1. Which command is used to remove collection of MongoDB database?
 2. RDBMS stands for.
 3. Explain dbpath.
- (B) Answer the following. (any two) (06)
1. Explain the use of _id key in MongoDB.
 2. Explain upsert function with example.
 3. Explain pretty () methods with example.
 4. Explain Advantage of Mongoddb over RDBMS.
- (C) Answer the following. (any one) (05)
1. Explain find method with all operators.
 2. Explain insert () and update () with example.
- Que-3 (A) Attempt the following. (03)
1. What is the use of unset ()?
 2. How to retrieve session variable?
 3. HTTP stands for.
- (B) Answer the following. (any two) (06)
1. What is authentication and authorization?
 2. Explain Session manager class.
 3. Explain session_set_save handler () function.
 4. Explain Read (), Write () function in Session Manager with MongoDB.
- (C) Answer the following. (any one) (05)
1. Explain magic methods available in PHP.
 2. Write a PHP program to create login & application with session using MongoDB.

- Que-4 (A) Attempt the following. (03)
1. MongoDB applies the _____phase, which collect and condense the aggregated data in mapReduce.
 2. What is Web Analytics?
 3. Explain Count ()
- (B) Answer the following. (any two) (06)
1. Explain \$group and \$match commands with example.
 2. Explain emit () Method with example.
 3. Explain db.collection.distinct () db.collection.count () with example.
 4. Explain Real time Analytics in detail.
- (C) Answer the following. (any one) (05)
1. Explain aggregation with its expressions.
 2. Explain Map Reduce with suitable example.
- Que-5 (A) Attempt the following. (03)
1. Which command is used to backing up student database?
 2. What is the size of chunk file?
 3. GridFS divided a file into chunk. (true or false)
- (B) Answer the following. (any two) (06)
1. Explain files and chunks collection.
 2. Write short note on replication.
 3. What is sharding? Explain horizontal partitioning.
 4. Explain optimization in detail.
- (C) Answer the following. (any one) (05)
1. Explain mongoRestore with all options.
 2. What is GridFs? Explain with advantage and disadvantage of it.
