JBF-003-1081003   Seat No. _____

M. Sc. (IT & CA) (Sem. I) (CBCS) Examination

December – 2019

CS - 03 : NoSQL Database : MongoDB

Faculty Code : 003
Subject Code : 1081003

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1 **A** Answer the following :   **4**

    1 _____ command is used to display list of databases.

    2 _____ method is used to retrieve only one document from collection.

    3 MongoDB stores documents in _____.

    4 MongoDB is _____ type of NoSQL database.

  B Answer any one in brief :   **2**

    1 What is NoSQL?

    2 How to create collection in MongoDB?

  C Answer any one in detail :   **3**

    1 Explain database, collection and document.

    2 List and explain characteristic of NoSQL.

  D Answer any one :   **5**

    1 Explain $in, Snin, $all, $or and $ne with suitable example.

    2 Explain different types of NoSQL databases.

2 **A** Answer the following :   **4**

    1 _____ method is used to insert data in MongoDB.

    2 _____ method skips a number of results in a cursor.

    3 The _____ method invoked on the MongoCursor object sorts the query results based on the value of a specified field.

    4 The count( ) returns the number of items in the cursor. True or False?

B   Answer any one in brief :   **2**

1   What is upsert?

2   Explain sort( ) method.

C   Answer any one in detail :   **3**

1   Explain count(), skip() and limit().

2   How to manage relationship between documents?

D   Answer any one :   **5**

1   Explain how to insert data in MongoDB using PHP with suitable example.

2   Explain how to display data from MongoDB using PHP with suitable example.

3   A   Answer the following :   **4**

1   In PHP, a session is initiated by calling the built-in _____ method.

2   _____ method of session_set_save_handler( ) function called whenever a session is initiated with session_start( ).

3   A session can be terminated by calling _____ method.

4   HTTP is stateless protocol. True or false?

B   Answer any one in brief :   **2**

1   What is HTTP session?

2   What are the limitations of php native session handling?

C   Answer any one in detail :   **3**

1   Explain read( ) callback function of session_set_save_handler( ).

2   Explain write( ) callback function of session_set_save_handler( ).

D   Answer any one :   **5**

1   How to implement session handling using mongodb?

2   Explain PHP native session handling.

4   A   Answer the following :   **4**

1   Result of group( ) has to be less than _____ MB in size.

2   _____ command gives all the distinct values.

3 _____ phase breakdown the task into smaller subtasks and execute them to produce intermediate results

4 MapReduce has been derived from functional programming paradigm. True or false?

B Answer any one in brief : **2**

1 How to define map( ) function?

2 What is the use of distinct( )?

C Answer any one in detail : **3**

1 How to perform mapreduce using MongoDB?

2 Explain runCommand( ) method with all arguments.

D Answer any one : **5**

1 Explain group( ) with suitable example.

2 What is MapReduce? Explain it in detail.

5 A Answer the following : **4**

1 _____ is a technique that allows you to spread your data across multiple Machines.

2 In GridFS each chunk stores up to _____ of data.

3 _____ function is used for adding new indexes to a collection.

4 _____ utility can import data from different files.

B Answer any one in brief : **2**

1 How to take backup of single database and single collection?

2 What is the use of profiler?

C Answer any one in detail : **3**

1 Explain how to import and export data?

2 Write a note on sharding.

D Answer any one : **5**

1 Explain GridFS.

2 List different replication topologies. Explain any one.

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