



# SHREE H. N.SHUKLACOLLEGE OF I.T. & MGMT.

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MBZ-003-1081003

Seat No. \_\_\_\_\_

M. Sc. (I.T.) (Sem. I) (CBCS) Examination

December – 2016

CS-03 : NoSQL Database : MongoDB

Faculty Code : 003

Subject Code : 1081003

Time : 2½ Hours]

[Total Marks : 70

- 1 (a) Objective type questions : 4
- ~~(1)~~ What is nosql?
  - (2) Most NoSQL databases support automatic \_\_\_\_\_ meaning that you get high availability and disaster recovery.
  - ~~(3)~~ Full form of nosql
  - ~~(4)~~ NoSQL databases is used mainly for handling large volumes of \_\_\_\_\_ data.
- (b) Answer in brief : (any one) 2
- (1) Difference between sql and nosql.
  - ~~(2)~~ How to install php driver on windows platform?
- (c) Answer in detail : (any one) 3
- ~~(1)~~ Explain characteristics of nosql.
  - (2) Explain history of nosql.
- (d) Write a note on : (any one) 5
- ~~(1)~~ What are the advantage and disadvantage of nosql? Explain in detail.
  - (2) Explain database, collection and document.

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- 2 (a) Objective type questions : 4
- (1) Which type of DBMS is MongoDB?
  - (2) What is the difference between MongoDB and MySQL?
  - (3) MongoDB database uses \_\_\_\_\_ for storing records.
  - (4) What is the default port number of mongodb?
- (b) Answer in brief : (any one) 2
- (1) Explain the use of `_id` key in mongodb.
  - (2) What is the use of `runCommand()`?
- (c) Answer in detail : (any one) 3
- (1) Explain following :
    - (i) `selectCollection()`
    - (ii) `selectDB()`
    - (iii) `getNext()`
  - (2) Explain `sort`, `limit` and `skip` function with example.
- (d) Write a note on : (any one) 5
- (1) Explain `insert()` and `remove()` with example.
  - (2) Explain `find` method with all operators.
- 3 (a) Objective type questions : 4
- (1) The session ID is a \_\_\_\_\_ bit character string.
  - (2) Which method is used to start a session?
  - (3) By default PHP uses \_\_\_\_\_ based session handling.
  - (4) `Session_start()` must send session data to the web browser via \_\_\_\_\_.
- (b) Answer in brief : (any one) 2
- (1) Limitations of native PHP session handling.
  - (2) Explain the session garbage collector.

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(c) Answer in detail : (any one) 3

(1) Explain Problems of using MongoDB and RDBMS together.

(2) What is HTTP Session?

(d) Write a note on : (any one) 5

(1) Write a code to use session in login and logout page.

(2) Explain session\_set\_save\_handler in detail.

4 (a) Objective type questions : 4

(1) MongoDB uses \_\_\_\_\_, a functional programming paradigm to perform aggregation and batch processing of data.

(2) Sorting by natural order means?

(3) reduce() takes the result array of \_\_\_\_\_ as its input and combines all the elements in that array into a single element by performing some operation.

(4) The concept MapReduce has been derived from which programming paradigm?

(b) Answer in brief : (any one) 2

(1) Explain count(), distinct() with example

(2) Explain emit().

(c) Answer in detail : (any one) 3

(1) How we can apply mapreduce in mongodb? Explain with example.

(2) Explain difference between mapreduce and group().

(d) Write a note on : (any one) 5

(1) What is MapReduce? Explain in detail.

(2) Explain group() function.

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- 5 (a) Objective type questions : 4
- (1) What is the size of chunk file?
  - (2) What is the maximum size of mongodb document?
  - (3) Which command is used to backing up a stud database?
  - (4) The mongoimport utility can load data in which three file formats?
- (b) Answer in brief : (any one) 2
- (1) What is chunk file?
  - (2) Explain getGridFS().
- (c) Answer in detail : (any one) 3
- (1) Write a short note on replication.
  - (2) What is sharding? Explain horizontal partitioning.
- (d) Write a note on : (any one) 5
- (1) What is GridFS? Explain advantages of GridFS.
  - (2) Explain mongorestore with all options.