Total No. of Questions : 5]	SEAT No.:
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[5954]-504 B.B.A. (CA) CA - 504 : MONGO DB (2019 Pattern) (Semester - V)

Time: 2½ Hours] [Max. Marks: 70

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Draw a neat label diagram whenever necessary.

Q1) Answer the following: (Any 8)

 $[8 \times 2 = 16]$

- a) Define the term Replica set.
- b) Explain the use of "Mongostat"
- c) How scaling is handled in MongoDB
- d) What is the importance of "-id" field in a MongoDB.
- e) Define the term TTL index.
- f) What is the significance of write concern value in w field?
- g) What is the importance of an index in data.
- h) What is MMS backup?
- i) Write any two features of MongoDB.
- j) Write syntax of update command.

Q2) Solve the following: (Any 4)

 $[4 \times 4 = 16]$

- a) Differentiate between core server and MongoDB shell in detail.
- b) Explain Why MongoDB is preferred over RDBMs in some applications.
- c) Explain the pattern matching operators used in MongoDB with suitable example.
- d) Write on the importance of database profiling.
- e) Explain the different applications of graph database.

Q3) Solve the following: (Any 4)

 $[4 \times 4 = 16]$

- a) Explain the document data model of MongoDB.
- b) Write on how write queries are handled in replicated environment.
- c) Explain the aggregation framework in brief.
- d) Explain the concept of "2d sphere" index with suitable example.
- e) What is page fault in MongoDB.

Q4) Solve the following:

 $[8 \times 2 = 16]$

- a) Create a collection "Online Course".
- b) Create a new document in "Online Course" collection having ID = 02.
- c) Write a command to show the details of "Online Course".
- d) Show the details of "Online Course" by Find command.
- e) Retrieve the document from "Online course" by find one command.
- f) Display the details of "Online course" whose fee is greater than 20,000.
- g) Display ID, coursename, Fee, use" Pretty course".
- h) Display the details of course having fees 20,000 and duration 6 months.

Q5) Solve the following: (Any 2)

 $[2\times3=6]$

- a) Explain the MongoDB CRUD CONCERNS.
- b) Explain the various types of NOSQL database.
- Explain the Map-Reduce function with suitable example.

