23CBA310/ 18CBA11

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION MAY 2024
(Third Semester)

Branch – **COMMERCE (BUSINESS ANALYTICS)**

NOSQL-MANGO DB

Time: Three Hours Maximum: 50 Marks

SECTION-A (5 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (5 x 1 = 5)

1. What is one key advantage of using MongoDB over traditional relational databases?
   a) MongoDB enforces a rigid schema structure
   b) MongoDB is not suitable for large-scale applications
   c) MongoDB provides flexible schema design
   d) MongoDB lacks data validation capabilities
2. What is the primary language for querying data in MongoDB?
   a) SQL b) NoSQL c) JavaScript d) JSON
3. Which MongoDB aggregation pipeline stage is used to group documents by a Specific field?
   a) $match b) $project c) $group d) $sort
4. What is the default index type in MongoDB for the _id field?
   a) Unique index b) Text index c) Compound index d) No index
5. What is the primary benefit of using case-insensitive regular expressions in MongoDB?
   a) They improve query performance.
   b) They make searches case-sensitive.
   c) They allow matching regardless of letter case.
   d) They are used to sort query results.

SECTION - B (15 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 3 = 15)

6. a) What is CAP theorem?

   (OR)

   b) Mention the need of MongoDB.
7. a) What is CURD?

   (OR)

   b) What is the use of $lt and $gt operator in MongoDB?
8. a) What is sorting?

   (OR)

   b) Give a brief note on Field Queries.
9. a) What is data sharding?

   (OR)

   b) Explain ObjectID in MongoDB.
10. a) Give a short note on Map Reduce.

    (OR)

    b) What is the use of regular Expression. Give example.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

11. a) Give any 6 difference between MongoDB and RDBMS.

(OR)

b) Explain about import and export MongoDB Server configuration.

12. a) Explain about
    i) changing entries
    ii) $in and $all operators

(OR)

b) How to create a MongoDB and also mention about update, read and delete using mongo.

13. a) Explain aggregation operators with code.

(OR)

b) Explain about projection queries.

14. a) What are relationships in MongoDB.

(OR)

b) Explain MongoDB indexing (Index creation, drop, find and backup).

15. a) Explain Map-Reduce in detail.

(OR)

b) Explain Text-Processing of large-scale dataset.

Z-Z-Z END