

### Department of Computer Science Engineering – (Data Science)

**Course: MongoDB LABORATORY**

**Course Code: BDSL456B**

**SEMESTER: IV**

#### Cycle of Experiment

##### Cycle-1

Exp. No.	Name of Program
1	a. Illustration of Where Clause, AND, OR operations in MongoDB. b. Execute the Commands of MongoDB and operations in MongoDB: Insert, Query, Update, Delete and Projection. (Note: use any collection).
2	a. Develop a MongoDB query to select certain fields and ignore some fields of the documents from any collection. b. Develop a MongoDB query to display the first 5 documents from the results obtained in a. [use of limit and find]
3	a. Execute query selectors (comparison selectors, logical selectors) and list out the results on any collection b. Execute query selectors (Geospatial selectors, Bitwise selectors) and list out the results on any collection
4	Create and demonstrate how projection operators (\$, \$elemmatch and \$slice) would be used in the MongoDB.
5	Execute Aggregation operations (\$avg, \$min, \$max, \$push, \$addToSet etc.). Encourage students to execute several queries to demonstrate various aggregation operators.

##### Cycle-2

Exp. No.	Name of Program
6	Execute Aggregation Pipeline and its operations (pipeline must contain \$match, \$group, \$sort, \$project, \$skip etc. students encourage to execute several queries to demonstrate various aggregation operators)
7	a. Find all listings with listing_url, name, address, host_picture_url in the listings And Reviews collection that have a host with a picture url. b. Using E-commerce collection write a query to display reviews summary.
8	a. Demonstrate creation of different types of indexes on collection (unique, sparse, compound and multikey indexes) b. Demonstrate optimization of queries using indexes.
9	a. Develop a query to demonstrate Text search using catalog data collection for a given word b. Develop queries to illustrate excluding documents with certain words and phrases
10	Develop an aggregation pipeline to illustrate Text search on Catalog data collection.