

Enrollment No: \_\_\_\_\_

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**B.Tech Mid Semester Exam**

Semester: 6  
 Subject Code: 203105379  
 Subject Name: MEA(R)N Stack Web Development

Date: 01/02/2024  
 Time: 02:30PM to 04:00PM  
 Total Marks: 40

Sr. No.		Marks
Q1	<b>(A) Five One line Questions</b>	05
	(1) What is sharding in MongoDB?	
	(2) What is the use of the \$in operator in MongoDB?	
	(3) Which function is used to delete a single document from a collection ?	
	(4) Write a command to create an index on Emps collection in descending order of employeeID ?	
	(5) What is the use of the \$addField operator in the aggregation pipeline?	
	<b>(B) Five Fill in the blanks</b>	05
	(1) Instead of Primary Key mongoDB uses _____ in collection.	
	(2) Aggregation operations in MongoDB _____ values from multiple documents.	
	(3) To display the results in a formatted way, you can use the _____ method.	
	(4) Express is a _____ web application framework for Node.js	
	(5) _____ field is always the first field in the document?	
Q.2	<b>Attempt any four(Short Questions)</b>	12
	(1) State the difference between the find() and limit() methods.	
	(2) Explain \$match, \$project, \$group	
	(3) Explain findOneAndUpdate(), findOneAndDelete() with an example	
	(4) What is a module ? Explain types of modules in detail.	
	(5) What is an Event Loop in Node.js? How event loop handle the user request in node.js	
Q.3	<b>Attempt any two questions</b>	08
	(1) Explain aggregation in MongoDB ? Give an example.	
	(2) Explain insert(), insertOne(), insertMany() methods with an example.	
	(3) State the difference between NoSQL and RDBMS?	
Q.4	(A) What is node.js ? How does node implement asynchronous architecture? Give an example.	05
	(B) What is express ? Explain the features of express in detail?	05
	OR	
	(B) Implement a custom node.js module to compute the area of square, rectangle, triangle, and circle. Demonstrate the usage of this module in a simple node js application.	05