

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	(A) Five One line Questions (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 \$addFields operator in the aggregation pipeline? (B) Five Fill in the blanks (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?	05
Q.2	Attempt any four(Short Questions) (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	12
Q.3	Attempt any two questions (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?	08
Q.4	(A) What is node.js ? How does node implement asynchronous architecture? Give an example. (B) What is express ? Explain the features of express in detail? 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