## Please check that this question paper contains 9 questions and 2 printed pages within first ten minutes.

[Total No. of Questions: 09] Uni. Roll No. 1905.7.98

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Program: B.Tech. (Batch 2018 onward)

Semester: 6th

Name of Subject: MEAN Full Stack Web Development

Subject Code: PEIT-109

Paper 1D: 17209

Scientific calculator is NotAllowed

## Time Allowed: 03 Hours

Max. Marks: 60

## NOTE:

Parts A and B are compulsory

- Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- Any missing data may be assumed appropriately

Part - A

[Marks: 02 each]

- List the benefits of full-stack development.
- Describe JavaScript closures with example.
- Explain the concept Rendering Views in Express web application with example.
- How express handles the requests in MEAN project?
- How to Structuring an AngularJS web application?
  - Differentiate the concept of One-way and Two-way data binding.

Part - B

[Marks: 04 each]

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Which technologies make up the MEAN stack? Explain in detail.

Discuss the concepts of Mongoose schema. Also write a code how to create a schema.

Explain the working routing, services in Angular with example.

Illustrate, how the MEAN stack components work together to provide an application

How to design a single-page web application with Angular?

Illustrate, How the components of the simple Angular app fit together? Explain it. working.

## Page 1 of 2

[Marks: 12 each]

Part – C

Now to design a common MEAN stack architecture using a REST API built in Node.js, Express, and MongoDB? Explain with detail examples.

OR

Siscuss the process of implementation of MVC Pattern. Explain the horizontal and vertical folder structure with example.

Write a code how the POST, GET, PUT, and DELETE HTTP request methods stage to common CRUD operations in MEAN Web application with examples.

OR

Creating a new document/database using MongoDB and preform CURD Operations like insert, update, read and delete data with examples.