

Hall Ticket Number:

18CS701

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IV/IV B.Tech (Regular) DEGREE EXAMINATION

January, 2022

Seventh Semester

Time: Three Hours

Computer Science and Engineering

Full Stack Development

Maximum : 50 Marks

Answer Question No.1 compulsorily.

Answer ONE question from each unit.

1. Answer all questions

- Define Node.js and where can we use Node.js?
- Write the purpose of listen() method in Node.js application.
- What are the parameters of Express middleware callback function? Give syntax.
- Write differences between res.write() and res.send() method in Node.js.
- What is NoSQL?
- Write the syntax of MongoDB URI to be used in Node.js.
- Write comparison between TypeScript and JavaScript.
- What are the commands used to create and build an Angular application?
- Name any two properties of @Component decorator and their types.
- Write the difference between <router-outlet> and routerLink in Angular.

(1X10 = 10 Marks)

(4X10=40 Marks)

(1X10=10 Marks)

UNIT – I

- List Differences between Node.js and JavaScript. 4 M
- Explain the steps involved in implementing GET and POST methods in Node.js web application with example code. 6 M

(OR)

- Explain Synchronous and Asynchronous File System operations with example codes in Node.js. 5 M
- What is template engine? Code an Express.js application using template-engine to display data. 5 M

UNIT – II

- Define Cookies? How to send and receive cookies in express? Explain with example code. 5 M
- Explain the steps in coding an Express application that connects to MongoDB database and lists the documents. 5 M

(OR)

- How to implement session authentication in Node.js, Explain with code. 5 M
- List any five collection operations in MongoDB? Explain with code for each. 5 M

UNIT – III

- Explain different data types in TypeScript. Design a Bank Account application using class and interface in TypeScript. 5 M
- Draw the Angular Architecture. Explain each building block for implementing Angular application. 5 M

(OR)

- Define a component. Explain the complete configuration of a component with example. 5 M
- Explain the Folder structure and the role of each file in an Angular application. 5 M

UNIT – IV

- List different built-in directives in Angular. Explain different structural directives with code. 5 M
- What are Angular Services? Why @Injectable() decorator is recommended for implementing Angular Service application, Explain the creation of a service with code. 5 M

(OR)

- Illustrate the use of EventEmitter for implementing custom events in Angular with code. 5 M
- Explain how to implement a router with parameters in Angular with code. 5 M