**Sub Code: M23215802 SET-1 D23**

M. Tech I Semester Regular Examinations, March - 2024

**Advanced Data Structures & Algorithms**

**(Computer Science and Engineering)**

**Time: 3 hours Max Marks: 75M**

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**Note:**1. *Answer any* ***FIVE*** *Questions One Question from each unit*

2. *All Questions carry equal marks*

3. *Parts of a question should be answered at the same place.*

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| **UNIT - I** | | | |
| **1.** | **a).** | Explain in detailed about List tag in HTML?  What is meant by HTML security? | **8 M** |
|  | **b).** | Difference between DOM and SAX Approaches? | **7 M** |
| **(OR)** | | | |
| **2.** | **a).** | Explain HTML5 Attributes & Events Vulnerabilities? | **8 M** |
|  | **b).** | Explain about Document object Models? | **7 M** |
| **UNIT - II** | | | |
| **3.** | **a).** | Explain arrow function and event handling in JavaScript? | **8 M** |
|  | **b).** | What is angular Built in Pipes? | **7 M** |
| **(OR)** | | | |
| **4.** | **a).** | Demonstrate the Primitives Operations and Expressions in JavaScript? | **8 M** |
|  | **b).** | Explain Single Page Application development using Angular JS? | **7 M** |
| **UNIT - III** | | | |
| **5.** | **a).** | What are the need and capabilities of node-js and features? | **8 M** |
|  | **b).** | Illustrate the API Development in Express.js? | **7 M** |
| **(OR)** | | | |
| **6.** | **a).** | a) Illustrate the Types of Middleware’s?  b) Explain Error Handling? | **8 M** |
|  | **b).** | Explain Developing Template Engines in node-js? | **7 M** |
| **UNIT - IV** | | | |
| **7.** | **a).** | What are some common challenges faced when learning React.js, and how can they be overcome? | **8 M** |
|  | **b).** | What is React.js and what problem does it solve in web development? | **7 M** |
| **(OR)** | | | |
| **8.** | **a).** | How can tools like Create React App simplify the setup and configuration process? | **8 M** |
|  | **b).** | What are some popular React router libraries and their key features? | **7 M** |
| **UNIT - V** | | | |
| **9.** | **a).** | What is Mongo DB, and how does it differ from traditional relational databases? | **8 M** |
|  | **b).** | How does Mongo DB handle indexing for efficient query performance? | **7 M** |
| **(OR)** | | | |
| **10.** | **a).** | Can you explain Mongo DB's support for full-text search and aggregation pipelines? | **8 M** |
|  | **b).** | Explain how to set up and use Mongo DB Compass for visualizing and interacting with Mongo DB data? | **7 M** |

**\*\*\*End of Question Paper\*\*\***