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ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)**B.E. /B.Tech / B. Arch (Full Time) - END SEMESTER EXAMINATIONS, APR. / MAY. 2025**Computer Science and Engineering and Information Technology
Fourth Semester**SDC IT23S01 MERNSTACK**

(Regulation 2023)

Time: 1.5 hrs.

Max. Marks: 50

PART- A (2/3 Marks x 12 =30 Marks)

(Answer all Questions)

Q. No.	Questions	Marks
1	Differentiate between inline and block-level elements in HTML.	2
2	What are the advantages of using Flexbox in CSS?	2
3	What is the purpose of the .navbar class in Bootstrap?	2
4	What is npm, and what role does it play in Node.js development?	2
5	What is the purpose of the mongod process in MongoDB?	2
6	How do you connect a MongoDB database to a Node.js application?	2
7	How does the <form> tag work in HTML?	3
8	Describe the 'content-box' and 'border-box' values of the box-sizing property in CSS.	3
9	Give the difference between col-sm-*, col-md-*, and col-lg-* in Bootstrap.	3
10	How does the data retrieve from a given URL and log the result?	3
11	Brief out the difference between <Route> and <Link> in React Router.	3
12	Demonstrate how to perform a complex query in MongoDB.	3

PART- B (5 Marks x 4 = 20 Marks)

(Answer any 4 Questions)

Q. No.	Questions	Marks
I.	Create a simple HTML form with various input elements and explain its components.	5
II.	Describe the Bootstrap Grid System in detail. Provide an example of a responsive layout using grid classes.	5
III.	Demonstrate how to create a login form in React with controlled components and handle submission.	5
IV.	Describe the core modules provided by Node.js and their functionalities.	5
V.	Consider the student list. Write the Express GET /students route to fetch all students.	5
VI.	Consider the form created React to add student details. Write the Express POST /students route to receive and save the data using Mongoose.	5