Darshan Institute of Engineering & Technology
B.Tech. | Sem-4 | Winter-2025

Course Code	: 2401CS491	**Date**	: 07-11-2025
Course Name	: Web Technology - II	**Duration**	: 150 Minutes
		Total Marks	: 70

Instructions:
1. Attempt all the questions.
2. Figures to the right indicates maximum marks.
3. Make suitable assumptions wherever necessary.

Q.1	**(A)**	Explain modules in NodeJS.	**4**
	(B)	List features of NodeJS.	**3**

OR

Write a short-note on REPL.

	(C)	Explain "path" core module with examples.	**7**

OR

Write a code to first rename the file "a.txt" to "b.txt" and then delete "b.txt" using NodeJS.

Q.2	**(A)**	Explain route parameters in ExpressJS.	**4**
	(B)	Creating REST API to perform CRUD operation using Node, Express and MongoDB for a table having following fields.	**10**

- LaptopID
- LaptopName
- LaptopImage
- LaptopPrice

OR

Creating REST API to find laptop with price between given range using Node, Express and MongoDB for a table having following fields.

- LaptopID
- LaptopName
- LaptopImage
- LaptopPrice

Q.3	**(A)**	Explain JSX.	**4**
	(B)	List lifecycle methods of React class component.	**3**

OR

Write a short note on conditional rendering in ReactJS.

	(C)	Explain Routing in ReactJS with example.	**7**

OR

Explain styling in ReactJS with example.

Q.4 **(A)** Explain Hooks in ReactJS. **4**

(B) Implement ReactJS application to consume getALL, getByID and delete **10** operation on a api with following fields.
- LaptopID
- LaptopName
- LaptopImage
- LaptopPrice

OR

Implement ReactJS application to display all the laptops with price within the given range, take input from two textboxes for lower and upper range.

Q.5 **(A)** Explain difference between Authentication and Authorization. **4**

(B) List advantages and disadvantages of basic authentication. **3**

OR

List advantages and disadvantages of API Key authentication.

(C) Explain Json Web Tokens. **7**

OR

Explain best practices for consuming APIs in ReactJS.

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