

Reg. No.

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B.E / B.TECH. DEGREE EXAMINATIONS, MAY 2024

Sixth Semester

CS18002 – ADVANCED USER INTERFACE TECHNOLOGIES*(Common to CS & IT)***(Regulation 2018 / 2018A)****TIME: 3 HOURS****MAX. MARKS: 100**

COURSE OUTCOMES	STATEMENT	RBT LEVEL
CO 1	Students will be able to excel expertly about the various Client-side JS Framework, Basics of ANGULAR 4.0.	2
CO 2	Students will be able to review the various concepts and need of TypeScript.	2
CO 3	Students will be able to know the Front-end application development and the React library.	2
CO 4	Students will be to develop the various React features including components and forms.	3
CO 5	Students will be able to accomplish the functional front-end web application using React.	4

PART- A (10 x 2 = 20 Marks)

(Answer all Questions)

	CO	RBT LEVEL
1. How tuple is different from array in typescript?	1	2
2. Compare and Contrast var and let keyword in Typescript.	1	2
3. Distinguish between AngularJs and Angular.	2	2
4. Summarize the properties of a decorator.	2	2
5. Enumerate the features of Template driven forms.	3	2
6. Verify if NodeJS and npm is installed on your system or not.	3	3
7. List out the lifecycle methods of component in React.	4	2
8. What is the purpose of state implementation in React?	4	2

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|-----|---|---|---|
| 9. | Do we need to keep all component states in Redux store?
Justify. | 5 | 3 |
| 10. | Mention the Key benefits of Flux. | 5 | 2 |

PART- B (5 x 14 = 70 Marks)

- | | | Marks | CO | RBT
LEVEL |
|---------|---|-------|----|--------------|
| 11. (a) | Discuss the steps involved in the installation and execution of Typescript.
(OR) | (14) | 1 | 5 |
| (b) | Explain the various types of inheritance in Typescript with suitable example programs. | (14) | 1 | 5 |
| 12. (a) | Discuss the different types of data binding in Angular with suitable examples.
(OR) | (14) | 2 | 5 |
| (b) | Explain the various types of pipes provided by Angular 4 with examples. | (14) | 2 | 5 |
| 13. (a) | Compare and contrast Model driven forms and Template driven forms .
(OR) | (14) | 3 | 3 |
| (b) | Demonstrate the form validation using Angular for e-mail and password with an example. | (14) | 3 | 3 |
| 14. (a) | Differentiate Hybrid and Native Framework with code snippet.
(OR) | (14) | 4 | 4 |
| (b) | Describe the process of creating single page application using react router. | (14) | 4 | 4 |
| 15. (a) | Develop a simple react-redux application by combining action, reducer and storage unit.
(OR) | (14) | 5 | 5 |
| (b) | Elaborate the data flow process in React-Redux form. | (14) | 5 | 5 |

PART- C (1 x 10 = 10 Marks)

(Q.No.16 is compulsory)

- | | | Marks | CO | RBT
LEVEL |
|-----|--|-------|----|--------------|
| 16. | Write a Typescript program to compute the factorial using both recursive | (10) | 1 | 4 |

and non recursive versions for a given input.