Paper / Subject Code: 48812 / Web Computing

IT Sem V (R-2019 C Scheme) "AI & DS" May'23

5/5/23

(3 hours) Total Marks: 80

1. Question **No. 1** is compulsory
2. Attempt any **three** questions from remaining five questions
3. Assume suitable data if **necessary** and justify the assumptions
4. Figures to the **right** indicate full marks

Answer the Following.

Q1	A	What is HTTP? Explain its working along with request and response example.	05
	B	Write a Javascript to change the background color of the web page to red color if button named "RED" is clicked and to green color if button named "GREEN" is clicked.	05
	C	Write the program to create a simple HTTP server to display a welcome message with node.js.	05
	D	What are components in React? Create one class component "Car" in React and invoke it using index.js.	05
Q2	A	Write JavaScript to validate Username, Password and Email. Username and Password should not be blank and minimum length of password =8. Email should have @ character.	10
	B	What is a single page application? Explain React JSX with suitable examples such as rendering the greeting message "Hello! Welcome to React"	10
Q3	A	1) Write a Javascript to accept two numbers and display their sum using pop up box. 2) Explain the concept of React Hooks. What are the rules of using Hooks? Write the code making use of Hooks useState function that displays the number of times button named "CLICK" is clicked.	12
	B	Explain React Component Life cycle with suitable diagram.	8
Q4	A	Write an XML file marksheet.xml representing your semester mark sheet. How do you prove that it is well formed and valid XML?	05
	B	Explain different types of node.js modules? What are different modules that provide core functionality?	05
	C	What are the features of React.js	05
	D	Draw and illustrate 3-tier web architecture.	05

Q5 A Explain the working of the event loop along with different phases of node.js with a neat diagram. Write an asynchronous file reading node.js program and explain how it is executed. 10

B What is NodeJs and Express.js? Discuss the features and advantages of Express.js. 10

Q6 A Explain the architecture of Flux in detail. 10

B Differentiate ES5 and ES6. Give an example of the Anonymous and Arrow function in ES6. 10

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