SASTRA
ENGINEERING · MANAGEMENT · LAW · SCIENCES · HUMANITIES · EDUCATION
DEEMED TO BE UNIVERSITY
(U/S 3 of the UGC Act.1956)
THINK MERIT | THINK TRANSPARENCY | THINK SASTRA
THANJAVUR | KUMBAKONAM | CHENNAI

PART A

Answer ALL the questions   5x10=50

1.a) Design a "Contact Us" section for a college website that includes a blue "Home" navigation link (underlined on hover), a welcome message inside a `<div>`, and a table listing three departments and their emails. Style the table with borders and padding. (5)

b) Create a feedback form for an online store using HTML5 form tags with fields for required Name, Email (type email), Rating (number 1–5), Purchase Date (type date), and a Submit button, highlighting the use of modern input types. (5)

2. a) Given an array of product names for a store, use ES6 map and arrow functions to generate personalized greetings for each product, then apply the spread operator to add a product and display the updated greetings with code and output. (5)

b) For a student object containing name, scores, and hobbies, use object and array destructuring to extract data, then write a callback (using an arrow function) to log each subject and score from the scores object and show the output. (5)

3. Describe the MERN stack and its components, highlighting how do they work together to build a full-stack web application. (10)

4. You are developing a user dashboard that includes multiple sections such as Profile, Notifications, and Settings. Apply your understanding of component composition in React to design a reusable layout that integrates these sections effectively. (10)

5. a) While developing a React application, your team notices that a component renders incorrectly when a string is passed instead of a number as a prop. **Analyze** how integrating PropTypes into the component can help trace and prevent such type-related issues during development. (5)

b) Explain the mounting and updating phases of life cycle of a react component.(5)