

TE - Sem V R-19 C-Scheme Sem V CMPN Winter 2025

21/11/25
Max Marks: 80

Duration: 3hrs

- N.B.: (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Assume suitable data, if required and state it clearly.

- 1 Attempt any FOUR [20]
- a Explain the differences between client-side scripting and server-side scripting, and provide examples of each?
 - b Create an HTML form for user feedback including Name, Email, Rating (1-5), and Comments. Write JavaScript code to validate all fields.?
 - c Explain the concept of AJAX and how it differs from traditional web development approaches?
 - d Design a simple calculator using PHP?
 - e How can you fetch JSON data from an API using JavaScript?
- 2 a Describe the structure of both HTTP Request and HTTP Response messages and explain how a client communicates with a web server using HTTP? [10]
- b Write a JavaScript program that validates a registration form using regular expressions (e.g., email, phone number, and password). Explain the concept of exception handling in your solution.? [10]
- 3 a Explain the Servlet Life Cycle with a neat diagram. How do GET and POST methods differ in handling form data? Write a simple example? [10]
- b Discuss how AJAX improves the user interface of a web application. Write a program using the jQuery framework with AJAX to fetch data from the server and display it dynamically.? [10]
- 4 a Write a PHP program to connect with a MySQL database and insert user registration details (Name, Email, Password). Explain how user tracking can be implemented in PHP applications? [10]
- b Explain the features of React.js. Write and explain the steps to create a simple "Hello World" React application? [10]
- 5 a Explain the JavaScript DOM Model with a neat diagram. Discuss how DOM is used for accessing and modifying HTML elements dynamically with suitable code examples? [10]
- b Explain with an example how a Servlet connects to a database using JDBC. Also describe how session handling and cookies help to maintain user state in web applications? [10]
- 6 a Using the fundamental syntax and semantics of HTML5, create a simple webpage that includes a table with at least three rows and two columns, a list, and an embedded image? [10]
- b Explain XML Schema and Document Object Model (DOM) in detail. Differentiate between DOM and SAX parsers with suitable examples? [10]
