

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VI Computer Science & Business Systems : WINTER: 2025
SUBJECT: MODERN WEB APPLICATIONS

Day : Thursday
Date : 04/12/2025

W-24188-2025

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat labelled diagrams **WHEREVER** necessary.

Q. 1 Explain the architecture of the World Wide Web and describe the role of web browsers, web servers, and URLs. (10)

OR

Q.1 Compare different categories of web applications and evaluate how tiered architecture improves scalability and performance. (10)

Q. 2 List and describe the major HTML elements used for text formatting, images, tables, and hyperlinks. (10)

OR

Q.2 Design a responsive webpage layout using external CSS and Bootstrap components such as dropdowns and forms. (10)

Q. 3 Explain the concept of objects in JavaScript and how they contribute to dynamic web page behavior. (10)

OR

Q.3 Develop a dynamic web page using JavaScript that includes alerts, button interactions, and Bootstrap JS popovers. (10)

Q.4 Describe XML structure, DTD, and XML vocabularies with suitable examples. (10)

OR

Q.4 Demonstrate how DOM manipulation using JavaScript can transform XML data using XSLT. (10)

Q. 5 Explain variables, operators, and built-in functions in PHP with examples. (10)

OR

Q.5 Write a PHP script that collects form input and processes user-submitted data to display results dynamically. (10)

Q. 6 Create a PHP script to connect to a MySQL database, retrieve records, and handle connection errors. (10)

OR

Q.6 Develop a user authentication module in PHP that uses sessions and authorization levels to manage access control. (10)

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