

# 25 Lecture - CS506

## Important Subjective

Certainly, here are 10 short-answer questions related to Web Application Development along with their answers:

**\*\*Question 1:\*\*** What is the purpose of HTML in web development?

**\*\*Answer:\*\*** HTML (Hypertext Markup Language) is used to structure and present content on the web. It defines the elements that make up a web page's structure, including headings, paragraphs, links, and images.

**\*\*Question 2:\*\*** Explain the difference between frontend and backend development.

**\*\*Answer:\*\*** Frontend development involves creating the user interface that users interact with directly. Backend development involves handling server-side operations, databases, and the logic behind the scenes.

**\*\*Question 3:\*\*** What is a responsive web design?

**\*\*Answer:\*\*** Responsive web design ensures that a web application's layout adapts to different screen sizes and devices, providing an optimal user experience on various platforms.

**\*\*Question 4:\*\*** What is the purpose of CSS in web development?

**\*\*Answer:\*\*** CSS (Cascading Style Sheets) is used to control the presentation and styling of a web application. It defines how elements should be displayed, including fonts, colors, layout, and spacing.

**\*\*Question 5:\*\*** Briefly explain the role of a framework in web development.

**\*\*Answer:\*\* A framework is a pre-built set of tools, libraries, and best practices that streamline web development tasks. It helps developers by providing a structured foundation to build upon.**

**\*\*Question 6:\*\* What is AJAX, and why is it important in web applications?**

**\*\*Answer:\*\* AJAX (Asynchronous JavaScript and XML) is a technology that allows web applications to send and receive data from the server without needing to refresh the entire page. It enhances user experience and responsiveness.**

**\*\*Question 7:\*\* Describe the purpose of a RESTful API in web development.**

**\*\*Answer:\*\* A RESTful API (Representational State Transfer) enables communication between different software applications by using standard HTTP methods. It allows applications to request and exchange data in a structured format.**

**\*\*Question 8:\*\* What is the significance of user authentication and authorization in web applications?**

**\*\*Answer:\*\* User authentication verifies the identity of users, while authorization determines what actions they are allowed to perform within the application. They are essential for security and access control.**

**\*\*Question 9:\*\* What is version control, and why is it important in collaborative web development?**

**\*\*Answer:\*\* Version control is the practice of tracking and managing changes to code. It allows multiple developers to work on the same project simultaneously, preserving a history of changes and enabling easy collaboration.**

**\*\*Question 10:\*\* Why is testing crucial in web application development, and what are some common types of testing?**

**\*\*Answer:\*\* Testing ensures that a web application functions as intended and is free of errors. Common types of testing include unit testing (testing individual components), integration testing (testing interactions between components), and user acceptance testing (testing by end-users to ensure usability).**