

Answer any five questions:

1. What is the purpose of the DOCTYPE declaration in HTML, and what might happen if it is omitted? Explain the difference between the id attribute and the class attribute in HTML. Provide examples of how they can be used in a webpage. Define block-level elements and give examples of three commonly used block elements in HTML. Why are block elements important in webpage layout? What is the href attribute in the a (anchor) tag used for? Provide an example of how it is used to create a hyperlink. [4+5+6+5=20]
2. Describe the box model in CSS. How does padding, border, and margin influence an element's size? **Create a webpage layout using HTML and CSS that contains the following:**
 - i) A form that includes input fields for name, email, and message, with appropriate labels and placeholders.
 - ii) Use CSS to style the form elements (font, color, padding, margins, etc.).
 - iii) Implement a hover effect on the form's submit button that changes its background color and border.

Discuss the importance of responsive design in web publishing. How do HTML and CSS work together to create web pages that adapt to different devices and screen sizes? [5+10+5=20]
3. Describe the difference between a class selector (.class) and an id selector (#id) in CSS. In what situations would you prefer one over the other? How do you validate an XML document? Explain with examples of using DTD and XML Schema (XSD). Explain the difference between client-side and server-side scripting in web development. Provide examples of each. [6+6+8=20]
4. Explain the steps involved in publishing a website? What is the difference between static and dynamic web pages in web publishing? Describe the basic workflow of the production of electronic media, print media and multimedia documents. How does networking system help in web publishing? What are the benefits of web publishing in printing industry? [(3+3)+6+5+3=20]
5. What is the difference between HTTP and HTTPS? Describe the process of how a client (browser) sends an HTTP request and how the server responds with an HTTP response. Explain the structure of both HTTP request and response messages, including the start-line, headers, and body sections. How do cookies help in maintaining session state between client and server, and what are some common security issues with cookies? [3+6+6+5=20]
6. Write short note on i) PCDATA ii) HTTP Status Code iii) Directives iv) Desktop Publishing [5x4=20]
7. Explain how Servlets handle HTTP requests and responses? What are the key features of Java Servlets? Explain the process of session management in Servlets using cookies and URL rewriting. Provide examples. What is the difference between doGet() and doPost() methods in Servlets? [6+5+6+3=20]

[Turn over

8. What are the main differences between JDBC and ODBC drivers? List the types of JDBC drivers. Give a brief explanation of each type. What is the significance of a database in web applications? [4+12 +4=20]