

THE OPEN UNIVERSITY OF SRI LANKA  
B.Sc.(IT) DEGREE PROGRAMME – 2024/2025  
DEPARTMENT OF COMPUTER SCIENCE  
ITU5308 – WEB TECHNOLOGY  
FINAL EXAMINATION  
DURATION: TWO HOURS ONLY (2 HOURS)



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Date: 13.11.2025

Time: 01.30 p.m. – 03.30 p.m.

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ANSWER ONLY FOUR (04) QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS

**QUESTION 01**

- 1.1. Define the term “Internet” and briefly explain how data travels across it. [05 Marks]
- 1.2. What is the purpose of DNS in accessing websites? [05 Marks]
- 1.3. Explain the role of a web server in the client–server model. [05 Marks]
- 1.4. Describe how HTTP enables communication between browsers and servers. [05 Marks]
- 1.5. What are the main parts of a URL? Provide an example. [05 Marks]

**QUESTION 02**

- 2.1. What are HTML elements and why are they important? [05 Marks]
- 2.2. What does it mean when elements are nested in HTML? [05 Marks]
- 2.3. Define HTML attributes and give two examples. [05 Marks]
- 2.4. Distinguish between the “id” and “class” attributes. [05 Marks]
- 2.5. Explain how hyperlinks support web navigation. [05 Marks]

**QUESTION 03**

- 3.1. Compare inline CSS, internal CSS, and external CSS. [05 Marks]
- 3.2. Explain the use of style, id, and class selectors in CSS. [05 Marks]
- 3.3. Describe the CSS box model. [05 Marks]
- 3.4. State two differences between Flexbox and CSS Grid. [05 Marks]
- 3.5. What is responsive design, and how are media queries used to achieve it? [05 Marks]

**QUESTION 04**

- 4.1. Explain *dynamic content* and how scripting languages generate it. [05 Marks]
- 4.2. Why is JavaScript essential for modern websites? [05 Marks]
- 4.3. Differentiate between inline, internal, and external JavaScript. [05 Marks]
- 4.4. List examples of UI features that typically rely on JavaScript. [05 Marks]
- 4.5. What is AJAX, and how does it improve user experience? [05 Marks]

**QUESTION 05**

- 5.1. What is the difference between client-side and server-side scripting? [05 Marks]
- 5.2. State differences between static content and dynamic content. [05 Marks]
- 5.3. Explain how a database supports dynamic websites. [05 Marks]
- 5.4. Describe the communication flow between client, server, and database in a login process. [05 Marks]
- 5.5. State three advantages of using databases in web development. [05 Marks]

**QUESTION 06**

- 6.1. How do you write comments in CSS? [05 Marks]
- 6.2. Why are comments useful in web development? [05 Marks]
- 6.3. Define web hosting and its function. [05 Marks]
- 6.4. Changing hosting is easier than changing a domain. Explain the reasons behind the statement. [05 Marks]
- 6.5. Give two reasons why individuals typically do not manage their own hosting servers. [05 Marks]

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