COMPUTING AND INFORMATICS

COMPUTER SCIENCE

L6/S/M/2024,L6/J.2025

WEB DESIGN SKILLS

THEORY ASSESSMENT

JANUARY 2026

DUE 26/1/26

Instructions

• Answer all questions clearly and concisely.

• Provide examples where applicable.

• Diagrams, tables, and sketches are encouraged for visual clarity.

• Submit in a well-organized document (handwritten neatly).

• Include a cover page with your name, course, and date.

• Number all questions and answers clearly.

• Attach diagrams/sketches where required.

• Submit by the due date provided by your instructor.

Section A: Introduction to Web Programming (15 marks)

1. Define the following key web terms:

   - Internet, World Wide Web, HTML, CSS, JavaScript.

2. Briefly explain the history of the Internet and the Web, highlighting the evolution of HTML and CSS.

3. List three web programming/scripting languages and describe their main uses.

4. Discuss two current trends in web programming (e.g., responsive design, AI integration).

5. Explain the importance of websites in modern business, education, and communication.

Section B: Website User Requirements (15 marks)

6. Differentiate between functional requirements and non-functional requirements with examples.

7. Describe the process of user requirements identification (methods such as interviews, surveys, observation).

8. Explain the importance of user requirements analysis before starting design.

9. Provide examples of functional and non-functional requirements.

Section C: Documentation of User Requirements (15 marks)

10. Identify two tools used for documenting user requirements.

11. Outline the steps in preparing a User Requirements Specification (URS) document.

12. Explain why reviewing user requirements is important.

13. Describe two techniques for reviewing user requirements.

14. Differentiate between validation and verification of requirements.

Section D: Website Application Design (15 marks)

15. State and explain three principles of website design.

16. Outline the website design process from planning to deployment.

17. Define User Experience (UX) design and explain its importance.

18. Compare at least two website design tools (e.g., Figma vs WordPress) in terms of usability and purpose.

19. List three factors to consider when selecting design tools.

20. Explain the importance of installation and configuration of design tools.

Section E: Website Design Methods (10 marks)

21. Explain the concept of User-Centered Design.

22. Define Visual Design and list its key elements (typography, color, spacing, etc.).

23. Describe Interaction Design and its role in user engagement.

24. Differentiate between wireframing and prototyping.

Section F: Visual Hierarchy in Web Applications (15 marks)

25. Define Graphical User Interface (GUI).

26. Explain how typography, color, and contrast influence user perception.

27. Discuss the role of spacing, layout, and reading patterns in web design.

28. Provide examples of how size, scale, proximity, repetition, alignment, texture, and style contribute to effective design.

Section G: Site Maps and Wireframes (15 marks)

29. Explain the importance of site maps in web design and SEO.

30. Differentiate between two types of site maps.

31. Create a simple visual site map for a law firm website (hint: include Home, About Us, Services, Contact).

32. Sketch a wireframe for a homepage of an educational website.