Daffodil International University
Faculty of Science & Information Technology
Department of Computer Science & Engineering
Mid Examination, Summer 2025
Course Code: CSE415, Course Title: Web Engineering
Level: 4 Term: 2 Batch: 61

Time: 01:30 Hrs **Marks: 25**

Answer **ALL** Questions
[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

1.		"The World Wide Web is an application using the Internet to transmit information."		
	a)	**Explain** the statement by comparing the roles of the Internet and the World Wide Web.	[2.5]	
	b)	A non-technical client wants a new e-commerce website. They give you the following two requirements: - Users must be able to create an account and log in. - The website must be very fast and easy to use **Identify** Functional Requirement and Non-Functional Requirements	[2.5]	CO1
2.	a)	**Explain** the Client-Server paradigm.	[2]	
	b)	What does it mean for HTTP to be a "stateless" protocol? How does this statelessness impact the user experience on a modern e-commerce site?	[3]	CO3
3.		You are creating a **"Device Registration"** form for a company's new product line. The form requires a device name, a unique serial number, serial number confirmation and other necessary information. You must implement client-side validation to guide the user before submission.		
	a)	Write the HTML code for the registration form. Analyze and **apply** necessary information to the structure.	[5]	
	b)	Write the CSS rules needed to provide visual feedback for the validation. Your CSS must include a rule to provide a basic, readable layout, error status with color to any input field that fails validation.	[4]	CO4
	c)	**Describe** the logic and write the function structure for validating the form upon submission. You must ensure- i. On form submit, prevent default and validate ii. Device Name: required → else show "Device Name is required." iii. Serial Format: must be **XXXX-YYYY** → else show "Invalid Serial Number format. Must be XXXX-YYYY" iv. Match Serial: confirm matches → else show "Serial Numbers do not match."	[6]	