



Daffodil International University

Web Engineering

Section:63_J, Quiz-2, Time Duration:45 minutes, Marks-15 Teacher Initial:IST

Section-1

Answer this question (each requires reasoning / analysis, not just definition): Marks-6

1. How does JavaScript update webpage content dynamically?
2. A web form validates user input using JS before submission. Discuss how this improves user experience and server efficiency
3. Can you visualize how JavaScript interacts with HTML and CSS to make a static web page dynamic?

Section-2

a) Design a **Student GPA Calculator** web page using **HTML, CSS, and JavaScript** that:
Marks-5

1. Allows a student to input marks for 3 courses.
2. Calculates GPA when a button is clicked.
3. Displays a message and changes background color based on result:
 - ☐ Green $\rightarrow$ $GPA \geq 3.50$ (Excellent)
 - ☐ Yellow $\rightarrow 2.50 \leq GPA < 3.50$ (Average)
 - ☒ Red $\rightarrow GPA < 2.50$ (Poor)
4. The interface must include a header, a styled form, and a footer.

b) A school wants a web form where teachers input marks, and the system automatically shows the grade.> Make an HTML form with a number input for marks (0–100). When the user clicks “Show Grade,” display the grade using: Marks-4

A: 80–100

B: 60–79

C: 40–59

F: Below 40