

# Assignment 8

**Subject:** PPWJ (CSE 3838)

**Session:** Sep 2025 to Jan 2026

**Branch:** CSIT

**Section:** All

**Course Outcomes:** CO6

**Learning Levels:** Remembering (L1), Understanding (L2), Application (L3), and Analysis (L4)

| <b>Q No.</b> | <b>Questions</b>  | <b>Learning Levels</b> |
|--------------|---|------------------------|
| Q1           | <p>You are given the following HTML code:</p> <pre>&lt;!doctype html&gt; &lt;html&gt; &lt;head&gt; &lt;title&gt;Canvas HTML5&lt;/title&gt; &lt;/head&gt; &lt;body&gt; &lt;div id="one" class="greeting"&gt;Hello World&lt;/div&gt; &lt;p class="greeting"&gt;Welcome to JavaScript&lt;/p&gt; &lt;p&gt;Let's learn DOM methods!&lt;/p&gt; &lt;script&gt; // Write your JavaScript code here &lt;/script&gt; &lt;/body&gt; &lt;/html&gt;</pre> <p>Write JavaScript code to do the following:</p> <ul style="list-style-type: none"><li>• Select the element by ID and print its text content to the console.</li><li>• Select all <code>&lt;p&gt;</code> elements by tag name and print how many <code>&lt;p&gt;</code> tags are present.</li><li>• Select all elements with class name <code>greeting</code> and change their text color to blue.</li></ul> <p>Both elements with class <code>greeting</code> should turn blue in the browser.</p> | L2, L3, L4             |

| Q No. | Questions   | Learning Levels |
|-------|---|-----------------|
| Q2    | <p>Design a web page using <b>HTML and JavaScript</b> to demonstrate the dynamic creation of HTML elements using DOM methods.</p> <p>Create a <code>&lt;div&gt;</code> container with an appropriate <code>id</code>. Using JavaScript, perform the following tasks when <code>window.onload()</code> function is called :</p> <ol style="list-style-type: none"> <li>1. Create a <code>&lt;h2&gt;</code> heading element with suitable text and add it to the <code>&lt;div&gt;</code> container.</li> <li>2. Create a <code>&lt;p&gt;</code> paragraph element with meaningful content and add it to the container.</li> <li>3. Create an <code>&lt;img&gt;</code> image element, set its source and width using JavaScript, and add it to the container.</li> <li>4. Create a hyperlink using the <code>&lt;a&gt;</code> tag, set any valid URL and link text, and add it to the container.</li> <li>5. Ensure that all elements are created dynamically using JavaScript DOM methods</li> </ol>                 | L2, L3, L4      |
| Q3    | <p>Create a web page where clicking anywhere on the window will toggle the background and text color of the page.</p> <ul style="list-style-type: none"> <li>• Create an HTML page with a heading saying “Click anywhere to toggle Dark Mode”.</li> <li>• Use a JavaScript variable <code>darkMode</code> (boolean) to track whether the page is in Dark Mode or not.</li> <li>• Use the <code>window.onclick</code> event to handle clicks anywhere on the page.</li> <li>• If <code>darkMode</code> is false: <ul style="list-style-type: none"> <li>– Set background color to black</li> <li>– Set text color to white</li> <li>– Set <code>darkMode</code> to true</li> <li>– Display the message: “Dark Mode is ON”</li> </ul> </li> <li>• If <code>darkMode</code> is true: <ul style="list-style-type: none"> <li>– Set background color to white</li> <li>– Set text color to black</li> <li>– Set <code>darkMode</code> to false</li> <li>– Display the message: “Dark Mode is OFF”</li> </ul> </li> </ul> | L2, L3, L4      |

| Q No.     | Questions   | Learning Levels |                  |           |       |         |      |           |     |          |        |        |
|-----------|---|-----------------|------------------|-----------|-------|---------|------|-----------|-----|----------|--------|--------|
| Q4        | <p>Create a webpage with a rectangular <code>&lt;div&gt;</code> element. Using JavaScript:</p> <ul style="list-style-type: none"> <li>• Display text inside the <code>&lt;div&gt;</code> (“hello world”).</li> <li>• Apply width, height, and background color to the <code>&lt;div&gt;</code>.</li> <li>• Change the background color of the <code>&lt;div&gt;</code> when the following events occur:</li> </ul> <table border="1" data-bbox="314 631 1140 889"> <thead> <tr> <th data-bbox="314 631 652 676">Event</th><th data-bbox="652 631 1140 676">Background Color</th></tr> </thead> <tbody> <tr> <td data-bbox="314 676 652 720">mousedown</td><td data-bbox="652 676 1140 720">Green</td></tr> <tr> <td data-bbox="314 720 652 765">mouseup</td><td data-bbox="652 720 1140 765">Blue</td></tr> <tr> <td data-bbox="314 765 652 810">mouseover</td><td data-bbox="652 765 1140 810">Red</td></tr> <tr> <td data-bbox="314 810 652 889">mouseout</td><td data-bbox="652 810 1140 889">Yellow</td></tr> </tbody> </table> | Event           | Background Color | mousedown | Green | mouseup | Blue | mouseover | Red | mouseout | Yellow | L3, L4 |
| Event     | Background Color  |                 |                  |           |       |         |      |           |     |          |        |        |
| mousedown | Green   |                 |                  |           |       |         |      |           |     |          |        |        |
| mouseup   | Blue  |                 |                  |           |       |         |      |           |     |          |        |        |
| mouseover | Red   |                 |                  |           |       |         |      |           |     |          |        |        |
| mouseout  | Yellow  |                 |                  |           |       |         |      |           |     |          |        |        |
| Q5        | <p>Design a web page using <b>HTML, CSS, and JavaScript</b> to perform the following tasks:</p> <ol style="list-style-type: none"> <li>1. Create a <code>&lt;div&gt;</code> element containing any text and an <code>&lt;img&gt;</code> element.</li> <li>2. Define a CSS class named <b>highlight</b> with the following styles: <ul style="list-style-type: none"> <li>• Background color: light blue</li> <li>• Text color: dark blue</li> <li>• Padding: 15px</li> <li>• Border: 2px solid blue</li> <li>• Font size: 18px</li> </ul> </li> <li>3. When a button is clicked: <ol style="list-style-type: none"> <li>(a) Add the <b>highlight</b> class to the <code>&lt;div&gt;</code> element using JavaScript.</li> <li>(b) Change the source of the image using the <code>setAttribute()</code> method.</li> </ol> </li> <li>4. Ensure that the changes occur dynamically without reloading the web page.</li> </ol>   | L3, L4          |                  |           |       |         |      |           |     |          |        |        |
|           | <b>-END-</b>  |                 |                  |           |       |         |      |           |     |          |        |        |