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**Reg.No:**

**FRANCIS XAVIER ENGINEERING COLLEGE**  
**(An Autonomous Institution)**  
**B.E DEGREE – CONTINUOUS ASSESSMENT EXAMINATION I**  
**Fifth Semester**  
**Computer Science and Engineering**  
**19CS5701– Internet Programming**  
**(Regulation 2019)**

**Time: Three hours****Maximum: 100 Marks****Answer ALL Questions****PART – A (10 x 2 = 20 Marks)**

Q.No	Question	Max. Marks				
1.	<p>How can you use Column Spanning and Row Spanning?</p> <p>Row spanning is used to merge (combine) two or more rows. Column spanning is used to merge (combine) two or more columns.</p> <pre>&lt;table&gt;   &lt;tr&gt;     &lt;th colspan="2"&gt;Name&lt;/th&gt;     &lt;th&gt;Age&lt;/th&gt;   &lt;/tr&gt;   &lt;tr&gt;     &lt;td&gt;Jill&lt;/td&gt;     &lt;td&gt;Smith&lt;/td&gt;     &lt;td&gt;43&lt;/td&gt;   &lt;/tr&gt;   &lt;tr&gt;     &lt;td&gt;Eve&lt;/td&gt;     &lt;td&gt;Jackson&lt;/td&gt;     &lt;td&gt;57&lt;/td&gt;   &lt;/tr&gt; &lt;/table&gt; //  &lt;th rowspan="2"&gt;Phone&lt;/th&gt;</pre>	2				
2.	<p>How will you create a password field in a HTML form?</p> <pre>&lt;html&gt;&lt;&lt;body&gt;Enter password:&lt;Input type="Password" name=p1 value=p&gt; &lt;/body&gt;&lt;/html&gt;</pre>	2				
3.	<table border="1"><tr><td>W</td><td>Y</td></tr><tr><td>X</td><td>Z</td></tr></table> <p>Write HTML code to create the following table</p>	W	Y	X	Z	2
W	Y					
X	Z					

	<pre> &lt;html&gt; &lt;body&gt; &lt;table&gt; &lt;tr&gt;&lt;td&gt;w&lt;/td&gt;&lt;td&gt;Y&lt;/td&gt;&lt;/tr&gt; &lt;tr&gt;&lt;td&gt;X&lt;/td&gt;&lt;td&gt;Z&lt;/td&gt;&lt;/tr&gt;&lt;/table&gt;&lt;/body&gt;&lt;/html&gt; </pre>	
4.	<p>Justify the uses of URL encoded in HTML?</p> <p>URL encoding converts non-ASCII characters into a format that can be transmitted over the Internet. URL encoding replaces non-ASCII characters with a "%" followed by hexadecimal digits. URLs cannot contain spaces.</p>	02
5.	<p>Mention the need for cascading style sheets.</p> <p>CSS makes the front end of a website shine and it creates a great user experience. Without CSS , websites would be less pleasing to the eye and likely much harder to navigate. In addition to layout and format,CSS is responsible for font color and more.</p>	02
6.	<p>How will you include CSS in a web site?</p> <p>1.Linked Styles -Style information is read from a separate file that is specified in the&lt;LINK&gt; tag</p> <p>2.Embedded Styles -Style information is defined in the document head using the&lt;STYLE&gt; and &lt;/STYLE&gt; tags.</p> <p>3.Inline Styles -Style information is placed inside an HTML tag and applies to all content between that tag and it companion closing tag.</p>	02
7.	<p>Write a javascript program using prompt()</p> <pre> &lt;!DOCTYPE html&gt; &lt;html&gt;   &lt;head&gt;     &lt;title&gt; JavaScript prompt() method     &lt;/title&gt;     &lt;script&gt; function fun() { var a = prompt("Enter some text", "the javatpoint.com"); if (a != null) { document.getElementById("para").innerHTML = "Welcome to " + a; } }     &lt;/script&gt;   &lt;/head&gt;   &lt;body style = "text-align: center;"&gt;     &lt;h1 style = "color: red;"&gt; Hello World </pre>	02

	<pre>&lt;/h1&gt; &lt;h2&gt; Example of the JavaScript prompt() method &lt;/h2&gt;   &lt;button onclick = "fun()"&gt; Click me &lt;/button&gt; &lt;p id = "para"&gt;&lt;/p&gt;  &lt;/body&gt; &lt;/html&gt;</pre>																			
8.	<div>State the types of JavaScript statements with examples.</div> <table><thead><tr><th>Statement</th><th>Description</th></tr></thead><tbody><tr><td><a href="#"><u>const</u></a></td><td>Declares a variable with a constant value</td></tr><tr><td><a href="#"><u>continue</u></a></td><td>Breaks one iteration (in the loop) if a specific condition is met, moving to the next iteration in the loop</td></tr><tr><td><a href="#"><u>do ... while</u></a></td><td>Executes a block of statements and repeats the loop as long as the condition is true</td></tr><tr><td><a href="#"><u>for</u></a></td><td>Loops through a block of code a number of times</td></tr><tr><td><a href="#"><u>for ... in</u></a></td><td>Loops through the properties of an object</td></tr><tr><td><a href="#"><u>for ... of</u></a></td><td>Loops through the values of an iterable object</td></tr><tr><td><a href="#"><u>function</u></a></td><td>Declares a function</td></tr><tr><td><a href="#"><u>if ... else ... else if</u></a></td><td>Marks a block of statements to be executed if a condition is true</td></tr></tbody></table>	Statement	Description	<a href="#"><u>const</u></a>	Declares a variable with a constant value	<a href="#"><u>continue</u></a>	Breaks one iteration (in the loop) if a specific condition is met, moving to the next iteration in the loop	<a href="#"><u>do ... while</u></a>	Executes a block of statements and repeats the loop as long as the condition is true	<a href="#"><u>for</u></a>	Loops through a block of code a number of times	<a href="#"><u>for ... in</u></a>	Loops through the properties of an object	<a href="#"><u>for ... of</u></a>	Loops through the values of an iterable object	<a href="#"><u>function</u></a>	Declares a function	<a href="#"><u>if ... else ... else if</u></a>	Marks a block of statements to be executed if a condition is true	02
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9.	<div>List the properties of HTML DOM?</div> <p>The properties of HTML DOM are followings –</p> <ul style="list-style-type: none"><li>p.innerHTML – inner content of P(HTML element).</li><li>p.nodeName – the name of P</li><li>p.nodeValue – the value of P</li><li>p.parentNode – the parent node of P</li><li>p.childNodes – the child node of P</li><li>p.Attributes – the attributes node of P</li></ul> <p>In the above properties, P is the HTML element.</p>	02																		
10.	<div>How to add nodes in DOM Tree?</div> <p>The first step is to create a node object of the type you want using one of document.createElement(), document.createAttribute() or</p>	02																		

	document.createTextNode(). For attributes, however, you'll probably just want to create an element node and assign it attributes directly	
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**PART – B (5 x 13 = 65 Marks)**

Q.No	Question	Max. Marks
11 (a)	<p>Describe in detail about Internet and World Wide Web.</p> <ul style="list-style-type: none"> <li>• Internet &amp; Internet protocol (7)</li> <li>• WWW(6)</li> </ul> <p>Client &amp; server</p> <ul style="list-style-type: none"> <li>• Web languages &amp; protocols</li> <li>• Web pages • Home page</li> <li>• Web browsers</li> <li>• Web sites</li> </ul> <p align="center">(OR)</p>	13
11 (b)	<p>Create a Restaurant Web Page with HTML forms in detail along with form elements, attributes and methods.</p> <ul style="list-style-type: none"> <li>• Program(10)</li> <li>• Output (3)</li> </ul>	13
12 (a)	<p>Explain how tables can be inserted into a HTML document with an example.</p> <ul style="list-style-type: none"> <li>• HTML table elements with attributes and values(10)</li> <li>• Output(3)</li> </ul> <p align="center">(OR)</p>	13
(b)	<p>How to Create a simple web page using HTML formatting tags.</p> <ul style="list-style-type: none"> <li>• HTML List elements with attributes and values(10)</li> <li>• Output(3)</li> </ul>	13
13 (a)	<p>Develop a simple online shopping application using CSS Selectors.</p> <ul style="list-style-type: none"> <li>• Program using Class, id , multiple, universal selectors (10)</li> <li>• Output (3)</li> </ul> <p align="center">(OR)</p>	13
(b)	<p>Create a web page for the college information using any one CSS type (Assume your own data).</p> <ul style="list-style-type: none"> <li>• Program using Internal , Inline, External Style sheet (10)</li> <li>• Output (3)</li> </ul>	13

14a)	<p>Design a form with following condition emp- name, product- name, dept-name etc should not be blank .Write a function for all these validation .When you introduce any number field, always check it is negative or not, if it so do not accept the input value. calculate  <math>Gross.value = val(basic.value + hra.value + da.value)</math></p> <ul style="list-style-type: none"> <li>• Program (10)</li> <li>• Output (3)</li> </ul> <p>(OR)</p>	13
(b)	<p>Write a java script program to develop the arithmetic calculator.</p> <ul style="list-style-type: none"> <li>• Program (10)</li> <li>• Output(3)</li> </ul>	13
15 (a)	<p>i)Apply HTML element id to find the DOM HTML element.</p> <pre> &lt;!DOCTYPE html&gt; &lt;html&gt; &lt;body&gt;     &lt;h2&gt;GeeksforGeeks&lt;/h2&gt;     &lt;!-- Finding the HTML Elements by their Id in DOM --&gt;     &lt;p id="intro"&gt;A Computer Science portal for geeks.&lt;/p&gt;     &lt;p&gt;This example illustrates the &lt;b&gt;getElementById&lt;/b&gt; method.&lt;/p&gt;     &lt;p id="demo"&gt;&lt;/p&gt;     &lt;script&gt;         const element = document.getElementById("intro");         document.getElementById("demo").innerHTML =         "GeeksforGeeks introduction is: " + element.innerHTML;     &lt;/script&gt; &lt;/body&gt; &lt;/html&gt; </pre> <p>ii) illustrates the dom-manipulation using getElementById() Method.(6)</p> <pre> &lt;!DOCTYPE html&gt; &lt;html&gt; &lt;head&gt;     &lt;title&gt;DOM manipulation&lt;/title&gt; &lt;/head&gt; </pre>	<p>7</p> <p>6</p>

	<pre> &lt;body&gt;      &lt;label&gt;Enter Value 1: &lt;/label&gt;     &lt;input type="text" id="val1" /&gt;     &lt;br /&gt;     &lt;br /&gt;     &lt;label&gt;Enter Value 2: &lt;/label&gt;     &lt;input type="text" id="val2" /&gt;     &lt;br /&gt;     &lt;button onclick="getAdd()"&gt;Click To Add&lt;/button&gt;     &lt;p id="result"&gt;&lt;/p&gt;     &lt;script type="text/javascript"&gt;         function getAdd() {              // Fetch the value of input with id val1             const num1 = Number(document.getElementById("val1").value);             // Fetch the value of input with id val2             const num2 = Number(document.getElementById("val2").value);             const add = num1 + num2;             console.log(add);              // Displays the result in paragraph using dom             document.getElementById("result").innerHTML = "Addition : " + add;             // Changes the color of paragraph tag with red             document.getElementById("result").style.color = "red";         }     &lt;/script&gt; &lt;/body&gt;&lt;/html&gt; </pre>	
(b)	<p>i) Explain about the document tree in detail.</p> <p>Program (4) Tree (3)</p> <p>ii) Explain DOM event handling in detail.</p> <p>Events (3) Program (3)</p>	<p>7</p> <p>6</p>

**PART – C (1 x 15 = 15 marks)**

Q.No	Question	Max. Marks
16 (a)	Create a HTML Form page for Railway Registration Form and apply HTML List elements.	15

	<ul style="list-style-type: none"> <li>● Design a web page using HTML form elements like textbox, label, radio,checkbox,option ,button,file,color etc. also list elements(12)</li> <li>● Output (3)</li> </ul> <p style="text-align: center;">(OR)</p>	
<b>(b)</b>	<p>Write the complete JavaScript to prompt the user for the radius of the sphere and call function sphere Volume to calculate and display the volume of the sphere. Use the statement.  <math>\text{Volume} = (4.0/3.0) * \text{Math.PI} * \text{Math.pow}(\text{radius}, 3)</math></p> <ul style="list-style-type: none"> <li>● Program (12)</li> <li>● Output (3)</li> </ul>	15