USN										

School of Computer Science and Engineering

B.Tech (Hons.)

Midterm Scheme of Evaluation - Set 1

Academic Year 2024-2025

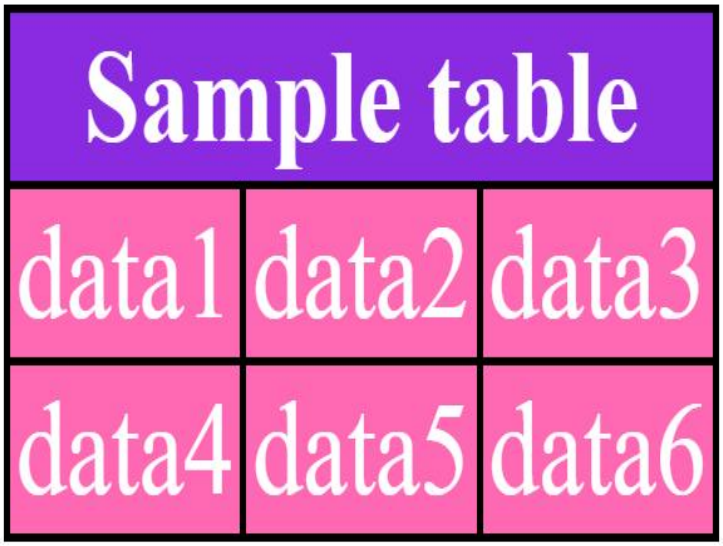
Course: Web Fundamentals and UX Design		Course Code: CS1307	Semester: I
Time: 10AM-11.30AM	Duration: 90 minutes	Date : 06/12/2024	Max Marks: 25

Notes/ Instructions:

All questions are compulsory.

Sl. No.	PART A – Max Marks (5)	Marks	L1-L6	CO
1.	Block elements are normally displayed without starting a new line. a) True b) False **Answer: a) False**	1	L2	CO1
2.	What will be the output of the following JavaScript code snippet? <script> var txt1 = "hello"; var txt2 = "world"; document.getElementById("demo").innerHTML = txt1 + txt2; </script> a) Undefined b) NULL c) hello world d) helloworld **Answer: d) helloworld**	1	L3	CO3
3.	Which property is used to change the font of an element? a) font-style b) font-family c) font-weight d) font-variant **Answer: b) font-family**	1	L1	CO2
4.	Specify the CSS property for the following: To Set: The top border = 5 pixels The bottom border = 3 pixels The left border = 10 pixels The right border = 2 pixels for a HTML element **Answer: border-width: 5px 2px 3px 10px**	1	L2	CO2

5.	What will be the return value of the following JavaScript function?
	function compare()
	{
	let a=2;
	let b='2';
	if(a==b)
	return true;
	else
	return false;
	}
	a) True
	b) False
	c) Compilation error
	d) Runtime error
	Answer: a)True
		1	**L3**	**CO3**

Sl. No.	**PART B – Max Marks (20)**	**Marks**	**L1-L6**	**CO**
6.	Design a webpage using html and css for the following output.  A background color of blueviolet is applied to the heading and background color set to pink for the data and text color and border to be set according to the above output. Upon hover set the background color of a row to blue. **<!DOCTYPE html> <html lang="en"> <head> <meta charset="UTF-8"> <title>CSS Table</title> <style> table,th,td {**	**5**	**L3**	**CO2**

	border: 1px solid black; **color:white;** **}** **table{** **margin:5px;** **padding: 10px;** **}** **th{** **background-color: blueviolet;** **}** **tr** **{** **background-color: hotpink;** **}** **tr:hover** **{** **background-color: blue;** **}** **</style>** **</head>** **<body>** **<table >** **<tr>** **<th colspan="3">Sample table</th>** **</tr>** **<tr>** **<td>data1</td>** **<td>data2</td>** **<td>data3</td>** **</tr>** **<tr>** **<td>data4</td>** **<td>data5</td>** **<td>data6</td>** **</tr>** **</table>** **</body>** **</html>**			
7.	a) Imagine you are tasked with designing the layout for a website. You have to apply a background color of aqua only to the direct list elements inside a list with a class of navbar.	**2**	**L3**	**CO2**

	Which is the CSS selector you use for this and write a CSS rule. Below is the code for navbar. **Note: Write only the CSS Part and the selector to be used Mention the list items that will have a background color applied.** <nav> <ul class="navbar"> <li>Home</li> <li>About</li> <li>Services</li> <ul> <li>Web Design</li> <li>SEO</li> <li>Contact</li> </ul> </ul> </nav> **Answer:** **.navbar > li {** **background-color:blue;** **}** **List items with a background color applied are:** **Home** **About** **Services**			
	b) Imagine you are designing a basic webpage for a personal blog. You want to style specific elements like headings, paragraphs, and links using CSS. Explain how simple selectors in CSS can be used to style these elements with an example. Answer: **Types of Simple Selectors:** 1. **Element Selector**: Targets an HTML element by its tag name. 2. **Class Selector**: Targets HTML elements with a specific class attribute. 3. **ID Selector**: Targets an element with a specific id attribute <!DOCTYPE html> <html lang="en"> <head> <meta charset="UTF-8"> <meta name="viewport" content="width=device-width,	**3**	**L2**	**CO2**

```
initial-scale=1.0">
    <title>My Blog</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <h1>Welcome to My Blog!</h1>
    </header>
    <section>
        <h2>My First Post</h2>
        <p class="intro">This is the introduction to my first
blog post.</p>
        <p>This is the body of the post.</p>
        <a href="https://example.com" id="external-
link">Click here for more info</a>
    </section>
</body>
</html>

Styles.css
/* Element Selector for headings */
h1 {
    font-size: 2.5em; /* Larger font size for main heading */
    color: #333; /* Dark color */
    text-align: center; /* Center-aligned text */
}

h2 {
    font-size: 2em; /* Slightly smaller font size for
subheadings */
    color: #555; /* Lighter color */
}

/* Class Selector for paragraphs with 'intro' class */
.intro {
    font-style: italic; /* Italicize the introduction paragraph */
    color: #777; /* Lighter gray color */
}

/* Element Selector for all paragraphs */
p {
    font-family: Arial, sans-serif; /* Change font */
    line-height: 1.6; /* Increase line spacing */
    margin-bottom: 15px; /* Space between paragraphs */
}

/* ID Selector for links */
#external-link {
    color: #0066cc; /* Blue color for the link */
    text-decoration: none; /* Remove underline */
    font-weight: bold; /* Make the link text bold */
}
```

	#external-link:hover {
	color: #004999; /* Change link color when hovered */
	text-decoration: underline; /* Underline the link when hovered */
	}			

8.	Design the JavaScript code that accomplishes these tasks effectively. Given the following HTML code, apply your understanding of JavaScript that selects all elements with the class name highlight and changes the text color of the second paragraph to brown with class highlight, third paragraph applied a background color of blue, and the content of first paragraph to be set to the text "the content of this paragraph is modified". <body> this is a javascript this is a javascript this is a javascript this is a javascript </body> **Answer:** <!Doctype html> <html> <head> <title>javascript</title> </head> <body> this is a javascript this is a javascript this is a javascript this is a javascript <script> const l=document.getElementsByClassName("highlight"); l[1].style.color = "brown"; l[0].textContent = 'The content of this paragraph is modified'; l[2].style.backgroundColor = 'blue'; </script> </body> </html>	**5**	**L3**	**CO3**
9.	How do the different values of the CSS position property affect the placement of elements on a web page, provide an example to illustrate any 3 property values? **Answer: List-2Marks** The position property specifies the type of positioning method used for an element. There are five different position values: 1. static 2. relative 3. fixed 4. absolute 5. sticky	**5**	**L3**	**CO2**

	Static -2 Marks
	• HTML elements are positioned static by default.
	• Static positioned elements are not affected by the top, bottom, left, and right properties.
	• An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:
	• This element has position: static;
	div.static {
	position: static;
	border: 3px solid #73AD21;
	}
	
	Relative: 2 Marks
	• Relative positioning is the position where the element is positioned relative to its normal position.
	• Setting the top, right, bottom, and left properties of a relatively-positioned element will cause it to be adjusted away from its normal position.
	• Other content will not be adjusted to fit into any gap left by the element.
	• This element has position: relative;
	div.relative {
	position: relative;
	left: 30px;
	border: 3px solid #73AD21;
	}			

Course Outcomes

1. Build static web pages using HTML (HyperText Markup Language)
2. Apply CSS (Cascading Style Sheets) to the web pages to create visually appealing designs
3. Develop interactive and dynamic web pages using JavaScript incorporating event handling, DOM manipulation to enhance user experience and interactivity

Marks Distribution									
L1	L2	L3	L4	L5	L6	CO1	CO2	CO3	CO4
1	5	19				1	17	7	

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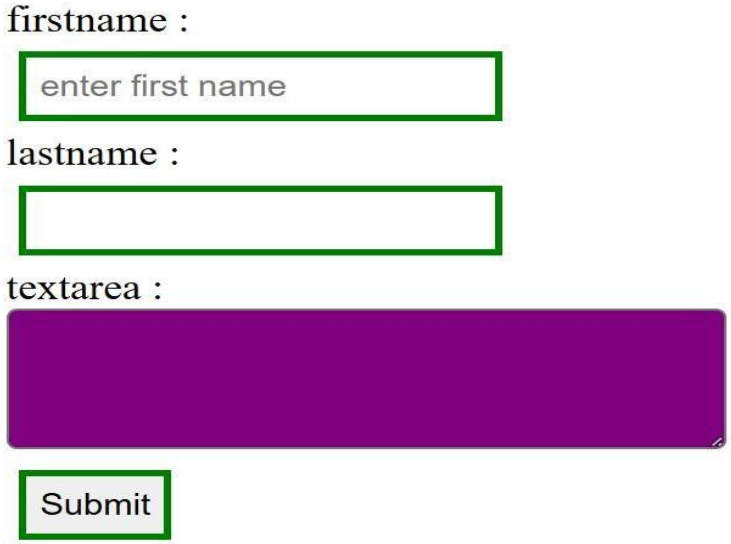
RV UNIVERSITY Go, change the world an initiative of RV EDUCATIONAL INSTITUTIONS	USN **School of Computer Science and Engineering** **B.Tech (Hons.)** **Midterm Evaluation Scheme - Set 2** **Academic Year 2024-2025**		
Course: Web Fundamentals and UX Design		**Course Code: CS1307**	**Semester: I**
Time: 10AM-11.30AM	**Duration: 90 minutes**	**Date : 06/12/2024**	**Max Marks: 25**

Notes/ Instructions:

All questions are compulsory.

Sl. No.	PART A – Max Marks (5)	Marks	L1-L6	CO
1.	Block elements are normally displayed starting with a new line. a) False b) True **Answer: b) True**	1	L2	CO1
2.	What will be the output of the following JavaScript code snippet? <script> var txt1 = "hello "; var txt2 = "world"; document.getElementById("demo").innerHTML = txt1 + txt2; </script> a) Undefined b) NULL c) hello world d) helloworld **Answer: c) hello world**	1	L3	CO3
3.	Which CSS property is used to set the font of an element to bold? a) font-style b) font-family c) font-weight d) font-variant **Answer: c) font-weight**	1	L1	CO2
4.	Specify the CSS property for the following: Set The top margin = 5 pixels The left margin = 3 pixels The right margin = 10 pixels The bottom margin = 2 pixels for a HTML element **Answer: margin : 5px 10px 2px 3px**	1	L2	CO2

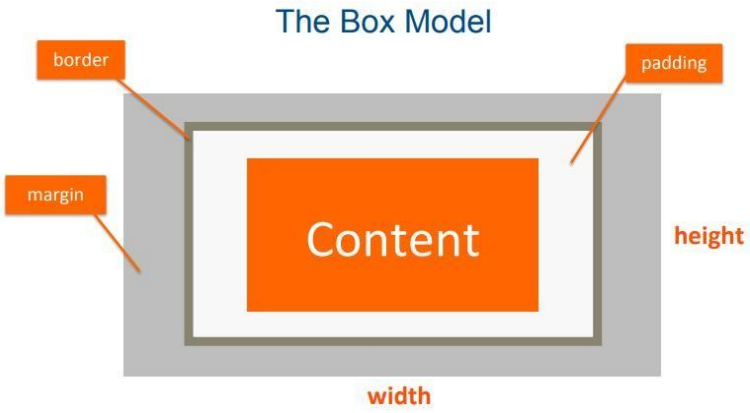
5.	What will be the return value of the following JavaScript function?
	function compare()
	{
	let a=2;
	let b='2';
	if(a===b)
	return true;
	else
	return false;
	}
	a) True
	b) False
	c) Compilation error
	d) Runtime error
	Answer: b) False
		1	**L3**	**CO3**

Sl. No.	**PART B – Max Marks (20)**	**Marks**	**L1-L6**	**CO**
6.	Design a webpage using html and css for the following output:  Apply css properties: background color for text area set to purple, width for textarea, border of color green for the input type. Answer: **<!DOCTYPE html>** **<html>** **<head>** **<meta charset="utf-8">** **<title>HTML FORM</title>** **<style>** **textarea {** **background-color: purple;** **width: 30%;** **height: 50px;** **padding: 5px;**	**5**	**L3**	**CO2**

	border-radius: 4px; **color: aqua;** **}** **input{** **border-radius: 5px;** **border: 3px solid green;** **margin:5px;** **padding:5px;** **}** **input{** **box-shadow: 5px 5px 5px 5px rgba(163, 7, 7, 0.5);** **}** **</style>** **</head>** **<body>** **<form>** **firstname : <input type="text"** **name="firstname" placeholder="enter first** **name"> ** **lastname : <input type="text"** **name="lastname" > ** **textarea : <textarea rows="3">** **</textarea> ** ** ** **<input type="submit">** **</form>** **</body>** **</html>**			
7.	**a)** How can you apply CSS to set the paragraph color to green and font size to 24px, but only if the paragraph immediately follows a div element? Which is the CSS selector you use for this and write the CSS rule for it. This is a division First paragraph Second paragraph **Note: Write only the CSS Part and the selector to be use** **Answer:** **Use adjacent sibling contextual selector**	**2**	**L3**	**CO2**

	div+p **{color:green;** **font-size:24px;** **}** **Or** **div>p** **{color:green;** **font-size:24px;** **}** **List items with a background color applied are:** **Home** **About** **Services**			
	b) Explain how simple selectors in CSS can be used to style the HTML elements with an example. Answer: List -1Marks • Element selector: p { color: blue; font-size: 18px; } • Class Selector: Targets elements with a specific class attribute. The class selector is preceded by a period (.) Example: .highlight { background-color: yellow; padding: 10px; } • ID Selector: Targets a specific element with a unique id attribute. The ID selector is preceded by a hash (#). Example: #main { width: 80%; margin: 0 auto; }	**3**	**L2**	**CO2**

8.	Design the JavaScript code that accomplishes these tasks effectively. Given a following HTML code write a JavaScript that selects all elements and changes the text color of the second paragraph to yellow, the content of first paragraph to be set to the text "the content of this paragraph is modified and third paragraph applied a background color of white. <body> this is a javascript this is a javascript this is a javascript this is a javascript </body> Answer: <!Doctype html> <html>	**5**	**L3**	**CO3**
	<head> <title>javascript</title> </head> <body> this is a javascript this is a javascript this is a javascript this is a javascript <script> const l=document.getElementsByClassName("highlight"); l[1].style.color = "yellow"; l[0].textContent = 'The content of this paragraph is modified'; l[2].style.backgroundColor = 'white'; </script> </body>			

9.	How do the padding and margin properties in the CSS box model influence the spacing of elements, provide an example to illustrate? **Answer:** In CSS, the term "box model" is used when talking about design and layout. The CSS box model is essentially a box that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content. • Content - The content of the box, where text and images appear • Padding - Clears an area around the content. The padding is transparent • Border - A border that goes around the padding and content • Margin - Clears an area outside the border. The margin is transparent 	**5**	**L3**	**CO2**

Course Outcomes

1. Build static web pages using HTML (HyperText Markup Language)

2. Apply CSS (Cascading Style Sheets) to the web pages to create visually appealing designs
3. Develop interactive and dynamic web pages using JavaScript incorporating event handling, DOM manipulation to enhance user experience and interactivity

Marks Distribution									
L1	L2	L3	L4	L5	L6	CO1	CO2	CO3	CO4
1	5	19				1	17	7	

L1- Remember, L2- Understand, L3 – Apply, L4- Analyse, L5 – Evaluate, L6 – Create