PES University, Bangalore
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END SEMESTER ASSESSMENT (ESA) B.TECH. III SEMESTER-December 2019

UE18CS204- Web Technologies I

Time: 3 Hours	Answer All Questions	Max Marks: 100

1	a	Create the table shown below that contains various form elements. Style the table using an **external stylesheet** "styles.css" that makes all the font appear in red color and a table border is solid black with 1px width.	8

	b	Using a neat diagram explain CSS Box Model.	6

	c	Write CSS rules for the following
		  i. A div with id **test** has some text in it. The color of text must change from black to blue when the mouse cursor moves over the div.
		  ii. An **embedded style** that states, paragraphs that have class "copper" have red color font.
		  iii. Add an **inline style** for the paragraph element given below that indicates that the font-color must be blue
		                    <p>I am blue</p>
			6

2	a	Create a web page that asks the user to enter the number of rows and columns. When the user clicks on the "Generate" button, a table with the specified number of rows and columns must be created. Sample user interface is given.	8

Figure 1-Initial UI

Rows   6

Cols   3

Generate

cell	cell	cell
cell	cell	cell
cell	cell	cell
cell	cell	cell
cell	cell	cell
cell	cell	cell

Figure 2-Final UI after generating table

b	Given the JavaScript array	5

```
var names = [ "piyush", "gourav", "smruti", "ritu" ];
```
Perform the following operations
   i) Use **Array.join([separator]),** to display the elements of the array with a "*" in between.
   ii) Add "sumit" and "amit" to the end of the array
   iii) Add "sunil" and "anil" to the beginning of the array
   iv) Remove the last element from the array
   v) Remove the first element from the array

c		3+4= 7

Predict the output for the JavaScript snippets given below and give reason for the same.

(i) <script>

```
        foo();
        bar();
        function  foo() {
                console.log('in function foo');
        };
        var bar = function () {
                console.log('in function bar');
        }
</script>
```

```
(ii) <script>
        function test() {
                console.log(x);
                var x = 5;
                console.log(x);
                if(true)
                {
                        var x=6;
                        console.log(x);
                }
                        console.log(x);
                }
                test();
        </script>
```

3	a	Create web page such that, 10 seconds after the page is loaded, a div is created on the page. The div has height and width of 50 pixels each. The div must contain the text "Touch Me Not". If the user moves the mouse cursor over the div, or presses "ctrl+x" on the keyboard, the div must be removed from the page. **Note**: Write only JavaScript code.	10
	b	What is event bubbling. List two approaches for preventing event bubbling.	4
	c	Demonstrate the three approaches using which the event handler "showMessage" can be registered on the button shown below. **<button id=" btn">Click Me</button>** Create the showMessage function such that is displays the HTML element on which the event took place and the type of event.	6

4	a	A webpage has the following elements
		
		   i. A text input - for entering new items.
		   ii. A list – into which the new items will be added
		
		When the user types an item into the textbox and clicks outside the box, the item gets added to the list. If the user closes the webpage and reopens it, the items in the list must still be displayed. Implement this feature without sending the data to the server.
		
		   • Apple
		   • Orange
		   • Banana
		
		  Grapes|
			10

	b	Explain the format of an HTTP Request.	4

	c	With respect to Apache configuration explain the following
		    i) Listen
		    ii) Document Root
		    iii) HTTP Authentication
			2*3=
			6

5	a	What is the significance of the different values of the readyState property of XMLHttpRequest while developing an AJAX application? Use the XMLHttpRequest object to create a simple request to the url http://abc.com/test.php and display the response in an alert.
		Note: The HTML code is given below. Write the relevant JavaScript code
		
		`<!DOCTYPE html>`
		`<html>`
		    `<head>`
		    `</head>`
		    `<body>`
		    `<button id="btn" onclick="getData()">Click Me</button>`
		    `</body>`
		`</html>`
			7

	b	Explain the difference between cookies and session. A PHP script is invoked with the following URL. **http://ab.com/test.php?name="katniss"&color="green"& city="Bengal"** The PHP script, creates a session for the user with the name, a cookie(that expires in 1 hour) with the color and also sends a reply welcoming the user with their name and city. Write the code for the file test.php. Note: The URL given is a sample. Assume that the values of name, color and city will change based on user input.	3+5= 8
	c	List and explain the different modes of opening a file using the **fopen** function? (Any five modes)	5