

END SEMESTER ASSESSMENT (ESA) B.TECH. III SEMESTER- Dec. 2016

UE15CS204 – Web Technology I

Time: 3 Hrs

Answer All Questions

Max Marks: 100

Note: All answers must be precise and to the point.

1.	<div>a) Write HTML code to design the table as shown below. Add embedded CSS to the page such that<ol style="list-style-type: none">All table headings are displayed in red fontAll other cells have blue textHovering over any cell of the table changes the color of text to yellow<table><tr><th rowspan="2">Sno</th><th rowspan="2">Course</th><th rowspan="2">Subject</th><th colspan="2">Marks</th><th rowspan="2">Category</th></tr><tr><th>Internal</th><th>External</th></tr><tr><td rowspan="2">1</td><td rowspan="2">BTech(CSE)</td><td>Fun with Game Design</td><td>30</td><td>70</td><td>T</td></tr><tr><td>Fun with Programming</td><td>30</td><td>70</td><td>P</td></tr></table></div>	Sno	Course	Subject	Marks		Category	Internal	External	1	BTech(CSE)	Fun with Game Design	30	70	T	Fun with Programming	30	70	P	7
Sno	Course				Subject	Marks		Category												
		Internal	External																	
1	BTech(CSE)	Fun with Game Design	30	70	T															
		Fun with Programming	30	70	P															
	<div>b) What are the three approaches to applying styles to a given HTML page? Explain each one briefly.</div>	6																		
	<div>c) Create a web page for online registration of an international seminar.<ol style="list-style-type: none">The participants can be students or faculty members or company representatives.The participants should give choice for accommodation from a list of four hotels. A participant may select more than one hotelParticipant must be able to enter his age as between "15-25","25-35" or "35-45"The form should provide the controls for the information to accept above mentioned details as well as for personal information like name and gender.Create the web page with suitable form elements and default valuesNote: No code is required for submission of the data. No code required for validation</div>	7																		

2.	<div>a) Write a javascript program to sort an array of firstnames. Hint: You may use the built in sort function or a sorting algorithm like bubble sort</div>	7
	<div>b) What are the five primitive types in JavaScript? With a neat diagram show how primitives and objects are stored.</div>	6
	<div>c) Please read the functions given below carefully and answer the questions that follow function f1(s) { s = s.split(''); var len = s.length, halfIndex = Math.floor(len / 2) - 1, tmp; for (var i = 0; i <= halfIndex; i++) { tmp = s[len - i - 1]; s[len - i - 1] = s[i]; s[i] = tmp; } }</div>	7

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alert(s.join(''));
}

function f2(str,num)
{

var UPPER = 'ABCDEFGHIJKLMNOPQRSTUVWXYZ';
var LOWER = 'abcdefghijklmnopqrstuvwxyz';
var result = [];

for(var x=0; x<str.length; x++)
{
    if(UPPER.indexOf(str[x]) !== -1)
    {
        result.push(str[x].toLowerCase());
    }
    else if(LOWER.indexOf(str[x]) !== -1)
    {
        result.push(str[x].toUpperCase());
    }
    else
    {
        result.push(str[x]);
    }
}

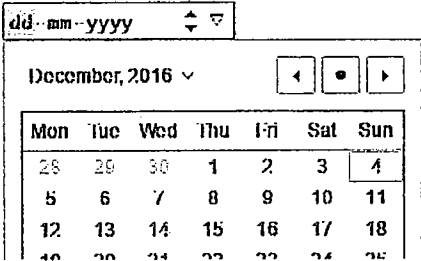
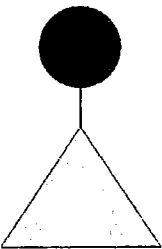
alert(result.join(''));
}

```

Questions:

- i. What is the output of f1("stressed")
- ii. What is the output of f1("stressed", "relaxed")
- iii. What is the output of f2("I Love New York", 5);
- iv. What is the output of f2("I Love New York");

3.	a)	Create a simple web based copy and paste tool. It should work as follows i. User types text in a textbox ii. When user right clicks the contents of the text box are copied iii. When the user right clicks anywhere on the page a div with the copied text appears at that position. iv. Please account for the phenomenon of event bubbling in your program	7
	b)	What are the three models for registering event handlers? Explain with relevant code examples.	6
	c)	Explain using a simple example i. How to check if any child element exists in a given html page ii. How to access all the child elements (including nested elements) of a given page	7
4.	a)	Using PHP create two simple scripts (i) To measure the number of page refreshes that occurs (ii) To count the number of page visits	7

	<p>b) April is a great UI designer with excellent HTML, CSS and JavaScript skills. She has created a simple webpage to showcase the paintings she does as a hobby. She wants to add a page to website where visitors can add comments. Then she wants to host the website. In addition to the skills that she has, what new technology skills must she adopt to achieve this. Given that on the comments page the users enters their names in one box and comments in another box, demonstrate with suitable code examples how April will code for this.</p> <p>Note: Writing the HTML code is not required. Assume the name of the textboxes in the form are "name" and "comments"</p>	6
	<p>c) While reading PHP code if you come across the line of code shown below, how would you interpret it?</p> <p><code>\$storead = fopen('some/abc.txt','r');</code></p> <p>What is the significance of the second parameter of the fopen function? Can it take other values? If so, list out the other possible values for the second parameter and their significance.</p>	7
5.	<p>a) A team at greys.com wants to reengineer their customer orders page. They want to add a date picker to the page similar to the one shown below.</p>  <p>During discussions Alex says that the date picker is not supported on one of the popular browsers. So they must be able to detect whether the user's browser supports date picker or not. Derek, the manager, assigns the task of finding a solution for detecting browser support to Meredith and Christina. Meredith strongly believes in code reuse. Christina always does her own thing. Describe with code examples the approaches Meredith and Christina would adopt to solve this problem.</p>	7
	<p>b) Using canvas draw the diagram shown below. All lines must be green in color, The circle must be red and the triangle must be yellow.</p> 	6
	<p>c) Della has developed an educational website that is popular among school students. She wants to ensure that the website is available to students even when they are not connected to the internet. Describe with suitable code examples the approach she must take</p>	7