SRN [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

PES University, Bangalore
(Established under Karnataka Act No. 16 of 2013)

UE17CS204

END SEMESTER ASSESSMENT (ESA) B. TECH III SEMESTER- Dec 2018

UE17CS204 – Web Technologies I

Time: 3 Hrs	Answer All Questions	Max Marks: 100

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

1.	a)	What are URLs? What is the significance of using http://localhost/test.html to open a file rather than double clicking and opening the same file?	4
	b)	Create a page for a user to enter his travel details for a booking a flight. The user must be able to enter the from and to, gender, travel dates, whether he needs meals, assistance etc. and his budget. Justify the selection of input types using HTML comments. Please ensure that when the form is submitted, the data entered is available on the server and is not part of the URL	6
	c)	Create a div that is placed at 200 px from the top left corner of the browser. The div contains the image "pic.jpeg". Clicking on the image must open the page www.pics.com . The text below the div must be exactly as follows Click **on the image** to proceed. **Note:** Ensure proper spacing and demarcation within and outside the div.	4

	d)	Demonstrate the three approaches you can use to include CSS in a web page with relevant code snippets? Write CSS rules for the following
		   i. Mouse over any paragraph changes font color to green and background to red.
		   ii. All hyperlinks that are in an unordered list must be green
		   iii. All table cells with class 'test' must have a green border
			6

2	a)	Create a page with the following functionality:
		   i. Left click – displays a menu with options "Add" and "Delete"
		   ii. Double click – clears the menu if it is shown, and creates a blue rectangle at that point
		   iii. Pressing the "L" key on the key board displays a prompt for the user to enter text that will be displayed in the rectangle, if present.
		   iv. Display the prompt again if the text has more than 50 characters
		   v. Pressing "Ctrl+X" clears everything on the page.
			9

	b)	Create a web page such that a first-time user is prompted to enter his favorite number and on subsequent visits the number is displayed in a div after incrementing it by one. Suggest two approaches to implement this. Implement the solution using the more efficient approach. Justify your selection	5

	c)	Write short notes on
		   i. Offline Browsing
		   ii. Web Workers
		   iii. Hoisting
			6

3.	a)	Dave is new to Apache web server and has been asked to host a website developed by his team. His boss Mike has asked him to take care of a few things:	6=2 +1+ 1+1 +1
		i. The files in the "admin" folder must be accessible only to authenticated users ii. A developer has misnamed a few webpages as .jml files. Unfortunately these files cannot be renamed. iii. All files related to the website must be placed in the 'webapp' directory on the machine rather than the default location iv. Only allow requests from localhost v. Of course, he must first check if Apache is running on this machine Help Dave !!	
	b)	How does a web server indicate what content it is sending to the browser? How is this information conveyed?	4
	c)	A form takes the username and password of the user. How will the HTTP request and response be structured? Assume the request is submitted using GET to www.lmc.con/login.php and completes successfully with a message "Login successful", being returned.	6
	d)	Differentiate between i. URLs http://abc.com:1212/program.html and http://abc.com/program.html ii. httpd.conf and .htaccess iii. Htttp response codes 403 and 500 iv. GET and POST	4

4.	a)	Explain the difference with relevant PHP code snippets i. Implode and explode ii. Double quoted and single quoted strings iii. * and + in a regex iv. fread and fgets	4
	b)	Visitors to your website can access the page protected.php only if they are logged in. Additionally visitors who have visited within the last seven days must be greeted with "Welcome back". Write the code for protected.php. List out any assumptions you make.	6
	c)	Write programs to do the following i. An array contains n numbers ranging from 0 to n-2. There is exactly one number repeated in the array. You need to write a program to find that duplicate number ii. Given a URL for a webpage, output "secure" or "insecure" based on the protocol.	4
	d)	Create a page that enables the user to enter a linux command. This command must be there in the list of acceptable commands stored in a file on the server. The result of executing the command or an error "Invalid Command" must be displayed. Write HTML and PHP code	6

5.	a)	What is jQuery? What are its advantages?	4
	b)	What is responsive design? Explain how bootstrap enables responsive design with an example.	6
	c)	What is the significance of $(document).ready()?Use jQuery to do the following i. Add a red border to all png images ii. When the mouse is placed over a list item change its font color to red	6
	d)	What are the seven styles of buttons available in bootstrap? Create a button and a datalist(it must contain the bootstrap styles) on the page and change the style of the button based on the user's selection. Achieve this using jQuery and Bootstrap.	4