FRANCIS XAVIER ENGINEERING COLLEGE
(An Autonomous Institution)
B.E DEGREE – CONTINUOUS ASSESSMENT EXAMINATION II
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.	What do you mean by bubbling listener? Event bubbling is a method of event propagation in the HTML DOM API when an event is in an element inside another element, and both elements have registered a handle to that event. It is a process that starts with the element that triggered the event and then bubbles up to the containing elements in the hierarchy. In event bubbling, the event is first captured and handled by the innermost element and then propagated to outer elements. Syntax: addEventListener(type, listener, useCapture)	2

2.	How HTML DOM allows java script to change the text color and background color of a particular element?
	
	 `<!DOCTYPE html>`
	 `<html>`
	 `<body>`
	 //Set a background color for a document:
	 document.body.style.backgroundColor = "red";
	
	 `<p id="myP" style="color:red;">`This is an example paragraph.`</p>`
	
	 `<button type="button" onclick="myFunction()">`Return text color of p`</button>`
	
	 `<script>`
	 function myFunction() {
	   alert(document.getElementById("myP").style.color);
		2

	`}`
	`</script>`
	
	`</body>`
	`</html>`	

3.	Write an example code for a well-formed XML document.
	
	`<?xml version = "1.0" encoding = "UTF-8" standalone = "yes" ?>`
	`<!DOCTYPE address`
	`[`
	`<!ELEMENT address (name,company,phone)>`
	`<!ELEMENT name (#PCDATA)>`
	`<!ELEMENT company (#PCDATA)>`
	`<!ELEMENT phone (#PCDATA)>`
	`]>`
	
	`<address>`
	`<name>TanmayPatil</name>`
	`<company>TutorialsPoint</company>`
	`<phone>(011) 123-4567</phone>`
	`</address>`
		2

4.	How to use XML schema?
	
	XML Schema is commonly known as XML Schema Definition (XSD). It is used to describe and validate the structure and the content of XML data. XML schema defines the elements, attributes and data types. Schema element supports Namespaces. It is similar to a database schema that describes the data in a database.
	
	Example:
	
	`<?xml version = "1.0" encoding = "UTF-8"?>`
	`<xs:schemaxmlns:xs = "http://www.w3.org/2001/XMLSchema">`
	`<xs:element name = "contact">`
	`<xs:complexType>`
	`<xs:sequence>`
		2

5.	Write a PHP program to print factorial of a number.
	
	`<?php`
	`$num = 4;`
	`$factorial = 1;`
	`for ($x=$num; $x>=1; $x--)`
	`{`
	`  $factorial = $factorial * $x;`
	`}`
	`echo "Factorial of $num is $factorial";`
	`?>`
	Output :Factorial of 4 is 24
		2

6.	What do you mean by for-each loop in PHP.?	2

	``php
	<?php
	$a = array (1,2,3);
	foreach($a as $i)
	{
	echo "$i
	 ";
	}
	``
	Output:-
	1
	2
	3
		• Foreach loop is very much useful in iterations
		• The name itself suggests, for each iteration in for loop, it performs the operations.
		• Iteration variable goes through all the elements in the array
			2

7.	Write the characteristics of web service.
	
	    ● Machine-to-machine interactions
	    ● Loose coupling
	    ● Interoperability
	    ● Platform-independence
	    ● Operating system-independence
	    ● Language-independence
	    ● Leveraging the architecture of the World Wide Web
			2

8.	What are the elements of WSDL? Types– a container for data type definitions using some type system (such as XSD). Message– an abstract, typed definition of the data being communicated. Operation– an abstract description of an action supported by the service. Port Type–an abstract set of operations supported by one or more endpoints. Binding– a concrete protocol and data format specification for a particular port type. Port– a single endpoint defined as a combination of a binding and a network address. Service– a collection of related endpoints		2

9.	Write the SOAP structure
	
	`<?xml version="1.0"?>`
	`<soap:Envelopexmlns:soap="http://www.w3.org/2003/05/soap-envelope/"`
	`soap:encodingStyle="http://www.w3.org/2003/05/soap-encoding"><soap:Header> ... </soap:Header>`
	`<soap:Body> ...`
	`<soap:Fault> ... </soap:Fault>`
	`</soap:Body>`
	`</soap:Envelope>`
			2

10.	What are the steps involved in AJAX operation? 1. A client event occurs.		2

| | 2. An XMLHttpRequest object is created.
3. The XMLHttpRequest object is configured.
4. The XMLHttpRequest object makes an asynchronous request to the Webserver.
5. The Webserver returns the result containing XML document.
6. The XMLHttpRequest object calls the callback() function and processes the result.
7. The HTML DOM is updated. | |

PART – B (5 x 13 = 65 Marks)

Q.No	Question	Max. Marks
11 (a)	Explain in detail about Window Object Window Object o Window Object Properties (6) o Window Object Methods (7) (OR)	13
11 (b)	Write a program using mousemove, mouseover, mouseout events using javascript. Mousemove (4) Mouseover(4) Mouseout(5)	13
12 (a)	Discover XML document to store voter ID, voter name, address and date of birth details and validate the document with the help of DTD. XML Program (7) DTD Program (6) (OR)	13
(b)	Write XSLT code to display employee details in a Table form which is stored is XML. XML Program(5) XSL Program(5) Output(3)	13
13 (a)	Discuss in detail about Regular expressions in PHP About regular Expressions(10) Program(3) (OR)	13
(b)	i) Using PHP Check if the type of a variable is integer or not Program (4) Output (2) ii) Write a program using PhP for Fibonacci series using Recursive function Program (4) Output (3)	6 7
14a)	Write a program to get JSON data using XML About XML and JSON (7) Program with oputput(6) (OR)	13

(b)	Illustrate in detail about the object that helps AJAX reload parts of a webpage without reloading the whole page. Program (10) Output (3)	13
	(OR)	
15 (a)	Design a web service using SOAP and display the value of the product using XML Program using SOAP(10) Output (3)	13
	(OR)	
(b)	Discuss in detail about the XML Web Services . Introduction (4) WSDL(4) SOAP(5)	13

PART – C (1 x 15 = 15 marks)

Q.No	Question	Max. Marks
16 (a)	Create college registration form is used to register students for a course in which students can fill their contact information, academic history etc. and validate the form using PHP. Program (10) Output(5)	15
	(OR)	
(b)	Write XPATH code to xml file "course.xml" and a stylesheet for that xml file named "course.xsl". The XSL file uses the XPath expressions under select attribute of various XSL tags to fetch values of category,title,trainer,year,fees, of each course node. XML Program (7) XPATH Program (8)	15