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.	Name the two traditional ways of assigning event handlers in DOM. 1) Via HTML, using attributes 2) Via scripting	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);
	 }
	 </script>
	
	 </body>
	 </html>
		2

3.	What is DTD? DTD (Document Type Definition) is a way to describe XML language precisely. DTDs check vocabulary and validity of the structure of XML documents against grammatical rules of appropriate XML language. An XML DTD can be either specified inside the document, or it can be kept in a separate document and then liked separately	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	2

	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>`	

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

6.	Write a PHP program to convert an array to string with different parameters. <pre>`<?php` `$arra = array (? This " , " Is " , " An " , " ARRAY" , " ! " );` `echo " <h4> "." Default array " . " </h2> ";` `print_r ($arra);` `echo " <h4> " . " Array to string " . " </h2> ";` `echo implode(" ",$arra)." "; // default separator` `echo implode("_",$arra)." ";` `echo implode("-",$arra)." ";` `echo implode("/",$arra);` `echo " <h4> " . " Data type: - " . " </h2> ";` `echo gettype ($arra);` `?>`</pre>Output: Default array Array ([0] => This [1] => Is [2] => An [3] => ARRAY [4] => !) Array to string This Is An ARRAY ! This _ Is _ An _ ARRAY_ ! This - Is - An - ARRAY- ! This / Is / An / ARRAY/ ! Data type: - Array	2
7.	What is AJAX? AJAX is an acronym for asynchronous JavaScript and XML. Ajax is a set of client side technologies that provides asynchronous communication between user interfaces and web server. Advantages: asynchronous communication minimal data transfer server is not overloaded with unnecessary load.	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.	Write an example of a web services registry and its function. It refers to a place in which service providers can impart information about their offered services and potential clients can search for services Example: IBM - WebSphere Service Registry, Oracle Service Registry etc.,	2

PART – B (5 x 13 = 65 Marks)

Q.No	Question	Max. Marks
11 (a)	i) Explain about the document tree in detail. Program (4) Tree(2) ii)Explain DOM event handling in detail. DOM Events (7) (OR)	6 7
11 (b)	Write a program using mousemove, mouseover, mouseout events using javascript. Mousemove (4) Mouseover(4) Mouseout(5)	13
12 (a)	Write XSLT code to display employee details in a Table form which is stored is XML. XML Program(5) XSL Program(5) Output(3) (OR)	13
(b)	Illustrate in detail the XML schema, built in and user defined data types. Program using XML schema (10) Output (3)	13
13 (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)	13

		Output(3) (OR)	
(b)		i) Using PHP Check if the type of a variable is integer or not Program (4) Output (2)	6
		ii) Write a program using PhP for Fibonacci series using Recursive function Program (4) Output (3)	7
14a)		Illustrate in detail about the object that helps AJAX reload parts of a webpage without reloading the whole page. Program (10) Output (3) (OR)	13
(b)		Write a short notes on REST based JSON Web Services About REST and JSON (7) Program with ouptput(6)	13
15 (a)		Design a web service using SOAP and display the value of the product using XML Program using SOAP(10) Output (3) (OR)	13
(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)	Discuss in detail about Regular expressions in PHP About regular Expressions(10) Program(5) (OR)	15
(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