Name : Enrolment No. :	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, Dec 2023

Program Name : BCA
Course Name : Web Technologies
Course Code : CSEG1028
No. of Page(s) : 2
Instructions : Attempt all sections.

Semester : I
Time : 3 hours
Max. Marks : 100

SECTION-A

S. No.	Questions	Marks	CO
Q.1	Discuss workings of a web server in detail.	4	CO1
Q.2	Describe any 4 text formatting tags of HTML with appropriate examples.	4	CO2
Q.3	Define XML DTD. Compare internal and external DTD with examples.	4 (1+3)	CO3
Q.4	Explain with examples the looping statements in Javascript.	4(2+2)	CO4
Q.5	List and elaborate any 4 types of 'input' in HTML with examples.	4	CO2
SECTION-B			
Q.6	Explain any 5 CSS properties (Ex.- color, border) with appropriate examples.	10 (2*5)	CO2

Q.7	Make the tree and write XML code to store the data if the schema is as given below:
	`<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">`
	`<xs:element name="Library">`
	`<xs:complexType>`
	`<xs:sequence>`
	`<xs:element name="Book">`
	`<xs:complexType>`
	`<xs:sequence>`
	`<xs:element name="BookName" type="xs:string"/>`
	`<xs:element name="Author">`
	`<xs:complexType>`
	`<xs:sequence>`
	`<xs:element name="FirstName" type="xs:string"/>`
	`<xs:element name="LastName" type="xs:string"/>`
	`</xs:sequence>`
	`</xs:complexType>`
	`</xs:element>`
	`<xs:element name="ISBN" type="xs:string"/>`
	`<xs:element name="Price" type="xs:decimal"/>`
		10 (4+6)	CO3

	<xs:element name="PublicationDate" type="xs:date"/> </xs:sequence> </xs:complexType> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </xs:schema>		
Q.8	List and explain any 5 methods of 'String' object in Javascript.	10 (2*5)	CO4
Q.9	Explain workings of AJAX with the help of client-server architecture. OR Draw and explain Model-View-Controller architecture of Angular JS.	10	CO5
	SECTION-C		
Q.10	Use HTML and CSS to achieve the following: Design a simple webpage that includes the following elements: - A title and heading with the text "Web Technologies". - A paragraph with a brief introduction about the course. - A table with schedule of classtests and assignments. - Two images of reference books that when clicked, lead to the PDF of those books. Use any 4 CSS elements to enhance the appearance of your webpage.	20 (2) (2) (4) (4) (8)	CO2
Q.11	Use HTML and javascript to achieve the following: Create a e-commerce webpage that takes the user to another webpage based on their gender and age. Take two inputs from user- One is their gender and the other is their date of birth. If the gender is 'Female' and age is less than 18, 'Girls' section of the website should open. Similarly for the 'Boys' section, gender should be 'Male' and age should be less than 18. If the gender is 'Male' and age is greater than 18, 'Men' section of the website should open. Similarly for the 'Women' section, gender should be 'Female' and age should be greater than 18. OR Use HTML and javascript to achieve the following: Take three floating point numbers as input from user. Round up these numbers to the nearest integer. Find and print the minimum and maximum number out of these three integers. Also, print their absolute values. Use 'Math' object of Javascript to achieve this.	20 (8+12) (8+12)	CO4