USN | | | | | | | | | | | **18CS63**

Sixth Semester B.E. Degree Examination, July/August 2022
Web Technology and its Applications

Time: 3 hrs.   Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 a. What is HTML? Explain the structure of HTML document with an example.   **(08 Marks)**
   b. What are contextual selectors? Identify and explain 4 different contextual selectors.
                                                                                (08 Marks)
   c. Write the syntax of below mentioned HTML elements and briefly explain with examples.:
       (i)   <a>   (ii)   <img>   **(04 Marks)**

OR

2 a. Illustrate the CSS box model. Be sure to label and briefly explain each component of the box.   **(08 Marks)**
   b. List the HTML5 semantic elements and explain any three with suitable examples.   **(08 Marks)**
   c. Describe the embedded style sheet with example.   **(04 Marks)**

Module-2

3 a. Write HTML code for the following table with appropriate styling:

Year : 2021

Month	Days Name	Id	Dates				
	Mon	1	1	8	15	22	29
	Tue	2	2	9	16	23	30
	Wed	3	3	10	17	24	31
March	Thu	4	4	11	18	25	
	Fri	5	5	12	19	26	
	Sat	6	6	13	20	27	
	Sun	7	7	14	21	28	

                                                                                (08 Marks)
   b. What is responsive design? Explain in brief the four key components that make a responsive design work.   **(08 Marks)**
   c. Illustrate and briefly explain the use of number and range HTML5 controls.   **(04 Marks)**

OR

4 a. Illustrate the construction of multi column layouts with example.   **(08 Marks)**
   b. Explain the different types of buttons defined in HTML.   **(08 Marks)**
   c. How the block level and inline elements are displayed in the normal flow?   **(04 Marks)**

Module-3

5 a. Write Javascript code that uses function for the following problems:
       (i)   For the string input the output should be to display the position of left most vowel.
       (ii) For the numeric input output should be to display the reverse of a number.   **(08 Marks)**
   b. Explain the two approaches to embed PHP script in HTML with suitable and compare the two approaches.   **(08 Marks)**
   c. What is DOM? Briefly explain the different types of nodes.   **(04 Marks)**

OR

6   a.   Explain the PHP module in Apache and describe the difference between multi-threaded and multi-process setup.   (08 Marks)
    b.   Discuss the different ways the javascript can be included in HTML page and which is the most preferred way and why?   (08 Marks)
    c.   List the Web Server's responsibilities.   (04 Marks)

Module-4

7   a.   What are super globals? List the different super globals and briefly explain any two.
                                                                                       (08 Marks)
    b.   Explain the support of object oriented design in PHP.   (08 Marks)
    c.   Write a PHP code that checks for valid MIME types and file extensions.   (04 Marks)

OR

8   a.   Write a PHP program to create a class called "Artist" with suitable constructor. All it's data members are accessible only inside the class.
         Data members : first name, last name, birth city, birth date
         Data functions : getters and setters
         Using above class instantiate two objects and displays the artist details.   (08 Marks)
    b.   Explain the two techniques provided in PHP for reading/writing files and also list comparative advantages and disadvantages.   (08 Marks)
    c.   What is a visibility of a class member? Briefly explain the different levels of visibility.
                                                                                       (04 Marks)

Module-5

9   a.   What is session state? How does session state works with suitable example.   (08 Marks)
    b.   Demonstrate the manipulation of attributes, properties and styles of the element using jQuery with suitable examples.   (08 Marks)
    c.   What is JASON? Explain with the code example, how to convert string to JASON and vice versa.   (04 Marks)

OR

10 a.   What is AJAX? Using an UML diagram, explain how the asynchronous request is handled.
                                                                                       (08 Marks)
    b.   Explain the loading and processing of an XML document in javascript with suitable example.   (08 Marks)
    c.   Using functions, emulate a class with data members and member functions in javascript.
                                                                                       (04 Marks)

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