Name: | Registration#:

COMSATS UNIVERSITY ISLAMABAD
DEPARTMENT OF COMPUTER SCIENCE
Terminal Examination, Spring 2022

Class/Section: -	BSSE – 6B	Marks: -	50
Subject: -	Web Technologies	Time: -	180 minutes
Instructor: -	Humaira Waqas	Dated: -	6th July, 2022

Question # 01: - [CLO1]

a) Describe HTTP, its message types and mention at least 2 status codes with their meanings. [5]

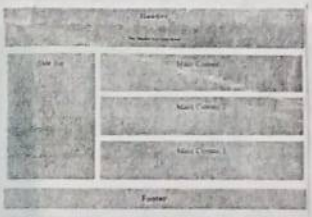
b) Under the umbrella of Web for Everyone, how W3C standards have improved Web Accessibility for people with blindness disability? [5]

Question # 02: - [CLO2]

a) What is the problem with the fixed layout? How media queries help in resolving that issue? Write media queries for the following two scenarios: [5]

   a. Change background color of a paragraph to red, if the user's device has either a minimum height of 680px or if the screen device in portrait mode.
   b. Change text color of a paragraph to red, if the height and width of the user's device are exactly equal.

b) Create the following layout using CSS Flexbox as shown in the Figure below: [5]



Question # 03: - [CLO2]

1. What benefits does client-side scripting brings in Web Application development? Write a single paragraph in your words. [3]
2. Create a JavaScript Object Constructor, with the name "Vehicle" and set "name", "manufacturer", "model", "color" and "year" as its properties. Perform following two operations using the Constructor:
   a. Create a new object car and set its property values. [2+2]
   b. Iterate over all object properties and print their values.
3. Write a jQuery script which reads class attribute of the following HTML code and adds text inside the tags based on the value of the class attribute. If the value of class attribute is ***"blue"***, then it should add text ***"This paragraph has blue color"***. If the value of class attribute is ***"red"***, then it should add text ***"This paragraph has red color"***. Tags with no class attribute should remain same. [3]

3.d Consider the following HTML Code (5)

```
<h1>Web Technologies</h1>
<div id="course">
    <a href="">Outline</a>
    <ul>
        <li>HTML</li>
        <li>CSS</li>
    </ul>
</div>

<input type="text" id="topic" placeholder="Enter Topic" />
<button id="add">Add</button>
```

Write ***jQuery*** code for following operations:

1. Hide and Show List (0.5)
2. Set value of "href" attribute of hyperlink to "outline.html" (0.5)
3. Select "course" div and navigate to <a> and change its text to "CSC336 Outline". (1)
4. Select the "course" div and navigate to <h1> and set the border of its parent to "1px solid red" (1)
5. Write click event handler for "Add" button that gets value from Textbox and append it in topics list. (1)
6. Change the background color of First List Item to "yellow" and Last List Item to "green" (1)

Question # 4 [CLO-C4]: [20-Marks].

4.a Write PHP code that receive following data through *POST method, validate and* store it in "students" table. (5)

Field	Validation
Reg_No	Required
Name	Required
CGPA	Required & Value between 0.0 to 4.0
Email	Required & Valid Email Address

4.b Write PHP code that takes any part of name as input and searches it both in "first_name" and "last_name" columns of the "persons" table. Then it displays matched records in \"HTML Table" Format as shown in figure given below. (5)

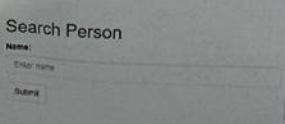


Table: persons

id	first_name	last_name	email
1	Bilal	Khan	bilal@gmail.com
2	Kashif	Khan	kashif@example.com
3	M	Ali	ali@example.com
4	Yasir	Khan	yasir@example.com

4.c Answer the following questions. (10)

1. How crypt () Function works in PHP? . (1)
2. Write PHP code that creates an associative array that stores all month names as keys and month numbers as values. Then, iterate the array and display all the month names with month numbers i.e., January – 1 … (2)
3. Differentiate between Session and Cookies. (3)
4. What is meant by "SQL Injection"? Briefly describe remedies for it. (4)

BEST OF LUCK