



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

BSc in Information Technology
Second Year - Semester I Examination – June/July 2022

ICT 2204 – WEB TECHNOLOGIES

Time: Two (02) hours

- Answer **ALL** the questions.
- This paper counts 50% of the final evaluation

1. a) Briefly explain **client-Server architecture**. **(03 marks)**

b) Write HTML code to display the following table. **(08 marks)**

| Day | Seminar | | |
|---------|----------|----------|----------------------|
| | Schedule | | Topic |
| | Start | End | |
| Monday | 9.00 am | 2.00 pm | Introduction to WWW |
| | | | Introduction to HTML |
| Tuesday | 9.00 am | 11.00 am | CSS |
| | 11.30 am | 1.00 pm | JavaScript |
| | 1.30 pm | 3.00 pm | PHP |

- c) Following instructions are given to create an HTML code to design a form for registration. Write the necessary HTML tags for the blanks (A, B, C, D, E, F, G, H, and I) in the code.
- i. A: To add a table with 90% and margin 10px.
 - ii. B: To add a text field for Name.
 - iii. C: To add a text area for Address.
 - iv. D, E: To add the radio button for Male and Female.
 - v. F, G: To add the check box for veg, non veg.

- vi. H: To add the drop-down list. List should be contained USA, Canada, Australia, India, UK.
- vii. I: To add the submit button for form.

```
<form action="action_page.php" method="get">
  <table .....A.....>
    <tr>
      <td> Name </td>
      <td>.....B.....</td>
    </tr>
    <tr>
      <td>Address</td>
      <td>.....C.....</td>
    </tr>
    <tr>
      <td> Gender </td>
      <td>Male.....D.....</td>
      <td>Female.....E.....</td>
    </tr>
    <tr>
      <td>Food</td>
      <td>Veg:.....F.....</td>
      <td>Non Veg:.....G.....</td>
    </tr>
    <tr>
      <td>country</td>
      <td>.....H.....
    </td>
    <tr>
      <td>.....I.....</td>
    </tr>
  </table>
</form>
```

(14 marks)

2. a) CSS provides class and id selectors. Write down two benefits and differences in those selectors.

(05 marks)

- b) Consider the following HTML code and add the following styles.

```
<h1>Introduction to Computers</h1>
<p>This course design for Computer science and IT students</p>
<p>All students should be here</p>
```

- i. Write an internal CSS to make the above header one and paragraphs in the web page appear in "Times new roman" font and center align.
- ii. Write an internal CSS to make the header one color Red with a bold, green border around header 1.
- iii. Write an internal CSS to make the first paragraph color blue and the second paragraph color red.
- iv. Write the code for adding header 2 with the following styles.
 - a. Add a second heading with the text "Seminar 01," bolded and italicized.

(10 marks)

- c) Assume you're planning to create a web application for ordering restaurant food online. The user can log in, choose an item, and then place an order. (The user can change the order item by adding extra cheese or chicken.) Name, phone number, address, and email address must be included on the order page.

- i. Sketch the following pages for above system.
 - a. Foods category page. All foods should have name price.
 - b. Order page with customizing properties

(10 marks)

3. a) Write the equivalent script for the following code using **for loop** without affecting the output

```
<script type="text/javascript">
var count=new Array();
i=0;
do{
if(i%2 == 0)
count[i] = 1;
else
count[i]=i*10;
i=i+1;
}while(i<=5)
window.alert(count);
</script>
```

(05 marks)

b) Give the output of the following code segments.

i)

```
<script type="text/javascript">
var sum,a;
sum = 0;
a = 1;
do{
    sum = sum + a;
    a = a+2;
}while(a<=8)
window.alert(sum);
</script>
```

(03 marks)

ii)

```
<script type="text/javascript">
var A,B,C;
A = (10*3)%(4/2);
B = 40%3;
if(!(B >= A))
    C=5;
else
    C=10;
window.alert(C);
</script>
```

(03 marks)

c)

i. Write down the javascript function (getPower()) that displays the squared value of a user input value. As an alert, the squared value should be displayed. (Math.pow)

(05 marks)

ii. Write down the javascript function that will update the text in the paragraph when the button is clicked. (Changed text: "This is the faculty of Applied sciences at Rajarata university")

Click on the button to change the text of a paragraph

Welcome to Applied sciences

Click Here!

(05 marks)

d) Explain the difference between GET and POST methods.

(04 marks)

4.

a) Consider question 1, part c (form). Get the values of name, address and gender type in the HTML form and display them on "**action_page.php**".

(10 marks)

b) Describe the differences between sessions and cookies and how we construct them.

(05 marks)

c) Write the PHP codes to get the reverse of the string: "Rajarata University of Sri Lanka." And get the word count.

(05 marks)

d) Briefly explain, why do we use the XMLHttpRequest object in AJAX?

(05 marks)

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