

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)  
ORGANISATION OF ISLAMIC COOPERATION (OIC)

**Department of Computer Science and Engineering (CSE)**

SEMESTER FINAL EXAMINATION

WINTER SEMESTER, 2016-2017

DURATION: 3 Hours

FULL MARKS: 150

**CSE 4539: Web Programming**

Programmable calculators are not allowed. Do not write anything on the question paper.

There are **8 (eight)** questions. Answer any **6 (six)** of them.

Figures in the right margin indicate marks.

1. a) Explain the ordered list and unordered list in HTML with example. Write down the output for the following code and explain your answer. 4+3  

```
<ul style="list-style-type:none">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

b) Does an HTML link always need to be a text or it can be something else? Explain with example. There are 3 different default colors (red, blue, purple) for links, what do these different colors mean? Are these colors modifiable? If yes, explain how. 5+4+4

c) In the <img> tag explain the src, alt, align, border and width attributes. 5
2. a) When to use the GET or POST method in HTML form? 4  
b) CSS stands for what? Why use CSS? Explain different ways to insert CSS in HTML with example. 1+2+9  
c) Explain <Meta> tag and all of its' attributes. 9
3. a) Write necessary code of CSS to modify the <h1>, <h3> and <p>'s back-ground color as red, green and blue, text color as blue, green and red, opacity as 30%, 40% & 50% and text-size as 15, 10 and 7 respectively. 12

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
  "Your code will go here"
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>This is a Heading</h1>
```

```
<h3>This is a paragraph.</h3>
```

```
<p>This is another paragraph.</p>
```

```
</body>
```

```
</html>
```

- b) What is viewport? Write short notes on the following CSS positioning schemes that are used for controlling the layout of a page: 1+12
- Static Positioning
  - Fixed Positioning
  - Absolute Positioning
  - Relative Positioning

4. a) What is PHP Superglobals? Mention some of them. What is Session variable? Why is it used? 3+3+3  
Give example of session variable creation, resetting and destroying.

- b) Suppose you are given the following HTML code. Write down necessary PHP code inside PHP section to make the \* marked fields as required and also set error messages in case of empty field submission. 16

```
<!DOCTYPE HTML>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
.error {color: #FF0000;}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<?php
```

```
    "Your code goes here"
```

```
?>
```

```
<h2>PHP Form Validation Example</h2>
```

```
<p><span class="error">* required field.</span></p>
```

```
<form method="post" action="<?php echo  
htmlspecialchars($_SERVER["PHP_SELF"]);?>">
```

```
    Name: <input type="text" name="name">
```

```
    <span class="error">* <?php echo $nameErr;?></span>
```

```
    <br><br>
```

```
    E-mail: <input type="text" name="email">
```

```
    <span class="error">* <?php echo $emailErr;?></span>
```

```
    <br><br>
```

```
    Website: <input type="text" name="website">
```

```
    <span class="error"><?php echo $websiteErr;?></span>
```

```
    <br><br>
```

```
    Comment: <textarea name="comment" rows="5" cols="40"></textarea>  
    <br><br>
```

```
    Gender:
```

```
    <input type="radio" name="gender" value="female">Female
```

```
    <input type="radio" name="gender" value="male">Male
```

```
    <span class="error">* <?php echo $genderErr;?></span>
```

```
    <br><br>
```

```
    <input type="submit" name="submit" value="Submit">  
    </form>
```

```
</body>
```

```
</html>
```

5. a) What is XML? What is an XML parser? Explain 2 major types of XML parsers. 2+6  
 b) In PHP there are 6 built-in sort functions. Explain each of their functionalities with example 6×2.5  
 c) What are XML Expat & XML DOM? 2
6. a) Write down PHP code for database connectivity. 5  
 b) Write down PHP code to create a table, insert data into it, select data from it and delete data from the table with any example you may find appropriate. 4×5
7. a) What is JSON? What are the JSON Syntax Rules? 5  
 b) What is the output of the following code? What needs to be changed to print John Jones? 2+2
- ```

<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
var text = '{"employees":[" +
'{"firstName":"John","lastName":"Doe" },' +
'{"firstName":"Anna","lastName":"Smith" },' +
'{"firstName":"Peter","lastName":"Jones" }]}';

obj = JSON.parse(text);
document.getElementById("demo").innerHTML =
obj.employees[1].firstName + " " + obj.employees[1].lastName;
</script>

</body>
</html>

```
- c) Write the output of the following code: 2×5
- ```

<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
var a = "5" + 5 + 5;
var b = 5 + 5 + "5";
var c = 5 + "5" + 5;
var x = 5 + 5 + "Hello" + 5;
var y = 5 + 5 + "Hello" + 5 + 5;

document.getElementById("demo").innerHTML =
a + "<br>" + b + "<br>" + c + "<br>" + x + "<br>" + y;
</script>

</body>
</html>

```
- d) Explain loose and strict comparison with example. Explain JS floating point difficulty and solution. 3+3

8. a) Write a PHP code to take any number as input and print it in reverse order, print the sum of the digits as well and finally determine whether the summation is a prime or not.

Input: 123456

Output: 654321 21 Not Prime

Here the first number is the input number in reverse order, second number is the sum of the digits and the third output is prime status.

- b) Write down PHP code to generate Pascal Triangle of size 10. Example of Pascal Triangle of size 8 is as below: 7

```
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
1 5 10 10 5 1
1 6 15 20 15 6 1
1 7 21 35 35 21 7 1
```