KEY

Faculty of Information Technology
Computer Science Department

Web Applications and Technologies - COMP334
Midterm Exam

Date: Sunday, 10/04/2016   Time: 80 minutes
Choose Your Instructor: ☐ **Dr.Yousef A Hassouneh**   ☐ **Dr. Samer Al-Zain**

Student Number:	
Student Name:	

<u>Instructions:</u>
- ✓ This is a closed book exam. Answer all of the four questions, no optional questions.
- ✓ Answer the questions clearly in the space provided. Use the back of the pages for your rough work
- ✓ Students' questions are allowed only in the first 10 minutes after distribution the exam papers.
- ✓ Leaving the exam not before half the exam time being passed.

Question #	1	2	3	4	5	Total of 100
Grade						

Question # 1 (20 points) :

A. Describe the components of a typical three-tier web application.

Presentation Tier
- Viewing/Rendering html, Internet browsers, many clients

Application Tier
- Application & buisiness related logic

Database Tier
- Database storage & operations such as read/write/update/delete -- etc

B. Write down the steps for the process of requesting and receiving a static web page (HTML) and the process of requesting and receiving a dynamic web page (PHP). Your answer should clarify the roles of web browser, web server and php interpreter.

Static page

1. IB sends http requesta To web server
2. Web server process requests
3. Web server searches for html page
4. Web server returnes html page through http response To browser
5. IB renders html To user

Dynamic Web page

1. IB sends http request To Web server
2. Web server process request, and delegates request To php interpreter
3. php interpeter processes php page: html is copied & php is executed
4. The result is html page That is sent To IB
5. IB renders HTML To user

C. What is the difference between GET and POST methods.

GeT

1. submitted data is displayed in the url / not secure
2. Limited amount of data is allowed

PosT

1. submitted data is hidden inside The http request.
2. no limite for data size

D. What is the difference between **Block** and **Inline** elements in HTML, give two examples on each?

Block : displayed alone on page, other elements are displayed after of before it, example <div> and <p>

InLine : displayed on same section line example: <a> and <img>
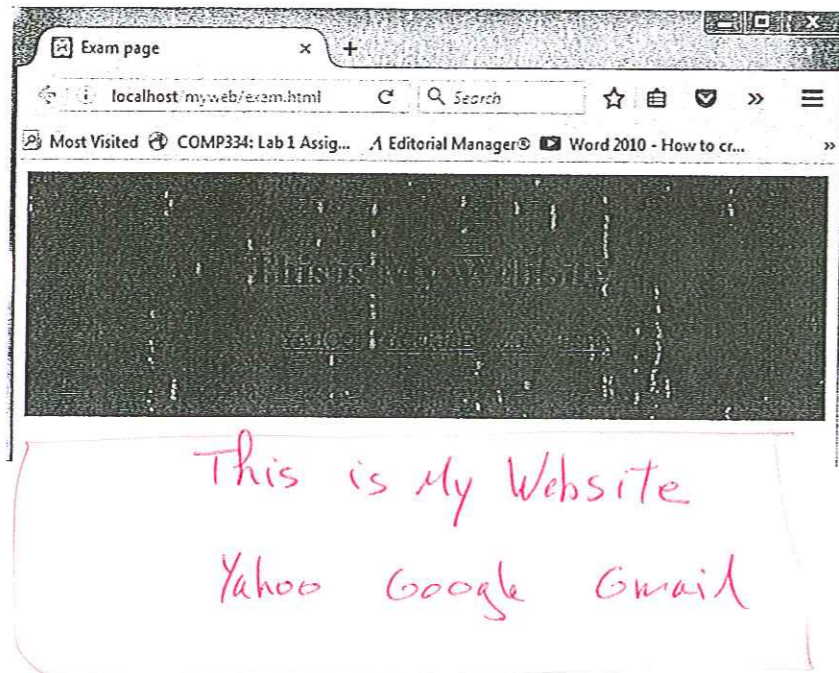

Question # 2 (10 points) :

Determine whether each of the following statements are TRUE or FALSE:

T/F	Statements
T	1. The element <a> is an inline element.
F	2. Clients (browsers) Provide HTML pages to the server.
F	3. HTML syntax is much more strict than XHTML, leading to clean and clear documents in a standard form.
F	4. HTML with CSS can be used together to dynamically create pages on a web server.
F	5. The <caption> for a table should be located right before the <table> tag
T	6. The <meta> tags are processed and understood by Internet Browsers.

Question # 3 (15 points)

A. Write XHTML codes and CSS that generate the following part of a webpage :

NOTE: the links should be built using list items and anchors (<li>, <a>). The CSS should be internal and assume that the back color is green.

This is My Website

Yahoo   Google   Gmail

```
<Html>
<head> <title> Page Name </title> </head>
<style type = " text/css " >
    div { padding : 30 px ; background-color : green ; text-align : center }
    li { display ; inline ; margin-right : 10 px } </style> </head>
<body>
<div> <h1> This is My Website </h1>
<ul>
    <li> <a href = "http//www.yahoo.com ">Yahoo </a><li>
    <li> <a href = "http//www.Google.com "> Google</a><li>
    <li><a href = "http//www.Google.com "> Gmail </a></li>
</ul>

</div>
</body>
</html>
```

Write a suitable CSS rule for each of the following styles.

A. All Heading at level 2 through 5 should be in center alignment.

```
h2,h3,h4,h5 {
    text-align: center
}
```

B. The paragraphs that belong to class "shades" only should be preceded by a 3 cm indentation and 2 points blue border .

```
P.shades {
    border: 2 px solid;
    border-color: blue;
    text-indent           : 3 cm;
}
```

C. Suppose that e have a div element with id="d1" and with specific height and width, we want it to be displayed exactly at x,y coordinates 100, 300.

```
#id d1 {
    position: absolute;
    left: 100 px;
    top: 300 px;
}
```

D. A hyperlink that is active should appear on orange and larger by 1.5 em.

```
a:active {
    color: orange;
    font-size: 1.5em;
}
```

E. All paragraphs that have the "later" class should be hidden.

```
P.later {
    visibility: hidden;
}
```

Question # 5 (30 points) :

Write a dynamic web page containing HTML and PHP script to do the following:
- The HTML page will contain a form that allows users to enter a player's number and then submit it to a script called "players.php", using POST method.
- The "players.php" initialize an associative array, in which the player number is the key and the goal count is the value.
- The "players.php" search the array for the player number, if exist the player exit the script should create a dynamic HTML page that displays the number of goals has been registered by the player. If the player does not exist, the script creates an HTML page to display a message that indicate no such player exist.
- The "players.php" should display a welcome message when page is first requested.

```php
<html>
<head>
<title>
Player Scores
</title>
</head>
<body>
<?php
$players = array(10=>5, 15=>8 , 5=> 6, 12=>2);

if (isset($_POST['submit']) && isset($_POST['playerID']))
        {
        $id = $_POST['playerID'];
        if (isset ($players[$id]))
                echo "<h2> Players whose number is ".$id. "has registered".
$players[$id]."scores</h2>";
        else
                echo "<h2>Sorry no Player with number".$id."has been found<h2>";
    }
    else
        echo "<h2>no player's id has been sent</h2>";
?>
</body>
</html>
```