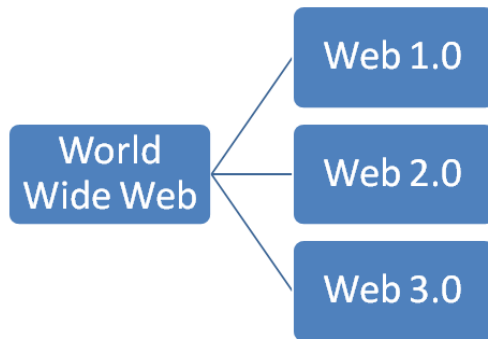# Web Development Questions/ Mid-Term / Semseter-1: 2015-2016

Note: Students MUST get back to the lecture documents for details.

Question 1-16 for only Theory Exam, Questions 17-40 for Theory and LAB exam.

1) **List all types of Web and explain each one.**

Web 1.0: (Static Web)
- It is "only readable" phrase of the World Wide Web.
- There is only limited interaction between sites and web users.
- Web 1.0 is simply an information portal where users passively receive information without being given the opportunity to post reviews, comments, and feedback.

Web 2.0
- It is "writable" phrase of the World Wide Web with interactive data.
- Web 2 facilitates interaction between web users and sites, so it allows users to interact more freely with each other.
- Examples of Web 2.0 applications are Youtube, Wiki, Facebook.

Web-3.0
- It is "executable" phrase of Word Wide Web with dynamic applications, interactive services, and "machine-to-machine" interaction.
- Web 3.0 is a semantic web which refers to the future. In Web 3.0, computers can interpret information like humans and intelligently generate and distribute useful content tailored to the needs of users.

2) **How can you create a static website?. And dynamic website.**
   Sol: (Static websites (web1)→ programming by HTML, CSS and Java Script.
   For dynamic website: Web Language, Server Side
   1-Java Script.   2- PHP   3- ASP.   4- Perl.
   Storing data in database such as MySql database together with the Apachi Server.

3) **What does static web site mean?.**
   Sol: Web 1.0: (Static Web)
   - It is the "only readable" phrase of the World Wide Web.
   - There is only limited interaction between sites and web users.

- Web 1.0 is simply an information portal where users passively receive information without being given the opportunity to post reviews, comments, and feedback.

4) What does dynamic website mean?.

Sol: Dynamic website (Web 2.0)

- It is the "writable" phrase of the World Wide Web with interactive data.
- Web 2 facilitates interaction between web users and sites, so it allows users to interact more freely with each other.
- Examples of Web 2.0 applications are Youtube, Wiki, Facebook.

5) What language can you use to build web page in client side?. And in server sides?

Sol:

Web Language, Client Side
1- HTML.
2- CSS.
3- JS

Web Language, Server Side
1- PHP
2- ASP.
3- Perl.

Storing data in database,
MySql database
Server is Apachi.

6) Where can you store information and data in website?.

Sol: Website data can be stored in a database hosted in a server of that website. Such as MYSQL database environment.

7) How do you plan a website? Explain in details.

Sol:

Planning Site Steps: 1-Planning. 2-Designing. 3-Coding. 4-Testing Deployment. 5-Maintaining.

1-Planning:

If you design any project, you have to plan the project by answering on the following questions:

1- What will the site do?.

2- Where will the site live?.

3- How will the site work?.

4- Who will the site serve?.

5- When will the site go live?.

2-Designing: coloring, styling, ways how to attract the audience for browsing. It is a task for an architecture engineer.

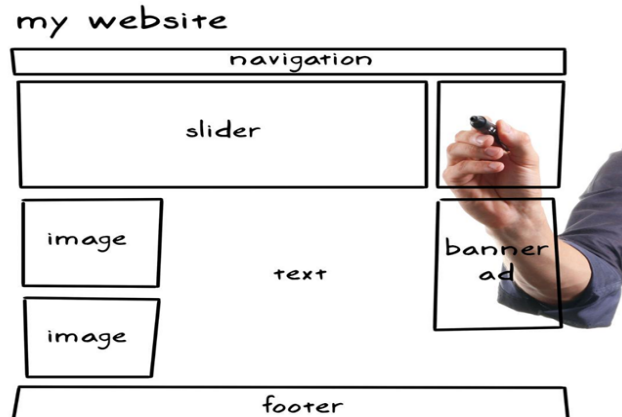**3-Coding:** it is computer student's task as 100%: HTML, CSS, JS, PHP, ASP, MySQL,

4-Testing Deployment: how to upload the sites, hosting (free, for fees).

5-Maintaining: daily maintain the site, keeping from virus, link down, or updating the content of the website.

8) Advantages of the static web pages are __ Quick to develop, Cheap to develop, Cheap to host. ___**, and the disadvantages are** __ Requires web development expertise to update site. Site not as useful for the user _ **.**

9) **What are a possible website features?.**
    Sol:

10) **What is the name of a protocol that enables to access a web page?.**
    Sol:
    HTTP or HTTPS (Hypertext Transfer Protocol)
    Transmit hypertext over Internets this is the protocol of the web page.

11) **What is a protocol name and its function that has the following specifications: "A Protocol that has port 21 in transport layer / TCPIP"**
    Sol:

FTP (File Transfer Protocol)

Transfers text or binary files between an FTP server and clients. It has port number 21.

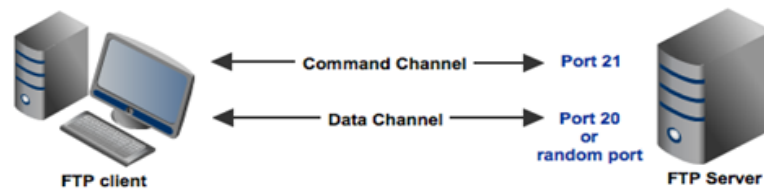•How? By opening a run window then write:

ftp IP
password

•What are the Commands of FTP:

PUT: for sending information to Host.
Get: to bring information from Host.

12) **URL is abbreviation of** ___Uniform Resource Locator_____.

13) **Identify each part of the following web link:**
    1- http://www.cihanuni-sul.com/admin/main.aspx
    2- https://www.car.com/gmc.html
    3- http://www.car.com/gmc.js
    4- http://www.educate.com/gmc.css

Sol:

According to this classification

pathway

http://domain.ca/folder/folder/file.htm

| | protocol | domain name | folders | file (this will have an extension such as .htm, .jpg, .gif, .css) |

	Protocol	Domain Name / IP	Folder/ Path	File
1	http	www.cihanuni-sul.com	Admin	main.aspx
3	https	www.car.com	-	gmc.html
4	http	www.car.com	-	gmc.js
5	http	www.educate.com	-	gmc.css

14) What is DNS?. Why is it important?.

Sol: DNS: is a worldwide system of servers that store location pointers to websites. The numerical address is called IP (Internet Protocol) address is actually the real URL. It is important because numerical string is difficult to be remembered by the human being.

15) List 5 protocols of Internet and mention the function of each one.
   Sol: The following are the major protocols of the Web:
   1- E-mail (SMTP). 2- Telnet. 3- FTP. 4- Usenet.   5- HTTP.

16) Mention three type of Network (Internet) Domain. And give example for each type.
   Sol: Types with examples are following:
   1- Top level: www.cihanuni-sul.com ,   .edu,   .gov ,   .mil,   .net ,   .org
   2- Second level: www.flicker.com , for fees.
   3- Third level: www.name.flicker.com : normally it is for free charge hosting.

HTML: Note: Student is responsible for each HTML Tag that has been explained in the class.

17) How to build a Table in Web Page?.
   Sol: by using these set of tags as example:

```
<table border="1"  >
<tr>
<th > </th>
<th > </th>
</tr>
                          <tr>
                          <td>   </td>
                          <td>   </td>
                          <td>   </td>
                          <tr>
                          </table>
```

18) How to insert an image in Web Page?.

Sol: by using this HTML tag:

19) How to construct a web page contain two frames divided equally ordered as columns?.

Sol:

<!DOCTYPE html>

<html> <head>

<title> Main </title> </head>

<frameset cols="50%,50%">

<frame src="contact.html" >

<frame src="index.html" >

</frameset> </html>

20) How to list terms as 1,2,3,4.

Sol:
list 1
list 2
list3
<list 4li>

21) How to Add a two Paragraphs?.

Sol: by adding two p tags in the body as follows:
<p> Paragraph-1</p>
<p>Paragraph-2</p>

22) How to Move a Text, named "Your Name's CV"?.

Sol: <marquee> Ahmed's CV</marquee>

HTML: FORM

23) Design and construct a Web Page form for a Pizza Restaurant Order.

Hint, project Description is as follows:

The order form has:

1- Applicant Name.   2- Delivery Address.   3- Telephone Number

4- Pizza Size (small, medium, large). 5- Sauce types(Buffalo, Barbeque, No, Sauce, Red, White).

6- Optional Addition: Pepperoni, Sausage, Mushrooms, Onion.

7- Comment.   8-Submit & Reset Buttons.

Note: it has been solved with students in the Lab.

Sol:

Applicant Name	[_____]
Delivery Address	[_____]
Telephone Number	[_____]
Pizza Size	○ small ○ Medium ○ Large
Sauce Type	Select your Sauce ▾
left to student	left to student
Comment	[_____]
Send Order	
Clear information	

<!DOCTYPE html>

<html> <header><title> Pizza Order </title></header> <body>

<form method="POST"   name="pizz_rest" action="pizz.php">

<table>

<tr>

<td>Applicant Name </td>

<td> <input name="appl_name" type="text" maxlength="30" size="30" >   </td>

</tr>

<tr>

<td> Delivery Address</td>

<td> <input name="dlv_add" type="text" maxlength="50" size="50" > </td>

</tr>

<tr>

<td> Telephone Number </td>

<td> <input name="tele" type="text" maxlength="15" size="15" > </td>

</tr>

<tr>

<td> Pizza Size </td>

<td>

   <input type="radio" name="piz_size" value="small" > small

```html
        <input type="radio"  name="piz_size" value="Medium" >  Medium
      <input type="radio"  name="piz_size" value="Large" >  Large
</td>
</tr>
<tr>
<td> Sauce Type</td>
<td>
<select  name="Sauce">
<option>  Select your Sauce </option>
<option> Buffalo  </option>
<option>  Barbeque </option>
<option>  No Sauce </option>
<option>  Red </option>
<option>  White </option>
</select>
</td>   </tr>
<tr>
<td>  left to student</td>
<td>   left to student</td>
</tr>
<tr>
<td> Comment </td>
<td> <textarea name="comt" rows="5"  cols="100"> </textarea>  </td>
</tr>     </table>
<input  type="submit" value="Send Order" />
</br>  <input  type="reset" value="Clear information">
</form> </body></html>
```

24) Design and construct a Login Web Page form.

Sol: Design is as follows:

User Name | ahmed
Password | ●●●●●●●●●●●●●
[Login]
[Clear]

Construction HTML Tagsare following:

```
<!DOCTYPE html>
<html>
<head>
<title> Page Login </title> </head>
<body></br>
<center><p>Page Login</p> </center> </br>
<form  name="login" method="POST"  action="login.php">
<table>
<tr>
<td> User Name</td>
<td> <input name="name" type="text" maxlength="40" size="40"/> </td>
</tr>
<tr>
<td> Password </td>
<td> <input name="pass_word" type="password" maxlength="60" size="60"/> </td>
</tr>
</table>
<input type="submit" value="Login"/></br>
<input type="reset" value="Clear">
</form>    </body></html>
```
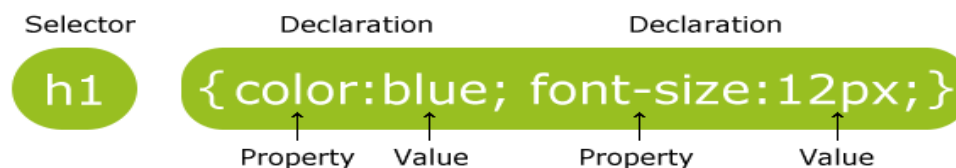
25) Design and construct a Web Page form for Online Hotel Reservation.

Sol: Form has been designed as below namely **Figure_Hotel Form**.

Hint: About the HTML tags, are the same as Pizza form tags. Students must solve it by themselves.

Figure_Hotel Form

CSS:

26) Write the Basic syntax of CSS.

    Sol:

27) How many methods does CSS have to be included in HTML Web page?. Mention them, and give example as code for each one.

    Sol: **CSS can be embedded into HTML Web Page by 3 methods:**

    1- Internal Embedding.   **2- External Embedding.**   **3- Inline Embedding.**

1- Internal Embedding: CSS code will be before <body> tag. Surrounding by <style> tag as:

<html><head>

<style type="text/CSS">

 { Property: Value; } </style> </head>

<body> </body> </html>

2- External Embedding-Step:
1-In the external CSS, create any file name with extension.css,
Example: file.css .
2- Then, link this file.css inside the HTML page by using <link> tag.
3- <link> tag lies inside the head tag of HTML page .
Example:

```
<head>
<link rel="stylesheet" type="text/css" href="file.css">
</head>
```

4- The external CSS file is written by using any text editor.

5- The file should not have any HTML tag.

6- The css file must be saved with file.css extension.

Example: file.css

Body { background-color: lightblue}

P { color: yellow; font-family: "Arial" ; text-align:center}

h1{ color:navy ; margin-left: 20px}

3- Inline Embedding:

1- Inline CSS code will be written inside <body> tag or inside any required tag as:

<html> <head>   <title> CSS inline </title>   </head>

<body style="background-color:black; color:red ; font-size:30px; text-align:center">

<p   style=" color: red ; background-color="blue" ">   Inline CSS example </p>

</body> </html>

28) Where is the best situation of using External CSS?.

Sol: External CSS embedding is very useful if there is a case that the website has a lot of web pages, and all or most of these web pages have the same styling such as margin, color, background, font style , size etc. So that, the easiest way is to define one file .css then call it inside all the required web page by link HTML Tag.

29) Font-size and font-family css code are used for   Decreasing or increasing the text size and   type of the writing style_____ respectively.

30) How to change the following in Web page design:

1- Writing type.

2- Background color.

3- Background image.

Sol: By using CSS code as follows:

1- Writing type: font-family:Arial;
2- Background color: background-color: yellow;
3- Background image: background-image: url("imagepath.jpg");

31) What is the action of this CSS code?
{Background-image: url("imagepath.jpg"); Background-repeat:repeat;}
Sol: The result action is to add the image named" imagepath.jpg" in the whole web page background thoroughly. Repeated value means if the image is smaller than the web page width and height, the image will be repeated to fill in all the web page.

32) How to set an image position to be bottom vertically and middle horizontally of the Web page?.
Sol:


```
<!DOCTYPE html>
<html> <head> <title> Image Position </title>
<style type="text/css">
img{position:absolute; top:100%; left:50%;}
</style> </head><body>
<img src="logo.jpg"  width="200px" height="200px"/>
</body> </html>
```
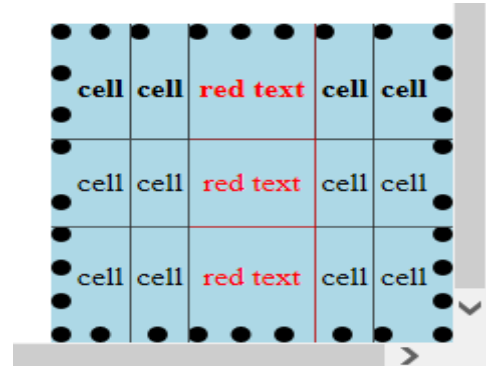
33) Build a blue background table with dotted border consisting of three rows and 5 columns. The third column text must be red color. The position of this table is positioned at maximum right-bottom of the web page.

Sol:

<!DOCTYPE html> <html>

<head> <title> Table </title>

<style type="text/css">

table { border:10px dotted black; border-collapse:collapse; background-color:lightblue; width:200px; height:200px; text-align:center; }

.table_pos {position:absolute; left:100%;top:100%;}

</style> </head> <body>

<table border="1" class="table_pos" >

   <tr ><th>cell</th>

      <th>cell</th>

      <th style="color:red;"> red text</th>

      <th>cell</th>

      <th>cell</th>

   </tr>

 <tr >

      <td>cell</td>

      <td>cell</td>

      <td style="color:red;">red text</td>

      <td>cell</td>

      <td>cell</td>

   </tr>

 <tr >

      <td>cell</td>

```
            <td>cell</td>

            <td style="color:red;">red text</td>

            <td>cell</td>

            <td>cell</td>

        </tr>

    </table> </body> </html>
```
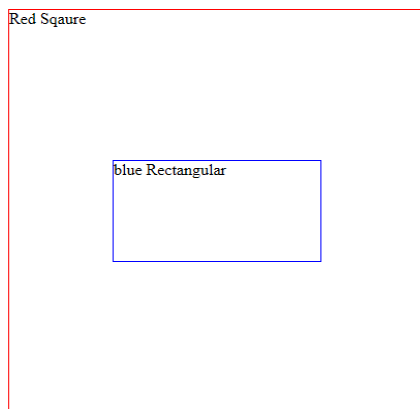
34) Draw the following shapes with the same positions: 1- Red shape dimensions: 400px for width and height. 2- Blue shape dimensions: 200px width, 100 px height.

Sol-35:

<!DOCTYPE html>

<html> <head> <title> position and shapes </title>

<style type=text/css>

div.relative

{ position:relative; width:400px; height:400px; border:1px solid red; }

div.absolute

{ position:absolute; width:200px; height:100px;

left:25%;

top:150px;   <! Note: (400/2)- (100/2)>;
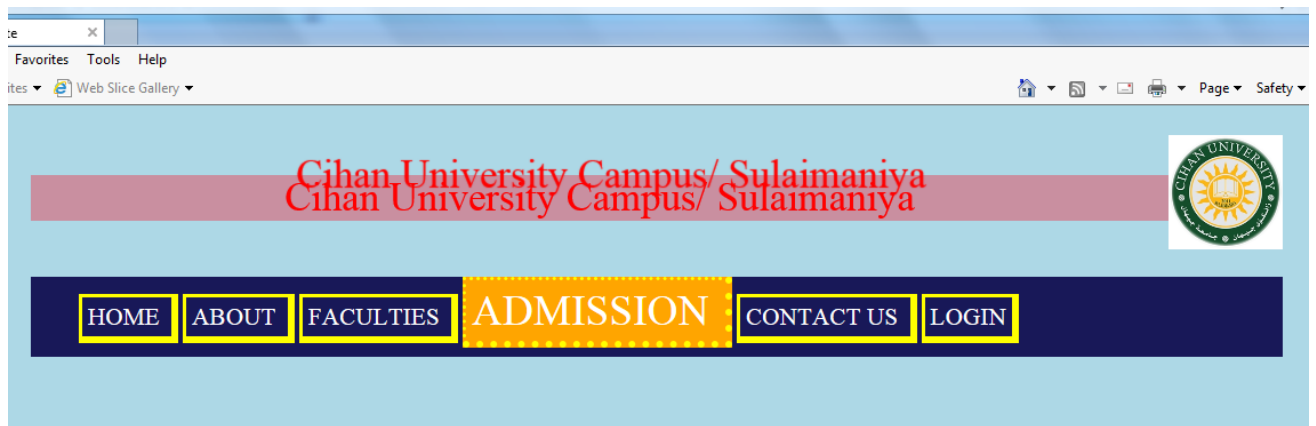
border:1px solid blue;}

</style></head><body>

<div class="relative"> Red Sqaure

<div class="absolute">

 blue Rectangular

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

35) Construct a navigation bar of a website which is drawn as below.

Sol: It has been solved in the Lab.

<html> <head><title> University Website</title>

<style type="text/css">

body{background-color:lightblue;}

p{font-size:26pt; color:red; text-shadow:10px -20px 1px red; background-color:rgba(244,33,55,0.4); text-align:center; }

#nav {position:relative;top:14px; background:#181858; font-size:16pt; height:70px;   }

ul {list-style-type:none ; position:absolute; top:-10px;}

a { margin:2px; padding:5px; text-decoration:none; border-style:solid; line-height:1cm;

border-width: 3px 6px 6px 3px; color:white; border-color:yellow; }

li{text-transform:uppercase; display:inline;}

.wrap{ margin-right:auto; margin-left:auto; width:1096px;}

img{float:right;}

a:hover { border-style:dotted; font-size:28pt; background:orange;}

</style> </head><body><div class="wrap">

</br><img src="logo.png"   width="100px" height="100px">

<p> Cihan University Campus/ Sulaimaniya </p>

<div id="nav">

  Home

  About

  Faculties

  Admission

 Contact Us

  Login

</div></div>

</body></html>

36) Construct a Web Page named "Cihan.html" with the following specifications:

Web page having a list of existing Cihan University Departments, text size 20 point, color is red, and background is pink color.

Note: CSS styling must be inline.

Sol: It has been solved in LAB.

37) Construct a Web Page with the following specifications:

"Cihan University" Web page having font type as Arial, bold, italic, background is an image distributed to all web background, and font size is 16pt.

Note: CSS styling must be external.

Sol: It has been solved in LAB.

38) Construct a Web Page with the following specifications:

Adding moved red (right to left direction) sport headline news in the upper part of the Web page.

News: "Athletes championship for Cihan University will be held soon. Real-Madrid won against Barcelona 2-0 . "

Note: CSS styling must be Internal (use either class or id)

Sol: It has been solved in LAB.

39) Use inline and internal CSS method to style the following table:

Days	Subject	Subject
Sunday	English	Mathematics
Monday	Physics	computer
Tuesday	**Sport**	**Chemist**
Wednesday	English	computer
Thursday	*Mathematics*	*Physics*

Sol:

<!DOCTYPE html> <html><head> <title> Styling Table</title>

<style type="text/css">

table {   border-collapse:collapse; border: 5px solid   blue; width:400px; height:250px }

</style> </head>

<body>

<table border="1">

<tr >

<th> Days </th>

<th> Subject</th>

```html
<th> Subject</th>
          </tr>
<tr  height=50  width >
<td> Sunday</td>
<td>English  </td>
<td> Mathmatics</td>
</tr>
<tr  style="background:blue">
<td> Monday</td>
<td> Physics</td>
<td> Computer</td>
</tr>
<tr   style="font-weight:bold" >
<td>Tuesday </td>
<td> Sport </td>
<td> Chemist</td>
</tr>
<tr>
<td>Wednesday </td>
<td style="border-color:red"> English</td>
<td> Computer</td>
</tr>
<tr style="font-style:italic">
<td> Thursday </td>
<td> Mathmatics</td>
<td  style="background:red"> Physics </td>
</tr>   </table> </body> </html>
```

40) Design and build the following web page using HTML & CSS named: univ.html:

Cihan University Campus/ Sulaimanyah

Add Logo
Image

CSS: text-shadow (any)

| Home |
| About |
| Faculties |
| Admission |

Css: color is Red, border color: pink.

Dear prospective students,

You are about to become part of the distinguished tradition of Cihan University/Sulaimaniya! Whether you are seeking to attend an academic program or improve your career potential or enrich your life through education, Cihan University/Sulaimaniya is the right choice!

CSS: color : blue , Text-align: left , Text-indent:4px, Line-height: 2px, word-spacing: 5px; , background of the writing: light green (hint: by hsla)

Here 3 images moving right to left direct.

Hint: add three images inside marquee

Sol: H.W has been assigned to the students.