<table>
<thead>
<tr>
<th>COURSE CODE / NAME :</th>
<th>STIJ3043 / WEB APPLICATION DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE                :</td>
<td>28 JUNE 2012 (THURSDAY)</td>
</tr>
<tr>
<td>TIME                :</td>
<td>09.00 AM –11:30 AM (2 ½ HOURS)</td>
</tr>
<tr>
<td>VENUE               :</td>
<td>DMS</td>
</tr>
</tbody>
</table>

**INSTRUCTION:**

1. This exam booklet consists of **NINE (9)** questions in **SECTION A** and **ONE (1)** question in **SECTION B**, in **TWELVE (12)** printed pages, excluding cover page.
2. You **MUST** provide straight-forward and concise answers, and must be handwritten within the provided answer spaces.
3. This is an in-class, CLOSE-book, CLOSE-note, OFF-LINE and NO-discussion exam. You **CANNOT** discuss, seek or refer your answers with external parties.

**MATRIC NO.**

(with word)

(with number)

**IDENTIFICATION NO.:**

**LECTURER:**

**GROUP:**

**TABLE No.:**

**DO NOT OPEN THIS EXAMINATION PAPER UNTIL INSTRUCTED**

CONFIDENTIAL
SECTION A: STRUCTURED QUESTIONS (70 MARKS)

1. "People are using the web to build things they have not built or written or drawn or communicated anywhere else" by Tim Berners-Lee.
   a) List **FOUR (4)** advantages of the web.  

   (4 marks)

   b) Give **FOUR (4)** examples of WEB 2.0 applications.  

   (4 marks)

2. Compare between Static and Dynamic web page, give **THREE (3)** points.  

   (6 marks)
3. Write the output for the following HTML tag

<table>
<thead>
<tr>
<th>HTML</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course reviews basic concepts and techniques &lt;br&gt; for developing applications within computer network environment.</td>
<td></td>
</tr>
<tr>
<td>This course reviews basic concepts and techniques &lt;hr&gt; for developing applications within computer network environment.</td>
<td></td>
</tr>
<tr>
<td>&lt;ol&gt; &lt;li&gt;Toyota &lt;li&gt;Proton &lt;li&gt;Nissan &lt;li&gt;BMW &lt;/ol&gt;</td>
<td></td>
</tr>
<tr>
<td>&lt;p style = &quot;text-align:right&quot;&gt; SOC &lt;/p&gt; UUM CAS, Sintok, Kedah.</td>
<td></td>
</tr>
</tbody>
</table>

(8 marks)
4. Write HTML5 elements based on the following information.
   a) Insert an image file to your page. The image file name is “logo.gif”.
      (2 marks)

   b) Insert a table that consists of one row and two fields.
      (2 marks)

   c) Make a hyperlink to UUM website
      (2 marks)

   d) Allow the user to enter a number between 5 and 50.
      (2 marks)

   e) Create a text input for a telephone number. The element should automatically
      receive the focus when the form is rendered in a browser.
      (2 marks)
5. Cascading Style Sheets 3 (CSS3) is used to specify the presentation of elements separately from the structure of the document. Discuss THREE (3) techniques for using style sheets.

(6 marks)
6. Write a Javascript code to calculate an area and perimeter for circle. User will input a radius (for circle) using window prompt. Display the area and perimeter using window alert.

(10 marks)

The formula:

<table>
<thead>
<tr>
<th></th>
<th>Area</th>
<th>Perimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle</td>
<td>(\pi r^2)</td>
<td>(2\pi r)</td>
</tr>
</tbody>
</table>

Example: input and output for circle
7. Determine and write the answer in the provided space whether the following PHP/SQL scripts are **TRUE** or **FALSE**. If **FALSE**, correct the script in the provided space.

(10 marks)

<table>
<thead>
<tr>
<th>Statement</th>
<th>True/False</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>```php&lt;br&gt;$counter = 1&lt;br&gt;while ($counter &lt;= 10)&lt;br&gt;    {&lt;br&gt;        Echo $counter; &quot;\n&quot;;&lt;br&gt;        $counter++;&lt;br&gt;    }&lt;br&gt;?&gt;`</td>
<td></td>
<td></td>
</tr>
<tr>
<td>```php&lt;br&gt;$i=0, $i&lt;10, ++$i&lt;br&gt;for ($i=0, $i&lt;10, ++$i)&lt;br&gt;    {&lt;br&gt;        Print(&quot;&lt;p&gt;i=&quot;, $i.&lt;/p&gt;);&lt;br&gt;    }&lt;br&gt;?&gt;`</td>
<td></td>
<td></td>
</tr>
<tr>
<td>update employee&lt;br&gt;Set Department = “SOC”&lt;br&gt;Where ID = “4466”;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>select name&lt;br&gt;from Employee&lt;br&gt;where Gender = “Male”;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>delete *&lt;br&gt;from Employee where ID=&quot;3366&quot;;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Label the following Ajax-enabled web application diagram.

Figure: Ajax-enabled web application interacting with the server asynchronously

(6 marks)
9. Explain the function of the following.

a)

```php
<?php
    setcookie( "name", "student", time() + FIVE_DAYS);
    setcookie( "univ", "UUM", time() + FIVE_DAYS);
?>
```

(3 marks)

b)

```php
<?php
    foreach ($_COOKIE as &key => $value)
        print("<p> $key: $value </p>");
?>
```

(3 marks)
SECTiON B: SCENARIO (30 MARKS)

1. UUM offers several benefits to its staff. You have been assigned to create a web site that enables all staff to select and set up their chosen benefits. Furthermore, you have been asked to create special pages to allow web admin to update the database contents.

   Answer the following questions based on the information provided below:

   Table 1: Doctor

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Address</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>112</td>
<td>Nor</td>
<td>Jitra</td>
<td>Women's Care</td>
</tr>
<tr>
<td>212</td>
<td>Fatin</td>
<td>Changloon</td>
<td>Kid's Care</td>
</tr>
<tr>
<td>312</td>
<td>Ahmed</td>
<td>UUM</td>
<td>General</td>
</tr>
</tbody>
</table>

   *All fields are in String format

   a) One benefit that is offered by UUM is medical insurance. When staffs apply for medical insurance, they must select a primary care physician. Therefore, staffs request to have a list of all approved doctors by UUM to select one of them. To access these data, you need to have a valid, open connection with the database doctors. Complete the PHP script to connect with "doctors" database and save this script as db_conn.php. The database is accessed from localhost, username is root, and password is uumCare.

   (6 marks)

   ```php
   <?php
   $dbhost = _______________;
   $dbuser = _______________;
   $dbpassword = _______________;
   $dbname = _______________;

   //connect to MySQL
   $db = _______________;

   //open doctors database
   _______________;
   ?>
   ```
b) Write PHP code to retrieve a list of all approved doctors by UUM then display this list in doctor.php page.

(10 marks)

```php
<?php

require ("_______________");

$sql = _________________;

$result = _________________;

echo "<table border='1' > <tr>
    <th> ID </th>
    <th> Name </th>
    <th> Address </th>
    <th> Experience </th>
</tr>

while ($raw = _________________)
{
    echo "<tr>
    echo "$_______________";
    echo "_______________";
    echo "$_______________";
    echo "$_______________";
    echo "$_______________";
    echo "$_______________";
}

echo "_______________";

?>
```
c) After you finish creating doctor page, you plan to create a new page to allow the web admin to insert a new doctor into doctor table. This page contains four text boxes and one save button. Text boxes will be used by the web admin to insert the id of the doctor, his name, his address and his experience. These textboxes have the following names: txtId, txtName, txtAddress and txtExperience. 

Complete the PHP script to store the data inserted in textboxes into the doctor table when the web admin clicks on save button.

(10 marks)

```php
<?php

require("__________");

$Id = __________;

$name = __________;

$address = __________;

$experience = __________;

$sql = __________;

$result = __________;

if (________)

    echo __________;

else

    echo __________;

?>
```
d) Why you must close the connection once you finish working with it? Write the PHP script to close the opened connection.

(4 marks)