UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2012/2013 – 2nd Year Examination – Semester 3

IT3504: Web Development Techniques

PART 2 - Structured Question Paper

3rd March, 2013

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **12 pages**.
- **Answer all questions.** All questions **do not** carry similar marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

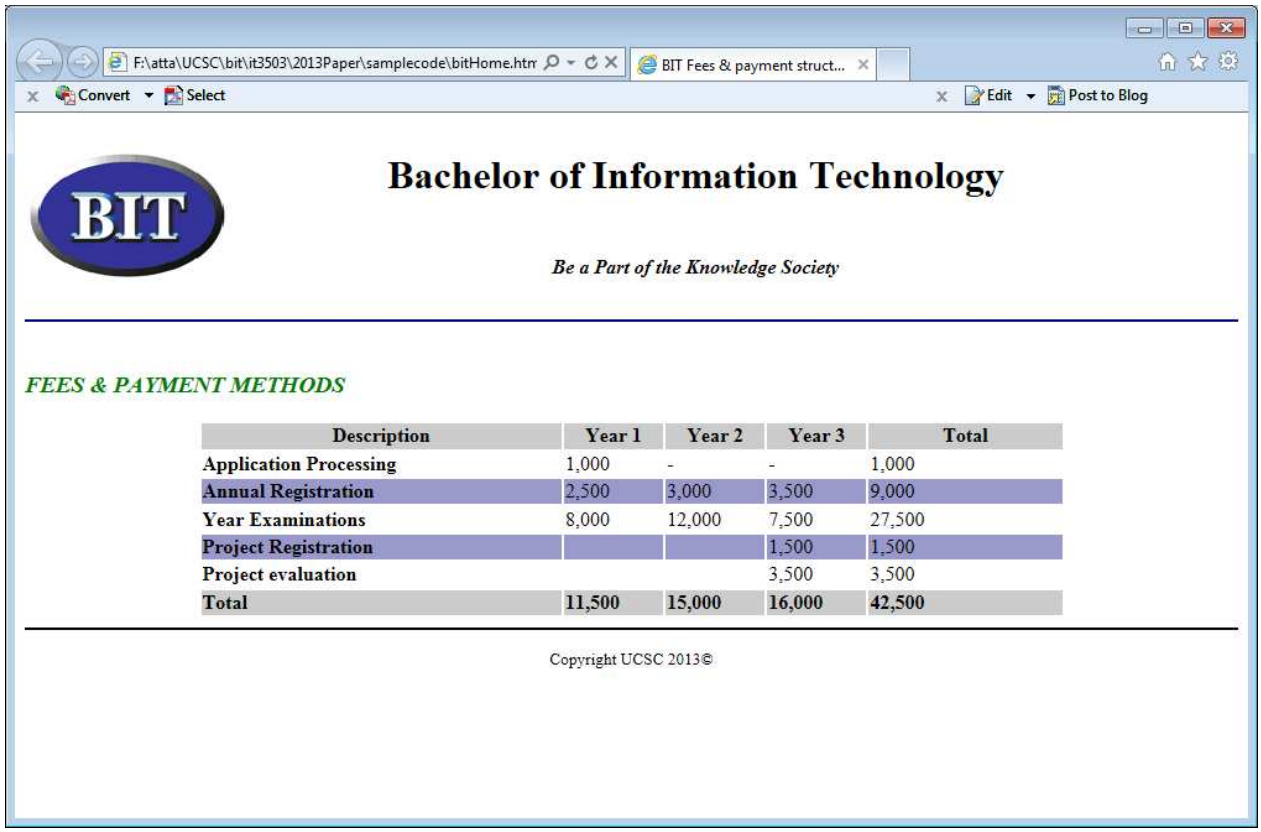
Index No …….

1) (a) Write the HTML code to generate a Web Page in the format given below:

(40 marks)

Consider the following while writing the HTML code:

1. Image (on the top left hand side) used in the page is the file "bitlogo.gif" and is in the "images" folder in the document root.
2. The page must be constructed using tables (two tables).
3. Top table having width 800 and height 100 consist of an image (160X100) and two lines of text.
4. Text colour of main heading, "Bachelor of Information Technology", should be "Black" ,it should be centred accordingly and in header size 1 font.
5. The text "Be a Part of the Knowledge Society" bust be treated as Emphasized text block which must be centred and bottom aligned with header size 4 font.
6. Line after the main heading section should be given in colour "Navy".
7. The text before the second table ("FEES &PAYMENT METHODS") must be in colour green and align to left with font size 4.
8. The second table must have a width of 700 and must be distributed to 5 columns with following width 300,80,80,80,160.
9. First row and first Colum must be treated as table header to improve the visibility.
10. The first row of the table and last row of the table must have a background colour R, G, B values 204,204,204.
11. The third and fifth row must be with background colour RGB values 153,153,204.
12. The text in the Final row must be bold.
13. Line after the second table should be in colour "Black".
14. The text "Copyright UCSC 2013©" must appear in black colour and with font size 2.
15. The page must be titled as "BIT Fees & payment structure".



Continued…

ANSWER IN THIS BOX

```
<html>
<head>
<title>BIT Fees & payment  structure</title>
</head>
<body>
<table width="800" height=”100” border="0">
  <tr>
    <td width="160" rowspan="2">
<img src="images/bitlogo.gif" width="160" height="100"
alt="Bit Logo" /></td>
    <td width="640" align="center"><h1>Bachelor of
Information Technology </h1></td>
  </tr>
  <tr>
    <td align="center" valign="bottom"><h4><em>Be a Part
of the Knowledge Society </em></h4></td>
  </tr>
</table>
<hr color="navy">
<br>
  <font color="green" align="left" size = “4”> <i>FEES &
PAYMENT METHODS </i></font>


<table width="700" border="0" align="center">
  <tr bgcolor="#cccccc">
    <th width="300" scope="col">Description</th>
    <th width="80"  scope="col">Year 1</th>
    <th width="80"  scope="col">Year 2</th>
    <th width="80"  scope="col">Year 3</th>
    <th width="160"  scope="col">Total</th>
  </tr>
  <tr>
    <th align="left" scope="row">Application
Processing</th>
    <td>1,000</td><td>-</td><td>-</td><td>1,000</td>
  </tr>
  <tr bgcolor="#9999CC">
    <th align="left"  scope="row">Annual Registration</th>
    <td>2,500</td><td>3,000</td> <td>3,500</td>
<td>9,000</td>
  </tr>
```

Continued…

```
  <tr>
      <th align="left" scope="row">Year Examinations</th>
      <td>8,000</td>
      <td>12,000</td>
      <td>7,500</td>
      <td>27,500</td>
    </tr>
      <tr bgcolor="#9999CC">
      <th align="left" scope="row">Project Registration</th>
      <td> </td><td> </td><td>1,500</td>
      <td>1,500</td>
    </tr>
    <tr>
      <th align="left" scope="row">Project evaluation</th>
      <td> </td>
      <td> </td>
      <td>3,500</td>
      <td>3,500</td>
    </tr>
     <tr bgcolor="#CCCCCC">
      <th align="left" bgcolor="#CCCCCC"
  scope="row"><strong>Total</strong></th>
      <td "><strong>11,500</strong></td>
      <td ><strong>15,000</strong></td>
      <td ><strong>16,000</strong></td>
      <td ><strong>42,500</strong></td>
    </tr>
  </table>
  <hr color="Black" />
  <p align="center"><font size=2>Copyright UCSC
  2013&copy;</font></p>
  </body>
  </html>
```

Continued…

Continued…

(b) Consider the following HTML code.

```
<html>
 <head>
   <link rel="stylesheet" type="text/css" href="MyStyle.css">
   <title>CSS Test</title>
 </head>
<body>
  <h1>Title 1 text is colour navy centred in Arial</h1>
   <p>This is a centred aligned paragraph in blue bold and italic
   text with font size 3 with a 2px solid black border</p>
  <h3>Title 2 text is red italic in courier</h3>
   <p>This is another centred aligned paragraph in blue bold and
   italic  text with font size 3 with a 1px solid black border
   </p>
</body>
</html>
```

Define styles for the following requirements in a separate style sheet "MyStyle.css"(write the required code for the MyStyle.css).

- Heading 1 style with
  - Arial font
  - Left alignment
  - In blue colour
- Heading 3 style with
  - Courier font
  - Italic font style
  - red colour
- Paragraph style with
  - Bold font style
  - Font size 3
  - blue colour
  - centre alignment
  - Sold 1px Black border

(10 marks)

ANSWER IN THIS BOX

```
h1 {

     font-family: Arial, Helvetica, sans-serif;
     text-align: left;
     color: #0000FF;

}
```

Continued…

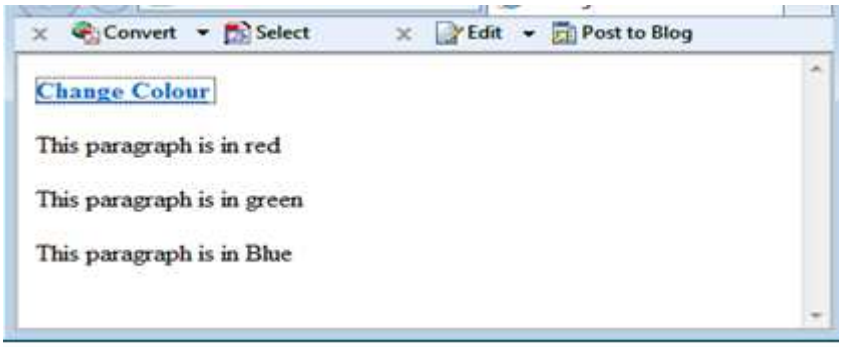
```
h3 {
      font-family: "Courier New", Courier, mono;

      font-style: italic;

      color: #FF0000;
}
p {
      font-style:bold;
      font-size:3;
      text-align:center;
      border: 1px solid #000000;

      color: #0000FF;

}
```

Continued…

2) Assume that you have 3 different paragraphs where you have to change the colour of the font as mentioned below through the active link (“Change Colour”) on the page. When the link is clicked the paragraphs colour must be changed. Write all required code (HTML, Java Script function/s) based on styles for this task

- the first paragraph must be in red colour
- the second paragraph must be in green colour
- the third paragraph must be in Blue colour

The page must appear as given below and must be titled as “Change Font Color”



(20 marks)

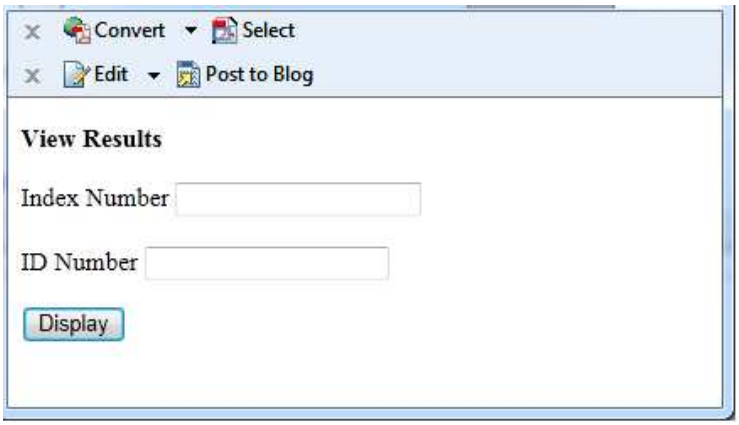
ANSWER IN THIS BOX

```
<html>
<head>
<title>Change Font Color </title>
<script language=”javaScript”>
function changeColor()
{
  document.getElementById("colorRed").style.color="#FF0000";

document.getElementById("colorGreen").style.color="#00FF00";

document.getElementById("colorBlue").style.color="#0000FF";
 }
</script>
</head>
<body>
<h4><a href="javascript:changeColor()"> Change Colour </a>
</h4>
<p id="colorRed">This paragraph is in red</p>
<p id="colorGreen">This paragraph is in green</p>
<p id="colorBlue">This paragraph is in Blue</p>
</body>
</html>
```

Continued…

Continued…

3) Suppose you are creating a dynamic web page to display results for the examination consisting of 3 subjects. The user will enter the Index number with the ID number for verification to a form as shown below:



Note:-Form variable name for Index Number and ID number is ” indexno”, “idno” respectively.

Once a user presses the display button, the form action will be submitted to DisplayRes.php. The PHP code of the page validates the information against data in the result table with the structure given below.

Table Name :-`st_marks`

Field	Type	description
indexno	varchar(8)	Primary key, not Null
st_name	varchar(100)	not Null
idno	varchar(10)	Not null
Sub1res	varchar(5)	Not null
Sub2res	varchar(5)	Not null
Sub3res	varchar(5)	Not null

If a valid entry is found, the results should be displayed. Otherwise display the following error message.

```
“No Results Found for the Index No! Please verify the Index Number and ID number”
```

Write the PHP code for the DisplayRes.php to quarry and display the results.

Assume that you already have a user account (user name:”WebUser”, password:”Pw123”) to connect to MySQL database ('student_db) on the same server running the web service. Results must be displayed in a simple table as shown in the example below.

Name:	ABC Perera
Index No	121342
Subject 1	S-Pass

Continued…

Subject 2	D-Pass
Subject 3	Fail

(30 marks)

ANSWER IN THIS BOX

```
<?php

$indexNo = $_POST['indexno'];
$idNo = $_POST['idno'];
$con = mysql_connect('localhost','WebUser','Pw123') or
die(mysql_error());

$db_con = mysql_select_db('student_db',$con) or
die(mysql_error());

$SQLQRY = "SELECT st_name,indexno,Sub1res, Sub2res,
Sub3res FROM st_marks WHERE indexno =’” . $indexNo .”AND
idno = ‘” .$idNo . “';”


$resultSet = mysql_query($SQLQRY);
if(mysql_num_rows($resultSet)== 1){
     //get results to an array and display results
        $r = mysql_fetch_assoc($resultSet);

         echo  "<table border='1'>
                   <tr> <td>Name:
</td><td>".$r['st_name']."</td> </tr>
                   <tr> <td>Index Number:
</td><td>".$r['indexno']."</td> </tr>

<tr><td>Subject1</td><td>".$r['Sub1res']."</td></tr>

<tr><td>Subject2</td><td>".$r['Sub2res']."</td></tr>

<tr><td>Subject3</td><td>".$r['Sub3res']."</td></tr>
                    </table>";
}

else {
echo "<h1>No Results Found for the Index No !Please
verify the Index Number and ID number</h1>";
}
?>
```

Continued…

*****