



UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2020 – 2nd Year Examination – Semester 3

IT3505 – Web Application Development II
Part 2 - Structured Question Paper

(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 **2 questions** and **07 pages**.
- Answer all questions. All questions carry equal 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.
- Calculators are **not** allowed.
- *All Rights Reserved.*

Questions Answered

Indicate by a cross (x), (e.g.

x

) the numbers of the questions answered.

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

- 1) (a) Explain the functionality of the following JavaScript code within the HTML. [10 Marks]

```
<html>
  <body>

  <p id="test"></p>

  <script>
    document.getElementById("test").innerHTML = "BIT at UCSC";
  </script>

  </body>
</html>
```

ANSWER IN THIS BOX

The getElementById() method returns the element that has the ID attribute with the specified value.

This script assigns the value "BIT at UCSC" to the <P> element which has the ID "test"

Parts (b) and (c) of this question are based on the following HTML script. Assume that the script is saved with the name “index.php” in the “DOCUMENT ROOT” folder of your computer where the Apache webserver runs.

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Please Sign UP </title>
    <script src="jquery.js"></script>
</head>
<body>
<h2> Sign Up Form </h2>
    <form id='signup' action="index.php" method="GET">
        <table border="1">
            <tr>
                <td>NIC number</td>
                <td><input id='nicno' type="text" name="nicno"></td>
            </tr>
            <tr>
                <td>Full Name</td>
                <td><input type="text" name="FullName"></td>
            </tr>
            <tr>
                <td>Contact</td>
                <td><input type="text" name="Contact"></td>
            </tr>
            <tr>
                <td>Course</td>
                <td><select name="courses" id="courses">
                    <option value="MCS">MCS</option>
                    <option value="MIS">MIS</option>
                    <option value="BIT">BIT</option>
                    <option value="MBA">MBA</option>
                </select>
            </td>
            </tr>
            <tr>
                <td colspan="2">
                    <input type="submit" name="submit" value="Submit">
                </td>
            </tr>
        </table>
    </form>
</body>
</html>
```

- (b) Draw the layout of the page displayed when the HTML script is rendered.

[20 Marks]

ANSWER IN THIS BOX**Sign Up Form**

NIC number	<input type="text"/>
Full Name	<input type="text"/>
Contact	<input type="text"/>
Course	MCS ▾
Submit	MCS
	MIS
	BIT
	MBA

- (c) Explain the following script line by line, assuming that it is embedded in the header section of the above HTML script. [20 Marks]

```

<script>
    $(document).ready(function() {
        $('#signup').submit(function(e) {
            e.preventDefault();
            if ($('#nicno').val()=='') {
                alert("Invalid form data");
            } else {
                alert("Form submitted");
            }
            this.submit();
        });
    });
</script>

```

ANSWER IN THIS BOX

```

1. <script>
2. $(document).ready(function() {
3. $('#signup').submit(function(e) {
4. e.preventDefault();
5. if ($('#nicno').val()=='') {
6. alert("Invalid form data");
7. } else {
8. alert("Form submitted");
9. this.submit();
10. }
11. });
12. })
13. </script>

```

Note that 2 marks each is allocated to the line numbers 1,2,3,4,5,6,7,8,9,and 13

1. The `<script>` tag is used to embed a client-side script (JavaScript).

2. to make a function available after the document is loaded:

3. Trigger the submit event for the element with id signup

4. cancels the event if it is cancelable, meaning that the default action that belongs to the event will not occur. For example or example, this can be useful when:

Clicking on a "Submit" button, prevent it from submitting a form

Clicking on a link, prevent the link from following the URL

5. Check if the element with id nicno' is blank

6. show an alert box with "Invalid form data" text

7. triggers if the element with if nicno has a value in it

8 show an alert box with "Form submitted" text

9 submits the current form

13. Shows the end of script

2)

- (a) Explain two (2) main differences between the GET and POST method used to pass data from an HTML form in PHP server side script.

[10 Marks]

ANSWER IN THIS BOX

- GET requests can be cached
- GET requests remain in the browser history
- GET requests can be bookmarked
- GET requests should never be used when dealing with sensitive data
- GET requests have length restrictions
- GET requests are only used to request data (not modify)

- POST requests are never cached
- POST requests do not remain in the browser history
- POST requests cannot be bookmarked
- POST requests have no restrictions on data length

Marks are given for any 2

(b)

Identify the syntax errors in the following PHP script to output the text “UCSC at BIT”. Rewrite the code by removing all syntax errors to produce the expected output.

[20 marks]

```
<php
a = "UCSC"
b= "at"
c = 'BIT'
echo a + b + C
>
```

ANSWER IN THIS BOX

```
<?php
$a = "UCSC" ;
$b= "at";
$c = "BIT";
echo $a." ".$b." ".$c ;
?>
```

- (c) Write a PHP script to delete the following cookie.

[5 Marks]

```
setcookie("course","BIT",time()+3600);
```

ANSWER IN THIS BOX

```
setcookie("course ", " BIT ", time() - 3600);
```

- (d) Explain the following PHP script and write down the output that would appear on the screen after the execution of this script.

[15 marks]

```
<?php
    $f = fopen("db.txt","w");
    $a = 0;
    $a += fwrite($f,"I am a BIT student");
    echo $a;
    fclose($f);
?>
```

ANSWER IN THIS BOX

The fopen() function opens the db.txt file in Write only mode
Fwrite writes to an opened file

This will create a file with the name db.txt and write the phrase "I am a BIT student" here.

Print 18 in the screen.
