UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2014/2015 – 2nd Year Examination – Semester 3

IT3505: Web Development Techniques II
PART 2 - Structured Question Paper

1st March, 2015
(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 **6 pages**.

- **Answer all questions.** All questions **may not** 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.

Questions Answered
Indicate by a cross (✗), (e.g. ✗) the numbers of the questions answered.

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

1) (a) Write a PHP script to print the string "Hello World" on the screen.

(10 Marks)

ANSWER IN THIS BOX

```php
<?php
echo "Hello World";
?>
```

(b) Write a PHP script to print all odd integers from 1 to 50.

(10 Marks)

ANSWER IN THIS BOX

```php
<?php
for(i =  1  ; i <= 50 ;  i = i+ 2  ){
    echo i;
}
?>
```

c) Name two different techniques that can be used in web programming to retain data among multiple HTML sessions. Give a main difference between these two techniques.

(10 marks)

ANSWER IN THIS BOX

```
Two different techniques :
   1) Sessions
   2) Cookies


Main differences :
      Cookies is a client side technique whereas session is
      a server side technique
```

d) **Explain what will happen when the following HTML is rendered through a web browser.**

```
<!DOCTYPE html>
<html>
<body>
<FORM>
<INPUT TYPE="text" VALUE= "20"
onChange= "alert('Please dont change this value')">
</FORM>
</body>
</html>
```

(20 marks)

ANSWER IN THIS BOX

An input box with the value 20 will appear.

If the user tried to change the value a pop-up box with the message "Please don't change this value" would appear

If the value is change by the users, after displaying and closing the message box, the user changed value would be replaced with 20.

3

2   Few rows of a table named "**student**" in a MySQL database named "**school**" is given below.
Assume that the database can be accessed by using the use id "**root**" with the password "**root123**".

id	name	date_of_birth	sex	class
95001	Saman	2008-01-10	m	2A
95002	Kamala	2007-12-22	f	2D
94001	Sunil	2006-06-18	m	4B
94002	Wasantha	2006-03-05	m	4A
94003	Wasana	2006-10-10	f	4A

a)   Give PHP statements required to establish a connection to this MySQL database "school". Clearly state all your assumptions, if any.

(10 marks)

ANSWER IN THIS BOX

```php
$servername = "localhost";
$username = "root";
$password = "root123";
$dbname = "school";

// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);
```

b)   How do to you verify that the connection you have tried to establish in part a) above had been established without any error? Write PHP code necessary to display the errors encountered if the connection attempt failed.

(10 marks)

ANSWER IN THIS BOX

if the value of $conn->connect_error is True the connection has failed.

```php
Code to print an error message when the connection failed
if ($conn->connect_error) {
    die("Database connection failed: " . $conn->connect_error);
}
```

4

c) Write a PHP script named "**tools.php**" which contains a function named "**list_students**" that accepts a connection to the database "**student**" and prints only the "**ids**" and "**names**" of all students in the table "**school**".

(15 marks)

ANSWER IN THIS BOX

```php
<?php
function list_students($conn){

   $sql = "select * from student";
   $result = mysqli_query($conn,$sql);

   if(!$result){
      die("Error in executing the SQL" . $conn->error);
   }
   while ($row = mysqli_fetch_array($result)){
      echo $row['id'] . " " . $row['name']. "<br>";
   }
}
?>
```

d) Write a PHP script named "list.php" to print only the ids and names of all students in the table "school" by calling the function you have developed in part c) of this question .

(15 marks)

ANSWER IN THIS BOX

```php
<?php
include_once 'tools.php';
$servername = "localhost";
$username = "root";
$password = "root123";
$dbname = "school";

// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);
if($conn->connect_error){
   die("Database connection failed: " . $conn->connect_error);
}
list_students($conn);

?>
```

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