

University of Ruhuna - Faculty of Technology

Bachelor of Information & Communication Technology
Level 2 (Semester 1) Examination - November 2019

Internet Application Development (Theory) – ICT2153

Time: 2 hours

Answer all four questions

1.

a. State whether each of the following statement is **true** or **false**. If answer is false, please explain your answer with 1 or 2 sentences.

- i. Server side scripts present information to users
- ii. ASP, JSP and PHP are examples for server side scripting languages
- iii. Client side scripting is used to provide interactive web sites that interface to databases or other data stores on the server
- iv. PHP variables are not case sensitive
- v. PHP variable name must start with a letter or the underscore character

b.

i. Write down the exact output produced by the following PHP script

```
<?php
    for ($i=5; $i>=0; $i--)
    {
        if($i == 3){
            continue;
        }
        echo " The number is " . $i . "<br>";
        if($i==2){
            break;
        }
    }
?>
```

Output

```
• blue
• green
• red
```


ii. Write down the exact output produced by the following PHP script

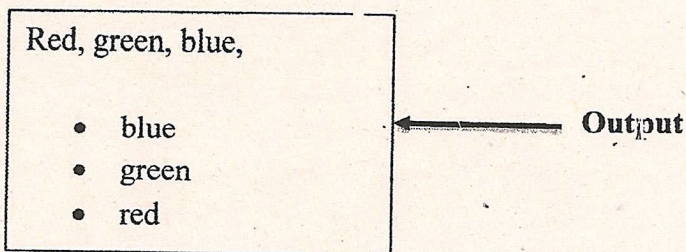
```
<?php
$product = array (array ("001", "book", "Rs: 100"), array ("002", "pen", "Rs: 20"),
array("003", "pencil", "Rs: 15"));

for ($row = 0; $row < 3; $row++) {
echo "<b>The row number $row</b>";

echo "<ul>";
for ($col = 0; $col < 3; $col++) {
echo "<li>".$product[$row][$col]."</li>";
}
echo "</ul>";
}
?>
```

- c.
- i. Briefly explain features of indexed arrays in PHP and explain two ways of defining indexed arrays using two examples.
 - ii. Consider that you are given the following array
\$color = array ('red', 'green', 'blue')

Write a PHP script to produce the following output by using the above color array



- iii. Write a PHP program which takes the final marks of the course unit "Internet Application Development" of a student and display his/her status. The status should be display according to the criteria given below.

Marks Range	Status
100>= Marks>75	Excellent
75>Marks>50	Good
50>Marks>=40.	Pass
None of the above	Improve your knowledge

2.

a.

- i. Write two types of functions in PHP programming
- ii. Explain 'Variable Length Argument Function' in php functions. Mention at least **three (03)** facts.

b.

- i. Write down the exact output produced by the following PHP script

```
<?php
function boo()
{
    $numargs = func_num_args();
    echo "Number of arguments: $numargs\n";

    if ($numargs >= 2){
        echo "Second argument is: " . func_get_arg(1) . "\n";
    }

    $arg_list = func_get_args();
    for ($i = 0; $i < $numargs; $i++){
        echo "Argument $i is: " . $arg_list[$i] . "\n";
    }
}
boo (1, 5,3, 9, 7);
?>
```


- ii. Complete the given program to produce the output given in the Figure 1 below. You need to write the label and the PHP code segment required to complete the code.

```
<?php

function dynamic_args(){

    for($i= 0; $i -----(1); $i++){
        echo "Argument $i = " ----- (2) ($i). "<br/>";
    }

    $args= ----- (3);
    foreach($args as $key => $value){
        echo"Argument {$key}: {$value} <br/>";
    }
}
dynamic_args("a","b","c","d","e");
?>
```

The above example will output:

```
Argument 0 = a
Argument 1 = b
Argument 2 = c
Argument 3 = d
Argument 4 = e
Argument 0: a
Argument 1: b
Argument 2: c
Argument 3: d
Argument 4: e
```

Figure 1

- c.
- i. Briefly explain the use of 'r+' and 'x+' modes of **fopen()** function in php file handling
 - ii. Write a PHP code segment to satisfy the following requirements.
 - Create an empty file called "file.txt" and Open the file.
 - Write the text "Welcome" in the file and close the file.
 - Reopen the file and write the text "This is the first day" at the end of the first line and close the file.

3.

a.

i. Write **three (03)** similarities of GET method and POST method.

ii. Briefly explain the use of following variables

- \$_SERVER:
- \$_POST:
- \$_ENV:

iii. Create the form given in Figure 2, using php & html.

- If the user selects A radio button and clicks on “Get Selected Values” button, the message “You have selected **Radio X**” should be displayed

Note: In Radio X, X is the number of the button

cust name	Peter
cust email	Peter@gmail.com

Radio 1 Radio 2 Radio 3

Figure 2: Form

b.

i. Write a PHP function to calculate the factorial of a given number (a non-negative integer).

ii. Write a PHP function that checks whether a given string argument is a palindrome or not?

Hint: A palindrome is a word, phrase, or sequence that reads the same backward as forward.

Note: Use built in functions in PHP to write the function for part ii)

4.

a.

- i. Write down **three (03)** situations which you can use sessions in PHP.
- ii. Briefly explain how PHP sessions work.
- iii. Write a PHP code segment to **create** and **display** a session according to the following requirement.
 - Name of the session is “color” and it holds the value “blue”

b.

- i. Write down the functionality of the following PHP-MySQLi functions
- ii. Consider the following “customer” table in “Shop” database and the given server connection details.

cust_name	cust_email
Peter	Peter@gmail.com

- Servername : localhost
- User: root
- Root pass.word: 123

Write a PHP code segment to make a database connection and insert a new customer to the above customer table as per the details below.

- cust_name: Amanda
- cust_email: amanda@gmail.com

Note: Display errors, when there are failures in connection establishment and query execution