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
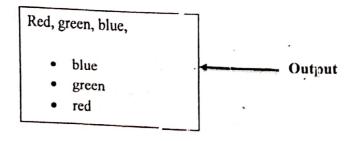   v. PHP variable name must start with a letter or the underscore character

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

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

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

```php
<?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

Red, green, blue,

- blue
- green
- red

← ———— Output

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
<?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
<?php

    function dynamic_args(){

        for($i= 0; $i < func-num-args() (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

Radio 1   Radio 2   Radio 3

Get Selected Values

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 password: 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