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University of Ruhuna - Faculty of Technology

Bachelor of Information & Communication Technology
Level 2 (Semester 1) Examination - October 2018

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**

- i. PHP, JavaScript and JSP are examples for server side scripting languages
- ii. **LAMP** is an open source Web development platform
- iii. In a php script, the php scripting block should be included before any of the html tags
- iv. PHP is not platform independent
- v. PHP variable names cannot start with a number

b.

i. Write a PHP code segment using **foreach** loop to display values of following array **\$x**

*foreach (\$x as \$value)
echo \$value*

\$x=array("x","y","z");

ii. Briefly explain the behavior and the scope of static variables in PHP programming language

iii. Draw the exact output produced by the following PHP code segment

```
<?php
for ($num=0;$num<=6;$num++)
{
    if($num==2){
        continue;
    }
    echo "Number=" . $num . "<br>";
    if($num==4){
        break;
    }
}
```

0
1
3
4

2.

Number = 0
Number = 1
Number = 3
Number = 4

c.

i. Briefly explain features of associative arrays in PHP and explain two ways of defining associative arrays using **two** examples.

ii. Consider that you are given the following data set consists of three records
 {(Peter,23,M), (Jane,34,F), (Carl,22,M)}

Write down a PHP code segment to store the above records in a multi-dimensional array and produce the following table output

Name	Age	Gender
Peter	23	M
Jane	34	F
Carl	22	M

iii. Consider the PHP code segment given below and write down the exact output produced by each of the statement labeled with 1,2,3,4 and 5

```
<?php
$letter=array("A","M","D","K");
$х = current($letter);
echo $х."<br>";----- (1)
$х = end($letter);
echo $х."<br>";----- (2)
$х = prev($letter);
echo $х."<br>";----- (3)
$х = current($letter);
echo $х."<br>";----- (4)
$х = reset($letter);
echo $х."<br>";----- (5)
?>
```

~~\$value = array(~~
~~Peter, 23, M,~~
~~array(Jane, 34, F),~~
~~array(Carl, 22, M),~~
~~for (\$row=0; \$row<3; \$row++)~~
~~echo "<table>";~~
~~echo "<tr>";~~
~~echo "<th>";~~
~~echo "<th> echo 'Name'; </th>";~~
~~echo "<th> echo 'Age'; </th>";~~
~~echo "<th> echo 'Gender'; </th>";~~
~~echo "<tr>";~~
~~for (\$col=0; \$col<3; \$col++)~~
~~echo "<td>";~~
~~echo \$value[\$row][\$col];~~

2.

a.

i. Write two advantages of using functions in PHP programming

ii. Explain 'pass by reference' in php functions

b.

i. Briefly explain the return values of each of the following PHP functions and when it can be useful.

1. func_num_args()
2. func_get_arg(position)
3. func_get_args()

ii. Fill in the **six** blanks in the following PHP code segment and rewrite the program to produce the output given in Figure 1 below

```
<?php
function foo(){
    $num_args= func_num_args() (1)
    echo "Number of arguments: ". func_num_args() (2). "<br>";
    if($num_args>=2){
        echo "Second argument is:". func_get_arg(1) (3). "<br>";
    }
    $arg_list= func_get_args() (4);
    for($i=0 (5); $i<$num_args; $i++){
        echo "Argument $i is ". $arg_list[$i] (6). "<br>";
    }
}
foo(1,2,3,4);
?>
```

The above example will output:

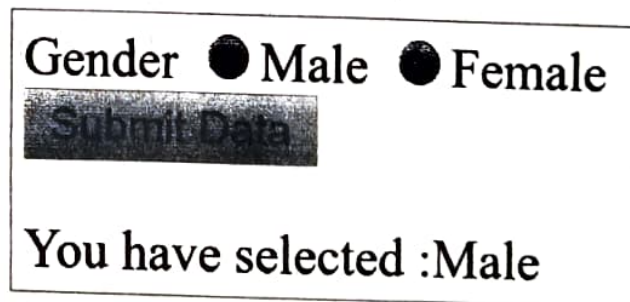
```
Number of arguments: 4
Second argument is:2
Argument 0 is 1
Argument 1 is 2
Argument 2 is 3
Argument 3 is 4
```

Figure 1

- c.
- Briefly explain the use of 'a' and 'w+' modes of **fopen()** function in php file handling
 - Write a PHP code segment to satisfy the following requirements.
 - Open a file and write the text "Hello world!".
 - Reopen the file and write the text "Hi everyone" at the end of the first line.

Note: Close the file when it is required.

- 3.
- A client used GET method to request data from a server. Write down two limitations of GET method with compare to POST method.
 - Explain features of **superglobal** arrays in PHP and provide two occasions when it has been used.
 - Create the form given in Figure 2, using php & html.
 - If the user selects "Male" radio button and clicks on Submit button, the message "You have selected: Male" should be displayed
 - If the user selects "Female" radio button and clicks on Submit button, the message "You have selected: Female" should be displayed



Gender ☒ Male ☐ Female

Submit Data

You have selected :Male

Figure 2:Form

- What is the purpose of using **\$this** variable in object oriented PHP?
 - Briefly explain why do we use static methods in Object Oriented PHP programming

- iii. Use Object Oriented PHP to implement the following class

Person
FirstName Age
setFirstName():void getFirstName():string setAge():void getAge():int

- Display the following information by using the getter and setter methods with a instance of Person class

FirstName: Albert, Age: 23

4.

a.

- i. Write two PHP scripts using following guidelines

- Assign the session variables 'user' with the value "Admin" and 'id' with the value '001'
- Check whether the variable 'user' is set. If it is set, then print "User is xxxx" (xxxx = the value of the user variable) and finally free the variable user.

b.

- i. Explain how PHP cookies work

- ii. Name two types of cookies and explain each of them separately.

Permanent
Temporary

- iii. Write a PHP code segment to **create** and **display** a cookie according to the following requirements.

- Name of the cookie is "UserName" and it holds the value "admin"
- Domain of the cookie is localhost
- The cookie must expire after an hour and it should be valid for all the directories

c.

i. Consider the following PHP-Mysqli functions

- A. mysqli_fetch_array()
- B. mysqli_fetch_row()
- C. mysqli_fetch_assoc()
- D. mysqli_affected_rows()
- E. mysqli_num_rows()

Match the suitable php mySQLi functions from the above list which describe the following functionalities

1. Returns a row from a recordset as an indexed array
2. Fetch a result row as an associative array, a numeric array, or both
3. Fetch a result row as an associative array
4. Takes a MySQL result index as its parameter, and returns the number of rows inside that result

ii. Consider the following "User" table in "Library" database and the server connection details.

name	age
James	20

- Servername : localhost
- User: root
- Root password: 123

Write a php code segment to update the **age** as **22**.

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