

KABARAK



UNIVERSITY

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SECOND SEMESTER, 2018/2019 ACADEMIC YEAR

**EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
INFORMATION TECHNOLOGY**

COMP 441: CLIENT-SERVER SIDE PROGRAMMING

STREAM: Y4S2

TIME:

EXAMINATION SESSION: JAN- APRIL

DATE:

INSTRUCTIONS:

Answer Question 1 and any other 2 Questions

QUESTION ONE [30 MARKS]

- a) Define the term open source (2 Marks)
- b) Demonstrate how variables are declared in PHP scripting (2 Marks)
- c) What is the difference between the following PHP access modifiers:
 - (i) Public (2 Marks)
 - (ii) Protected (2 Marks)
 - (iii) Private (2 Marks)
- d) Briefly discuss the Architecture of the Linux Operating System (5 Marks)
- e) List **THREE** broad categories of MySQL datatypes (3 Marks)
- f) Write a simple PHP code to demonstrate how one can connect to MySQL and select a database (4 Marks)
- g) Why is PHP a popular scripting language? (5 Marks)
- h) Briefly explain how to declare a user-defined function in PHP (3 Marks)

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(1 Peter 3:15)



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SECTION B: ANSWER ANY TWO QUESTIONS

QUESTION TWO [20 MARKS]

- a) Define an Array (2 Marks)
- b) Explain **THREE** types of arrays that be created in PHP (6 Marks)
- c) Briefly explain the output of the following program (4 Marks)

```
<?php
$cities = array("London", "Paris", "New York");
var_dump($cities);
?>
```
- d) What is proprietary software? (2 Marks)
- e) Explain how to create MySQL database using PHP (6 Marks)

QUESTION THREE [20 MARKS]

- a) What is the function of PHP logical Operators? (2 Marks)
- b) Study carefully the below PHP program. Clearly describe the output of the program upon execution. Use diagrams where possible. (6 Marks)

```
<html>
<head>
  <title>Registration Form</title>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
</head>
<body>
  <h2>Registration Form</h2>
  <form action="registration_form.php" method="POST"> First name:
    <input type="text" name="firstname"> <br> Last name:
    <input type="text" name="lastname">
    <input type="hidden" name="form_submitted" value="1" />
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

- c) Differentiate client-side script and server-side script (4 Marks)
- d) Explain **FIVE** responsibilities of a database administrator (5 Marks)
- e) State **THREE** examples of open source web browsers (3 Marks)

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QUESTION FOUR [20 MARKS]

- a) Explain FIVE advantages of MySQL (5 Marks)
- b) Using a user-defined function, write a simple PHP program to displays today's date (5 Marks)
- c) Write MySQL code that creates a table with the following field name: (5 Marks)
empNo, empName, empBasicSalary, empHouseAllowance, empPhoneNo
- d) Write MySQL code to insert at least one record into the above table in (a) (5 Marks)

QUESTION FIVE [20 MARKS]

- a) What is a string? (2 Marks)
- b) Write a PHP script that counts the number of words in a string (5 Marks)
- c) Discuss FIVE advantages of open source in software development (5 Marks)
- d) Explain the meaning of the following:
 - (i) Function overriding (2 Marks)
 - (ii) Function overloading (2 Marks)
- e) What is the difference between arsort() and krsort() functions in an array? (4 Marks)

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