



PAN AFRICA CHRISTIAN UNIVERSITY

BBIT, BSCIT

END OF TERM EXAMINATION

DEPARTMENT: COMPUTING & INFORMATION TECHNOLOGY

COURSE CODE: BSIT 308

CAMPUS: ROYSAMBU

COURSE TITLE: ADVANCED WEB DEVELOPMENT

EXAM DATE: MONDAY, DATE (29TH JULY 2024)

TIME: START HOUR – END 11:00-14:00 HRS

INSTRUCTIONS

- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other THREE questions in Section **B**.
- Write only your **student number** on the answer booklet provided.
- None programmable calculators permitted
- Calculators on phones, tablets and computers are NOT permitted in Theory Papers

SECTION A

(Answer ALL questions in this section)

QUESTION 1

a) Write a JavaScript code to find odd or even numbers **(4 Marks)**

b) Explain the output of the code below: **(2 Marks)**

```
<?php
for ($i = 1; $i <= 2; $i++) {
    for ($j = 1; $j <= 2; $j++) {
        echo "$i$j ";
    }
    echo "<br>";
}
?>
```

c) Describe **FOUR** process you would follow to configure a web server for HTTPS to ensure secure communications. **(4 Marks)**

SECTION B

(Answer any THREE (3) questions in this section)

QUESTION 2

a) Write a PHP script using a do-while loop to print the numbers from 1 to 10, but skip the number 5 **(4 Marks)**

b) Explore the following events in JavaScript, providing an example of each.

(6 Marks)

- i. onBlur
- ii. onFocus
- iii. onLoad

QUESTION 3

a) Some companies have set up an intranet to help support their information services. The service may be backed by a database system that dynamically generates web pages. Expound **TWO** differences between this approach and the more traditional method of client/server databasing **(4**

Marks)

b) Write a code which will design a responsive web page layout using HTML5 for structure, CSS3 for styling, and PHP. **(6**

Marks)

QUESTION 4

a) Explain the use of GET and POST methods in HTTP, providing relevant examples.

(4

Marks)

b) Study the php code below and answer the questions that follow

```
<html>
<body>
<?php
$db = mysql_connect("localhost","root");
mysql_select_db("mydb",$db);
$result = mysql_query("SELECT * FROM employees",$db);
printf("First Name: %s<br>\n", mysql_result($result,0,"first"));
printf("Last Name: %s<br>\n", mysql_result($result,0,"last"));
printf("Address: %s<br>\n", mysql_result($result,0,"address"));
printf("Position: %s<br>\n", mysql_result($result,0,"position"));
?>
</body>
</html>
```

Describe the purpose of each of the following statements in the code above **(6**

Marks)

- i. mysql_connect() function
- ii. mysql_select_db()
- iii. mysql_query()

QUESTION 5

- a) Discuss **THREE** key considerations when selecting a cloud service provider for hosting an application with variable traffic patterns **(6 Marks)**
- b) Style sheets were added to HTML 4.0 to solve a problem. Using an example to illustrate, explain the problem that style sheets solve. **(4 Marks)**

QUESTION 6

- a) John need to display a list of blog posts on a page. Each blog post includes a title, date, and summary. The data is stored in a database. Write ColdFusion code to query the database and dynamically generate an HTML page listing the blog posts.
(6 Marks)
- b) You need to create a navigation menu for a website where each menu item has a rollover effect that changes its background color and displays a tooltip. Write HTML and CSS to design a navigation menu with rollover effects. The tooltip should appear above each menu item when the user hovers over it.
(4 Marks)

EOF