

PAN AFRICA CHRISTIAN UNIVERSITY

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

END OF SEMESTER EXAMINATION

DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY

COURSE CODE: BCIT308

COURSE TITLE: ADVANCED WEB DEVELOPMENT

CAMPUS: ROYSAMBU

EXAM DATE: XXXXX XXXXX/JULY,2022

TIME: XXXXX

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.

SECTION A

(Answer ALL questions in this section)

Question 1:

a) JavaScript is "a loosely typed language". Explain the meaning of this statement.

[2

Marks]

b) Explain the uses of the following tags as used in web development.

[2

Marks]

i. `<script>`

ii. `<div>`

c) Write a PHP functions to achieve the following with MySQL database server on the local machine.

i. Connect to the server with username **root** and password **PAC2022** [1
Mark]

ii. Select a database called **Uni2020** to be used for queries [1
Mark]

iii. Close the database connection [1
Mark]

d) Write a JavaScript program, that asks the user to enter a number between 1 and 30, checks if the number is odd or even and then displays the result. [3

Marks]

SECTION B

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

Question 2:

a) Write a HTML code coupled with CSS code to output text in paragraph as colour red, aligned to the centre, initialize the text and background colour of document to be black in colour.

[4 Marks]

b) Consider the following fragment of JavaScript. Give the output that would be produced in the browser window by the pieces of code below. **[6**

Marks]

i. // Part (i)

```
var i
```

```
for (i = 2; i < 8; i += 2)
```

```
{
```

```
document.write("The value of i is "+i+ "<br/>")
```

```
}
```

ii. // part(ii)

```
<script type="text/javascript">
```

```
    const x;
```

```
    x = 12;
```

```
</script>
```

iii. // part(iii)

```
<script type="text/javascript">
```

```
    const x = 22;
```

```
    {
```

```
        const x = 90;
```

```
        console.log(x);
```

```
    {
```

```
        const x = 77;
```

```
        console.log(x);
```

```
    }
```

```
    {
```

```
        const x = 45;
```

```
        console.log(x);
```

```
    }
```

```
    }
```

```
    console.log(x);
```

```
</script>
```

Question 3:

a) PHP is "a weakly typed language". Explain what this statement means as regards PhP variables. **[4**

Marks]

b) Write the output of the following PHP code **[3**

Marks]

```
<html>
<body>
<?php>
$x=1;
while ($x<=5)
{
echo "The number is $x<br> "; $x++;
}
?>
</body>
</html>
```

c) Study the PHP figure below and answer the question that follow.

phpMyAdmin

Home

dbInfo (1)

dbInfo

☒ tableInfo

tableInfo

	Field	Type
☐	firstName	varchar(20)
☐	lastName	varchar(20)
☐	gender	char(1)
☐	email	varchar(30)

Write the SQL command to fetch records with fields involve d are onlyfirstname, gender and email, where the gender only "Male". **[3**

Marks]

Question 4:

a) Write a javascript program that requests the user to enter temperature in centigrade, convert temperature given in degrees Celsius to Fahrenheit and then display the output(in Fahrenheit) on the screen. (hint: fahrenheit = celsius * 1.8 + 32)

[5]

Marks]

b) Write a Javascript program that uses *for loop control structure* to vertically display even numbers between 15 and 25 in descending order.

[5]

Marks]

Question 5:

a) Study the file below saved with the name Myfirststyle.css.

```
Body {background-color: tan}
```

```
h1 {color: maroon; font-size:20pt}
```

```
hr {color: navy}
```

```
p {font-size:11pt; margin-left: 15px}
```

```
a:link {color: green}
```

```
a:visited {color: yellow}
```

```
a:hover {color: black}
```

```
a:active {color: blue}
```

i. Using a html statement explain how it can be called in any html page

[4]

Marks]

ii. Describe the effects of applying this file in any html page

[6]

Marks]

Question 6:

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EXAMINATIONS PAPER**



- a) Write a JavaScript program to grade student marks for a single subject, using a *if...else control structure*. Use the following grading system; **[5**

Marks]

Marks	Grade
0..39	F
40..49	D
50..59	C
60..69	B
70..100	A
Any other mark	Not Valid

- a) Write a JavaScript program that accepts two numbers (integers), calculates their sum, and displays that sum. **[5**

Marks]

EOF