

PAN AFRICA CHRISTIAN UNIVERSITY

CERTIFICATE IN INFORMATION AND COMMUNICATION TECHNOLOGY

END OF SEMESTER EXAMINATION

DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY

COURSE CODE: CICT0115

COURSE TITLE: INTRODUCTION TO WEB DEVELOPMENT

CAMPUS: ROYSAMBU

EXAM DATE:

TIME:

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) In explaining the difference between the web and the Internet, one can use the analogy of the road and the different vehicles running on it. Which one is analogous to the road and the vehicles respectively?

[2 Marks]

b) What does the following HTML Code do to the text "HTML is fun!" **[2 Marks]**

```
<p><b>HTML</b>is <u>fun!</u></p>
```

c) Identify the selector and property in the following CSS rule! **[2 Marks]**

```
body { background-color: aqua;}
```

d) Declare a variable called count & initialize it to the value of zero using JavaScript code.

[2 Marks]

e) You want to host your web development code online and keep track of changes and commits. What popular open-source tools are there for this purpose? **[2 Marks]**

SECTION B

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

Question 2:

- a) Study the following HTML5 Code extract and answer the questions that follow.
How many rows and columns are displayed with the code? What do the tags <tr>, <td>, and <th> represent? **[5 Marks]**

```
<table>
  <tr>
    <th>First Name</th>
    <th>Second Name</th>
    <th>Age</th>
    <th>Gender</th>
  </tr>
  <tr>
    <td>John</td>
    <td>Smith</td>
    <td>21</td>
    <td>Male</td>
  </tr>
  <tr>
    <td>Peter</td>
    <td>Ndegwa</td>
    <td>22</td>
    <td>Male</td>
  </tr>
  <tr>
    <td>Cleopatra</td>
    <td>Mrembo</td>
    <td>23</td>
    <td>Female</td>
  </tr>
  <tr>
    <td>Mary</td>
    <td>Wanjiku</td>
    <td>24</td>
    <td>Female</td>
  </tr>
</table>
```

- b) Write a simple HTML5 contact me FORM that collects Full Name, email address and telephone numbers of your website visitors. Use HTML5 elements to validate email
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addresses and telephone numbers.

[5]

Marks]

Question 3:

a) Identify and name the type of CSS selectors in the following CSS rules.

- i. `.warning {color: red;}`
- ii. `#navmenu ul li { list-style-type: none; }`
- iii. `P { color: blue; }`
- iv. `a:hover {background-color: yellow; }`
- v. `* {margin: 0px;}`

[5]

Marks]

b) Explain what frameworks are and give two examples of JavaScript frameworks.

[5]

Marks]

Question 4:

a) Write currency converter application for a Dollar to Kenyan Shillings currency using JavaScript code. Use 1 Dollar = 126 Kshs rate.

[5]

Marks]

b) You see the following files in your Documents folder. Identify what type of file they are, and the software application needed to open these files. Which one would be an appropriate file for webpage?

- i. Testing.docx
- ii. Sample.html
- iii. Demo.txt
- iv. Trial.css

[5]

Marks]

Question 5:

a) You have worked on your website, and you are now ready to deploy it. You figure that you need domain name for your website. What are the rules when coming up with your domain name? Give examples of valid domain names and

invalid domain names.

[5

Marks]

b) You want to apply styles to your webpages to change the appearance and accessibility of your website.

- i. List the ways you can apply styles to your webpage document.
- ii. Which one is the most preferred?
- iii. Which one has the highest priority?

[5

Marks]

Question 6:

a) List and briefly explain the three pillars of web architecture.

[6

Marks]

b) Use internal CSS to display the list below horizontal with spaces so that can be used as navigation elements

[4

Marks]

- **Home**
- **About**
- **Products**
- **Services**

EOF