



GRETSA UNIVERSITY - THIKA

UNIVERSITY EXAMINATIONS JANUARY - APRIL 2021 SEMESTER

DIPLOMA IN COMPUTER SCIENCE / INFORMATION TECHNOLOGY

COURSE CODE: DPCC 032

COURSE TITLE: FUNDAMENTALS OF WEB SYSTEMS

DATE: 10 MAY 2021

TIME: 11.30 AM - 2.30 PM

INSTRUCTIONS TO CANDIDATES

1. SECTION A IS **COMPULSORY**.
2. SECTION B: ANSWER ANY OTHER **THREE** QUESTIONS.
3. **DO NOT** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

CAUTION: *All exam rooms are under CCTV surveillance during the examination period.*

SECTION A: COMPULSORY

QUESTION ONE

- a) Distinguish between the following HTML tags:
- i. `` and `` [2 Marks]
 - ii. `<i>` and `` [2 Marks]
 - iii. `<mark>` and `` [2 Marks]
 - iv. `<rowspan>` and `<colspan>` [2 Marks]
- b) Outline the errors in the following HTML program [5 Marks]
- ```
<!DOCTYPE html>
<html>
<title>
<head> </head>
</title>
<body>
<h1>This Is a Heading<h1>
</body>
<p>This Is a Paragraph.<p>
</html>
```
- a) Use CSS code to set the size of the image in the line below to 250 pixels wide and 400 pixels tall. Rewrite the new line [4 Marks]
- ```

```
- c) Discuss two functions of the style attribute [4 Marks]
- d) Discuss four rules to be followed when writing HTML programs [4 Marks]
- e) Discuss the following HTML quotation tags and show examples in each
- i. `<blockquote>` [3 Marks]
 - ii. `<cite>` [3 Marks]
 - iii. `<q>` [3 Marks]
- f) Explain the function of the title attribute in the following line of code [3 Marks]
- ```
<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>
```
- g) Discuss the output of the following snippet of a HTML program [3 Marks]
- ```
<address>
  Written by John Doe.<br>
  Visit us at:<br>
  Example.com<br>
  Box 564, Disneyland<br>
  USA
</address>
```

SECTION B: ANSWER ANY THREE QUESTIONS

QUESTION TWO

- a) Distinguish between cell padding and border spacing with regard to HTML tables **[4 Marks]**
- b) Write a HTML program to add a table with two rows and two table headers. The two table headers should have the value "Name" and "Age" **[6 Marks]**
- c) Write a HTML program to recreate the following table: **[10 Marks]**

Russell's Test Scores		
	Test 1	Test 2
English	92	91
Science	89	96
Mathematics	97	90

QUESTION THREE

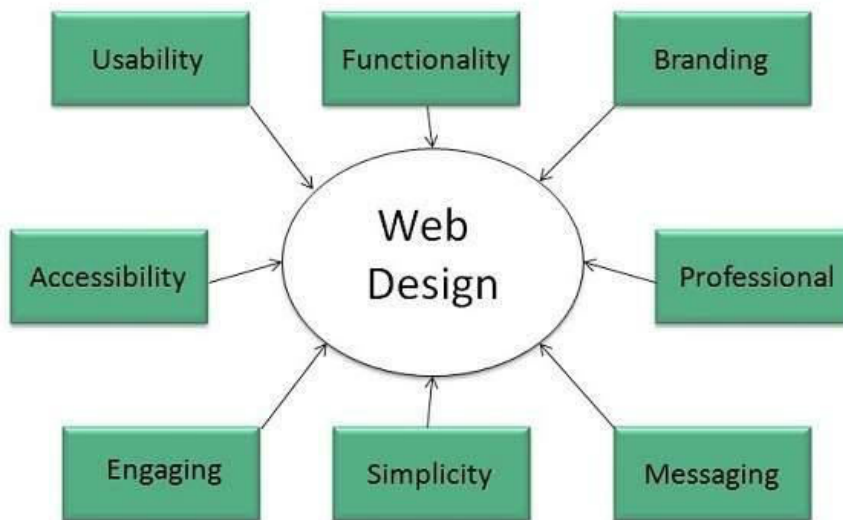
- a) Write a HTML program to display the following radio buttons **[6 Marks]**

- Male
 Female
 Other

- b) Explain four web development tools commonly used in the industry today **[4 Marks]**
- c) Write a HTML program to create 1 green button and 2 blue buttons that prompt the user to enter username, password, and then click to log in. The buttons should read: USERNAME, PASSWORD and LOGIN and should appear on different lines. USERNAME and PASSWORD buttons should be blue and LOGIN button should be green **[10 Marks]**

QUESTION FOUR

- a) Effective web design is necessary to communicate ideas effectively. Explain the following features of effective web design **[10 Marks]**



- b) Rewrite the following line to add a "tooltip" with the text "Fundamentals of Web Systems"
 <p> This is a HTML paragraph </p> [4 Marks]
- c) List three client-side scripting languages and three server-side scripting languages [6 Marks]

QUESTION FIVE

- a) Discuss the three ways in which CSS can be added to HTML documents [6 Marks]
- b) Define the use of the following CSS properties:
- i. Border [2 Marks]
 - ii. Margin [2 Marks]
 - iii. Padding [2 Marks]
- c) Write a HTML program with CSS styling to recreate the following document. Set the background colour of each paragraph to three different colours of your choice. [8 Marks]

