



(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
SECOND YEAR FIRST SEMESTER
EXAMINATIONS**

**FOR THE DIPLOMA IN
(INFORMATION TECHNOLOGY)**

COURSE CODE: DIT 068

COURSE TITLE: WEB PROGRAMMING

DATE: 13/12/2022

TIME: 9.00 A.M – 11.00 A.M

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSARY) [24 MARKS]

- a. Define the following terms
- i. Web Technologies [2 Marks]
 - ii. Web Development [2 Marks]
 - iii. Application Programming Interface (API) [2 Marks]
 - iv. HTML Elements [2 Marks]
- b. With examples distinguish between a Web Server and a Web Browser [4 Marks]
- c. Write down the source code of a simple html page displaying the hello world message with a page title as "My First Web Page." [4 marks]
- d. Write the following abbreviations in full giving the function of each [8 Marks]
- i. TCP
 - ii. URL
 - iii. HTTPS
 - iv. HTML5

QUESTION TWO [18 MARKS]

- a. Write the HTML source code that will attach a CSS3 file called "main.css" which is located in a sub directory to the html page called CSS3. [2 Marks]
- b. Describe the CSS syntax giving out an example [4 Marks]
- c. b. What does the following CSS code do to a html page. [6 Marks]

p, h1, h2 {

color: blue;

font-family: Roboto;

font-size: 12 pxl;

```
text-align: center;
```

```
}
```

- d. With example, give a simple CSS syntax to change the color of a h1 [2 Marks]
- e. Illustrate the CSS box model [4 Marks]

QUESTION THREE [18 MARKS]

- a. List and explain four security requirements that should be considered in when designing a website [8 Marks]
- b. Differentiate between a browser and a search engine. Giving examples. [4 Marks]
- c. Using examples, illustrate THREE ways one can organize the layout of a web page. [3 Marks]
- d. Explain the THREE levels of a CSS [3 Marks]

QUESTION FOUR [18 MARKS]

- a. Discuss the aspects of server-side scripting/programming [4 Marks]
- b. Consider the following arrays and conditions, what do you think would be the result? [3 Marks]

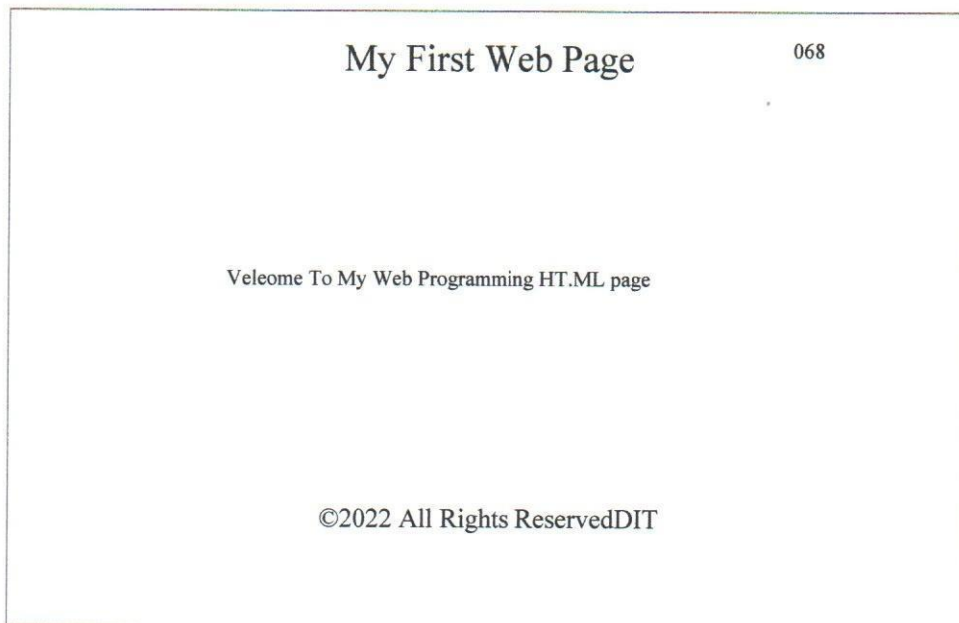
```
const arr1 = ['a', 'b', 'c']  
const arr2 = ['c', 'b', 'a'] console.log (  
  arr1.sort() === arr1,  
  arr2 === arr2.sort(),  
  arr1.sort() === arr2.sort()  
)
```
- c. What do you think the output would be? [3 Marks]

```
for (var i = 0; i < 5; i++) {  
    setTimeout (function () {console.log(i);}, i * 1000 );  
}
```

- d. Write down the HTML source code that will import a JavaScript file "script.js" to a user's html page that is in the same directory [2 Marks]
- e. Up to how many functions can be written validly inside a single HTML SCRIPT element [2 Marks]
- f. Write a JavaScript code that will be set on a button to show password when clicked and hide it after mouse up [4 Marks]

QUESTION FIVE [18 MARKS]

- a. Write a code that will insert an Image abc.jpeg that is on the same server as the html page and compare it to the same image being in "https://kibu.ac.ke/abc.jpeg" [2 Marks]
- b. Write the html source code that will generate the following output [10 Marks]



- c. Differentiate between a Static website and a Dynamic website [2 Marks]
- d. Differentiate between Internet and World Wide Web (WWW) [2 Marks]