(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 directoy [2 Marks]

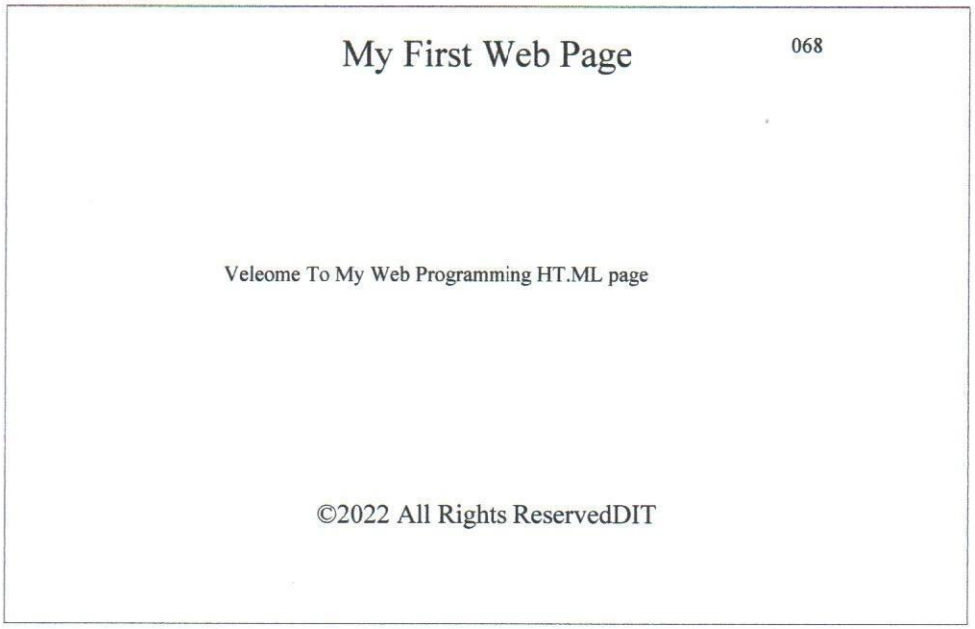
e. Up to how many functions can be written validly inside a single HMTL SCRIPT element [2 Marks]

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]