



**DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2019/2020**

**EXAMINATION FOR BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY AND**

**BACHELOR OF SCIENCE IN BUSINESS INFORMATION TECHNOLOGY**

**CIT 2204: WEB APPLICATIONS PROGRAMMING / CIT 2208: FRONT-END WEB  
DEVELOPMENT**

**DATE: AUGUST 2020**

**TIME: 2 HOURS**

**INSTRUCTIONS**

**Answer question ONE and any other TWO questions**

**QUESTION ONE [30 MARKS]**

a) Define the following terms [6 Marks]

- (i) Internet:
- (ii) WWW
- (iii) Protocol
- (iv) HTML:
- (v) HTTP:
- (vi) URL:

b) “The World Wide Web is essential in the internet.” Discuss this statement. [4 Marks]

c) Describe the effect of the HTML code shown below to a web page. [3 marks]

`< <a href="form.html">Fill Our Form</a>`

d) Assume you are developing a program to grade students marks a per the following requirements

Marks range	Grade
0 – 39	E
40 - 49	D
50 – 59	C
60 – 69	B
70 – 100	A

Write a full HTML and JavaScript code that will allow a user to input an integer value then the program evaluates the marks and outputs the appropriate grade on a command screen. Use an embedded JavaScript code with an **if** control flow statement in evaluating the above [10 Marks]

- e) What is a web server? Why is it important in deploying web applications? [4 Marks]
- f) Assume that you are tasked to develop a dynamic web application. List three characteristics of such a website (3 marks)

## QUESTION TWO [20 MARKS]

- a) Define the following HTML code [3 Marks]
  - (i) `<b></b>`
  - (ii) `<i></i>`
  - (iii) `<u></u>`
- b) Giving an appropriate example, differentiate between block and inline elements [4 Marks]
- c) Design a simple HTML and JavaScript program that demonstrates the use of symbolic constant where the constant is the value of 0.56 in the equation  $c=0.56*(f-32)$ . The user provides the value of f and the output is the value of c [6 Marks]
- d) Differentiate between server side scripting and client side scripting. Give an example of a language that can handle each [3 Marks]
- e) Give three difference between 3 tier architecture and MVC [4 Marks]

## QUESTION THREE [20 MARKS]

- a) (i) What is CSS? [2 Mark]  
  
(ii) Discuss three ways of linking HTML and CSS [6 Marks]
- b) Discuss any three server status codes [3 Marks]
- c) Create a HTML document that displays the web page shown below [9 marks]

**Persons Information**

First Name

Age

Phone Number

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**Academic Qualification**

Academic achievements Degree  ▼

▲

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Course Taken

Skill  Programming  Management  Design

## QUESTION FOUR [20 MARKS]

- a) Discuss the difference between static and dynamic web sites. Give an appropriate example [4 Marks]
- b) Write html code that would display the table below [5 marks]

CALENDAR	
Month	Day

- c) How is JavaScript different from other programming languages such as C or C++? [4 Marks]
- d) Differentiate between the following HTML special characters [2 Marks]
- &lt;
  - &amp;
- e) Write HTML code to differentiate between cell spacing and cell padding [5 Marks]