

(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

**THIRD YEAR SECOND SEMESTER EXAMINATIONS
FOR THE DIPLOMA
IN
INFORMATION TECHNOLOGY**

COURSE CODE: DIT 091

COURSE TITLE: WEB DESIGN II

DATE: 25/04/2022

TIME: 8:00a.m-9:30am

INSTRUCTIONS TO CANDIDATES

Answer Questions ONE and ANY OTHER TWO.

TIME: 1 Hour 30 Minutes

Question 1 (Compulsory)

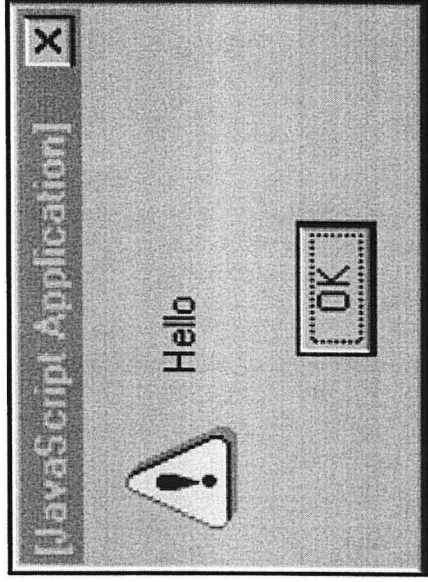
- a) Distinguish the following? (4 marks)
- Web designing vs. Web development
 - POST vs. GETS method.
- b) When surfing online, how can you determine if the current page is secure or not? (2 marks)
- c) When talking about responsive web design, what are the differences between the Mobile First and the Desktop First approaches? (2 marks)
- d) Explain **THREE (3)** reasons why HTML tables should be used for tabular data and not for laying out a page. (6 marks)
- e) Explain the difference between accessibility and usability. (2 marks)
- f) State **TWO (2)** reasons why accessibility is an important consideration in website design. (2 marks)
- g) The process of web design can be thought of as a three stage process: (1) Research; (2) Design; and (3) Implementation.
- State **TWO (2)** processes or actions involved in each of the following stages listed above. (6 marks)
 - Where does testing and evaluation fit within the above process? (1 mark)
- h) Explain what is meant by breadcrumb navigation **and** state **TWO (2)** advantages of its use. (3 marks)
- i) Designing a website for mobile devices raises particular issues. State **TWO (2)** issues that must be considered when designing a website for mobile devices. (2 marks)

Question 2

- a) Explain the **FIVE (5)** stages involved in web development. (5 marks)
- b) Write html code to create the table below (5 marks)

CLASS TIME TABLE				
Monday	Tuesday	Wednesday	Thursday	Friday
DIT091	DIT066	DIT091	DIT068	DIT062

- c) Write the JavaScript code that would give the output shown in figure 1 below. (2 marks)



- d) A baker has three types of cakes: small, medium and large. Write an html code that would facilitate the user to choose one of them. (5 marks)
- e) Body elements determine how content of a web page would appear on the browser. Explain **THREE (3)** such elements stating their effect on the content of the page. (3 marks)

Question 3

- a) Briefly discuss the **FIVE (5)** fundamental phases of a website development life cycle. (10 marks)
- b) As a website developer, what would you consider in creating a website that is easier to maintain? (4 marks)
- c) Graphics design is a fundamental component in website development. Explain **THREE (3)** graphics design principles that a website developer should consider. (6 marks)

Question 4

Masinde Muliro University of Science and Technology wishes to collect demographic data of their students. To fast track the process they have sought your expertise in creating a web application that would be used to collect and store the information for future reference. The table below shows the information to be collected.

Registration no.	surname	Other name	gender	address	Phone no.

Use the above information to answer the questions that follow:

- a) Write the sql statement that would create a database called personal details. (1 mark)

- b) Write the sql statements that would create the student details table above. (4 marks)
- c) Write the client application that would be used to collect the information and post it to the database. (5 marks)
- d) Write the php code that would enable the client to connect to the database. (2 marks)
- e) Using php write the server side application that would receive and process the student detail. (5 marks)
- f) Outline three rules that govern the choice of variable names in Php. (3 marks)

Question 5

- a) Write the html code to output the form shown in the figure below. (4 marks)

Name:	<input type="text"/>
Phone:	<input type="text"/>
Email:	<input type="text"/>

- b) Write a JavaScript code to validate the email address field in the figure above. (4 marks)
- c) Briefly explain **TWO** (2) components that are found in a website URL. (4 marks)
- d) Using an example, describe the use of a confirm box in java script. (3 marks)
- e) State **FIVE** (5) reasons why we need websites. (5 marks)