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**KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**UNIVERSITY EXAMINATION FOR 2024/2025 ACADEMIC YEAR**  
**SECOND YEAR, SECOND SEMESTER EXAMINATION**  
**FOR THE DEGREE OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

**KCS 2209 INTERNET APPLICATION PROGRAMMING**

**Date: 12<sup>TH</sup> AUGUST, 2024**

**Time: 2:30 PM – 4:30 PM**

**INSTRUCTIONS TO CANDIDATES**

**ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE: COMPULSORY (30 MARKS)**

- a) Using relevant examples, differentiate between the following terms
- i. Padding and margin (2 Marks)
  - ii. Front-end development and back end development (2 Marks)
  - iii. HTML and CSS (2 Marks)
  - iv. Class and ID (2 Marks)
- b) Describe five different ways a developer can use during development to improve search engine optimization (SEO) (5 Marks)
- c) Write HTML code, to display HTML list as captured in the image below (4 Marks)

Browser >

**Faculty of Science**

**Degree Programmes**

- o Computer Science
- o Information Technology
- o BBIT

**Diploma Programmes**

- Information Technology
- DBT

- d) Describe the importance of the following HTML5 tags.
- i. Nav (2 Marks)
  - ii. Article (2 Marks)
  - iii. Aside (2 Marks)
  - iv. Footer (2 Marks)
- e) i. Define mobile responsiveness. (1 Mark)
- ii. Describe reasons why developers need to consider mobile responsiveness during development. (4 Marks)

## **QUESTION TWO: (20 MARKS)**

- a) Describe four applicable uses of HTML forms (4 Marks)
- b) Write HTML code, to display the below captured image of HTML form (12 Marks)

The image shows a web form on a light blue background. It contains the following fields and controls:

- Project Name:** A text input field with the placeholder text "project name".
- Assigned to:** A dropdown menu showing "Er Merry Petision" with a downward arrow.
- Start Date:** A date input field with the placeholder "dd - mm - yyyy" and a calendar icon.
- End Date:** A date input field with the placeholder "dd - mm - yyyy" and a calendar icon.
- Priority:** Three radio buttons labeled "High", "Average", and "Low".
- Description:** A large text area for a description.
- Submit:** A green button.
- Clear:** A blue button.

- c) Describe four major roles of scripting languages like PHP in web development (4 Marks)

## **QUESTION THREE: (20 MARKS)**

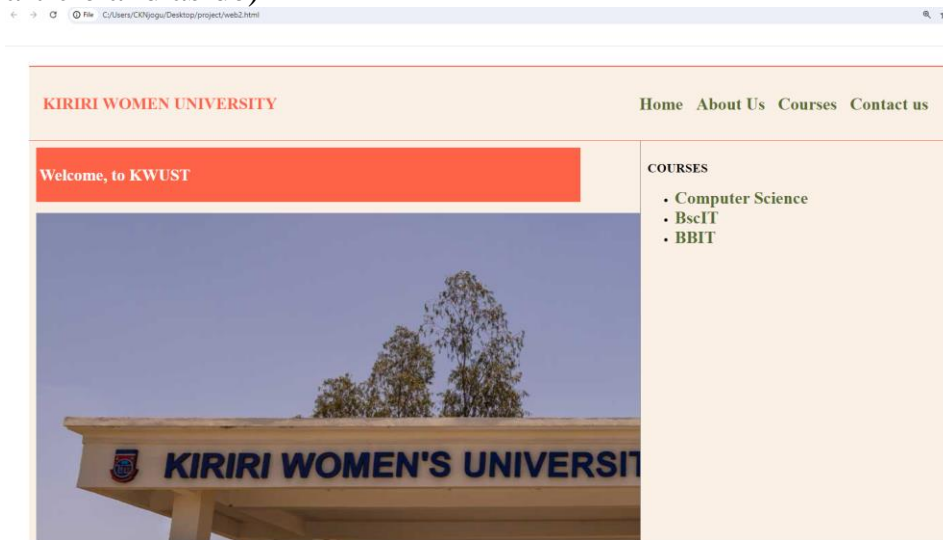
- a) Write HTML code that can generate the below table used by Kiriri to enter CAT marks (10 Marks)

KIRIRI STUDENTS CATS					
REGNO.	STUD_NAME	ASSIGNMENT I	CAT 1	CAT 2	TOTAL/30
DIT-001-23	Mary	7	7	5	19
DBT-005-23	Nancy	8	5	6	
DIT-006-23	Mercy	6		9	20

- b) Describe **FIVE** advantages of web-based applications over desktop-based applications (5 Marks)
- c) You have been provided with an image renamed as kwust.png, write HTML code to display the image on the web browser (5 Marks)

#### **QUESTION FOUR: (20 MARKS)**

- a) Write HML and CSS to generate the below captured webpage (Navigation Menu Bar, article and aside) **(12 Marks)**



- b) Describe the role of application programming interface (APIs) during web application development **(8 Marks)**

#### **QUESTION FIVE: (20 MARKS)**

- a) Using the below captured form and a database called Kwust with table know as Reg. write php script to connect HTML form with database provided **(12 Marks)**

- b) Describe the process of setting up and configuring apache webserver on linux (Ubuntu distribution) operating system **(8 Marks)**