

(Knowledge for Development)

**KIBABII UNIVERSITY
(KIBU)**

**UNIVERSITY EXAMINATIONS
2021 / 2022 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR TWO SEMESTER TWO EXAMINATIONS
FOR THE DEGREE OF MASTERS OF SCIENCE
(INFORMATION TECHNOLOGY)**

**COURSE CODE : MIT 842E
COURSE TITLE : WEB TECHNOLOGIES**

DATE: 18/06/2022 TIME: 2.00 P.M. – 5.00 P.M.

**INSTRUCTIONS TO CANDIDATES
ANSWER QUESTIONS ONE AND ANY OTHER TWO.**

QUESTION ONE (COMPULSORY) [20 MARKS]

- HTML uses
A. User defined tags
B. Pre-specified tags
C. Fixed tags defined by the language
D. Tags only for linking
- Fundamental HTML Block is known as _____
A. HTML Body
B. HTML Tag
C. HTML Attribute
D. HTML Element
- How can you make a bulleted list with numbers?
A. <dl>
B.
C. <list>
D.
- To refer to an external CSS file within an HTML document, use:
a) <CSS ...> ... </CSS>
b) <SCRIPT ... >... </SCRIPT>
c) <LINK ... >... </LINK>
d) <STYLE ... >... </STYLE>
- Which attribute, when added to a dropdown list, allows the user to select more than one item from the list in HTML?
A. The options attribute
B. The many attributes
C. The checked attribute
D. The multiple attributes
- If we want to define a style for a unique element, then which CSS selector will we use?
A. Id
B. text
C. class
D. name
- If we want to use a nice-looking green dotted border around an image, which CSS property will we use?
A. border-color
B. border-decoration
C. border-style
D. border-line
- Which attribute can be added to many HTML / XHTML elements to identify them as a member of a specific group?
A. Id
B. div
C. class
D. span
- When we write , what "img.png" inside double quote implies?
A. element
B. attribute
C. value
D. operator
- Which CSS property you will use if you want to add some margin between a DIV's border and its inner text?
A. spacing
B. margin
C. padding
D. inner-margin
- Which CSS property is used to control the text size of an element?
A. font-style
B. text-size
C. font-size
D. text-style
- By default Hyperlinks are displayed with an underline. How do you remove the underline from all hyperlinks by using CSS code?
A. a {text: no-underline;}
B. a {text-decoration:none;}
C. a {text-style: no-underline;}
D. a {text-decoration: no-underline;}
- The word "cascading" in CSS is best described by which statement below?
A. list of style rules are strictly applied from the bottom to the top of the list, with no exceptions.
B. The final properties of an element are changed by applying a variety of rules to that particular location within the overall HTML page.
C. One mistake in a higher rule will immediately wipe out all lower rules.
D. Once you start to style an element, you are required to continue adding styles until all possible properties are defined.
- Why use CSS?
A. it helps create unique web pages
B. it allows for the separation of style and content
C. it helps make the web page browser-independent
D. it changes the structure of the web page
- The style declaration block consists of what?
A. inline, embedded, external CSS
B. selector, property, value
C. html, css, javascript
D. <p> color:blue
- What is "style" when you use it in internal CSS?
A. tag
B. property
C. value
D. none
- You would like to highlight text on a web page. What tag would you use?
A. mark
B. section
C. article
D. detail
- Which of the following is an advantage of using JavaScript?
A - Less server interaction
B - Immediate feedback to the visitors

- C - Increased interactivity D - All of the above.
19. Which of the following function of the String object returns the characters in a string between two indexes into the string?
 A - slice() B - split() C - substr() D - substring()
20. Which of the following function of the String object returns the calling string value converted to lower case?
 A - toLocaleLowerCase() B - toLowerCase() C - toString() D - substring()

QUESTION TWO [20 MARKS]

- a. HTML tags provide web browsers with instructions about the web page, such as where to display images, and how the document is structured. Using example distinguish between HTML document structure tags and content (container) tags **[4 marks]**
- b. Explain any three tags found only in HTML5. **[4 marks]**
- c. Write HTML tag to output the Figure 1 below. **[6 marks]**

Fruits	Vitamin A	Vitamin C
Apples	98 ui	8.4 mg
Oranges	295 ui	69.7 mg
Bananas	76 ui	10.3 mg

Figure 1: Fruits and their Nutritional values

- d. Write HTML code that will output the figure below. **[6 marks]**

Contact Details

Name:

Telephone:

Email:

User info

Username:

Password:

Figure 2: Student Biodata Form

QUESTION THREE [20 MARKS]

- a. Distinguish between web design and development. **[4 marks]**
- b. Explain three essential client-side technologies for website development. **[6 marks]**
- c. Discuss two ways that you can use to evaluate a website. **[6 marks]**
- d. Explain the role of ID and Class as used in CSS. **[4 marks]**

QUESTION FOUR [20 MARKS]

- Discuss the importance of understanding how to use colour on a website. [2 marks]
- Discuss the importance of compressing images for use on a website. [6 marks]
- Explain two ways you can use to compress images. [6 marks]
- Explain three color codes that can be used in HTML. [6 marks]

QUESTION FIVE [20 MARKS]

Study figure 3 and use it to answer parts a, b and c.

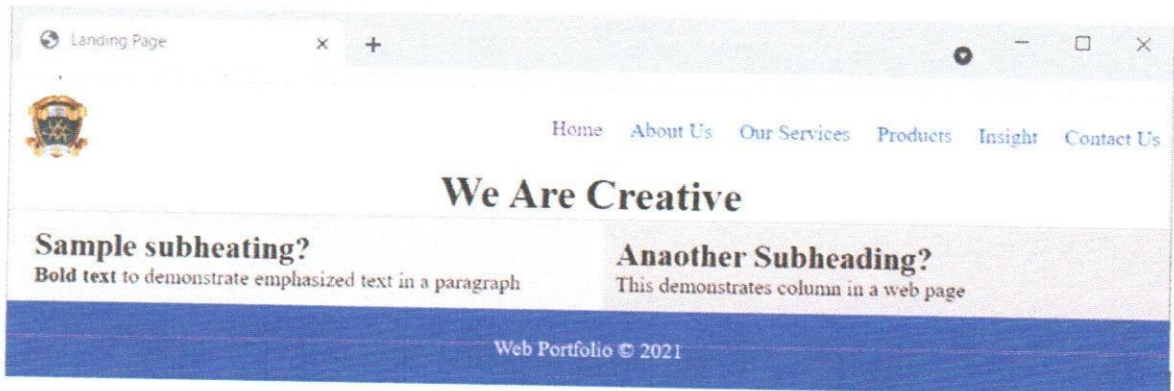


Figure 3: Web Portfolio Landing page

Note:

- Color for column 1 is white smoke (#F5F5F5)
 - Color for column 2 is neutral gray (##e9dfd)
 - Color for footer is blue
 - Entity name for © is copy.
- Write HTML code that will display Figure 2 shown above. Include links for the style sheet file (style.css) and JavaScript file (main.js). You will create an external styling sheet in part b of this question and an external JavaScript file in part c of this question. [10 marks]
 - Create a style.css file to format the above HTML file to output the figure above. [10 marks]