*(Knowledge for Development)*

# KIBABII UNIVERSITY

## (KIBU)

# UNIVERSITY EXAMINATIONS
# 2021/2022 ACADEMIC YEAR

# SPECIAL/SUPPLEMENTARY EXAMINATIONS
# YEAR TWO SEMESTER TWO EXAMINATIONS

# FOR THE DEGREE IN
# (INFORMATION TECHNOLOGY)

COURSE CODE  :  BIT 222

COURSE TITLE  :  WEB TECHNOLOGIES I

DATE:28/07/2022          TIME: 11AM -1PM

## INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

## QUESTION ONE (COMPULSARY) [30 MARKS]

1. Who is making the Web standards?
   A. Mozilla   B. Microsoft   C. The World Wide Web Consortium   D. World Internet Society

2. Which is the correct CSS syntax?
   A. body:color=black
   B.{body;color:black}
   C.{body:color=black(body}
   D. body {color: black}

3. How do you insert a comment in a CSS file?
   A. this is a comment
   B./* this is a comment */
   C.// this is a comment
   D.// this is a comment //

4. What is the correct HTML for inserting an image?
   A. Img href="image.gif /
   B. Img src="image.gif" /
   C. Image src="image.gif" /
   D. Img>image.gif

5. How can you make a list that lists the items with numbers?
   a) ol            B. dl            C. ul            D. list

6. How do you make a list that lists its items with squares?
   A. type: square   B. list-type: square   C. type: 2   D. list-style-type: square

7. In what form are style rules presented?
   A. selector {property: value}
   B. selector {property= value}
   C. selector (property: value)
   D. selector (property= value)

8. Which property applies a color to text?
   A. text-color   B. foreground-color   C. background-color   D. color

9. What does the ID selector do?
   A. Apply the style to a specific element
   B. Apply the style to all the elements
   C. Apply the style to a group of elements
   D. Apply the style to elements of the same type

10. What selector should you use when applying a style to multiple elements?
    A. ID      B. Class            C. Type            D. Any of the above

11. Where in the HTML document is the correct place to refer to an external style sheet?
    A. In the section
    B. At the top of the document
    C. In the section
    D. At the end of the document

12. Which HTML attribute is used to define inline styles?
    A. class        B. style            C. styles            D. font

13. Which method is ideal for applying the same style to an entire website?
    A. Internal CSS        B. Inline CSS        C. External CSS

14. What is the difference between margins and padding?
    A. margins add whitespace inside the border and padding adds whitespace outside
    B. padding adds whitespace and margins increase the border size
    C. there is no difference
    D. margins add whitespace and padding increases the border size
    e) padding adds whitespace inside the border and margins add whitespace outside

15. From the inside out, which of the following portrays the correct order of a box model?

A. margin, border, padding, content          B. content, margin, border, padding
C. border, margin, content, padding          D. content, padding, border, margin
e) padding, content, margin, border

16. How is everything treated in HTML DOM?
   A. Node          B. Attributes          C. Elements          D. Arrays

17. What is the work of the form control elements in the HTML DOM?
   A. User Interface elements               B. All the possible elements
   C. Debugging elements                    D. Collecting elements

18. How are the objects organized in the HTML DOM?
   A. Class-wise          B. Queue          C. Hierarchy          D. Stack

19. What is the HTML tag under which one can write the JavaScript code?
   A) <javascript>  B) <scripted>  C) <script>  D) <js>

20. Which of the following is the correct syntax to display "BIT 222" in an alert box using JavaScript?
   A. alertbox("BIT 222");
   B. msg("BIT 222");
   C. msgbox("BIT 222");
   D. alert("BIT 222");

21. What is the correct syntax for referring to an external script called "BIT222.js"?
   A. <script src="BIT222.js">
   B. <script href="BIT222.js">
   C. <script ref="BIT222.js">
   D. <script name="BIT222.js">

22. Predict the output of the following JavaScript code.

```
<script type="text/javascript" language="javascript">
var x=5;
var y=6;
var res=eval("x*y");
document.write(res);
</script>
```

   A. "30"          B. 30          C. 5*6          D. "5*6"

23. Which of the following is not JavaScript Data Types?
   A. Undefined          B. Number          C. Boolean          D. Float

24. Which of the following is correct about features of JavaScript?
   A. It cannot Handling dates and time     B. JavaScript is a object-based scripting language.
   C. JavaScript is not interpreter-based scripting language D. All of the above

25. Choose the correct JavaScript syntax to change the content of the following HTML code.
   A. document.getElement ("letsfindcourse").innerHTML = "I am a letsfindcourse";

B. document.getElementById ("letsfindcourse").innerHTML = "I am a letsfindcourse";

C. document.getId ("letsfindcourse") = "I am a letsfindcourse";

D. document.getElementById ("letsfindcourse").innerHTML = I am a letsfindcourse;

26. The following is a web-page:

```
<html>
    <head> <title>JavaScript</title> </head>
    <body bgcolor=""#0000ff"">
        <script language=""JavaScript"">
            <!-- document.write(""<h1> hello world </h1>""); //-->
        </script>
    </body>
</html>
```

27. When the above web page is loaded into a browser, what will happen?
    a. The body of the web page will not contain any text
    b. The body of the web page will contain the text "hello world" as an H1 heading
    c. The background color of the web page will be green
    d. document.write("<h1> hello world </h1 >"); is a comment.

28. Which HTML element is used to define multi-line input field?
    A. Text    B. Textarea    C. Blocktext    D. Textfields

29. Action attribute in HTML form specifies that
    A. Which HTTP Method is used          B. Which action is going on
    C. Where to submit form               D. The autocomplete form

30. For creating a drop-down list in HTML form which element is suitable?
    A. <List>          B. <Drop down>          C. <Select>    D. All the above


## QUESTION TWO [20 MARKS]

a. Briefly explain the concept of CSS.                                                [2 marks]
b. Briefly explain any four advantages of employing CSS in your websites.            [8 marks]
c. Describe the components of a CSS Style.                                           [6 marks]
d. Distinguish between Classes and IDs as used in CSS.                               [4 marks]


## QUESTION THREE [20 MARKS]

a. An anchor tag is used for links in a web page. Write the syntax for anchor tags for the following links.

    i.    Hyperlinks                                                                  [1 mark]

    ii.   sending emails                                                              [1 mark]

b. Explain any three types of content that go into the <head> ... </head> of an HTML web page.

[6 marks]

c. Compare and contrast the <div> ... </div> and <span> ... </span> tags as used in HTML web page.

[4 marks]

d. Write HTML code to display Table 1.

[8 marks]

Table 1: SCAI Programmes

| Department | Programmes |
|---|---|
| IT | PHD IT |
| | MSc IT |
| | BSc IT |
| | Dip IT |
| | Cert IT |
| Computer Science | MSc Computer Science |
| | BSc Computer Science |

## QUESTION FOUR [20 MARKS]

e. Describe two ways in which you can work with JavaScript in your web page. [4 marks]

f. JavaScript presents numerous advantages in website development. Explain how the following advantages are realized through application of JavaScript.

  i. Minimalized server interaction

[2 marks]

  ii. Richer, user-friendly interfaces

[2 marks]

g. Write a simple JavaScript code that will display the statement "Hello World" in a browser. Include a comment in your code.

[4 marks]

h. Write a JavaScript code that computes the value of variable z, where $z=x+y$, and display in a browser. The variables x, y, and z can be assigned different values.

[8 marks]

# QUESTION FIVE [20 MARKS]

a. Explain Document Object Model as used in website development.          [4 marks]

b. With the object model, JavaScript gets all the power it needs to create dynamic HTML. Explain three types of content of a web page that JavaScript can change in the process of creating dynamic HTML.          [6 marks]

c. Briefly discuss HTML DOM          [5 marks]

d. Describe the DOM Programming Interface.          [5 marks]