

CS



*(Knowledge for Development)*

**KIBABII UNIVERSITY**

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**UNIVERSITY EXAMINATIONS  
2020/2021 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS  
YEAR THREE SEMESTER ONE EXAMINATIONS**

**FOR THE DEGREE OF  
BACHELOR OF SCIENCE  
(INFORMATION TECHNOLOGY)**

**COURSE CODE : BIT 312/CSC363E**  
**COURSE TITLE : WEB TECHNOLOGIES II/  
WEB DESIGN**

**DATE: 13/07/2021**

**TIME: 2.00 PM- 4.00 PM**

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**INSTRUCTIONS TO CANDIDATES**

**ANSWER QUESTIONS ONE AND ANY OTHER TWO.**

### QUESTION ONE (COMPULSORY) [30 MARKS]

1. Which of the following tag represents an independent piece of content of a document in HTML5?  
A. section B. article C. aside D. header
2. Which of the following tag can be used to mark up a conversation in HTML5?  
A. footer B. nav C. dialog D. figure
3. \_\_\_\_\_ is not a HTML5 tag.  
A. <source> B. <video> C. <slider> D. All of the above
4. Which of the following element is used for styling HTML5 layout?  
A. CSS B. PHP C. JavaScript D. jQuery
5. \_\_\_\_\_ is the correct syntax of doctype in HTML5.  
A. </doctype html> B. <doctype html!> C. <!doctype html> D. All of the above
6. An article element contains –  
A. Text or embedded content B. Image C. Audio D. None
7. The default character encoding in HTML5 is.  
A) UTF-16 B) UTF-32 C) UTF-8 D) ISO-8859-1
8. Which of the following is the correct syntax for referring the external style sheet?  
A. <style src = example.css>  
B. <style src = "example.css" >  
C. <stylesheet> example.css </stylesheet>  
D. <link rel="stylesheet" type="text/css" href="example.css">
9. The HTML attribute used to define the inline styles is -  
A. style B. styles C. class D. None of the above
10. Which of the following is the correct syntax to make the background-color of all paragraph elements to yellow?  
A. p {background-color : yellow;} B. p {background-color : #yellow;}  
C. all {background-color : yellow;} D. all p {background-color : #yellow;}
11. Which of the following is the correct syntax to display the hyperlinks without any underline?  
A. a {text-decoration : underline;} B. a {decoration : no-underline;}  
C. a {text-decoration : none;} D None of the above
12. Which of the following property is used as the shorthand property of margin properties?  
A. margin-left B. margin-right C. margin D. None of the above
13. The CSS property used to specify the transparency of an element is -

- A. opacity B. filter C. visibility D. overlay
14. Which of the following syntax is correct in CSS to make each word of a sentence start with a capital letter?  
 A. text-style : capital; B. transform : capitalize;  
 C. text-transform : capital; D. text-transform : capitalize;
15. If we want define style for an unique element, then which css selector will we use ?  
 A. Id B. text C. class D.name
16. To make your website mobile friendly, you can make your website  
 A. Responsive B. Reactive C. Fast Loading D. Light
17. What is WordPress  
 A. It is a software used to press text B. It is a text formatting software  
 C. It is a CMS (Content Management System) D. It is mail service
18. Which of the following is true about JavaScript  
 A. It is a server side scripting language B. It is client side scripting language  
 C. It is a Software D. d) It is a database
19. When users are involved in complex tasks, the demand on \_\_\_\_\_ can be significant.  
 A. short-term memory B. shortcuts  
 C. objects that appear on the screen D. all of the mentioned
20. Which type of JavaScript language is \_\_\_\_  
 A. Object-Oriented B. Object-Based C. Assembly-language D. High-level
21. Which of the following is the correct output for the following JavaScript code:
- ```
varx=5,y=1
var obj = { x:10}
with(obj)
{
  alert(y)
}
```
- A. 1 B. Error C. 10 D. 5
22. The "function" and " var" as used in JavaScript are known as:  
 A. Keywords B. Data types C. Declaration statements D. Prototypes
23. Which of the following function of the String object returns the character in the string starting at the specified position via the specified number of characters?  
 A. slice() B. split() C. substr() D. search()
24. In JavaScript the x===y statement implies that:  
 A. Both x and y are equal in value, type and reference address as well.

- B. Both are x and y are equal in value only.  
 C. Both are equal in the value and data type.  
 D. Both are not same at all.
25. Which of the following is not JavaScript Data Types?  
 A. Undefined    B. Number    C. Boolean    D. Float
26. What is the correct syntax for referring to an external script called "LFC.js"?  
 A. `<script src="LFC.js">`                      B. `<script source="LFC.js">`  
 C. `<script ref="LFC.js">`                        D. `<script type="LFC.js">`
27. Use Experience designing is :  
 A. Deriving satisfaction from the use of technology    B. Enhancing the usability of a product  
 C. Having the best user Interface design    D. about successful and pleasurable product
28. UX design is not  
 A. Interaction design                      B. Wireframes and prototypes  
 C. Visual design                            D. Information architecture
29. UI design is not  
 A. Graphic design    B. Typography    C. Interaction design    D. Layout design
30. The basic elements that combine to create visual designs include the following except:  
 A. Lines    B. Shapes    C. Color    D. Space

### QUESTION TWO [20 MARKS]

- a. State five tasks JavaScript can perform [5 marks]  
 b. Write a JavaScript code to create an object. [3 marks]  
 c. In creating a JavaScript variable, you can use var, let and const keywords. Briefly explain the condition under which it is appropriate to use each of the keywords. [6 marks]  
 d. Write a JavaScript code that can compute the amount to be paid for buying three different items at given prices and display the prices and total on a screen. [6 marks]

### QUESTION THREE [20 MARKS]

- a. Describe the components of a CSS Style. [4 marks]  
 b. Compare and contrast Id and class selectors. [4 marks]  
 c. Explain three advantages of using CSS [4 marks]  
 d. Define web technology [2 marks]  
 e. Discuss any three web technologies. [6 marks]

#### QUESTION FOUR [20 MARKS]

- a. What is the need of mentioning `<!DOCTYPE HTML>` at the beginning of an HTML page? [2 marks]
- b. With justifications, explain motivation for development of HTML5. [4 marks]
- c. Why is the `div` tag so useful in developing HTML web pages? [4 marks]
- d. Briefly explain how to use the following HTML5 semantic tags and write HTML code for implementing them. [10 marks]
  - i. Header
  - ii. Section
  - iii. Article
  - iv. Aside
  - v. Footer
- e. Using HTML code example, differentiate between `DIV` and `SPAN` in HTML?

#### QUESTION FIVE [20 MARKS]

- a. Compare and contrast UI and UX design [8 marks]
- b. Briefly discuss web Information Architecture. [Hint: what, why, how of IA] [6 marks]
- c. Discuss the best Practices for designing a website interface. [6 marks]