

kasneb

DICT LEVEL III

PRINCIPLES OF WEB DEVELOPMENT

TUESDAY: 28 November 2017.

Time Allowed: 3 hours.

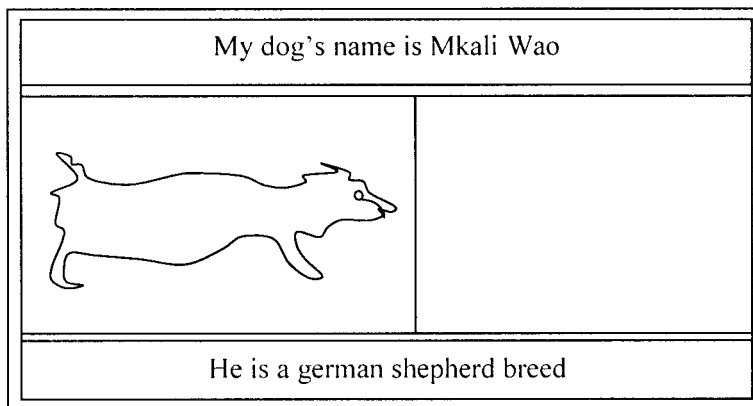
Answer ALL questions. Marks allocated to each question are shown at the end of the question.

QUESTION ONE

(a) Describe each of the following applications that are delivered through the World Wide Web (www) platform:

- (i) Hypermedia. (2 marks)
- (ii) Web application. (2 marks)
- (iii) Web software. (2 marks)

(b) (i) Write HTML code that would render the diagram below after execution:



(6 marks)

- (ii) Write HTML code that would make the above table invisible if incorporated in the code written in (b) (i) above. (2 marks)
- (iii) Indicate the code that you would use such that when "german shepherd" is clicked, a user is hyperlinked to the website <http://www.atftc.com>. (2 marks)

(c) Describe four procedures that one should consider when planning to build a website.

(4 marks)

(Total: 20 marks)

QUESTION TWO

(a) Show the type of output that will be displayed once the following code is rendered on a browser:

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<HTML>
<TITLE> Choose your age </TITLE>
<H1> RADIO BUTTONS </H1>
<P> How old are you? </P>
<OL>
  <LI> <INPUT TYPE = "radio" NAME = "age" VALUE =
    "Under 24" checked > Under 24 </LI>
  <LI> <INPUT TYPE = "radio" NAME = "age" VALUE = "25 - 34">
    25 - 34 </LI>
  <LI> <INPUT TYPE = "radio" NAME = "age" VALUE = "35 - 44">
    35 - 44 </LI>
  <LI> <INPUT TYPE = "radio" NAME = "age" VALUE = "over 45">
    45 + </LI>
</OL>
</HTML>

```

(6 marks)

- (b) With the aid of examples, demonstrate three ways in which style sheets can be inserted into HTML. (6 marks)
- (c) Interpret the usage of the following markup and media elements added into HTML:
- (i) <article> (1 mark)
 - (ii) <progress> (1 mark)
 - (iii) <source> (1 mark)
 - (iv) <embed> (1 mark)
- (d) Citing two options, describe “visibility” in the context of Dreamweaver web development software tool. (4 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Describe three common image formats used on the web. (6 marks)
- (b) Highlight three common attributes of an tag. (3 marks)
- (c) A web developer has created a page named “fruits.html” in Dreamweaver application. He wishes to include an image named “Orange.jpg” on the page.

Required:

Enumerate three steps in which the web developer could accomplish the above task. (3 marks)

- (d) The content area of a website contains content which is multifaceted. Rules must therefore be formulated to ease user navigation.

Required:

Discuss four ways in which a web developer could ensure ease of navigation within a website. (8 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Highlight four reasons why it is necessary for most applications on the web to support plug-ins. (4 marks)
- (b) A Dreamweaver user has four layers containing text, bitmap image and two 2-D shapes respectively. He intends to create a mask where the bitmap is masked by the text and one 2D shape is masked by the other 2D shape.

Required:

Summarise the steps the user could follow in order to accomplish the above task. (4 marks)

- (c) Enumerate the internal process followed in a web client-server interaction from the moment a user enters a uniform resource locator (URL) to the moment the requested information is displayed on your computer in form of a web page. (4 marks)
- (d) Outline the steps followed in creating frames in Dreamweaver application. (4 marks)
- (e) When you create a database connection, Dreamweaver stores the connection in an include file contained in the connections subfolder of the site’s local root folder. You could then edit or delete the connection information in the file manually.

Required:

Show how to edit and delete this connection. (4 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Explain the functions of the following HTML elements:
- (i) Head. (2 marks)
 - (ii) Body. (2 marks)
 - (iii) Form. (2 marks)

(b) State four examples of the common browsers in the market today. (4 marks)

(c) Write HTML code to display the information shown below on a web page:

Please select every sport that you play.

Soccer:	<input type="checkbox"/>	} Checkboxes
Football:	<input type="checkbox"/>	
Baseball:	<input type="checkbox"/>	
Basketball:	<input type="checkbox"/>	

(6 marks)

(d) With the aid of an example, explain each of the following categories of HTML elements:

(i) Block-level elements. (2 marks)

(ii) Text-level elements. (2 marks)

(Total: 20 marks)

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