

# KASNEB

## CICT PART II SECTION 4

### WEB DESIGN AND e-COMMERCE

FRIDAY: 25 November 2016.

Time Allowed: 3 hours.

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

#### QUESTION ONE

- (a) Explain the application of e-commerce in the following fields:
- (i) Home banking. (2 marks)
  - (ii) Home entertainment.. (2 marks)
  - (iii) Electronic cash (e-cash). (2 marks)
  - (iv) Electronic cheques (e-cheques). (2 marks)
- (b) Discuss six advantages of having e-commerce over extranets. (6 marks)
- (c) With the aid of a table, describe the six service layers of cloud computing. (6 marks)
- (Total: 20 marks)**

#### QUESTION TWO

- (a) Highlight three ways in which JavaScript code could be added to HTML elements. (3 marks)
- (b) Analyse four advantages of XML over HTML. (8 marks)
- (c) Write JavaScript code to execute the following tasks:
- (i) Calculate the product of two numbers and return the result. (3 marks)
  - (ii) Define an object with an object literal. (3 marks)
  - (iii) Illustrate how to set up a cookie. (3 marks)
- (Total: 20 marks)**

#### QUESTION THREE

- (a) Differentiate between “graphics design” and “web design”. (4 marks)
- (b) Write a simple HTML document that will display a photo named “myhouse.png” on a 304px by 228px screen. (4 marks)
- (c) You have an external script named “script.js” with the following code:

```
Function Hello ( )  
{  
    alert (“Hello my dear friends.”);  
}
```

**Required:**

Create an HTML document that will connect to the above script when a button is clicked from the browser. (6 marks)

- (d) Write HTML code that renders the table below when run on a browser:

First name	Last name
Mary	Wafula
Moses	Okolli
Richard	Wambua
Jane	Kiprono

(6 marks)  
**(Total: 20 marks)**

**QUESTION FOUR**

(a) Write HTML code that displays the web page shown below:

Person's Information

First name	<input type="text"/>
Age	<input type="text"/>
Phone number	<input type="text"/>

  

Academic Qualifications

Academic achievement:	Bachelors <input type="button" value="v"/>
Degree taken:	<div style="border: 1px solid black; padding: 5px;">B.Sc. Computing B.Sc. Mathematics B.Sc. Information</div>
Skills:	<input type="checkbox"/> Programming <input type="checkbox"/> Management

          

Ensure that academic achievement is selected from a drop down list. (14 marks)

(b) Create a PHP script for creating a MySQL database. (6 marks)  
**(Total: 20 marks)**

**QUESTION FIVE**

(a) Paul Mwiti has been tasked to provide guided navigation during the design of a website for a customer.

- (i) Explain to Paul Mwiti the meaning of the term "guided navigation". (2 marks)
- (ii) Distinguish between "familiar navigation" and "primary navigation". (4 marks)

(b) You are employed in a software development company that specialises in the development of web applications.  
Explain five ways in which you could optimise the performance of web applications. (10 marks)

(c) E-commerce is a growing technology adopted around the world.  
Highlight four technological limitations of the adoption of e-commerce in developing countries. (4 marks)  
**(Total: 20 marks)**

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