



CICT PART II SECTION 4

WEB DESIGN AND e-COMMERCE

MONDAY: 30 November 2020.

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 output of the following JavaScript code:

```
(i)  Var X = {Foo:1};
     Var output = Function ()
     {
         delete X.foo ;
         return X.foo ;
     }
     ) ();
     Console.Log (output);
```

(3 marks)

```
(ii) Var Employee =
     {
         Company : 'xyz'
     }
     Var Emp1 = Object.create (employee);
     delete Emp1.company console.log (emp1.company);
```

(3 marks)

(b) Discuss six components necessary for creating a business model for e-commerce.

(6 marks)

(c) Explain four types of testing used during website development.

(4 marks)

(d) Write HTML and JavaScript code to illustrate how to set the focus to the first field in form named "myform".

(4 marks)

(Total: 20 marks)

QUESTION TWO

(a) With the aid of an example in each case, identify four methods of establishing data connection to an internet service provider (ISP). (4 marks)

(b) (i) A function is required to be embedded on a school portal to enable the teachers to record marks for continuous assessment tests (CATs).

The program should carry out the following tasks:

- Read three numbers input for the 3 CATs into an HTML form.
- Output the total marks.
- Calculate the average mark.
- Output the average of the three marks as a real number.

Required:

Write a JavaScript function to execute the above tasks.

(4 marks)

- (ii) Write a JavaScript program to display two buttons; one labelled "In The Morning" and the other labelled "In The Evening".

Ensure that when you click on any of the buttons, a function will be called and an alert would be displayed based on what has been clicked either as "Good morning" or "Good Evening". (4 marks)

- (c) Write CSS code for animation that appears when a file is loaded into a browser. A green circle should appear in the upper left corner of your browser. As soon as the page loads, the circle moves 600 pixels to the right, jumps back to the upper left corner, slides to the right again, and repeats a third time before finally returning to the upper-left corner and stopping. (8 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Explain four limitations of e-commerce that are specific to a business organisation. (4 marks)

- (b) (i) Business to business (B2B) is a major and valuable model of e-commerce.

Using examples, demonstrate the various applications that may be undertaken through B2B.

(4 marks)

- (ii) Mwenda Salama Investment Company wishes to adopt electronic commerce and transform into a digital store.

Using your position as their main consultant, advise the company on four factors that must be taken into consideration while preparing to launch the website. (4 marks)

- (c) Create the following table using internal cascading style sheets for formatting and HTML for content-presentation:

Are you stuck in the middle of nowhere?

Call this guy please!

Name	Telephone	
Matano Mane	0712565	0722005

(8 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Analyse four values of the cascading style sheets (CSS) animation direction property. (8 marks)

- (b) Consider the HTML code below:

```
<!DOCTYPE html>
<html>
<frameset cols = "25%, *, 25%">
<frame src = "frame_a.html">
<frame src = "frame_b.html">
<frame src = "frame_c.html">
</frameset>
</html>
```

Required:

- (i) Sketch the nature of browser output that a user may observe when the code is parsed. (4 marks)

- (ii) Executing the code in HTML5 produces an error message that frames and framesets are not supported.

Rewrite the code such that it could execute properly in HTML5.

(8 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Discuss six benefits of using software as a service (SaaS) cloud computing model for hosting e-commerce applications. (6 marks)
- (b) Identify six key security threats in an e-commerce environment. (6 marks)
- (c) Write HTML code that will render the customer feedback form below on a web browser:

Feedback

How was your experience?

Good

Average

Bad

Which of the following services would you like us to improve?

Time management

Consumer services

(8 marks)
(Total: 20 marks)

access thousands of free content on www.freekcepastpapers.com