

KASNEB

CICT PART II SECTION 4

WEB DESIGN AND e-COMMERCE

FRIDAY: 27 May 2016.

Time Allowed: 3 hours.

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

QUESTION ONE

- (a) Hyper Text Markup Language (HTML) has steadily grown from HTML+, HTML2, HTML4 to the current HTML5.
Describe four structural components that have been introduced into HTML 5. (8 marks)
- (b) In the context of web design, explain the following terms:
- (i) Graphics Interchange Format (GIF). (2 marks)
 - (ii) Joint Photographic Expert Group (JPEG). (2 marks)
 - (iii) Portable Network Graphics (PNG). (2 marks)
- (c) Using an appropriate example, discuss three standard JavaScript pop-up boxes. (6 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) Creating dynamic websites inevitably includes the use of one or more plug-ins.
With reference to the above statement,
- (i) Explain the meaning of the term "plug-in". (2 marks)
 - (ii) List two common browser plug-ins. (2 marks)
- (b) Analyse four e-commerce revenue models. (8 marks)
- (c) You are required to insert a flash movie into a website you are designing.
Required:
- (i) Explain how, from the flash program, you would prepare the flash movie for embedding into your website. (4 marks)
 - (ii) Write HTML code to embed the flash movie into your website. (4 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Describe the following terms in the context of the development of HTML.
- (i) Semantic HTML. (2 marks)
 - (ii) DOCTYPE. (2 marks)
- (b) Using an HTML code snippet in each case, contrast between HTML tags that would be used to link the following objects:
- (i) Image. (2 marks)
 - (ii) Website. (2 marks)
 - (iii) e-mail. (2 marks)

- (c) Differentiate between “<div>” and “<frame>” tags as used in HTML during website development. (4 marks)
 - (d) Distinguish between web page authoring tools and HTML editors. (4 marks)
 - (e) Explain the reason why hyperlinks or images might not display correctly on loading a website. (2 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) (i) One of the current issues with respect to e-commerce is “security risks”. Despite this being the case, most people are still reluctant to implement stronger security infrastructures.
Suggest two reasons for this reluctance. (2 marks)
- (ii) Discuss why e-commerce servers tend to be at a higher echelon with regard to risk and subsequent attacks. (4 marks)
- (b) Describe the following types of animations:
 - (i) 2-D animations. (2 marks)
 - (ii) 3-D animations. (2 marks)
- (c) Highlight four features of e-commerce. (4 marks)
- (d) Write HTML code to create the form below:

Personal Information:

First name:

Last name:

Submit

(6 marks)
(Total: 20 marks)

QUESTION FIVE

- (a) Platform as a Service (PAAS) has emerged from a confluence of two trends; the suboptimal nature of Infrastructure as a Service (IAAS) for cloud computing and the evolution of web applications.
Required:
 - (i) In relation to developing a website, outline six functions of Platform as a Service (PAAS). (6 marks)
 - (ii) Distinguish between cloud computing and service oriented architecture (SOA). (4 marks)
- (b) Using the cascading style sheets (CSS) float property, write HTML code that would make an image float to the right or to the left of text. (6 marks)
- (c) Write HTML code that would render the list shown below:

Simple Ordered List

Choice of Beverage for Breakfast:

1. Coffee
2. Tea
3. Milk

(4 marks)
(Total: 20 marks)