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# AFRICA NAZARENE UNIVERSITY

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**CENTRE:** RONGAI  
**DEPARTMENT:** COMPUTER SCIENCE  
**UNIT TITLE:** INTRODUCTION TO WEB DESIGN AND DEVELOPMENT  
**UNIT CODE:** CSC 103  
**LECTURER:** JAMES OBUHUMA  
**TRIMESTER:** 2<sup>ND</sup> TRIMESTER 2014/2015  
**DATE:** 7<sup>TH</sup> APRIL, 2015  
**TIME:** 9.00AM – 12 NOON

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**Instructions:**

1. Answer question **ONE (Compulsory)** and any other **TWO** questions.
2. Write all your answers in the answer booklet provided.
3. Time allowed: Three hours.

**Question One: [30 Marks] - Compulsory**

- a) Give the role of the following terms with reference to the Internet and the Web:
- i) ICANN [2 Marks]
  - ii) W3C [2 Marks]
- b) Identify and explain any **three** reasons why HTML5 gaining more application in the current Internet World compared to earlier HTML versions. [3 Marks]
- c) Identify the **three** sections that form the URL www.cnn.com. [3 Marks]
- d) Consider the HTML <div> tag:
- i) What is its main role? [2 Marks]
  - ii) Why is the <div> not necessary in HTML5? [2 Marks]
- e) Differentiate between:
- i) Cellpadding and cellspacing [2 Marks]
  - ii) Colspan and Rowspan [2 Marks]
- f) Code an ordered list that uses lowercase roman numerals that starts at 9 and contains three elements. [3 Marks]
- g) Code a JavaScript that prompts a user to type the radius value after which it outputs the Perimeter of a circle through an alert message. [5 Marks]
- h) HTML5 provides better facilities for embedding video and audio files on web applications. Explain with a code snippet for achieving this. [4 Marks]

**Question Two: [15 Marks]**

- a) Write the HTML5 code for the following web page. Use an embedded CSS.

[10 Marks]

## Africa Nazarene University

|   |   |
|---|---|
| <p>Home</p> <p>About Us</p> <p>Programs</p> | <p><b>Home</b></p> <p>Africa Nazarene University is a member of the worldwide family of Nazarene institutions founded on the same principles - the development of students in a strong spiritual environment.</p> <p>ANU offers a well-rounded, holistic education to help members establish themselves in three important areas:</p> |
|---|---|

- b) Differentiate between Web 1.0 and Web 2.0 stating examples in each case. [5 Marks]

**Question Three: [15 Marks]**

- a) With reference to the Client-Server Model:
- i) With the aid of a diagram, discuss the model with respect to web-based applications. [4 Marks]
  - ii) State and explain the role of any **two** protocols used in the model. [4 Marks]
- b) With reference to the Domain Name System:
- i) What is its role? [2 Marks]
  - ii) With the aid of a diagram, explain how it works. [5 Marks]

**Question Four: [15 Marks]**

- a) The <canvas > tag is one of the flexibility features in HTML5:
- i) What is its role? [2 Marks]
  - ii) Using the <canvas> tag and JavaScript, write a code that draws a circle on a canvas. [7 Marks]
- b) Use an 'if' statement to display of the statement "Good Morning" if the time on your browser is less than 12:00 otherwise it display the statement "Good Afternoon" [6 Marks]

**Question Five: [15 Marks]**

Consider the following form:

**Suggestion Form**

Name:

Programme:            BBIT             BSC

Gender:                Male             Female

Suggestion:

Send

Clear Form

- a) Write the html5 code for the form. Use html5 field validation options.
- b) Write the html5 code for the form. Use JavaScript for field validation.

**[7 Marks]**

**[8 Marks]**