



# AFRICA NAZARENE

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# UNIVERSITY

## DISTANCE LEARNING

**CENTRE:** RONGAI  
**DEPARTMENT:** COMPUTER SCIENCE  
**UNIT TITLE:** INTRODUCTION TO WEB DESIGN AND DEVELOPMENT.  
**UNIT CODE:** CSC 103  
**LECTURER:** OBUHUMA JAMES  
**TRIMESTER:** 1<sup>ST</sup> TRIMESTER 2015/2016  
**DATE:** 7<sup>TH</sup> DECEMBER, 2015  
**TIME:** 9.00AM – 12 NOON

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**Instructions:**

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

### Question One [30 Marks]

a) Consider a <meta> tag a HTML file:

- Where is it placed in the HTML file? [1 Mark]
- With clear code snippets, state any two roles of the <meta> tag. [4 Marks]

b) What is the role of the <div> tag? [2 Marks]

c) Give the role of the following Internet Standards and Coordination organisations:

- Internet Society [2 Marks]
- ICANN [2 Marks]
- W3C [2 Marks]

d) Identify the sections that form the URL <http://www.safaricom.com>. [4 Marks]

e) Write the HTML5 code that will produce the following list:

- Web design is an interesting course.
- The following are my classmates:

- James
- John
- Mark [4 Marks]

f) Code a JavaScript that prompts a user to type the radius value after which it outputs the Area of a circle through an alert message. [5 Marks]

g) Assume you have an audio file “gospel.mp3”. Using an appropriate code snippet, explain how the file could be embedded on a web page. [4 Marks]

### Question Two [15 Marks]

Write the HTML5 code for the following web page. Use an embedded CSS. [15 Marks]

**Africa Nazarene University**

**Home**

**About Us**

**Programs**

**Home**

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.

ANU offers a well-rounded, holistic education to help members establish themselves in three important areas:

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### **Question Three [15 Marks]**

a) With reference to the Client-Server Model

- With the aid of a diagram, discuss the model with respect to web-based applications. [4 Marks]
- State and explain the role of any two protocols used in the model. [4 Marks]

b) With reference to the Domain Name System:

- What is its role? [2 Marks]
- 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:

- What is its role? [2 Marks]
- 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 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]**

a) Consider the following form:

**Suggestion Form**

Name:

Programme: BBIT  BSC

Gender: Male  Female

**Send** **Clear Form**

- Write the html5 code for the form using html5 field validation options. [7 Marks]
- Rewrite the html5 code for the form using JavaScript for field validation. [8 Marks]

