AFRICA NAZARENE
UNIVERSITY

CENTRE:	RONGAI
DEPARTMENT:	COMPUTER SCIENCE
UNIT TITLE:	INTRODUCTION TO WEB DESIGN AND DEVELOPMENT
UNIT CODE:	CSC 103
LECTURER:	OBUHUMA JAMES.
TRIMESTER:	1ST TRIMESTER 2015/2016
DATE:	4TH DECEMBER, 2015
TIME:	2.00PM – 5:00PM

Instructions:

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

Question One [30 Marks]

a) Consider a doctype statement in an HTML file:

   i) Where is it placed in the HTML file? **[1 Mark]**

   ii) What is its purpose? **[2 Mark]**

b) Differentiate between the following terms with respect to the Internet and the Web:

   i) Intranet and Extranet **[2 Marks]**

   ii) LAN and WAN **[2 Marks]**

c) Identify the various sections that form the URL http://www.cnn.com. **[4 Marks]**

d) HTML5 offers 6 elements critical for page layout management. State and explain the role of any three of the six elements. **[6 Marks]**

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

   ▪ Web design is an interesting course.

   ▪ The following are my classmates:

      D. James

      E. John

      F. Mark **[4 Marks]**

f) 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]**

g) Assume you have a video file "cartoon.mp4". 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   **Home**

Programs

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:

Question Three [15 Marks]

a) You have been contracted to design, develop then publish a website for a start-up ICT Company that offers ICT services including sale of ICT equipment. Using the System Development LifeCycle's (SDLC) main phases, discuss what activities you will undertake at every phase.

[10 Marks]

b) With the aid of a diagram, discuss the client/server model with respect to web-based applications.

[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]

a) Consider the following form:

i) Write the html5 code for the form using html5 field validation options. [7 Marks]

ii) Rewrite the html5 code for the form using JavaScript for field validation. [8 Marks]