



COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

NCSC205 INTERMEDIATE WEB APPLICATION DEVELOPMENT

END OF SECOND SEMESTER EXAMINATIONS

NOVEMBER/DECEMBER 2019

LECTURER: MR MAGWAGWA

DURATION: 3 HRS

INSTRUCTIONS

You are required to answer questions as instructed in each section

Start **each** question on a new page in your answer booklet

Answer all questions in **Section A**

Answer any **TWO (2)** questions from **Section B**

Credit will be awarded for logical, systematic and neat presentations

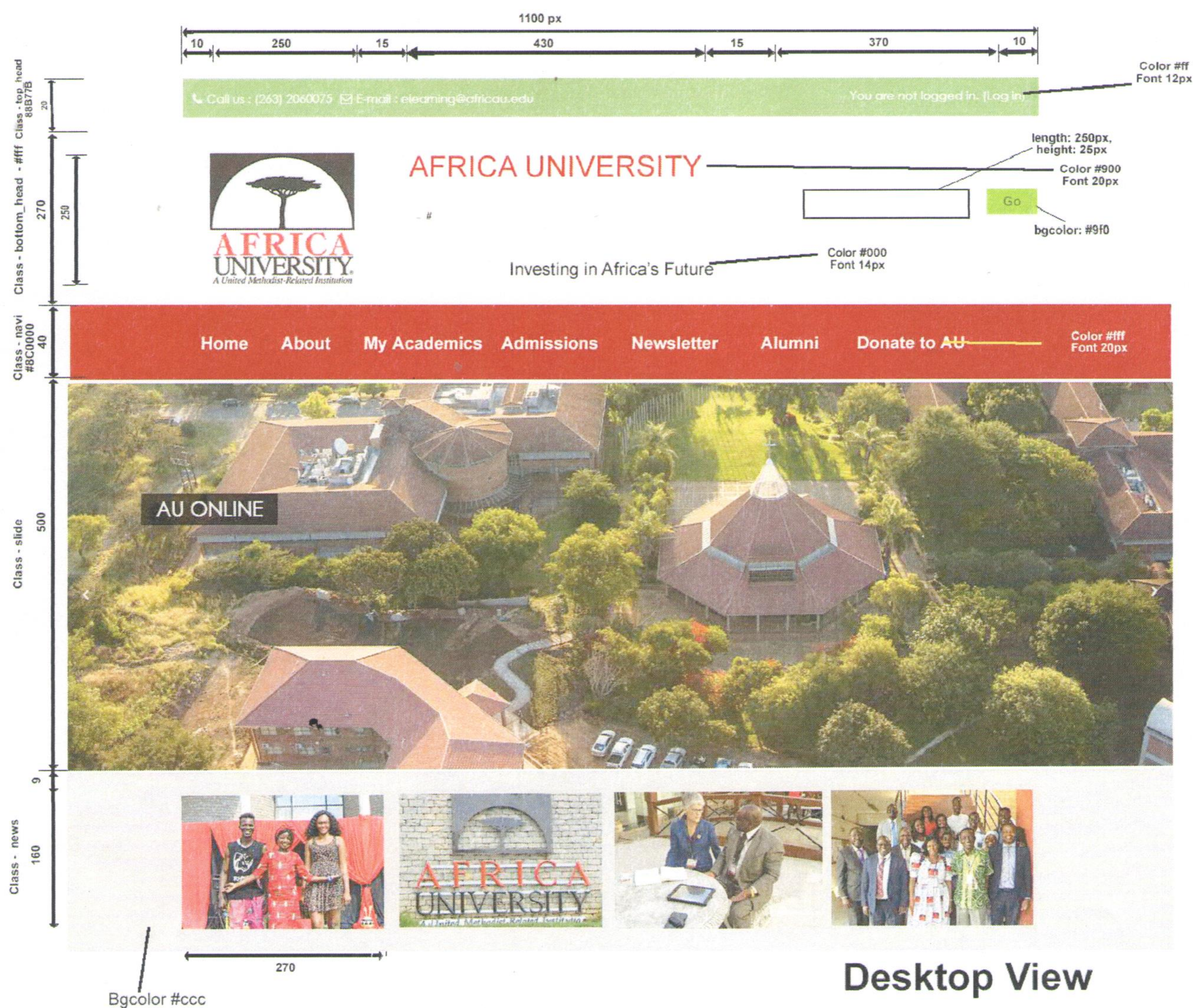
SECTION A

Question 1

Africa University is redesigning their website. The below image is the proposed design. Produce the Homepage HTML5 and CSS3 code for the page. Use a separate CSS to the index file and the name of the CSS is style.css. Use the font sizes, width and colors indicated at the edge of the image.

Please not you are expected to create desktop and mobile views

[40 Marks]



Additional information:

Main image should cover the inter-screen

Menu bar should also cover the inter-screen

Top-head class should be hidden in mobile view

logo - logo.png

Main image - slide.jpg

Smaller images – 1.jpg, 2.jpg, 3.jpg, 4.jpg

Padding on menu links - 15px

body font size is 14px

Links/ Menu

Home - index.html; About - about.html; Admissions - admissions.html; Newsletter - newsletter.html

Alumni - alumni.html; My Academics - academics.html; Donate to AU – donate.html; Login – login.php

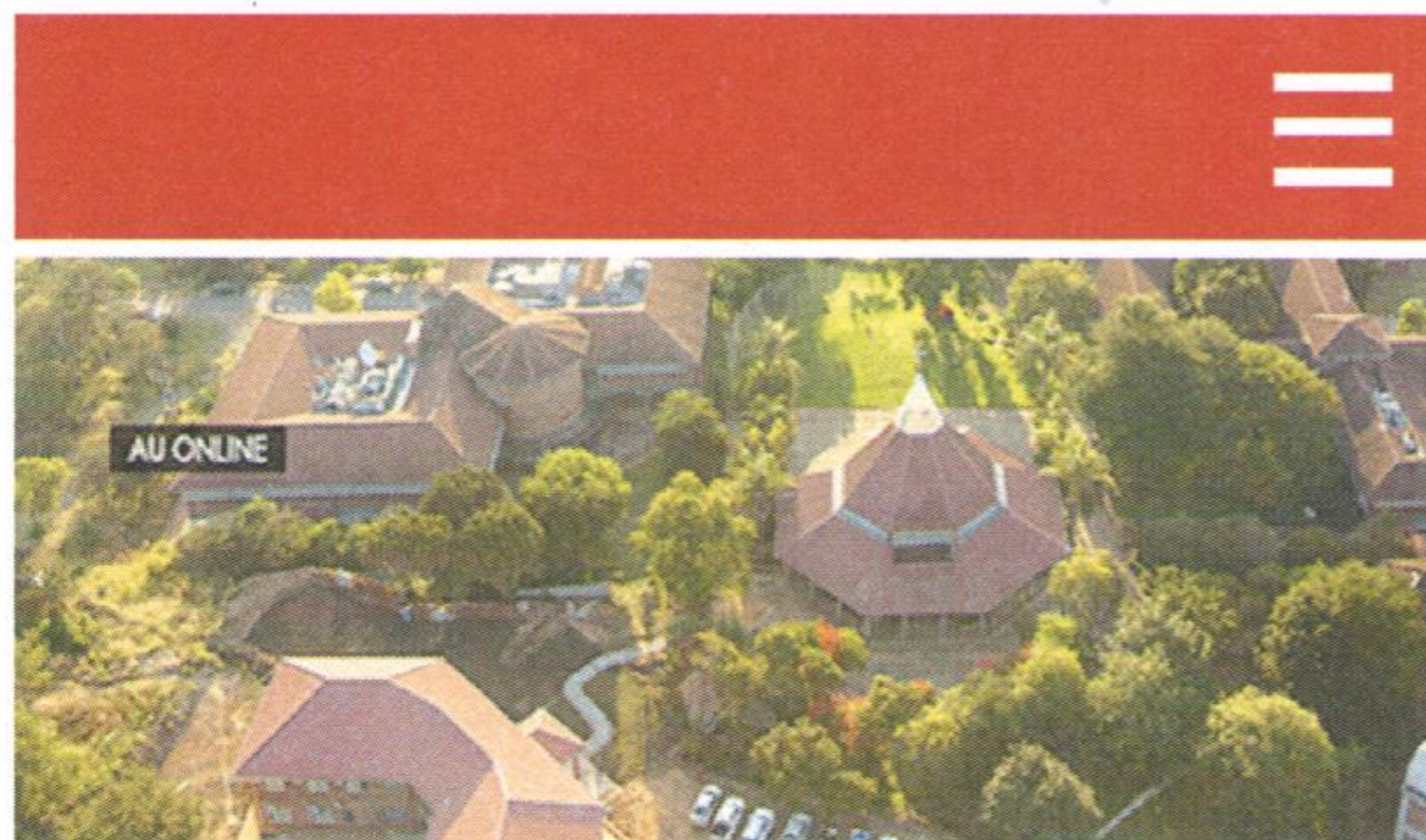


AFRICA UNIVERSITY

Investing in Africa's Future

Go

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Mobile View

Question 2

Explain the following line of Code

a) `alert("Hello! I am an alert box!!");`

[3 Marks]

b) `var person = prompt("Please enter your name", "Harry Potter");`

```
if (person == null || person == "") {  
    txt = "User cancelled the prompt.";  
} else {  
    txt = "Hello " + person + "! How are you today?";  
}
```

[3 Marks]

c) `$result = $conn->query($sql);`

`$row = $result->fetch_assoc();`

[3 Marks]

d) `$sql = "UPDATE username`

`SET name='$name', username='$username', password='$password', modified=NOW()`

`WHERE Id='$id'"`

[3 Marks]

e) `$name=$_POST["name"];`

`$password=$_POST["password"];`

[2 Marks]

Question 3

Create a simple form that accepts name, email and age. The form should have validation which accepts only the data mentioned.

[6 Marks]

SECTION B

Question 4

a) What is md5 encryption? Provide code snippet of implementing md5 encryption in PHP

[3 Marks]

b) Write PHP code that can calculate the sum, product and difference of two numbers

[7 Marks]

c) Define and explain any 4 (Four) drawing systems you know

[10 Marks]

Question 5

- a) What is a Content Management System(CMS), Identify 3 examples of them [5 Marks]
- b) Differentiate between Grey hat and Black hat search engine techniques? [10 Marks]
- c) Identify and Explain **any** Four(4) reason why we validate code [5 Marks]

Question 6

- a) What is an array? Show how you can store and retrieve from it using a for loop [5 Marks]
- b) Define and Explain the terms **placement, optimization, page ranking, indexing** and **crawling** in terms of Search Engine Optimization [10 Marks]
- c) Compare and Contrast Search Engine Optimization and Search Engine Marketing [5 Marks]