



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2017/2018 ACADEMIC YEAR

THIRD YEAR SECOND SEMESTER

**SCHOOL OF SCIENCE AND INFORMATION SCIENCES
BACHELOR OF SCIENCE IN INFORMATION SCIENCE**

COURSE CODE: INS 301

COURSE TITLE: WEB DESIGN AND DEVELOPMENT

DATE: 20TH APRIL, 2018

TIME: 8:30AM - 10:30AM

INSTRUCTIONS TO CANDIDATES

- a) *Answer question ONE (compulsory) and any other TWO questions.*
- b) *Question one carries 30 marks*
- c) *All other questions carry 20marks*
- d) *Mobile Phone is not allowed in the exam room*

SECTION A (COMPULSORY – this section carries 30 Marks)

QUESTION ONE.

- a) Expand each of the following acronyms and briefly explain their purpose: (5 Marks)
- i. HTML
 - ii. CCTLD
 - iii. HTTP
 - iv. CSS
 - v. DNS (5 Marks)
- b) Distinguish between the following
- i. Domain name and URL. (2 Marks)
- c) Explain how can you integrate a CSS file to your webpage (2 Marks)
- d) Describe **FIVE** ways to reduce a web page load time. (5 Marks)
- e) Consider the XHTML and write codes to will implement the use of ordered list that are embedded in PHP (10 Marks)

SECTION B- EACH QUESTION CARRIES 20 MARKS)

QUESTION TWO

- e) In relation to Cascading Style Sheets (CSS), briefly state what each of the following terms refer to: (5mks)
- i. Selector
 - ii. Property
 - iii. Value
 - iv. Id
 - v. Class
- f) Briefly describe **three** methods you would use to ensure that your website is SEO friendly. (3mks)
- g) Briefly discuss the steps you would take if you wanted to design a personal website up until it is finally published. (8mks)
- h) Write HTML that display an image that when clicked will link to a search engine of your choice. (4mks)

QUESTION THREE

- a) The terms Internet and World Wide Web are frequently used as if they are the same thing. Give a definition for each term that makes the distinction clear. **(4mks)**
- b) Compare and contrast HTML and HTML5? **(2mks)**
- c) There exist at least twelve principles of a good web design. Describe at least **Four**. **(8mks)**
- d) Write a CSS rule that would change the font in all paragraph elements to Arial and the colour of the font to red. **(6mks)**

QUESTION FOUR

- a) Consider the CSS style sheet below and identify FIVE errors in it (*line numbers have been added to ease making reference to the code in your answers*) **(5mks)**

```
1 html {
2 color: #000;
3 font-size: 1em;
4 line-height: 1.2;
5 }
6
7 h1 {
8 font-family: sans-serif;
9 font-size: 2em;
10 color: #fff;
11 background-color: #494;
12 min-height: 250px;
13 }
14
15 h2 {
16 font-family: sans-serif;
17 font-size: 1.25em;
18 }
19
```

```
20 p
21 font-family= serif;
22
23
24 A {
25 color: #494;
26 text-decoration: underline;
27 }
28
29 a:hover {
30 color: 7c7;
31 text-decoration: none;
32 }
33
34 a active {
35 color: #7c7;
36 text-decoration: none;
37 }
```

b) In relation to Web authoring, expand each of the following terms, as necessary and describe the role they play:

- a) HTML
- b) CSS
- c) JavaScript
- d) PHP
- e) MySQL

(5mks)

c) Show the relationship between the technologies in part a) using a sketch of a client-server model that shows where each of the above technologies reside and the connections between them.

(10mks)

END//