



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS  
2018/2019 ACADEMIC YEAR**

**SCHOOL OF SCIENCE AND INFORMATION  
SCIENCES**

**DEPARTMENT OF COMPUTING AND  
INFORMATION SCIENCES**

**FOURTH YEAR FIRST SEMESTER  
EXAMINATION  
FOR DEGREE IN COMPUTER SCIENCE**

**COURSE CODE: COM - 432**

**COURSE TITLE: WEBSITE DESIGN TECHNOLOGIES**

**DATE: 4<sup>TH</sup> DECEMBER, 2018**

**TIME: 0830 - 1030 HRS**

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**Instructions:**

Answer **ALL** questions from **section A** and **TWO** other questions from **section B**.  
The marks given in brackets are indicative of the weight given to each part of the question.

*This paper consists of 2 printed pages. Please turn over.*

### QUESTION ONE [30 MARKS]

- a. Define an API and how does it relate to HTML5 [2 marks]
- b. List three significant differences between XHTML and HTML. [3 marks]
- c. Heading content is defined as including all the heading elements in HTML such as <h1>, <h2>, etc. What is the new HTML5 element included within heading content and what is its purpose? [4 marks]
- d. Define the <article> element and its role in HTML5. [4 marks]
- e. Explain how to create a table using HTML5 with appropriate example. [5 marks]
- f. Create a webpage that will be used to display a list of salespeople with their sales statistics for the years of e.g 2015, 2016, and 2017 e.tc in two categories: sales of products and sales of services. You want each of the years to be in the horizontal header, and under each year, you will have a “Products” column and a “Services” column. [8 marks]
- g. Explain the function of JavaScript object literal with appropriate example to illustrate its syntax. [9 Marks]

### QUESTION TWO [20 MARKS]

- a. Define the term “drop zone” [2 marks]
- b. Draw HTML 5 structure and discuss its elements. [8 Marks]
- c. You want to locate all the elements on your webpage that are assigned the CSS class name Hidden. Provide the jQuery statement to use. [5 marks]
- d. You are interested in locating all <p> elements on your webpage, so your statement is *var paragraphs = \$('p')*. Provide a line of code would confirm whether at least one element is found. [5 Marks]

### QUESTION THREE [20 MARKS]

- a. Using appropriate tools (HTML5, CSS, Java script) Design an interactive University web site that enable the students to:
  - i. Login to website
  - ii. Check the fee balance
  - iii. Register the units for the current semester
  - iv. Check last semester results

[20 marks]

### QUESTION FOUR [20 MARKS]

- a. Define the term CSS and explain its function. [4 marks]
- b. Discuss the web development trifecta [6 marks]
- c. Using “web development trifecta” design a website that display today's date using HTML5 datetime type. [5 marks]
- d. Distinguish between cookies and sessions with appropriate example. [5 marks]

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