



UNIVERSITY EXAMINATIONS

**EXAMINATION FOR SEPTEMBER/DECEMBER 2019 FOR BACHELOR/DIPLOMA
IN BUSINESS INFORMATION TECHNOLOGY / COMPUTER SCIENCE**

RCS 202/024/039: WEB DEVELOPMENT 1

DATE: 11TH DECEMBER 2019

TIME: 2 HOURS

GENERAL INSTRUCTIONS:

Students are NOT permitted to write on the examination paper during reading time.

This is a closed book examination. Text book/Reference books/notes are not permitted.

SPECIAL INSTRUCTIONS:

This examination paper consists Questions in Section A followed by section B.

Answer **Question 1 and any Other Two** questions.

QUESTIONS in ALL Sections should be answered in answer booklet(s).

- 1. PLEASE start the answer to EACH question on a NEW PAGE.**
- 2. Keep your phone(s) switched off at the front of the examination room and NOT on your person.**
- 3. Keep ALL bags and caps at the front of the examination room and DO NOT refer to ANY unauthorized material before or during the course of the examination.**
- 4. ALWAYS show your working.**
- 5. Marks indicated in parenthesis i.e. () will be awarded for clear and logical answers.**
- 6. Write your REGISTRATION No. clearly on the answer booklet(s).**
- 7. For the Questions, write the number of the question on the answer booklet(s) in the order you answered them.**
- 8. DO NOT use your PHONE as a CALCULATOR.**
- 9. YOU are ONLY ALLOWED to leave the exam room 30minutes to the end of the Exam.**
- 10. DO NOT write on the QUESTION PAPER. Use the back of your BOOKLET for any calculations or rough work.**

SECTION A (COMPULSORY)

QUESTION ONE (COMPULSORY, 30 MARKS).

- a) Differentiate empty elements and container elements using an example (4 marks)
- b) Outline the three different parts of a CSS style block. (3 marks)
- c) Explain why when building a web application one must use both sever side and client side scripting languages. (4 marks)
- d) Outline the difference between HTML, CSS and JavaScript. (2 marks)
- e) State two advantages of using CSS and two advantages of using JavaScript. (4 marks)
- f) Write down a HTML script that will include the following tags used in the correct format: video, image, table with merged columns, unordered list, break, audio (7 marks)
- g) State three advantages of HTML 5. (3 marks)
- h) Outline any three JavaScript event handlers. (3 marks)

SECTION B (OPTIONAL 2 OUT OF 4)

QUESTION TWO (20 MARKS)

- a) Write HTML code to create a form of your choice. Use at least 4 different form elements. (4 marks)
- b) State any three syntactic rules of HTML. (3 marks)
- c) Write HTML code to generate the following: (3 marks)

First Name	Last Name	Age	Residence
James	Walker	25	Nairobi
Kelly	Sharon	24	Kiambu

- d) “Bootstrap is the most popular front end framework in the recent time.” With regards to the previous statement:
 - i. What is a framework? (2 marks)

- ii. Outline three advantages of using bootstrap. (6 marks)
- e) Outline any two key components of bootstrap. (2 marks)

QUESTION THREE (20 MARKS)

- a) Describe three methods of adding style rules to HTML using examples. (9 Marks)
- b) Outline four different types of CSS selectors. (4 marks)
- c) Explain the script below: (7 marks)

```
<html>
<head>
<style>
a:link {
    color: #FF0000;
}

a:visited {
    color: #00FF00;
}

a:hover {
    color: #FF00FF;
}
a:active {
    color: #0000FF;
}
</style>
</head>
<body>

<p><b><a href="https://www.google.com" target="_blank">This is a
link</a></b></p>
</body>
</html>
```

QUESTION FOUR (20 MARKS)

- a) JavaScript can be used by a front end web developer to achieve various things. State any three. (3 marks)
- b) Write down a HTML page that has a JavaScript function called myFunction that when run displays the text “Web is Fun” inside specified paragraph that has the id “demo”.

(9 marks)

- c) Identify the three ways of implementing Java script in a web page. **(3 marks)**
- d) JavaScript can "display" data in different ways. State any three ways. **(3 marks)**
- e) Explain the following terms as used in JavaScript. **(2 marks)**
 - i. DOM
 - ii. Variable
 - iii. Loose typing

QUESTION FIVE (20 MARKS)

Outline in detail the steps necessary for installing WordPress on your PC. **(4 marks)**

a) Define the following as used in WordPress: **(4 marks)**

- i. Plugin
- ii. Theme
- iii. Widget

b) Outline the two main functionalities XAMPP provides when developing websites on your PC. **(4 marks)**

c) Explain two Content Management System (CMS) Pitfalls and Misconceptions. **(4 marks)**

d) There are two ways to start using Bootstrap 4 on your own web site. Outline the two: **(2marks)**

e) What is the importance of the following Meta tag in bootstrap? **(2 marks)**

<Meta name="viewport" content="width=device-width, initial-scale=1">