



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

SECOND YEAR FIRST SEMSTER EXAMINATION FOR

BACHELOR OF SCIENCE (MATHEMATICS AND STATISTICS)

SCO 207: WEB DEVELOPMENT

DATE: 18/8/2021

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

This paper consists of FIVE questions

*Answer question **one** and any other **two** questions in this paper*

QUESTION ONE COMPULSORY (30 MARKS)

- a) Distinguish between the following as used in web development
- i. HTML element and Attributes (2 marks)
 - ii. Server side scripting and client side scripting (2 marks)
 - iii. Static and dynamic web pages (2 marks)
- b) Explain Two merits and Two demerits of using iframes in website development (4 marks)
- c) Create a scrolling list that shows four items from the following list of personal computer processor types:
Motorola 68000, Intel 8088, Intel Pentium MMX, Intel Pentium II, Intel Pentium III,
Intel Celeron, PowerPC G3, PowerPC G4, AMD Athlon. (6 marks)
- d) A form statement is found to have the following content;

<FORM METHOD=POST ACTION="http://192.168.13.101/cgi-bin/demoapp.pl">

Explain the elements of the above statement. (4 marks)

- e) Explain Two reasons of using Cascading Style Sheets in web design (4 marks)
- f) As a web designer describe Four design issues you would consider for a web site other than aesthetic and usability ones (6 marks)

QUESTION TWO (20 MARKS)

- a) Imagine that you are constructing a website to advertise a local coach or bus company. Outline Six information items would you include on the site. (4 marks)
- b) You have been contracted to develop a website for a client. Describe Six main activities that would be involved in designing the site? (6 marks)
- c) Write HTML code that generates the following table used by at MksU to enter CAT marks for students (10 marks)

STUDENTS CATS					
REGNO.	STUD_NAME	CAT I	CAT 2	CAT 3	TOTAL/30
BIT-035-001	Mary	7	7	5	19
BIT-035-028	Mark	8	5	6	
BIT-035-014	Macdonald	6		9	20
BIT-035-009	Mercy	10	4	8	22

QUESTION THREE (20 MARKS)

- a) Justify the following statements
- JavaScript is a loosely typed language (2 marks)
 - HTML is not a programming language (2 marks)
- b) A form is an object in the document object model. Describe Four elements used in the form object and the use of each during web application development (6 marks)
- c) The internet and the web have revolutionized many aspects of human life both positively and negatively. Analyze Four negative aspects of these technologies. (6 marks)
- d) Create a HTML document that displays an alert dialogue box with the message “Welcome to my page”, immediately the page loads. (4 marks)

QUESTION FOUR (20 MARKS)

a) Explain the use of the following in HTML

i. `<sup>` (2 marks)

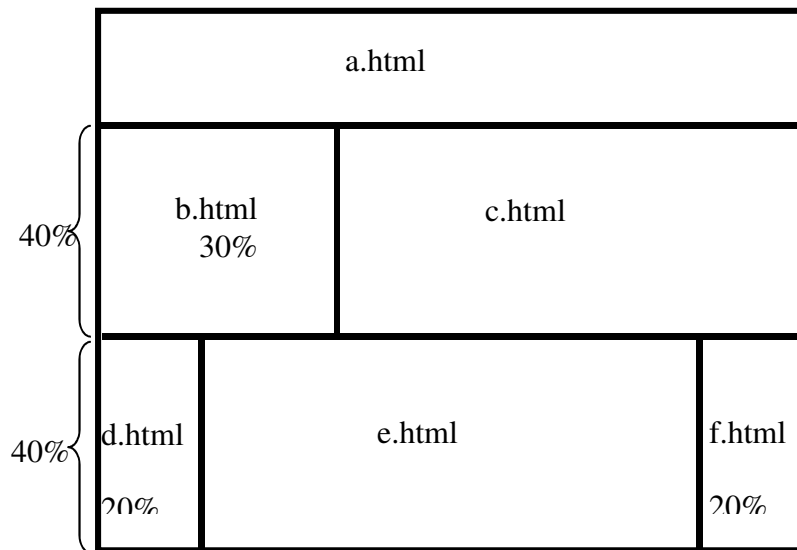
ii. `<abbr>` (2 marks)

iii. ` ` (2 marks)

iv. `<cite>` (2 marks)

v. `<hr>` (2 marks)

b) Generate code that will render the page layout below by using frames. The names of the documents to be loaded on each frame and the relative frame sizes are provided where necessary. (10 marks)



QUESTION FIVE (20 MARKS)

- a) Describe Two features for each of the following graphic formats used in web design. (4 marks)
- i. JPEG
 - ii. GIF
- b) Explain the difference between menu buttons and scrolling lists differ and how they save space on a Web page (6 marks)
- c) Generate HTML code to render the output below (10 marks)

Feedback Form

Please fill out this form to help us improve our site.

Name:

Comments:

Email Address:

Things you liked:

Site design ☐ Links ☐ Ease of use ☐ Images ☐ Source code ☐