



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR DEGREE IN:
BACHELOR OF TECHNOLOGY IN INFORAMTION TECHNOLOGY
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
(BTIT 13S – Y2 S1 & BSIT 13S – Y2 S1)

EIT 4202: WEB BASED APPLICATION PROGRAMMING

ICS 2203: INTRODUCTION TO THE INTERNET

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2014

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions. Attempt question **ONE (Compulsory)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

Question One (Compulsory)

- a) Describe the function and components of a URL (how it relates to protocols, addresses and points) **(4 marks)**
 - b) Explain **THREE** mechanisms for website development that could make website attractive **(6 marks)**
 - c) Explain **TWO** challenges in designing a site that all visitors can successfully access **(4 marks)**
 - d) Use CSS to differentiate between logic, content and presentation **(3 marks)**
 - e) List **THREE** standard image format for the web **(3 marks)**
 - f) Explain the purpose of using external style sheets **(2 marks)**
 - g) List down the font characteristics permitted in style sheets **(4 marks)**
 - h) Explain essence of using JavaScript in web development **(4 marks)**
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Question Two

- a) Explain the disadvantages of using internal CSS in HTML document (2 marks)
- b) Write a JavaScript program using for LOOP to output 10 even numbers, starting from number 15 (4 marks)
- c) Explain JavaScript functions and give the general formats of a JavaScript function: (4 marks)
- d) Explain differences between:
 - (i) Colspan and Row span
 - (ii) Cell spacing and cell padding (4 marks)
- e) Using examples, describe THREE JavaScript alert boxes (6 marks)

Question Three

- a) Explain using an example any SIX form attributes (6 marks)
- b) List the technologies that make up 'DHTML' (4 marks)
- c) Explain 'frameset' and describe its use (2 marks)
- d) Develop a web page
 - (i) That contains an image link to the next page. The image file name is pic.jpeg. Some browser do not support images replace the image with text welcome to next (name of the next page is content.htm)
 - (ii) Contain TWO links top to bottom and vice versa
 - (iii) Contain a link to a social network twitter.com (8 marks)

Question Four

- a) State and briefly explain SIX characteristics of a web programming language you would consider to use to build a web application (6 marks)
- b) Explain THREE areas in which HTML falls short as a tool for web application development (6 marks)
- c) Explain the function of the following:
 - (i) Web Server
 - (ii) Application server
 - (iii) DNS
 - (iv) Proxy server (8 marks)

Question Five

- a) Define cascading (2 marks)
- b) Explain the function performed by web and application servers in developing web pages (2 marks)
- c) Describe the difference between a script language and a markup language (2 marks)
- d) List TWO internal organization involved in managing internet services (2 marks)

- e) State FOUR advantages of using CSS layout over table layout **(2 marks)**
- f) Identify TWO locations in a HTML page that JavaScript code can be placed **(4 marks)**
- g) Write JavaScript program to illustrate variable assignment using two variables that are assigned numbers, and the output their sum **(4 marks)**