

(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

**SPECIAL/SUPPLEMENTARY EXAMINATIONS
YEAR TWO SEMESTER TWO EXAMINATIONS**

**FOR THE DEGREE OF
BACHELOR OF SCIENCE COMPUTER SCIENCE**

**COURSE CODE : CSC 226
COURSE TITLE : CLIENT SERVER
COMPUTING**

DATE: 17/10/2018 TIME: 09:00 A.M – 11:00 A.M

**INSTRUCTIONS TO CANDIDATES
ANSWER QUESTIONS ONE AND ANY OTHER TWO.**

QUESTION ONE (COMPULSORY) [30 MARKS]

- a) Differentiate between the following terminologies.
- (i) Website development and Website hosting [2 marks]
 - (ii) Client and Server [2 marks]
 - (iii) HTML and HTTP [2 marks]
- b) The e-mail service, though beneficial in our day-to-day life, has got its own drawbacks that are off late coming to the fore. Explain five drawbacks of e-mail. [5 marks]
- c) Using a clearly labelled diagram explain how the e-mail works [7 marks]
- d) Outline the misconception created by the client/server technology. [4 marks]
- e) How do you make an image clickable in HTML? Give an example. [4 marks]
- f) Differentiate between JavaScript and Java. [4 marks]

QUESTION TWO [20 MARKS]

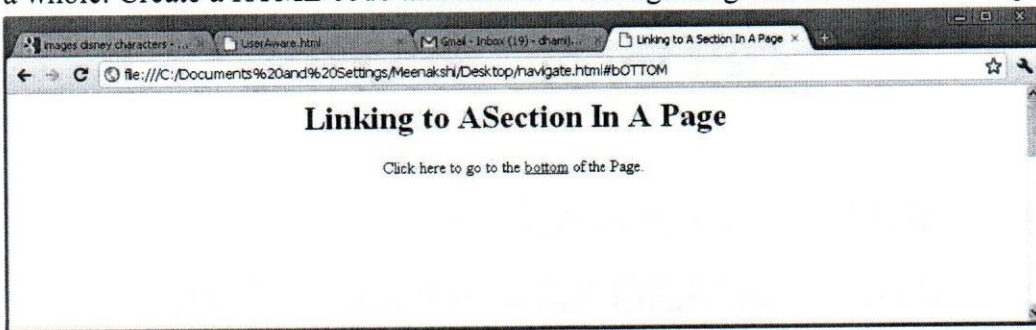
- a) Define the following protocols as used in the internetworking models. [4 marks]
- i. TCP
 - ii. UDP
 - iii. ARP
 - iv. ICMP
- b) The TCP/IP (DOD model) model it is a condensed version of the OSI model composed of four layers. Using a suitable diagram explain the layers and how the TCP/IP stack maps on the OSI model. [8 marks]
- c) Each layer of the DOD model has a couple of protocols associated to each. Discuss at least TWO protocols on each layer of the TCP/IP stack. [8 marks]

QUESTION THREE [20 MARKS]

- a) What are Cascading Style Sheets (CSS)? [2 marks]
- b) c) Explain the factors you consider when designing a website for an organization. [8 marks]
- c) Differentiate between web engineering and software engineering. [4 marks]
- d) Discuss the benefits of a database driven website. [4 marks]
- e) Outline any four tag's which are placed inside the <head> tag of a HTML document. [2 marks]

QUESTION FOUR [20 MARKS]

- a) What is a hyperlink? [2 marks]
- b) Describe the functions of the following body tags attributes
- i. Des Alink [2 marks]
 - ii. Bgcolor [2 marks]
 - iii. Link [2 marks]
 - iv. Scroll [2 marks]
- c) f) It is also possible to link to a section of a document instead of linking to the document as a whole. Create a HTML code that results to the figures given below. [7 marks]



- d) Write a HTML code that shows a MARQUEE display on a screen. [3 marks]

QUESTION FIVE [20 Marks]

- a) Differentiate between Stateful and Stateless servers. [4 marks]
- b) Client server is a modular infrastructure, this is intended to improve Data integrity, Interoperability and Scalability. Explain each with an example, in each case how it helps to improve the functionality of client server architecture. [8 marks]
- c) Client/Server architecture could be explained as 2-tier architecture. Explain? [4 marks]
- d) Explain the working of three-tier architecture with an application server. [4 marks]