

### OFFICE OF THE DEPUTY PRINCIPAL ACADEMICS, STUDENT AFFAIRS AND RESEARCH

# UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER EXAMINATION

MAIN EXAMINATION

## FOR THE DEGREE OF BACHELOR OF COMPUTER SCIENCE

**COURSE CODE:** 

**COM 222** 

**COURSE TITLE:** 

INTERNET APPLICATIONS

DATE: 25th April, 2019

TIME: 9:00AM-12:00PM

#### **INSTRUCTION TO CANDIDATES**

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#### **COM 222: INTERNET APPLICATIONS**

STREAM: BSc (Computer Science)

#### INSTRUCTIONS TO CANDIDATES

- i. Answer ALL questions from section A and any THREE from section B.
- ii. Maps and diagrams should be used whenever they serve to illustrate the answer.
- iii. Do not write on the question paper.

#### SECTION A (24 MARKS) COMPULSORY

#### **QUESTION ONE [12 MARKS]**

- a. Define the following terms:
  - i. Website
  - ii. Unified Resource Locator

[4 marks]

**DURATION: 3 Hours** 

- Outline three different activities through which the internet has revolutionized the world.
- **c.** Distinguish between a web browser and a search engine.

[2 marks]

**d.** Describe the operation of the internet.

[3 marks]

#### **QUESTION TWO [12 MARKS]**

a. Define the term bookmark with respect to web browsers.

[2 marks]

- b. What features makes Secure Shell protocol preferred over TELNET protocol on the public internet?
  [2 marks]
- c. Outline the procedure for organizing favourites.

[2 marks]

d. Name three common features found on a web browser.

[3 marks]

e. Explain the significance of a Network Virtual Terminal in a TELNET connection.

[3 marks]

A constituent college of Moi University

#### **SECTION B [36 MARKS]**

#### QUESTION THREE [12 MARKS]

a. Define the term html File.

[2 marks]

- b. When a user retrieves a file from the server using File Transfer Protocol, there are two different types of connections that are made. Provide a description of the connections.
  [4 marks]
- c. Explain how a search engine works.

[6 marks]

#### **QUESTION FOUR [12 MARKS]**

a. Describe the procedure to create a bookmark.

[6 marks]

b. With the aid of a diagram, explain how a user accesses and retrieves a file using the File Transfer Protocol Internet application. [6 marks]

#### QUESTION FIVE [12 MARKS]

a. Define the term plug-in.

[2 marks]

**b.** Outline four plug-ins and elaborate their functions.

[4 marks]

c. Your colleague from the School of Business complains of receiving a lot of emails such that he can easily miss out on important mails. He calls upon you, being a Computer Science student to help organize his email. Describe how you will apply filters to dictate how the emails will be automatically regrouped. [6 marks]



#### **QUESTION SIX [12 MARKS]**

- a. State the function if the following protocols used in electronic mails: [4 marks]
  - i. Simple Mail Transfer Protocol
  - ii. Multi-purpose Internet Mail Extension
- b. For an email user to easily access mails according to their priorities, they need to be in an organized format. Outline different tools for managing emails. [3 marks]
- **c.** Describe the process and purpose of nesting email folders.

[3 marks]

**d.** Explain why labels better than folders.

[2 marks]

#### **QUESTION SEVEN [12 MARKS]**

- a. Alupe University College requires its Computer Science fourth year students to take at least one elective online course out of three trending computing courses (Internet of Things, Big Data, Data Analytics). Design an HTML code that will display checkboxes which allows the students to select one of the three courses. The title of the page should be 'Elective Courses', the heading 'Select one Course' should be centered and the body background should have image of the clouds. [8 marks]
- **b.** Describe how to create nested labels.

[4 marks]