



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR FOUR SEMESTER TWO**

**FOR THE DEGREE OF
COMPUTER SCIENCE**

COURSE CODE : CSC 422

**COURSE TITLE : LEGAL & ETHICAL ISSUES IN
COMPUTING**

DATE: 11/11/2020 TIME: 2:00 P.M – 4:00 P.M

INSTRUCTIONS:

ANSWER QUESTIONS ONE AND ANY OTHER TWO

QUESTION ONE [COMPULSORY] [30 MARKS]

a) With examples; show if ethical issues are always moral issues. [6 marks]

b) The following issues relate to the use of ICT in Kenya:

- i. Using the office computer to do personal work
- ii. Selling pirated software to non-governmental organization
- iii. Withdrawing cash from your parents Mpesa without their consent
- iv. Plagiarizing and using materials from the internet for your class assignment without giving credit to the original author.
- v. Sharing offensive messages about a particular community on twitter account.
- vi. Hacking into your schools' database to change your examination results.

With at least a reason, classify each of these issues as either ethical or legal. [6 marks]

c) Describe each of the following ethical issues in regard to computer use:

i. Patent rights [2 marks]

ii. Trademark [2 marks]

d) i. How is intellectual property different from tangible property? [4 marks]

ii. Are there any special problems with the intellectual property ownership of computer software? [2 marks]

e) Robots raise several ethical issues especially concerning safety of human lives. Which ethical values should have been embedded in them to enable them to make ethical decisions? [4 marks]

f) Detail the different types of property covered by the intellectual property right. [4 marks]

QUESTION TWO [20 MARKS]

In December 2019, Edward Nyongesa, a former employee of the Criminal Investigation Department (CID) contractor Mara Moja Telecoms, leaked sensitive national security-related material both to Daily Nation and The Standard Media. The leaked reports revealed that the CID used at least three Internet surveillance programs, known internally as Kombora, SCUD, and KDF. The reports also revealed that the CID collected “metadata” from telephone communications that it had intercepted both in the East Africa region and Middle East. Many of Nyongesa’s critics have since claimed that the sheer scale of the material involved in this incident makes it the “most significant leak” in Kenyan history. Whereas some of Nyongesa’s critics have described him as a dissident and a “traitor” (who has also caused grave damage to Kenya’s intelligence capabilities), at least some of his defenders view him as a “hero” and a “patriot” (in part, at least, because they believe that Nyongesa’s disclosure showed how the Kenyan government had gone too far in its surveillance practices on its own citizens as well as on many of the leaders of closely allied nations).

- a) i. What is the action in this case study that is raising an ethical issue? [2 marks]
- ii. What is wrong with the action (from an ethical point of view)? [2 marks]
- iii. Who is responsible for that action? [2 marks]
- iv. Who is affected by that action? [2 marks]
- v. What is the effect of that action on the person affected? [2 marks]
- b) What ethical issues does the use of data mining raise with respect to privacy? [4 marks]
- c) Discuss ethical issues does the use of facial recognition systems raise with respect to privacy? [6 marks]

QUESTION THREE [20 MARKS]

Write an essay on the following:

The KIBU Computing Club 2020 conference held in Bungoma County, Drips Hotel that Kiprotich Boiyo recently attended did not give participants a printed copy of the program. Instead it asked participants to download an app to view the details of the sessions. Boiyo thinks it is wrong for the KIBU Computing Club conference to ask attendees to download the app.

What ethical issues, if any, does the KIBU Computing Club action raises and what is your take on the issues. Focus only on one issue.

You must:

- Present an introduction (or background) to your topic and your essay [5 marks]
- Compare and contrast professional ethics from other types of ethics [7 marks]
- Include examples of professional Codes of Ethics to support your answer [4 marks]
- Present a conclusion that briefly outlines your point of view [4 marks]

QUESTION FOUR [20 MARKS]

a) i. Differentiate between: I. Codified and uncodified law. [4 marks]

II. Law and policy [2 marks]

ii. Give examples in each of the above mentioned [2 marks]

iii. Edward and Gidraph are neighbours in a remote rural setting. At one point they disagree over domestic issues. With your understanding of law, give reasons why common law would be the best approach to solve their disputes rather than using civil law. [5 marks]

b) Paul Wanyonyi, a student at Kibabii University completes his studies in Computer Science and opens a computer repair shop at Kibabii trading centre. Cherotich, a second year student has a laptop which is defective. By virtue of knowing Paul, Cherotich takes her laptop to him and asks him to repair it and they agree that she will pay later. Paul opens the laptop but on completion it stops working completely, worse than it was before Cherotich brought it.

i. Was there a contract between Cherotich and Paul? Give reasons. [4 marks]

ii. Can Cherotich ask for compensation from Momanyi? [3 marks]

QUESTION FIVE [20 MARKS]

- a) i. Discuss five characteristics of a professional. [5 marks]
- ii. Based on the above, are Computer Science and IT graduates professionals? Give reasons for your answer. [3 marks]
- b) Explain the principles of due care and due diligence that as a technology worker you are expected to exercise in your working. [4 marks]
- c) Facebook is a social networking company that has acquired 69 other companies, including WhatsApp. The WhatsApp acquisition closed at a steep \$19 billion; more than \$40 per user of the platform.
- i. In your opinion, why was Facebook willing to pay such a huge amount of money to acquire a company that has no real assets? [4 marks]
- ii. Why do you think WhatsApp which doesn't have even a physical location nor a building is worth much more than British Airways which has tangible assets like aeroplanes, buildings and a world class airport? [4 marks]