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# KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
## UNIVERSITY EXAMINATIONS, 2024/2025 ACADEMIC YEAR
## THIRD YEAR, SECOND SEMESTER EXAMINATION
## FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)
## KCS 2306: COMPUTING PROFESSIONAL ETHICS

**DATE: 10<sup>TH</sup> DECEMBER, 2024**

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**TIME: 2:30PM-4:30PM**

**INSTRUCTIONS TO CANDIDATES**
**ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

## QUESTION ONE: COMPULSORY (30 MARKS)
a) In Kiriri Women's University a student Jane posted sex fantasies on the Internet called Pamela Mwangi's ordeal. The story was purely fictional, but Jane named the main character, Pamela, after a REAL student. In it, she described the rape, torture and murder of Pamela. He also exchanged e-mails with other people in the newsgroups, discussing sex acts. An alumnus saw this and reported it to the University. Jane was then arrested and held in custody. She was charged with transmitting interstate communication of threat to injure another person. The charges were eventually dropped.

    ii)     Highlight **TWO** unethical issues in the above case                      **(2 Marks)**

    iii)    State **TWO** ethical issues highlighted above                       **(2 Marks)**

    iiii)   State and explain **THREE** general unethical computing practices and state ways to safeguard your computers and systems against each                         **(6 Marks)**

    iiv)    On further investigations it was discovered that Pamela had left digital prints when logged in at the computer lab which led to this cyber bullying, differentiate between the two types of digital footprints.               **(3 Marks)**

    iv)    Highlight **TWO** dangers of digital footprints                    **(2 Marks)**

b) Crazy Web Services are recruiting for the position of a Certified Hacker. You have been shortlisted and invited for an interview. You are required to prepare for the interview on the following key areas;

    i)   Ability to demonstrate that you understand the 5 phases of hacking.      **(5 Marks)**

    ii)  to highlight **SIX** reasons for hacking.                     **(3 Marks)**

    iii) One of the panelists states that "Hacking is not necessary a bad practice" critic this statement referencing the **THREE** main types of hackers.          **(5 Marks)**

    iv) State **TWO** dangers which arise from hacking                  **(2 Marks)**

## QUESTION TWO: (20 MARKS)
Recently, in Kenya there were immense demonstrations duped "The Gen-Z Led Demonstrations." Social media and the internet played a very vital role in the said events where Freedom of speech was exercised. Youth were outrightly vocal in the social media space including the x-space, Facebook, TikTok, Instagram among other spaces. There were various instances where the government felt this freedom of speech was abused and it led to hate speech.

a) In reference to this context, differentiate between freedom of speech and hate speech.    **(2 Marks)**

b) In your view, illustrate with **THREE** examples where this freedom of speech crossed the boundary and was construed as hate speech.             **(3 Marks)**

c) Explain **FIVE** roles of social media and the internet in the above stated demonstrations?    **(5 Marks)**

d) in relation to hate speech, differentiate between the following terms and give an example of each; **(6 Marks)**

    ii)   Stereotypes and racism

iii) Libel and slander

iiii) Homophobia and sexism

e) Explain four reasons why hate speech, cyber bullying and cyber-crime activities increased a lot in the time of Covid-19? **(4 Marks)**

## QUESTION THREE: (20 MARKS)

In a recent case a girl's profile was tarnished on a famous social network site "**Tiktok**". On further investigation by the police, it was revealed that the profile was put up by the victim's best friend. The reason for tarnishing the image was that both girls were in love with the same boy and therefore to break up her relationship the girl's best friend did it, so that the boy could develop a negative attitude towards the girl and therefore she would get to marry that boy. Similar circumstances have taken place in various other social networks.

a) What is the name given to this kind of cybercrime? **(1 Mark)**

b) Explain **THREE** effects of such cybercrime activities on the victims **(3 Marks)**

c) Is cyber fraud different from cyber terrorism? Substantiate and give an example of each. **(4 Marks)**

d) Briefly describe **THREE** different kinds of malware and state ways to safeguard your computer device against each. **(6 Marks)**

e) IN 1992 The Computer Ethics Institute developed a set of principles referred to as the Ten Commandments of Computer Ethics to guide how people should use computers. State and explain clearly **FOUR** of these principles **(6 Marks)**

## QUESTION FOUR: (20 MARKS)

You are the new marketing manager for the Ford Motor Company. You are considering the use of spam as a strategy to promote the latest and greatest automobile model that is targeted at young, affluent adults.

a) Do you think this promotion strategy is ethical? Substantiate. **(4 Marks)**

b) Differentiate between spamming and adware **(4 Marks)**

c) List **TWO** advantages and two disadvantages of such a marketing strategy. **(4 Marks)**

d) How can one avoid being a victim of such social media marketing strategies? Explain **FOUR** ways. **(4 Marks)**

e) Differentiate between copyright and Patents and state **TWO** reasons why it's important to have intellectual property rights. **(4 Marks)**

## QUESTION FIVE: (20 MARKS)

Jolie is a computer security consultant; she enjoys the challenge of finding and fixing security vulnerabilities. Independently wealthy, she does not need to work, and so she has ample spare time in which to test the security of systems. In her spare time, Goli does three things: First, she aggressively attacks commercial products for vulnerabilities. She is quite proud of the tools and approach she has developed, and she is quite successful at finding flaws. Second, she probes accessible systems on the Internet, and when she finds vulnerable sites, she contacts the owners to offer her services repairing the problems. Finally, she is a strong believer in high-quality pastry, and she plants small programs to slow performance in the web sites of pastry shops that do not use enough butter in their pastries.

a) In reference to this case, what name is given to this practice? **(1 Mark)**

b) The Pastry shop realizes that their computers have been attacked by malware, State four characteristics they may have noted in their systems and computer which justify this. **(4 Marks)**

c) Explain if Joline justified to perform the above acts. **(2 Marks)**

d) State **THREE** unethical issues involved in the above case. **(3 Marks)**

e) You are required to upgrade the systems/software for one of the pastry shops above, state and explain three software contracts you would consider. **(6 Marks)**

f) Give **FOUR** reasons you should consider signing a contract while purchasing the software **(4 Marks)**