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KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION FOR 2024/2025 ACADEMIC YEAR THIRD YEAR, FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN MATHEMATICS

KCS 2300 COMPUTING PROFESSIONAL ETHICS

Date: 14TH AUGUST, 2024

Time: 11:30 AM – 1:30 AM

(2 Marks)

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTION

QUESTION ONE: COMPULSORY (30 MARKS)

- a) The Computer Ethics Institute provides The Ten Commandments of Computer Ethics as a code of computer ethics. State four of them and explain the implications if they are not adhered to. (8 Marks)
- b) Computer technology is a double-edged sword. Discuss the relevance of this statement in the world today giving relevant examples. (8 Marks)
- c) Explain why Kenyan presidential candidates had a problem in fixing electronic voting systems fault, through our courts, during the 2013 general election? (6 Marks)
- d) Cyrus has a deadline set for giving an on-line demonstration to a class in which he uses software that was licensed for 90 days. Just 10 minutes before starting the seminar, he suddenly realizes that the license would expire in the next 20 mins implying that his on-line demonstration of 2 hours will not be accomplished. Rather than pay the licensing fee, he changes the date on his computer, effectively fooling the software into believing it is at the beginning of the licensing period. He successfully conducts his on-line demonstration.
 - i) Describe the activity you consider unethical about Joe in the scenario above. (5 Marks)
 - ii) Highlight the impacts of the above unethical activities (3 Marks)

QUESTION TWO: (20 MARKS)

- e) Briefly explain the following laws and elaborate their significance in the modern day use of social media platforms with relevant examples:
- i. Child internet protection Act
- ii. Communication Decency Act (2 Marks)
- a) Computer profession has not come without its own share of problems, list 4 unethical computing practices and explain how one can safeguard themselves against each of them. (8 Marks)
- b) Students at KWUST reported that computers in one of the laboratories had viruses.
 - i. State three signs they may have noticed to justify their claim (3 Marks)

- ii. Explain 2 ways the university can use to prevent the computers from Viruses in future (2 Marks)
- iii. State and explain 3 examples of such computer virus that may have attacked their computers (3 Marks)

QUESTION THREE: (20 MARKS)

- a) Rodgers is working as a Business analyst. One afternoon when browsing through desktop files, he realizes that his supervisor installed desktop sharing application on his computer in order to monitor his workplace activity. Rodgers never got notified about the software installation and he believes that such actions demonstrate lack of faith in his ability to work professionally. On the other hand, the supervisor is convinced that he is entitled to monitor workplace activities of his staff member. Highlight the ethical and unethical practices of either party

 (6 Marks)
- b) Discuss elaborately with relevant examples the salient features of the following based on your knowledge and understanding of intellectual property: Copyright, Piracy, Patents and Trademarks (8 Marks)
- c) Hacking is not necessary a bad practice, justify this statement while highlighting the three main types of hackers
 (6 Marks)

QUESTION FOUR: (20 MARKS)

- a) Currently, there has been a growing trend of online attacks, bullying and incitement specifically on social media platforms like Facebook, X, Instagram, TikTok etc. In your own judgement provide a detailed explanation on the main contribution to this trend (8 Marks)
- b) what are the effects of number (a) above to a country and its people (4 Marks)
- c) Differentiate between the following terms in relation to freedom of speech and give relevant examples of each in relation to the most recent Gen_Z protests in Kenya; (8 Marks)
 - i. free speech and hate speech
 - ii. libel and slander
 - iii. stereotypes and sexism

QUESTION FIVE: (20 MARKS)

Stephen works as a computer professional in the university. He consults on the purchases of computer machines and related softwares, and ensures everything is working as it should when installed.

- a) Describe five characteristics Stephen should portray as a computer professional? (5 Marks)
- Stephen advised that they should sign a contract software during the purchase of the softwares, explain
 THREE reasons why this is important
 (3 Marks)
- c) Explain FOUR types of software contracts, and state which contract would be ideal for purchase of the computer machines.
 (8 Marks)
- d) When reviewing the software contact Stephen notices that major components have been omitted, state 4 components of the clause section which may have been omitted. (2 Marks)
- e) Would you advise Stephen to ignore these missing clauses and sign the contract either way? Explain.

(2 Marks)