



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

SCO402/SIT402 LEGAL AND ETHICAL ISSUES IN COMPUTING

DATE: 13/8/2021

TIME: 8:30 -10:30 AM

INSTRUCTIONS

*This paper consists of **FIVE** questions.*

*Answer **QUESTION ONE** and other **TWO** questions in this paper.*

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain each of the following terms as used in computing.
 - (i) Moral goods; (2 marks)
 - (ii) copyright; (2 marks)
 - (iii) Norms. (2 marks)
- b) Outline **four** types of ethical issues that could arise in an organization. (4 marks)
- c) Students in an ethics class were encouraged to apply ethical thinking at all times. Describe the stages involved in this thinking. (6 marks)
- d) John, a computing expert has registered with a professional body.
 - (i) State **three** ethical issues that could be addressed by this body. (3 marks)
 - (ii) Outline **three** benefits he could accrue from this registration. (3 marks)
- e)
 - (i) A system administrator was sacked from a company and decided to carry all the backed up data. Explain the legal implication of this action. (4 marks)
 - (ii) Students in a certain university deposit fees in the university's bank account and then submit the deposit slip for recording. State an unethical practice that could be perpetrated at each stage of the information cycle. (4 marks)

QUESTION TWO (20 MARKS)

- a) Explain each of the following terms as used computer ethics.
 - (i) moment of truth; (2 marks)
 - (ii) moment of recognition. (2 marks)
- b) Distinguish between *orchestrators* and *gatekeepers* as used in information cycle. (4 marks)
- c) A client discovered that his financial system had a back door created by an IT staff. Explain the ethical and legal issues that could be raised by the client. (6 marks)
- d) John, a bank's database administrator had an urgent financial need. He knew that he could transfer money from the bank to his account, meet his need and return the money without anyone realizing. Explain **three** ways in which John could act. (6 marks)

QUESTION THREE (20 MARKS)

- a) Outline **two** differences between *ethics* and *legal* issues. (2 marks)
- b) Mary intends to sue Max Health Care for breach of confidentiality. Describe **three** types of laws that Mary could use. (6 marks)
- c) Distinguish between *demand pull hypothesis* and *supply push hypothesis* as used in computer ethics. (4 marks)
- d) Peter, a computer scientist is in dilemma whether he is a professional or not.
 - (i) Explain **three** criteria that define a professional. (6 marks)
 - (ii) Outline **two** reasons that makes computer science a profession. (2 marks)

QUESTION FOUR (20 MARKS)

- a) Outline **two** obligations of the company to the employees. (2 marks)
- b) Machakos University has implemented e-payment for all its suppliers. Explain **three** computer crimes that the university is exposed to. (6 marks)
- c) A IT graduate applied for a job to manage the local area's sewer management system and his application was rejected. He then hacked the system and release raw sewage to the city's parks. Explain two laws he could be charged with in Kenya. (4 marks)
- d) John entered into a system development contract with Maisha Hotel. John was to be paid USD 1000 after delivering the system in six months.
 - (i) Identify the offerer in this case study. (1 mark)
 - (ii) State the obligations of each party. (3 marks)
 - (iii) Explain **two** circumstances under which this contract may be voided. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Explain the slippery slope as used in computer ethics. (2 marks)
- b) A company's computer use policy has succeeded in deterring unethical behavior. Describe **three** conditions that could have led to this success. (6 marks)
- c) Manji company has protected its computer resources from external attacks.
 - (i) Outline **three** ways through which the security of these resources could be compromised by employees. (3 marks)
 - (ii) Outline **three** precautions that could be put in place to minimize internal attacks. (3 marks)
- d) A student cracks software security codes and sells the software to his colleagues. Discuss the legal implications of this action. (6 marks)