



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**  
**DEPARTMENT OF COMPUTER SCIENCE & SOFTWARE ENGINEERING**  
**UNIVERSITY EXAMINATION FOR THE DIPLOMA IN LINUX ENGINEERING**  
**YEAR 1 SEMESTER 2 2019/2020 ACADEMIC YEAR**  
**KISUMU CAMPUS**

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**COURSE CODE: ICT 2218**

**TITLE: SOCIAL AND LEGAL ISSUES IN COMPUTER SCIENCE**

**COURSE EXAM VENUE:**

**STREAM:**

**DATE: 15/08/19**

**EXAM SESSION: 2.00 – 4.00PM**

**TIME: 2.00 HRS**

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**INSTRUCTIONS**

- 1. Answer Question 1 (Compulsory) and ANY other TWO questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

### QUESTION 1 [30 MARKS]

- a. Jonny is working as a Business Analyst. One morning when browsing through his desktop files, he realized that his supervisor installed desktop sharing application on his computer in order to monitor his workplace activity. Jonny never got notified about the application 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. Required,
- i. Using the ethical analysis knowledge as a guide, identify the ethical issues, and Conduct ethical analysis using an ethical theory of your choice. (6 marks)
  - ii. What is the best course of action (in your opinion) for the parties to be undertaken? (4 marks)
- b. Explain the following phrases as covered by the Data Protection Act?
- i. Access of data (2 marks)
  - ii. Accuracy of data (2 marks)
  - iii. Copyright of data (2 marks)
  - iv. Timeliness of Data (2 marks)
  - v. Data integrity (2 marks)
- c. The following computer devices briefly explain the level of energy use from the least to most amount of energy?
- i. Desktop PC (1mark)
  - ii. Mobile phone (1mark)
  - iii. Laptop (1mark)
  - iv. Mini Computer (1mark)
  - v. Television Remote control (1mark)
- d. Briefly explain how you would advise a manufacturing company to stop their rivals from stealing their ideas and producing similar products? (5 marks)

### QUESTION 2 [20 MARKS]

- a. Explain why you think computer use and information technology create so any ethical issues today(5 marks)
- b. Describe the term 'techno stress' and describe some of its effects on computer users (5 marks)
- c. Define the following terms as used in computing
- i. Computer novice (1 mark)
  - ii. End users (1 mark)
  - iii. Computer professional (1 mark)
  - iv. Computer ethics (1 mark)

- d. In your opinion what do you think will be some of the dangerous emerging ethical issues in the future of the internet (6marks)

### QUESTION 3 [20 MARKS]

- a. Describe the morally significant characteristics of communication on the internet and explain why you think they are problematic (5 marks)
- b) Explain the data security issues associated with improper password usage within organization (5 marks)
- b. Max was recently hired to supervise a large unit of a manufacturing company. He was informed that he is expected to increase the efficiency of the unit significantly. He then decides to install a system that allows him to monitor the computer of each employee in his unit. Discuss whether it is ethical for companies to monitor their employees' activities during working hours or not.

(10 marks)

### QUESTION 4 [20 MARKS]

- a. What do you think would happen to software development if software were declared 'unownable' (5 marks)
- b. Explain the kind of protection offered by copyright, trade secrecy and patents (9 marks)
- c. What are the arguments for and against the following IT social issues
- Globalization (3 marks)
  - Digital Divide (3marks)

### QUESTION 5 [20 MARKS]

- a. When computer professionals take on jobs they may enter relationships with an employer, a client, the public and co-professional. For each of these relationships describe the ethical parameters the professional must observe (8 marks)
- b. Briefly describe the morality of creating machines capable of making human labor obsolete. (8 marks)
- c. Computer technology is said to be a double edged sword.' Discuss the relevance of this statement in the world today. (4 marks)