



JARAMOGI OGINGA ODINGA UNIVERSITY OF  
SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

DIPLOMA IN LINUX ENGINEERING

COURSE CODE: ICT 2218

COURSE TITLE-SOCIAL, LEGAL AND ETHICAL ISSUES IN COMPUTER SCIENCE

EXAMINATIONS 2012/2013

TIME 2HRS

INSTRUCTIONS:

- 1) This paper contains five (5) questions.
- 2) Question ONE is Compulsory and any other TWO questions
- 3) Write the answers in the booklet provided**

### Question one 30 marks

- a. Define Ethics. (2mks)
- b. State any **three** characteristics of a profession (6mks)
- c. Differentiate between legal hacking and ethical hacking (4mks)
- d. Describe **five** reasons for practicing anonymity. (10mks)
- e. Outline **four** techniques of obtaining passwords. (8mks)

### Question TWO 20 marks

- a. Computer technology—a double-edged sword. Discuss (10mks)
- b. Define risk (2mks)
- c. List **four** reasons why a system may fail and the impact of such a failure. (8mks)

### Question THREE 20 marks

- a. Define the following terms:
  - (i) Society
  - (ii) Ethical dilemma
  - (iii) Morality (6mks)
- b. Briefly describe any **four** ethical theories (8mks)
- c. List **six** ethical and legal issues in IT (6mks)

### Question FOUR 20 marks

- a. Define privacy (2mks)
- b. List the **three** key aspects of privacy (3mks)
- c. It is argued that computer does not have a body of knowledge and therefore should not be considered as a profession, but relies on subjects such as Mathematics and Engineering. It is still evolving with new areas coming up and the already existing ones changing or being replaced. Do you agree with this argument? If so why? If not why (5mks)
- d. Discuss **five** effects of hacking (10mks)

**Question FIVE 20 marks**

- a. Isaac and Jane are friends, both working in the same bank. They are paid according to the number of hours they work. Isaac has access to database records for monthly earnings of each employee in the bank. In the month of September last year Jane had her house painted, bought new furniture for the house and new car. Isaac became suspicious and decided to access Jane's records to find out whether her earnings were enough to allow her to buy all those.
- i. Was Isaac's actions unacceptable. (Give a reason) (2mks)
  - ii. If Isaac suspected that Jane would have been getting money using unfair means would her actions be acceptable? (2mks)
  - iii. Do you think Isaac's action caused harm to anyone? If so which of the theories would support Isaac's actions? (4mks)
- b. Define teleworking (2mks)
- c. State **three** advantages and **three** disadvantages of teleworking (6mks)
- d. Are ATM's a good or a bad development? Discuss (4mks)