



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**

**UNIVERSITY EXAMINATION FOR THE BECHALORS OF SCIENCE IN  
PUBLIC/COMMUNITY HEALTH AND DEVELOPMENT**

**2<sup>ND</sup> YEAR 1<sup>ST</sup> SEMESTER 2018/2019 ACADEMIC YEAR**

**KISUMU, KISII CAMPUSES**

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**COURSE CODE:       SCS 3124**

**COURSE TITLE:     IT AND SOCIETY**

**EXAM VENUE:**

**STREAM:**

**DATE:**

**EXAM SESSION:**

**TIME: 2.00 HOURS**

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**INSTRUCTIONS:**

- 1. Answer Question 1 (Compulsory) and ANY other three 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 ONE 30 MARKS

“Developing and enforcing a corporate Information and Communication Technology (ICT) ethics policy and procedures that balance the need to run business responsibly and efficiently with the need to safeguard employee privacy, health and well-being has become an important responsibility of every organization. Employees and managers need special training to sensitize them to the new ethical issues surrounding ICT systems, such as personal use of the internet or corporate systems or copying digital material and software.”

- a) How does the web affect people’s relationship with the health services?  
(4 marks)
- b) Why do people still print paper documents?  
(6 marks)
- c) What is a smart environment?  
(4 marks)
- d) Identify TWO phenomena that a smart house would need to predict  
(4 marks)
- e) Information and communication technology is an asset that ushers in growth in different sectors of the economy, as such, many western economies, are generally ‘powered’ by Information and Communication technology. Well-embedded and targeted ICT applications, for instance have an inherent ability, to transition the developing nations to information based economies. Developing countries have been viewed as to have barriers. Using Kenya as an example, discuss these plentiful, urgent and veritable hurdles.  
(6 marks)
- f) You are a Medical Director at Magdalene, a private hospital. Barry, though an ICT intern, he is a gifted programmer and has in the past helped write very essential functions for the hospital at no cost. Previously you had not considered a policy to guide “bringing your own device” in the computer room, however, only recently has Barry begun to not only bring in his laptop but also stream pornographic movies. Do you think this is wrong? What are your reasons for your stand point in the matter? Accordingly, contemplate a fitting policy to address the situation.  
(6 marks)

### QUESTION TWO 20 MARKS

New technology offers an unprecedented chance for developing countries to ‘leapfrog’ earlier stages of development. Proponents of this view not only stress the potential benefits of ICT but also argue that in an increasingly globalized economy, countries that fail to “get connected” will fall further and further behind.

- a) Discuss, the potential contribution that information and communication technology (ICT) can make to global development  
(10 marks)
- b) On equal measure, discuss the contribution of information and communication technology (ICT) in widening the digital divide.  
(10 marks)

### QUESTION THREE 20 MARKS

- a) Using a practical example drawn from emerging technologies, distinguish between Emanuel Kant’s ideas and Jeremy Bentham’s Thoughts on computer ethics?  
(9 marks)

- b) Drawing from any economic block, country or institution with a global repute, discuss any FIVE guiding principles that would guide employee monitoring (11 Marks)

#### QUESTION FOUR 20 MARKS

- a) How does public policy affect ICT usage? (5 marks)
- b) How does ICT change the nature of trust? (5 marks)
- c) How should social context affect the design of ICT? (5 marks)
- d) What are the roadblocks to web usage beyond the availability of the technology? (5 marks)

#### QUESTION FIVE 20 MARKS

Revolution in technology and particularly internet, has led to organizations collecting large amounts of personal data from huge range of sources which can be accurate or inaccurate. The organizations can sell or share the data with other organizations without owner's consent. A hacker penetrates the database in bid to try and correct some information which owners think that is incorrect. The hacker is also able to identify which organization is holding information about who and for what purpose, he/she has a choice to report to the relevant authority for relevant action.

- i. Do you think the organizations have a right to access personal information, give reason for your answer and what about sharing. (4 Marks)
- ii. Is the hacker ethically justified and why. (6 Marks)
- iii. Imagine you were the hacker would you report to the relevant authorities what exactly happened, give reason for your answer. (6 Marks)
- iv. If you were in authority how best will you handle the above case. (4 Marks)