

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

JANUARY - APRIL 2015 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

REGULAR PROGRAMME

CMT 406: ICT AND SOCIETY

Date: APRIL 2015 Duration: 2 Hours Instructions: Answer Question ONE and any other TWO Questions.

Q1. a) Discuss the concept of Intellectual property. Demonstrate why it is nowadays difficult to protect it.

(6 marks)

b) Outline the benefits derived from implementing IS at Otis Elevator Company.

(5 marks)

c) Through the 1900's an increasing number of people have become teleworkers. These are people who work from home using a PC linked to a WAN via a modem and the telephone system. Discuss, with the aid of specific examples, the advantages and disadvantages to individuals, organizations and society of this type of employment.

(10 marks)

d) What do you know about digital divide and how it affects the lives of people?

(5 marks)

e) One of the major impacts of ICT is the creation of a flatter organizational structure. Explain how this is made possible through illustration or example.

(4 marks)

Q2. a) An individual may either deny or resist the implementation of IS in any organization. Give some reasons for these reactions and suggest actions top management and the IT department must take to resolve resistance to change.

(8 marks)

b) There are THREE main categories of support which the interest facilitates the support of its users: discovery, communication and collaboration. Group work is a form of collaboration whereby two or more individuals perform a set of common activities in order to accomplish a certain task. Required: Discuss THREE advantages and disadvantages of group work as manifested in the Otis Elevator case discussed in class.

(6 marks)

c) Health is sometimes at stake because of the widespread use of ICT. Give THREE of these health risks and suggest probable solutions to these eminent problems.

(6 marks)

Q3. a) Discuss any FOUR principles of change management.

(8 marks)

b) Assess how ICT has made an impact to organization by way of benefits. Give TWO practical examples to support your answer.

(6 marks)

c) Discuss any THREE advantages and disadvantages of the use of ICT in research and development.

(6 marks)

Q4. a) List and explain any THREE solutions you would give to Marty Sawyer, president of Rich-con Steel Company to rescue her company form the current quagmire as per the Richards and Conover Steel Company (Richcon) case discussed in class.

(6 marks)

b) Explain what is meant by a code of ethics and highlight the major components that must appear in a code of ethics for IT professionals.

(10 marks)

c) It has been said that when we design an Information system we are redesigning the organization. What are the ramifications of this statement?

(4 marks)

Q5. a) Based on your own observation and experience, what is the impact of the internet on organizations in Kenya?

(5 marks)

b) Should companies be responsible for unemployment caused by their information systems? Why or why not?

(10 marks)

c) Discuss FIVE challenges facing ICT implementation in Africa.

(5 marks)

END