

**THARAKA**



**UNIVERSITY**

**COLLEGE**

*(A Constituent College of Chuka University)*

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF  
BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

**COSC 100: INFORMATION TECHNOLOGY AND NATIONAL DEVELOPMENT**

**STREAMS: BSC (COSC)**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 09/04/2020**

**8.30 AM- 10.30 AM**

---

***INSTRUCTIONS:***

*Answer Question One and any other two questions.*

**Question One (30 marks)**

- (a) Explain the social engineering crime in computers. (2 marks)
- (b) Explain the following terms used in ICT sector. (2 marks)
- i. System administrator (2 marks)
  - ii. System analyst (2 marks)
  - iii. Systems engineer (2 marks)
  - iv. Digital village (2 marks)
- (c) Describe e-waste and explain the effects e-waste has on the economy of a country like Kenya (4 marks)
- (d) Discuss the “90/10” rule in computer security. (4 marks)
- (e) Differentiate between the terms ICT and IT (4 Marks)
- (f) Given that organizations are digitizing their service delivery processes, explain two measures you would advise clients on online services requests and delivery. (4 marks)
- (g) Discuss two applications of ICT in poverty reduction in Kenya. (4 marks)

**Question Two (20 marks)**

- (a) Explain the advantages of open source software to software developers. (5 marks)
- (b) Explain the disadvantages of open source software to organizations (5 marks)
- (c) Discuss the effects of ICT Policies to a country's development. (10 marks)

**Question Three (20 marks)**

- (a) Discuss five considerations you would make when setting up a computer network. (5 marks)
- (b) Discuss five benefits of weblogs to a politician. (5 marks)
- (c) Explain the gains a student of Computer Science stands to reap by having a weblog (5 marks)
- (d) Discuss five benefits of social sites to a community. (5 marks)

**Question Four (20 marks)**

- (a) Discuss the following terms used in ICT policies. (8 marks)
  - (i) Computer security
  - (ii) Information system
  - (iii) Programmer
  - (iv) Security threat
- (b) Discuss four Legal and Ethical Issues in computing technology. (4 marks)
- (c) Discuss four ways of securing data in a computer system. (4 marks)
- (d) Discuss four ways of enhancing businesses using the Internet. (4 marks)

**Question Five (20 marks)**

- (a) Information sharing is restricted and non-restricted in some issues. Explain. (2 marks)
  - (b) Expound on the role of Information Technology in the achievement of the Kenya Vision 2030. (4 marks)
  - (c) Discuss three measures of securing passwords. (6 marks)
  - (d) State and discuss four ICT issues as presented in Kenya vision 2030. (8 marks)
-