



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

*Faculty of Engineering & Technology*

**DEPARTMENT COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

UNIVERSITY EXAMINATION FOR BACHELOR OF TECHNOLOGY IN INFORMATION  
COMMUNICATION TECHNOLOGY (BTECH. ICT11M)

**EIT 4111: ICT & SOCIETY**

SPECIAL/SUPPLEMENTARY EXAMINATION

**SERIES: FEBRUARY/MARCH 2012**

**TIME: 2 HOURS**

## **Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions in **TWO** sections **A & B**

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

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## **SECTION A (COMPULSORY)**

### **Question 1 (30 marks)**

- Give a detailed definition of a computer (3 marks)
- Explain the possible outcome from the following characteristics of computers: (3 marks)
  - o Speed
  - o Reliability
  - o Storage Capacity
- Outline **FIVE** areas where benefits of computer use have been realized. (5 marks)
- Explain the things we need to protect in relation to Internet security (3 marks)
- Explain the types of attacks most frequent on a networked computer from an outside source. (4 marks)
- Explain **TWO** reasons why Information Technology creates ethical issues (4 marks)

- g) Outline the methods used for prevention of computer crime. (4 marks)
- h) Outline any **FIVE** Commandments of computer ethics (5 marks)
- i) Outline the uses of Encryption (4 marks)

**SECTION B (Attempt any TWO questions)**

**Question 2 (20 marks)**

- (a) i. Explain the various types of Firewalls (6 marks)
- ii. Explain the Four dimensions of privacy (6 marks)
- (b) i. Explain the four levels of threats to privacy (6 marks)
- ii. Describe the Technical Privacy Control (8 marks)

**Question 3(20 marks)**

- a) i. Outline any **FOUR** real world technologies that intrude to privacy
- ii. Describe each of the technologies mentioned in a.i. above. (10 marks)
- b) Describe Privacy Intrusion in Cyberspace through:
- i. Clickstream Data Analysis
- ii. Cookies
- iii. Pharming
- iv. Phishing
- v. Voice Over Internet Protocols (VoIPs) (10 marks)

**Question 4 (20 marks)**

- a) Explain the term 'The Right of Privacy' (4 marks)
- b) Describe the following Key Privacy and Anonymity Issues. (16 marks)
- i. Data encryption
- ii. Identity theft
- iii. Customer profiling
- iv. Need to treat customer data responsibly
- v. Workplace monitoring
- vi. Spamming
- vii. Advanced surveillance techniques

**Question 5(20 marks)**

- a) Discuss the Ethical Principles in an Information society. (8 marks)
- b) As part of the internet issues Federal Trade Commission (FTC) established 5 *Core Fair Info Practices*. Discuss the practices. (8 marks)
- c) Discuss the following act as relates to Children and the internet. (4 marks)

- i. *Communications Decency Act of 1996 (CDA) and Child Online Protection Act of 1998 (COPA)*
- ii. *Children's Online Privacy Protection Act of 2000 (COPPA)*