



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

SECTION A (COMPULSORY)

Question 1 (30 marks)

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