



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

CERTIFICATE IN INFORMATION TECHNOLOGY – CIT 2K 11M

EIT 1121: INFORMATION PROCESSING

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: OCTOBER 2011

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer booklet*

Answer question **ONE (COMPULSORY)** in section A and any other **TWO** questions from section B

Maximum marks for each part of a question are clearly shown.

This paper consists of **TWO** printed pages

Question 1 (30 Marks)

- a) Differentiate between information processing and data processing (2 Marks)
- b) State and explain the five core features of a systems (5 Marks)
- c) State any three main factors to consider when purchasing computer software and hardware (3 Marks)
- d) Explain what is meant by the following levels of decision making (4 Marks)
 - i. Operational
 - ii. Functional
 - iii. Tactical
 - iv. Strategic
- e) Distinguish between real-time and online processing techniques and their areas of application (6 Marks)
- f) Differentiate between Computer Input and Computer Output (4 Marks)
- g) State any four advantages of using computers (4 Marks)
- h) Define the term systems (2 Marks)

Answer any two questions (40 Marks)

Question 2

List and explain the **FIVE** distinctions between each of the four computer generations that have been in use to date (20 Marks)

Question 3

- a) Define the following terms (8 Marks)
 - (i) Information privacy
 - (ii) Information accuracy
 - (iii) Timeliness
 - (iv) Information Accessibility
- b) Explain the functions of the following computer components (8 Marks)
 - (i) Anti-virus Solution
 - (ii) Firewall system
 - (iii) Operating system
 - (iv) Office Application System
- c) List four advantages of the internet in modern day times (4 Marks)

Question 4

a) Explain in detail how the following computer related crimes can be prevented from happening

(i) Identity theft

(ii) Malicious code execution i.e. viruses and worms

(iii) Online fraud

(iv) Theft of time

(8 Marks)

b) Discuss any three key solutions to the threat of online and computer privacy (6 Marks)

c) Explain in what ways one can safeguard a networked system from unauthorized intrusion and what systems should be installed or put in place (4 Marks)

d) Compare and contrast between RAM and ROM (2 Marks)

Question 5

a) State three key elements that make up a computer system (3 Marks)

b) State and explain five advantages of using computer systems to an organization (5 Marks)

c) Explain the following stages as found in information Processing

(i) Input

(ii) Processing

(iii) Output

(6 Marks)

d) List three input and three output devices (6 Marks)