



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

Ukunda Campus

Faculty of Engineering and Technology

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

CERTIFICATE IN ELECTRICAL POWER ENGINEERING

EEE 1152: COMPUTER APPLICATION II

END OF SEMESTER EXAMINATION

SERIES: APRIL 2012

TIME: 2 HOURS

Instructions to Candidates:

This paper consists of **FIVE** questions

- *Answer Booklet*

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

Marks are indicated for each part of the question

This paper consists of **THREE** printed pages

Question One

- a) Define the following terms:
- (i) Nibble
 - (ii) Byte
 - (iii) Data
 - (iv) Bit
 - (v) Permanent storage
- (7marks)
- b) State any **FOUR** features of each of the network systems below
- (i) WANs
 - (ii) MANs
- (9 marks)
- c) Differentiate between the following terms:
- (i) Multiplexing and demultiplexing
 - (ii) Baseband and broadband transmission
 - (iii) Bounded and unbounded media
- (6 marks)
- d) List **FOUR** components other than the computer that would be required for the successful installation of a network
- (4 marks)
- e) Outline the stages of developing a program
- (4 marks)

Question Two

- a) Explain the following programming languages.
- (i) Machine code language
 - (ii) High level language
- (6 marks)
- b) State **THREE** advantages and **TWO** disadvantages of each of the programming languages above.
- (10 marks)
- c) State any **TWO** I/O devices and outline their application areas
- (4 marks)

Question Three

- a) Differentiate between Experts systems and artificial intelligent systems
- (4 marks)
- b) Briefly describe the following processing systems and their appropriate application.
- (i) Batch processing
 - (ii) Distributed processing
 - (iii) Multiprogramming
- (6 marks)
- c) State any **FOUR** benefits of Electronic mailing (E-mail)
- (4 marks)
- d) Define the following terms:
- (i) Web server
 - (ii) Extranet
 - (iii) MILNET
 - (iv) ARPANET
- (6 marks)

Question Four

- a) State the **FOUR** importance of layering the ISO-OSI reference model (4 marks)
- b) With an aid of a diagram, briefly explain the function of each layer of the ISO-OSI reference model (16 marks)

Question Five

- a) Explain any **FOUR** functions of operating systems (5 marks)
- b) Explain any **FIVE** factors that need to be considered before purchasing computer hardware. (5 marks)
- c) State and explain **FIVE** applications fields of a computer (10 marks)