



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2014/2015

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF
SCIENCE IN ELECTRICAL AND ELECTRONICS ENGINEERING**

BUILDING AND CIVIL ENGINEERING

ECU 109 : FUNDAMENTALS OF COMPUTING

Date: 17/12/2014

Time: 11:00 – 1:00 PM

Instructions

Answer Question one and any other two in Section B

QUESTION ONE (30 MARKS) (COMPULSORY)

SECTION B: ANSWER ANY TWO QUESTIONS FROM THIS SECTION

- a) Define the following terms: (4 marks)
- i. Computer
 - ii. Software
 - iii. Virus
 - iv. Trapdoor
- b) An operating system is necessary system software in a computer. Explain any three function of an operating system (6 marks)
- c) State and explain four features that make a computer a good tool for processing data. (4 marks)
- d) Describe any four services of the internet. (4 marks)
- e) Using suitable examples, explain three classifications of computers. (6 marks)

- f) Suppose you have called for an interview as a computer technician, and one of the requirements is for you to provide the specifications of a good computer. Provide a suitable answer to this requirement. (4 marks)
- g) Define and explain the term HTML. (2 marks)

SECTION B: CHOOSE ANY TWO QUESTIONS IN THIS SECTION

QUESTION 2: (20 MARKS)

- a) John wants to password protect his document from unauthorized users. How will he achieve this using Ms PowerPoint 2007? (4 marks)
- b) Describe any three types of network topologies. Mention the main advantage of each of these topologies. (12 marks)
- c) One of the most important network software is a protocol. In this context:
- i. Define the term protocol (2 marks)
 - ii. State the purpose of a protocol (2 marks)

QUESTION 3: (20 MARKS)

- a) State and explain four benefits of establishing a computer network in an organization? (8 marks)
- b) With reference to Ms Access 2007, define and illustrate concepts below:
- i. Table
 - ii. Record
 - iii. Primary Key
 - iv. Data item (8 marks)
- c) What is the difference between impact and non-impact printers? (4 marks)

QUESTION 4: (20 MARKS)

- a) Distinguish a header and footer in Ms word (4 marks)
- b) Explain any three factors that influence the performance of the computer. (6 marks)
- c) The internet can be described as a double edged sword. Discuss this statement. (10 marks)