



Machakos University College

(A Constituent College of Kenyatta University)

University Examinations 2014/2015

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY
EXAMINATION FOR CRAFT ONE IN BCE/ELECTRICAL

INFORMATION COMMUNICATION TECHNOLOGY

Date: 9/12/2014

Time: 8:30-10:30 am

INSTRUCTIONS

Answer question ONE and any other TWO questions

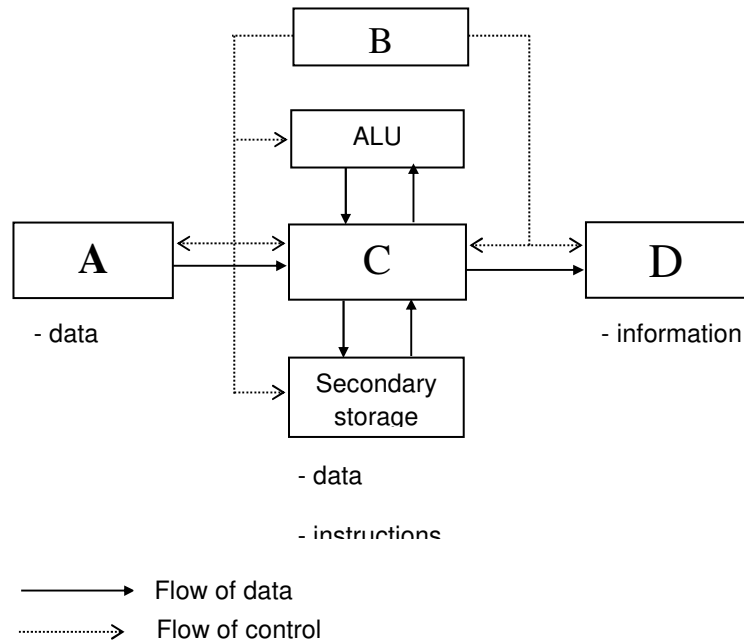
Don't write on this question paper

Question One

- Define the term *information Communication Technology*. (2 marks)
- Differentiate between OCR and MICR as used in computers. (4 marks)
- Outline **four** reasons why a mobile phone is regarded as a computer (4 marks)
- List any **four** input/output devices used on an Automated Teller Machine. (4 marks)
- You have been requested to advise your manager on different computer Software, briefly explain, giving examples, the **two** classes of software. (4 marks)
- Differentiate the following terms in relation to computers:
 - Soft copy and Hard copy;
 - Computer Software and Computer Hardware;
 - Bit and Byte. (6 marks)
- Outline **four** uses of the internet. (2 marks)
- Describe the **two** types of main memory in computer memory (4 marks)

Question Two

- Mutiso is a businessman from Kitui town and intends to automate his business. Describe the factors he would consider before purchasing the computers to use. (6 Marks)
- Outline **two** advantages of laptops as compared to desktop computers. (2 marks)
- Below is a block diagram of a digital computer system. Describe the function of the parts labeled A, B, C, and D. (8 marks)



- d) The computer has a primary memory which it uses while processing. Describe the need for secondary storage. (4 marks)

Question Three

- a) Explain each of the following terms as used in computer software:
- Compatibility;
 - Portability. (4 marks)
- b) An export company has decided to computerize their operations; they have decided to buy computer packages instead of developing their programs. Describe **three** benefits they are going to realize from their decision. (6 Marks)
- c) Imagine you are a computer consultant, a client approaches you to advise him/her on the type of operating system to use on his/her computer:
- Describe the term *operating system*. (2 marks)
 - Describe **two** types of operating system according to the number of users it supports. (4 marks)
- d) During an ICT class the lecturer discussed the first generation computers. Outline **four** characteristics of these computers. (4 marks)

Question Four

- a) Describe the term *computer/information security*. (2 marks)
- b) Differentiate the following pair of terms in relation to computer security
- Risk and Vulnerability
 - Threat and Attack

- iii. Hoax and Worm (6 marks)
- c) Describe the counter measures to the following computer crimes
 - i. software piracy;
 - ii. computer virus;
 - iii. Unauthorized access. (6 marks)
- d) Describe the following basic principles of data/information systems in relation to computer security;
 - i. Confidentiality
 - ii. Integrity
 - iii. Authenticity (6 marks)

Question Five

- a) Describe **two** types of computer networks based on geographical coverage. (4 marks)
- b) With the aid of a diagram, explain the *star* computer network topology. (4 marks)
- c) Differentiate between the *World Wide Web* and the *Internet*. (4 marks)
- d) Explain the challenges that faces integration of ICT in the society. (8 marks)