



# MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR APRIL SESSION EXAMINATION FOR DIPLOMA IN EDUCATION(ARTS)

UCU 002: INFORMATION COMMUNICATION TECHNOLOGY

DATE: 25/8/2017

TIME: 8:30 – 10:30 AM

## INSTRUCTION

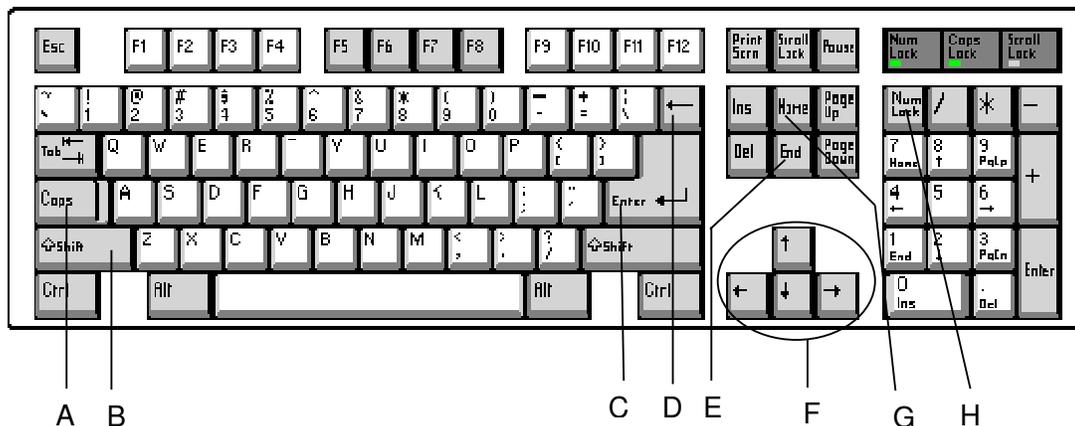
Answer question One and any other two questions

### SECTION ONE

1. (a) By classification, match the computer peripheral hardware components listed below with the various categories of peripherals: (6 marks)

Peripheral category	Peripheral hardware device/medium
Input devices	Floppy disk, microphone, floppy disk drive, projector,
Output devices	mouse, VDU monitor, digital camera, printer, CD-R,
Secondary storage devices	speaker, flash memory, keyboard, CD-RW drive, hard
Secondary storage media	disk, bar code reader, bank ATM card, graph plotter and scanner.

- (b) Explain the use of *any six* of the following keys labelled A to H on the picture of the computer keyboard below: (6 marks)



- (c) Differentiate between the following terms as used in the computer hard disk drives (HDDs):
- (i) a physical drive and a logical drive.
  - (ii) RAM and ROM. (4 marks)
- (d) State *Define* the following terms as used in information technology giving examples.
- i. Data
  - ii. Information
  - iii. Processing (3 marks)
- (e) Explain any **five** disadvantages of computers (5 marks)
- (f) list and explain the different types of computers (6 marks)
- 2 (a) Explain the different types of operating systems (6 marks)
- (b) Using a diagram, illustrate the various stages in data processing (5 marks)
- (c) Highlight any five limitations encountered by an organization through the use of computer networks. (5 marks)
- (d) Sometimes there is resistance from employees or users to adapt new technology. Outline FOUR reasons for user resistance to a new technology (4 marks)
- 3 (a) Describe the following challenges as encountered in ICT.
- i. Hacking
  - ii. Cracking
  - iii. Trespass
  - iv. Tapping
  - v. Piracy (5 marks)
- (b) Propose FIVE disadvantages of internet use in a modern society (5 marks)
- (c) Explain the meaning of the following terms as in ms word
- (i) Hardware and Software
  - (ii) Input Devices and Output devices (4 marks)
- (d) Draw a well labelled block diagram of the digital computer (6 marks)
- 4
- a) Explain **three** reasons why a *mobile phone* is regarded as a computer (3 marks)
- b) Describe **three** types *operating system* (6 marks)
- c) Differentiate between *application packages* and *user program* and state an example for each package. (3 marks)
- d) Propose five ideas the organization would adopt to protect its computer systems from Damage (5 marks)
- e) Explain the components of a computer system (3 marks)

- 5 (a) List any four Output devices (4 marks)
- (b) Explain briefly the five main security threats (5 marks)
- (c) Describe the following types of computers
- i. Mainframe computers
  - ii. Minicomputers
  - iii. Microcomputers (6 marks)
- (d) State five factors to consider when buying a computer. (5 marks)