



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR EXAMINATION FOR

CERTIFICATE IN ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE IN MECHANICAL ENGINEERING

SUPPLEMENTARY/SPECIAL EXAMINATION

EPC108: INTRODUCTION TO COMPUTERS

DATE: 30/8/2017

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

This paper consists of FIVE questions

Answer question one and other two questions in this paper

QUESTION ONE (COMPULSORY)

- a) Define the following terms in respect to ICT (3 marks)
- i. Data
 - ii. Information
 - iii. Computer Aided Design
- b) Illustrate and briefly describe the information processing cycle (5 marks)
- c) Outline three limitations of the microphone as an input device. (3 marks)
- d) State three ways of creating tables in MS-Word. (3 marks)
- e) Indicate the keyboard shortcut keys used to perform the following operations in a windows environment.
- i. Copy
 - ii. Paste
 - iii. Cut
 - iv. Select All (4 marks)

- f) Describe any three optical scanners and clearly indicate where they are used. (6 marks)
- g) Explain two areas where ICT is used in the building industry. (4 marks)
- h) Leo intends to upgrade his computer. List two examples of such upgrades. (2 marks)

QUESTION TWO

- a) The hard disk is the most popular backup device. Analyse three reasons why this is so. (6 marks)
- b) Explain **four** reasons why a computer is considered as a powerful tool. (4 marks)
- c) Describe any two mouse techniques and indicate how they interact with icons in a GUI. (6 marks)
- d) Indicate two limitations of automation. (2 marks)
- e) Differentiate between softcopy and hardcopy output. (2 marks)

QUESTION THREE

- a) Classify the following devices as either input or output
Plotter, Scanner, Digital camera, Barcode reader, Monitor, Speaker, Microphone, Keyboard, Printer, Joystick (5 marks)
- b) Machakos University College has automated most of its operations. Describe three areas where this happened and clearly indicate the benefits derived from this move. (6 marks)
- c) Most libraries still use COM.
 - i. Differentiate between the two types of COM. (2 marks)
 - ii. Indicate two merits and two demerits of this mode of output. (4 marks)
- d) Name the three major components of the CPU. (3 marks)

QUESTION FOUR

- a) Name the technology used in the first, second and third generation computers. (3 marks)
- b) Using **two** examples in each case, describe **two** ways of classifying computers. (6 marks)
- c) List **three** types of softcopy output devices. (3 marks)
- d) Describe any two magnetic scanners and indicate where they are used. (4 marks)
- e) Outline two application areas of speech recognition devices. (2 marks)
- f) Differentiate between static and dynamic RAM. (2 marks)

QUESTION FIVE

- a) Differentiate between RAM and ROM in two ways. (4 marks)
- b) Describe **three** variations of compact disks. (6 marks)
- c) Illustrate the flow of data and control in a computer. (10 marks)