



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR FIRST SEMESTER EXAMINATION FOR CERTIFICATE IN
ELECTRICAL ENGINEERING

SCU 101: INTRODUCTION TO COMPUTERS

DATE: 1/8/2017

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

Answer Question One and Any Other Two Questions

QUESTION ONE (COMPULSORY)

- a) Describe the following scanners and indicate where they are used. (6 marks)
 - i. MSR
 - ii. OBR
 - iii. MICR
- b) Illustrate and briefly describe the information processing cycle (5 marks)
- c) Explain three benefits that the electrical and electronics field derive from ICT technologies. (6 marks)
- d) Indicate the keyboard shortcut keys used to perform the following operations in a windows environment.
 - i. Copy
 - ii. Cut
 - iii. Paste (3 marks)
- e) Analyse three functions of an operating system. (6 marks)
- f) Indicate two application areas of the following software. (4 marks)
 - i. Word Processors
 - ii. Graphics packages

QUESTION TWO (20 MARKS)

- 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) Differentiate between impact and non impact printers. (4 marks)
- d) Differentiate between serial and direct access in respect to secondary storage. Use examples. (4 marks)
- e) Differentiate between softcopy and hardcopy output. Use examples. (2 marks)

QUESTION THREE (20 MARKS)

- a) Describe the following types of memory (8 marks)
 - i. Buffer
 - ii. Cache
 - iii. Registers
 - iv. Virtual
- b) List two ways of creating tables in Ms-Word. (2 marks)
- c) Define the term computer bus and describe any three buses. (4 marks)
- d) Illustrate the convectional naming pattern of disk drives.(Assume the computer has no floppy drive but has a partitioned hard disk, a CD drive and a flash disk.) (6 marks)

QUESTION FOUR (20 MARKS)

- a) Using **two** examples in each case, describe **two** ways of classifying computers. (6 marks)
- b) Explain **four** factors that one would consider when selecting software (4 marks)
- c) List the alignments used in Ms-word. (2 marks)
- d) Describe the two types of application software. Use examples. (4 marks)
- e) Explain four factors to be considered while choosing a backup device. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Paul who is a student in MU intends to buy a laptop and has approached you for advice. Explain to him **three** factors that will determine the cost of the laptop. (6 marks)
- b) Describe **three** variations of compact disks. (6 marks)
- c) Use a diagram to illustrate how operating systems are classified. (6 marks)
- d) Differentiate between the two types of COM. (2 marks)