



MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN ICT
DIT100: INTRODUCTION TO ICT**

DATE: 4/12/2017

TIME: 2.00-4.00 PM

INSTRUCTIONS

Attempt Question one Compulsory and any other four from section B

QUESTION ONE (30 MARKS)

- a) Argue any four reasons as to why an ATM can be referred to as a sophisticated computer. (8 marks)
- b) Outline four examples of soft copy output devices as used in computers. (4 marks)
- c) Define the following terms as used in ICT
 - i. GIGO (2 marks)
 - ii. Peripheral devices (2 marks)
 - iii. Cache memory (2 marks)
 - iv. Registers (2 marks)
- d) Explain two roles played by I.C.T within the transport sector. (4 marks)
- e) List four types of pointing devices as used in computers. (2 marks)
- f) Differentiate between *optical* and *digital* storage devices. (4 marks)

QUESTION TWO (20 MARKS)

- a) Explain four types of data processing modes as used in ICT. (8 marks)
- b) Differentiate the two types of main memory (4 marks)
- c) Outline any two characteristics of secondary storage devices (2 marks)

- d) Explain each of the following terms as used in computers.
- i. Nibble (2 marks)
 - ii. Biometrics (2 marks)
 - iii. Data processing. (2 marks)

QUESTION THREE (20 MARKS)

- a) Discuss **three** functions of operating systems as used in computer software (6 marks)
- b) Kijiti Kizito Procurement Officer with Express Communications Co. Ltd wants to purchase new printers for their new branch in Machakos city. Other than cost, outline four factors he should consider when purchasing the devices. (4 marks)
- c) With the aid of a well label block diagram, outline the components of a digital computer system. (8 marks)
- d) Define the term **ICT** as used in today's life. (2 marks)

QUESTION FOUR (20 MARKS)

- a) Al Ghurai Company Ltd is on a mission to purchase new software for their use in their company. Other than cost, explain any **three** factors they should consider when purchasing the programs. (6 marks)
- b) Differentiate between **SDRAM** and **SRAM** types of memories. (4 marks)
- c) Outline any four challenges been experienced as result of cyber security. (4 marks)
- d) The I.C.T personnel within the University have noted with concern that the spread of computer virus as well as the loss of hardware components within the campus is alarming. Outline **three** ways of controlling the loss of data and equipment. (6 marks)

QUESTION FIVE (20 MARKS)

- a) Describe the following types of computers (6 marks)
- i. Analogue computers
 - ii. Special purpose computers
 - iii. Digital computers
- b) Explain the **four** main operational functions of computer hardware (8 marks)
- c) Differentiate between **Non-impact** and **impact** printers. (4 marks)
- d) Technology is advancing at a very high speed. State two ways in which software users can cope with this trend. (2 marks)