



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2010/2011

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY

SEIT 105: INTRODUCTION TO COMPUTER HARDWARE

DATE: Thursday 2nd December, 2010

TIME: 2.00 p.m. – 4.00 p.m.

INSTRUCTIONS:

- **Answer Question 1 and 2 other Questions.**

- Q.1) a) Describe the function of the following buses in a standard computer system:
- i) Address bus
 - ii) Data bus
 - iii) Control bus (6 marks)
- b) i) Using a labeled block diagram describe the main components of a micro processor (8 marks)
- ii) Explain the function of the following Units in a Micro processor.
- i) The Accumulator
 - ii) Instruction register
 - iii) The program counter (6 marks)
- c) i) Differentiate between RAM and ROM (2 marks)
- ii) Explain the primary function of BIOS (2 marks)
- d) Describe 3 fundamental data storage technologies (6 marks)

- Q.2) a) i) name and describe four types of point-and-draw devices (8 marks)
- ii) Differentiate between a track pad and a mouse cursor. (2 marks)
- b) Explain the meanings of the following terms used in scanners' description.
- i) Optical character recognition (OCR) (2 marks)
- ii) Bar codes (2 marks)
- c) Name and explain three basic P.C printer technologies (6 marks)
- Q.3) a) Name and explain the function of each of the three main parts of a Microprocessor/CPU (6 marks)
- b) i) What is a Register in a Micro processor (1 mark)
- ii) Name and describe one function of each of the five registers in a micro processor (10 marks)
- c) Describe the three major step a machine cycle follows to carry out an instruction (3 marks)
- Q.4) a) List 7 Measures used to determine the performance of a monitor and state The Units used for each.
- b) Explain one merit and demerit of each of the following display systems.
- i) CRT
- ii) LCD
- iii) PLASMA (6 marks)
- Q.5) a) Describe four steps that you would follow so as to reformat your hard drive and install windows. (8 marks)
- b) i) What is a computer Mother board (1 mark)
- ii) Explain 3 advantages of using Motherboards (6 marks)
- c) i) What is a computer Network interface Card? (1 mark)
- ii) name the four techniques used to transfer data, used by NIC. (4 marks)

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