UNIVERSITY OF DAR ES SALAAM-COLLEGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES

IS 158: COMPUTER HARDWARE & SYSTEM MAINTANANCE (2 UNITS)

TIME 1000-1100

DATE: 281H APRIL, 2017

## Instructions

- i. Attempt all questions
- fi. All marks add up to 40
- iii. Be precise
- IV. Ensure your work is readable

## Question one:

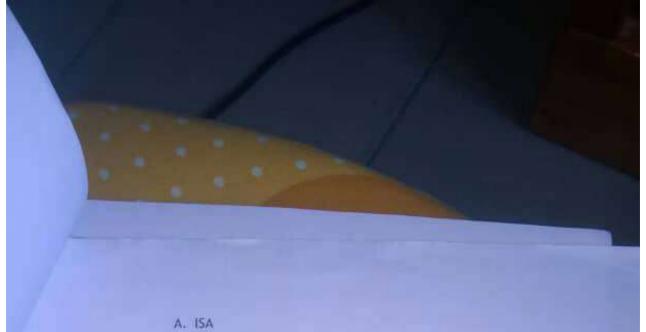
- a) What is the purpose of the following items that are located on mother board? (3 marks)
  - 1. System bus
  - ii. Expansion slots
  - iii. Chipset
- b) Differentiate the following terms

(4 marks)

- 1. VGA from HDMI
- Von Neumann architecture from AMD architecture(diagrammatic explanation will add up marks)

## Question two

- a) What is the function of the following interface cards; RAID adapter, wireless NIC and SCI adapter (6 marks)
- b) Explain in detail the three technologies commonly used in display subsystem. Describe five factors that determine monitor resolution. (6 marks)
- c) With examples explain three technologies for storage devices. (6 marks)
- d) Give the most correct answer out of alternatives given (4 marks)
  - Which of the following interface types is not commonly used to connect a mouse to PC?
    - A. USB
    - B. PS/2
    - C. IrDA
    - D. Parallel.
  - ii. Externally speaker systems commonly connect to a PC through a single jack that conforms to what PC standard?
    - A. PCMCIA
    - B. PC99
    - C. IEE 1394
    - D. There is no standard for audio connections on a PC.
  - III. What expansion bus has become the de facto standard for modern PC systems?



- B. EISA
- C. PCI
- D. AGP
- iv. To add external wireless network interface card to a notebook PC, what card standard is commonly used?
  - A. PCI
  - B. PC card
  - C. USB
  - D. FireWire

## Question three

- a) Explain the function of the following tools and give at least three examples for each (6 marks)
- f. Cleaning tools
- fi. Hand tools
- iii. Diagnostics tools
- iv. Disk management tools
- b) Differentiate BIOS from CMOS. Explain the three forms of BIOS. (3 marks)
- c) Give reasons that will force you to change BIOS settings. (2 marks)