

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2014/2015**

**SPECIAL/SUPPLEMENTARY YEAR I SEMESTER I EXAMINATON FOR THE DEGREE OF BACHELOR OF COMMERCE/BUSINESS IFNORMATION TECHNOLOGY**

**BBT 2102/HBC 2106: FOUNDATIONS/FUNDAMENTALS OF COMPUTER SYSTEMS**

**DATE:AUGUST 2015 TIME: 2 HOURS**

**INSTRUCTIONS:** Answer question one and any other two questions.

a. What is a computer user interface? (2 marks)

b Explain the following terms in relation to computer memory.

 i. Volatile

 ii. Transfer rate

 iii. RAID. (6 marks)

c. Explain the following micro operations.

 i. Indirect cycle

 ii. Interrupt cycle. (4 marks)

d. Explain the term ROM and RAM giving an example of each. (4 marks)

e. List and explain any three characteristics features of an operating system.

 (6 marks)

f Perform the following number conversions.

 a. 12578 to Decimal equivalent.

 b. 10102 to hexadecimal equivalent. (8 marks)

**QUESTION TWO (20 MARKS)**

a. Explain the following micro operations performed by the cental unit:

 i. Fetcy cycle

 ii. Indirect cycle.

 iii. Interrupt cycle.

 iv. Execute cycle.

 v. Instructions cycle. (10 marks)

b. Explain any five advantages and five disadvantages of computer systems.

 (10 marks)

**QUSTION THREE**

a. Looking at the recent trends in information technology and the advantages in their implementation, discuss how upgrading the current computer systems of JKUAT Mombasa CBD campus would benefit both the students and the staff. (20 marks)

**QUESTION FOUR**

a. Explain the reason why computer networks are installed in any organization.

 (8 marks)

b List and define the six components of a computer network. (12 marks)

**QUESTION FIVE**

i. Who is a computer user? (2 marks)

ii. Users can broadly classified into three categories list and describe them. (6 marks)

iii. Outline the history of computers for each generation identify its basic component and then list some of its main features. (12 marks)