

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

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2014/2015**

**YEAR 1 SEMESTER II EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN COMPUTER TECHNOLOGY**

**BCT 2203: PRINCIPLES OF COMPUTER MAINTENANCE**

**DATE: April 2015 TIME: 2 HOURS**

**INSTRUCTIONS: Answer Question One and Any Other Two Questions**

**QUESTION ONE (COMPULSORY) – 30 MARKS**

1. Define the following terms: (10marks)
2. Shadowing
3. Computer port
4. Throttling
5. Expansion slot
6. Adapter
7. How does a startup Bios control the boot process (3marks)
8. Differentiate the following
9. Hard boot and soft boot (2marks)
10. CMOs and BIOS (2marks)
11. Why is disk partitioning recommendable? (4marks)
12. Outline functionalities met by the BIOS (3marks)
13. Name and explain three ways of improving processor performance (6marks)

**QUESTION TWO (20 marks)**

1. Explain the term POST (2marks)
2. What are the advantages of POST? (3marks)
3. Outline at least four system devices tested by POST (4marks)
4. “CMOS checksum error” is a common problem in computer maintenance:
5. What does the problem mean? (2marks)
6. What are the likely causes to this problem? (3marks)
7. Outline the applicable solutions to this problem (6marks)

**QUESTION THREE (20 marks)**

You have been presented with a brand new desktop machine. Outline the procedure to follow to:

1. Achieve basic configuration and perform system boot before loading of the OS (8marks)
2. To install windows 7 operating system from a CD (7marks)
3. Install an antivirus program (5marks)

**QUESTION FOUR (20 marks)**

1. Outline the disadvantages of overclocking (3marks)
2. Briefly explain five mechanisms used to reduce overheating in computers (5marks)
3. Outline the general process that you would follow when replacing a mother board. (12marks)