

**UNIVERSITY OF BUEA**

**FACULTY OF ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF COMPUTER ENGINEERING**

Course Code: CET 202/EEF 310

Course Title: Computer Architecture

Second Semester 2012/2013 Exam

Instructions: Answer questions 1 and 3 others. Marks are allocated as shown.

1. Give the meaning of the following words/phrases used in Computer Architecture

- |   |        |
|---|--------|
| a. Computer organization                  | 1 mark |
| b. Byte-addressable memory                | 1 mark |
| c. One-and-half address instruction       | 1 mark |
| d. Symbol in an Assembly Language Program | 1 mark |
| e. An assembler                           | 1 mark |
| f. Datapath                               | 1 mark |
| g. Bus arbitration                        | 1 mark |
| h. An operand                             | 1 mark |
| i. An embedded computer                   | 1 mark |
| j. An accumulator                         | 1 mark |

2. What is an instruction? What are the different ways in which an operand can be addressed in an instruction?

20 marks

3. a.) What is memory hierarchy, its reason d'être and building blocks? What is locality of reference and how does it favour the hierarchy?

b) How does the CPU locate information in the cache?

4. a) How is the I/O system of a computer organized?

b) Name I/O interfaces used in a PC and their uses.

5. Discuss means of increasing the number of instructions to be executed simultaneously by a processor.

20 marks