ELIZADE UNIVERSITY
ILARA-MOKIN

FACULTY: BASIC AND APPLIED SCIENCES
DEPARTMENT: MATHEMATICS AND COMPUTER SCIENCE
1ST **SEMESTER EXAMINATION**
2019 / 2020 **ACADEMIC SESSION**

COURSE CODE: CSC209
COURSE TITLE: COMPUTER HARDWARE
COURSE LEADER: Mr. O. Babalola
DURATION: 2 Hours

HOD's SIGNATURE

INSTRUCTION: Compulsory Question - Question 1. Answer any other 2 questions.

Students are warned that possession of any unauthorized materials in an examination is a serious assessment offence.

Question #1 is Compulsory. Answer any two other questions.

1a. Select **any** of the following and write a 70-line essay (2-page) *10marks*
I. Bus II. Processor III. Memory

b. Write the acronym in full and a sentence explaining what it is *15marks*

I. ECC	II. DIMM	III. BIOS	IV. TCP	V. MBR	VI. IO	VII. GPU
VIII. CPU	IX. SCSI	X. MODEM	XI. BIT	XII. ESD	XIII. ISA	XIV. AWS
XV. NVME	XVI. CMOS	XVII. GHz	XVIII. MHz	XIX. PCI	XX. TCP	
XXI. LCD	XXII. Word	XXIII. Opcode	XIV. SSD	XXV DVD		

c. Describe 5 uses of register and mention 5 registers in computers.

2a. List 20 companies in the computing industry mentioning what their major business offering is. At least 10 of these must be hardware companies. Here is an example. *5marks*

Microsoft	Software (operating systems, application software).

b. List 10 job roles (careers) in computing. At least 5 of these should be in hardware. Mention what is expected for each of the role, i.e. what is expected of the worker in each of these roles. *4marks*
c. Mention 10 computer hardware magazine and textbooks. *3marks*
d. List 10 important tools a computer hardware personnel may not be able to do without. Motivate your answer.

3a. Instructions define what the processor is capable. Mention the various classes of instructions and give examples. *10marks.*
b. Describe the 8 great ideas in computer architecture. *4marks.*
c. Describe the way memory is accessed making reference to the following diagram.

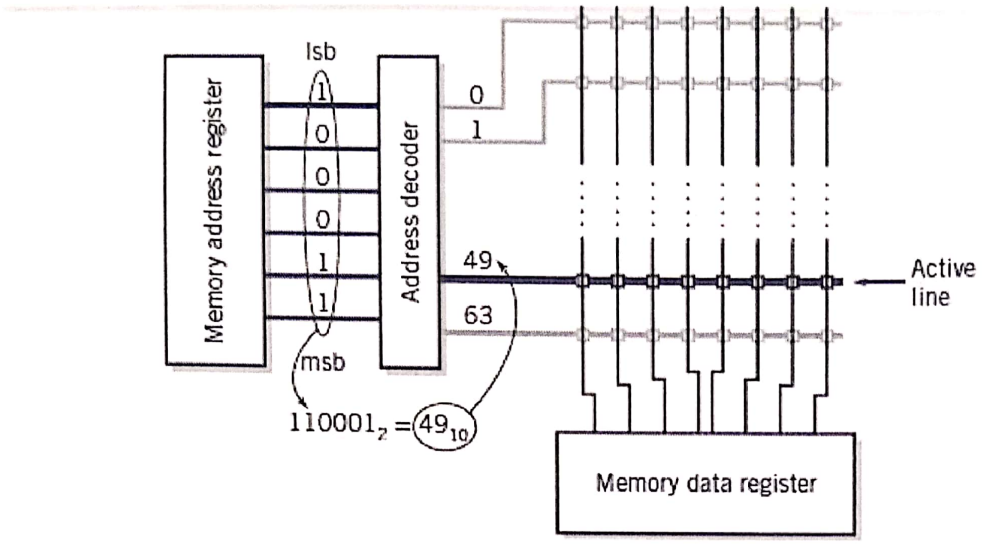

Figure 1.

4. a. Using Figure 2, describe the Von Neumann computer architecture. *2marks*
b. State what Figure 2 is, and explain its functioning. *5marks*
c. Write a simple program to illustrate its functioning. *5marks*
d. List the various categories of buses in a computer system, give examples. *3marks*

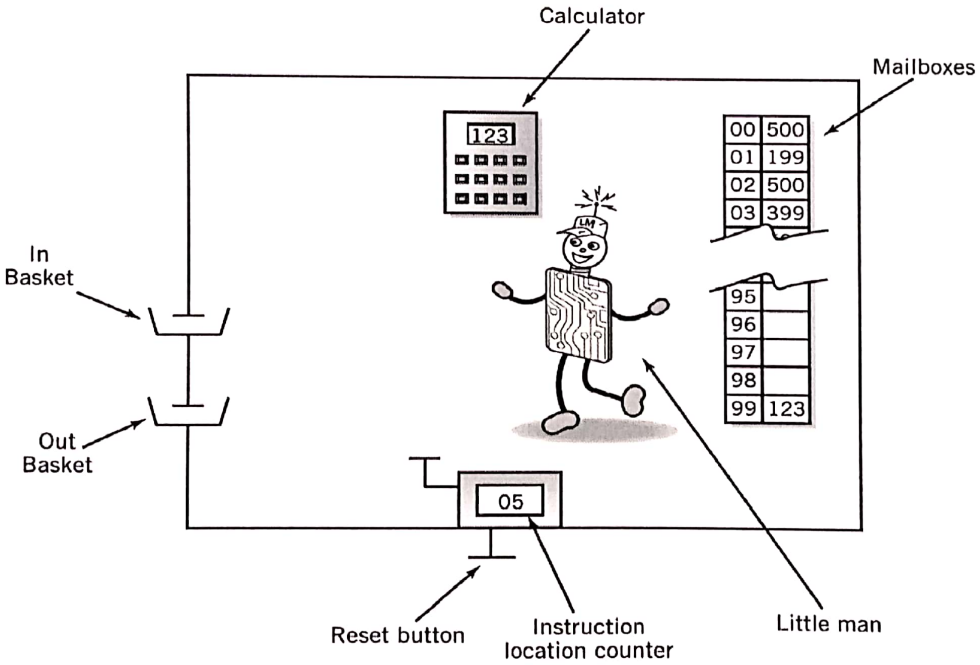

Figure 2

5. a. Why is computer performance measurement important? *2marks.*
b. How is computer performance measured? Mention a variety of things that can be measured. *3marks.*
c. Mention 5 of the presentations in CSC209 and the name of the presenter. *2marks.*
d. If Computer A runs a program in 15 seconds and Computer B runs the same program in 10 seconds, how much faster is A than B? *2marks.*
e. Contrast *instructions set* and *extended instruction set.* *2marks.*
f. Using illustrations, present an instruction, state the size of the instruction, highlight the elements of the instruction and their sizes. *2marks.*
h. Describe a typical instruction cycle. *2marks.*