THE UNIVERSITY OF ZAMBIA
School of Natural Science
Department of Computer Science

MAKEUP TEST
CSC 2101: INTRODUCTION TO COMPUTER SYSTEMS

QUESTION ONE

a) Malicious software (malware) is any software designed to damage or to disrupt a system. Briefly describe each of the following Types of malware [4 Marks]
   i.   Spyware
   ii. Viruses
   iii. Worms
   iv. Trojan Horses

b) The motherboard is the main printed circuit board. It contains the buses, or electrical pathways found in a computer. Buses allow data to travel among the various components. Discuss each of the following with examples [5 marks]
   i.   Motherboard Form Factors
   ii. What are some of the major factors one needs to consider when choosing which motherboard to use when building a computer from scratch?

c) Briefly discuss each of the following computer ports with examples [6 Marks]
   i.   Serial ports
   ii. USB is a standard interface
   iii. FireWire port
   iv. A SCSI port
   v.   RJ-45 port
   vi. A PS/2 port

d) Using your knowledge in the computer systems course, you know that it is important to work in a logical, methodical manner when working with computer components [10 Marks]
   i.   Name and List the major hardware components that make up a desktop computer.
   ii. Explain how you would go about to assemble the components list in (i) above in a logical, methodical manner to come up with a working computer using the motherboard below

QUESTION TWO

a) Mobile devices organize icons and widgets on multiple screens for easy access. Android OS uses the system bar, displayed on the bottom of the screen, to navigate apps and screens. Describe each of the following features with respect to IOS and Android mobile operating systems [7 Marks].

    i. Apps
    ii. Widgets
    iii. Home button
    iv. Notification Center
    v. Multitasking Bar
    vi. Screen Orientation
    vii. Screen Calibration

a) The diagram below shows a spreadsheet with results for 4 students. The continuous Assessment (CA) has a total of 40% and the final Examination is 60%. For the Continuous Assessment 10% is for the Labs, 10% assignments and 20% Tests [18 Marks].

K17			X ✓ fx								
	A	B	C	D	E	F	G	H	I	J	K
1											
2		Student ID	First Name	Last Name				Average Continous Assessment (40%)	Final Exam (60%)	Average Course Mark (100%)	
3					Test (20%)	Assignmments (10%)	Labs (10%				
4		CSC1111	Macdonald	Phiri	77.0	81.0	86.0		81.0		
5		CSC2222	Mwewa	Mbita	91.0	80.0	83.0		84.0		
6		CSC3333	Mweemba	Moonga	87.0	72.0	81.0		79.0		
7		CSC4444	Kalunga	Chanda	83.0	83.0	77.0		83.0		
8		CSC5555	John	Nawa	88.0	70.0	69.0		89.0		
9			Lowest Score								
10			Highest Score								
11			Average Score								
12											
13											
14											
15											

Copy and Complete the Table by writing the formulae to compute the following
    i. Give the formula that can be used to compute the following
        (1) The Lowest score for the **Labs, Assignments and Tests**
        (2) The Highest score for the **Labs, Assignments and Tests**
        (3) The Average score for the **Labs, Assignments and Tests**
    ii. The formula used to compute the **Average Continuous Assessment** for each student
    iii. The formula used to compute the **Course Grade** for each student
    iv. Which student had the highest exam score and which student had the lowest exam score?