ESB KAMONYI
EXAM OF COMPUTER SCIENCE
LEVEL: SENIOR 4 MCE
TERM: 2nd
ACADEMIC YEAR: 2016
Date: July, 08, 2016
Time: 3 hours
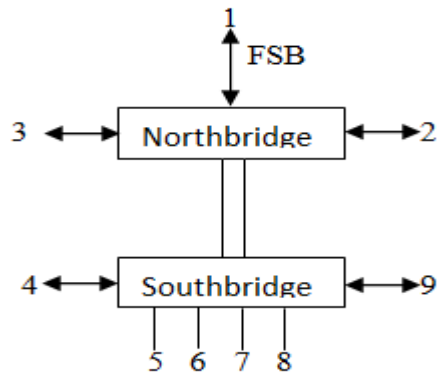**INSTRUCTIONS: All questions are compulsory**
                        Scientific calculator is not allowed

1. What is the role of octal and hexadecimal numbers system? **(2marks)**
2. Find the binary equivalent of $(353.45)_{10}$.   **(2marks)**
3. Convert $(7834.523)_{10}$ to octal system.   **(2marks)**
4. Give any two reasons why software needs to be updated.   **(2marks)**
5. Give the reason why software can be uninstalled from the computer.   **(1mark)**
6. Give the difference between primary memory and secondary memory, with two examples for each. **(4marks)**
7. Convert $(56734.5275)_{10}$ into hexadecimal.   **(2marks)**
8. Give the full word and the role of UPS? **(2marks)**
9. What is the difference between disk partition and disk formatting?   **(2marks)**
10. List the three motherboard form factors.   **(3marks)**
11. Convert the binary number 1111011 to decimal number.   **(2marks)**
12. What are two recently operating systems realized by Microsoft Company, in the following list of operating system? **(2marks)**

   a.   Windows 10   d.   Windows 8
   b.   windows 2000   e.   windows 7
   c.   windows xp   f.   windows vista

13. State 4 main components of a motherboard   **(2marks)**
14. Find binary equivalent of $(251.35)_{10} = (?)_2$.   **(2marks)**
15. Complete the missing correspondence of the following numbers decimal, binary, octal and hexadecimal.   **(5marks)**

Decimal number	Binary number	Octal number	Hexadecimal number
0	0	0	0
1	1	17	1
15	1111	31	F
25	11001	32	
26	11010	33	
27	11011	34	
28	11100	35	
29	11101		
30	11110		1E
31	11111		1F
32	100000		20
	100101		25

16. Find decimal equivalent of $(14AC)_{16} = (?)_{10}$ **(2marks)**
17. Find octal equivalent of $(123A.B4)_{16} = (?)_8$ **(2marks)**
18. Write in all letters the following maintenance jargons: **(8marks)**

   a. CMOS
   b. BIOS
   c. POST

   d. ESD
   e. RAM
   f. ROM

   g. NTFS
   h. FAT

19. Define a web browser. Give two examples of web browser. **(2marks)**
20. What is the role of the following internal components of the hard disk: **(3marks)**
   a. Platter
   b. Spindle
   c. Drive casing
21. Find the binary equivalent of $(453.25)_6 = (?)_2$. **(2marks)**
22. Why do you need to disassemble a desktop computer? **(2marks)**
23. Give the difference between system software and application software. **(2marks)**
24. Define multiboot. **(2marks)**
25. Give one way that a computer virus can enter the system. **(1mark)**
26. Give one effect that a virus can have one data stored on the computer. **(1mark)**
27. What can be done to reduce the risk of a computer virus? **(1mark)**
28. a) Define a chipset. **(0.5mark)**

   b) The Northbridge and the Southbridge chipsets share the work of managing the flow of data on the motherboard. Indicates the devices which communicate with the Northbridge and the south bridge on the following figure. **(4.5marks)**

29. What are the two types of CPU (microprocessors).**(2marks)**

GOOD SUCCESS!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!