

Name:

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COE 205, Term 101
Computer Organization & Assembly Programming
Quiz# 1

Date: Saturday, October 9, 2010

Q1. Fill the blank in each of the following:

1. There is one-to-one correspondence between _____ and _____.
2. Assembly _____ language _____ is _____.
3. One advantage of programming in _____ language is that programs are portable.
4. One advantage of programming in _____ language is having smaller code size and faster execution time.
5. It is more appropriate to use _____ language for developing hardware device drivers.
6. An _____ is a program that converts source-code programs written in assembly language into object files in machine language.
7. The _____ of a computer consists of the instruction set, programmer accessible registers and memory.
8. With a 20 bit address bus, the physical address space is _____.
9. The advantage of DRAM over SRAM is _____ while the disadvantage is _____.
10. Cache memory is used to help bridge the gap between _____.

11. Part of the disk access time, seek time is
while rotational latency is

12. The unsigned binary number 10100101 represents the decimal value _____.

13. The unsigned decimal number 500 is represented in binary as _____.

14. Assuming 8-bit representation, the signed number -30 is represented in sign-magnitude as _____ and in 1's complement as _____ and in 2's complement as _____.

15. Assuming 2's complement representation, the 12-bit number F00 represents the decimal value _____ and is represented using 16-bits as _____.

16. Assuming 2's complement representation, the operation $\text{FFE1} - \text{7FE0}$ produces the result _____ and overflow = _____.

17. Assuming 8-bit 2's complement representation, the smallest number that can be represented is _____ in decimal and _____ in binary.

18. Assuming that an 8-bit register contains the hexadecimal value C5 representing a character, the character stored is _____ and the parity used is _____. Note that the ASCII code of character 'A' is 41h.