

Name:

Id#

**COE 205, Term 091**  
**Computer Organization & Assembly Programming**  
**Quiz# 1**

Date: Wednesday, Oct. 21, 2009

**Q1.** Fill the blank in each of the following:

1. Assembly language is a programming language that uses \_\_\_\_\_ to represent operations, registers and memory locations.
2. There is one-to-one correspondence between \_\_\_\_\_ instructions and \_\_\_\_\_ instructions.
3. \_\_\_\_\_ translate assembly to machine code while \_\_\_\_\_ translate high-level programs to machine code.
4. Three advantages of programming in high level language include \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
5. Two advantages of programming in assembly language include \_\_\_\_\_, \_\_\_\_\_.
6. The \_\_\_\_\_ combines program's object file with other object files and link libraries, and produces a single executable program.
7. The \_\_\_\_\_ provides a hardware/software interface.
8. With a 32 bit address bus, the physical address space is \_\_\_\_\_.
9. Dynamic RAM is \_\_\_\_\_ and \_\_\_\_\_ than static RAM but \_\_\_\_\_.
10. \_\_\_\_\_ is used to bridge the CPU-memory performance gap.

11. Seek time is \_\_\_\_\_  
while rotation latency is \_\_\_\_\_.

12. The decimal number 1000 is represented in binary as \_\_\_\_\_  
and in hexadecimal as \_\_\_\_\_.

13. Using 16 bits, the range of represented unsigned numbers is \_\_\_\_\_  
while the range of 2's complement signed numbers is \_\_\_\_\_.

14. Using 8-bit 2's complement, the number F0 represents the decimal value \_\_\_\_\_.

15. Assuming 16-bit 2's complement representation, the operation  $FFF2 - 7FFF$  produces the result \_\_\_\_\_ and will set the over flow flag to \_\_\_\_\_ and the carry flag to \_\_\_\_\_.

16. 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 61h.