

Name:

Id#

**COE 205, Term 051**  
**Computer Organization & Assembly Programming**  
**Quiz# 2**

Date: Saturday, Oct. 1, 2005

**Q1.** Represent the numbers given below in **Hexadecimal** in the format specified in the table assuming **8-bits**:

Number	Sign-Magnitude	1's Complement	2's Complement
+27			
+101			
-27			
-101			

**Q2.** Determine the range of numbers in both binary and decimal that can be represented assuming **8-bit 2's complement representation**.

**Q3.** Using the 2's complement Hexadecimal representation obtained in Q1, perform the following operations and indicate if an overflow occurs or not:

i.  $(-101) + (-27)$

ii.  $(101) - (-27)$

**Q4.** Determine in binary the ASCII representation of the string **COE205** assuming **Odd Parity**. Note that the ASCII code of character A is 41H and that of character 0 is 30H.