

**Solution-Quiz # 2**

**BESE 16B**

**Digital Logic Design**

**Feb 21<sup>st</sup> 2011**

**Max Marks: 6**

Find the value of the following signed numbers if they are represented in:

1. Signed Magnitude Form
2. 1's Complement
3. 2's Complement

a. 11010110

Signed Magnitude:  $-1010110 = -(64+16+4+2) = -86$

1's Complement =  $-00101001 = -(32+8+1) = -41$

2's Complement =  $-00101010 = -(32+8+2) = -42$

b. 01110110

Signed Magnitude:  $01110110 = 64+32+16+4+2 = +118$

1's Complement =  $01110110 = 64+32+16+4+2 = +118$

2's Complement =  $01110110 = 64+32+16+4+2 = +118$

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