**Introduction to Computer Science**

**Faculty of Computing**



**Tutorial Session 06**

**Answer all questions.**

1. Explain what is meant by Packed Decimal Representation and represent following numbers by using Packed Decimal number representation.

a. 357

b. -678

In packed Decimal number representation, it uses the sign at the end of the binary conversion.

* = 1100
* = 1101

2. Represent following numbers by using 8 bits Ones Complement number representation.

a. 22

b. -15

3. Find the decimal value of the following 8 bits Ones Complement number representations.

a. 00001100

b. 11111000

4. Perform the following calculations using 8 bits Ones Complement addition.

a. 35 + (-16)

b. (-18) + 40

c. 100 + 28

5. Represent following numbers by using 8 bits Twos Complement number representation.

a. 45

b. -32

6. Perform the following calculations using 8 bits Twos Complement addition.

a. 20 + 5

b. 102 - 26