CSE 303: Data Communication

CT 3

Marks – 20 **Time – 30 Minutes**

This is an open book exam

1. Suppose you want to send a 12 bit data '***X'*** to your friend using Differential Manchester method. **12**

Here X is the least significant 12 bits of the binary representation of your roll number.

If your roll is 14101142, the binary representation will be

110101110010101010010110

Taking the left most 12 bits we have **X = 101010010110**

Now encode the bits in Differential Manchester method.

*Note: we can get the binary representation of our roll by searching **"14101142 in binary"** in google search bar.

2. Discuss how the Differential Manchester method handles the following concerns- **4+4=8**

a. Self-synchronization
b. DC component