

Assignment # 1

Question 1: Convert the following using the following schemes. Also discuss the schemes with respect to baseline wandering, DC components , self synchronization, Error detection and complexity.

- i) All line coding schemes (Unipolar NRZ, bipolar Manchester and differential Manchester, AMI, Pseudomplementary, 2B/1Q, 8B/6T , MLT-3 methods)
 - a) 000000000000
 - b) 111111111111
 - c) 010101010101
 - d) 000011110000
 - e) 111100000000
 - f) 001100110011

- ii) Convert the following data code to signal elements (4B/5B,B8ZS and HDB3 methods)
 - a. 000000001111111100110011
 - b. 000011110000111100001111
 - c. 000000000000000000000000
 - d. 111111111111111111111111