Course: CSE - 335, Data Communication
Trimester: Fall 2020
Batch: CSE-S-69-A, CSE-S-69-B
Assignment - 01
Deadline: 15th January, 2021

Questions:

01.	An analog signal carries 16 bits per signal element. If 800 signal elements are sent per second, find the bit rate.	[2]
02.	An analog signal has a bit rate of 4000 bps and a baud rate of 1000 baud. How many data elements are carried by each signal element? How many signal elements do we need?	[2]
03.	We need to send data 8 bits at a time at a bit rate of 3 Mbps. The carrier frequency is 10 MHz. Calculate the number of levels (different frequencies), the baud rate, and the bandwidth.	[3]
04.	Draw the result of scrambling the below sequences using each of the following scrambling techniques. Assume that the last non-zero signal level has been positive. ● B8ZS: 1110000000100 ● HDB3: 1100001100001	[3]

Note: Prepare all the answers in a doc file or you can prepare the answers in handwritten form. But make sure to convert into pdf before uploading your script. Do not forget to include your name and student ID in the script heading as well.