

NIBRAS, SHAMIT

ID: 19-40117-1

DEPARTMENT: CSE

Course: DATA  
COMMUNICATION

Section: G

Data communication Lab Test

Given,

ID = AB-CDEFG-H

My id= 19-40117-1

V1=BD=90

V2=C=4

FH=11

BG=97

$$X1 = V1 \sin(2\pi(FH*100) t) = 90 * \sin(2 * \pi * (11 * 100))$$

$$X2 = V2 \sin(2\pi(BG*100) t) = 4 * \sin(2 * \pi * (97 * 100))$$

$$\text{Composite\_signal} = 90 * \sin(2 * \pi * (11 * 100)) + 4 * \sin(2 * \pi * (97 * 100))$$

(a)Ans:

$$\text{Our signal is: } 90 * \sin(2 * \pi * (11 * 100)) + 4 * \sin(2 * \pi * (97 * 100))$$

The signal in time and frequency domain is done on octave and attested in the file.

(b)Ans:

$$AH = 11;$$

$$S = AH * 0.01;$$

(i)Ans:

Calculating the SNR value of the composite signal on octave and attested in the file.

(ii)Ans:

Calculating the maximum capacity of the signal on octave and attested in the file.

(iii)Ans:

Calculating the quantized signal and find the binary code words on octave and attested in the file.