Signals & Systems - Quiz 1 (Spring 2020) CLO-1 (16/12/2020)

Start Time: **05:00am,**

Time for solving: **20 minutes**

End Time for submission: **05:20am**

1) What is the Nyquist sampling rate for the signal x(t) given bellow? Find the discrete time signals $x_1[n]$ and $x_2[n]$ obtained by using sampling frequency Fs = Nyquist rate and Fs = 600Hz respectively. **(1+2 Marks)**

Where 'U' is the unit place digit of your registration numbers. If the unit place digit is zero then use U=5.

$$x(t) = 2\cos(100.U.\pi t) + 3\cos(200.U.\pi t) + 5\cos(300.U.\pi t)$$