ISRA UNIVERSITY

Islamabad Campus

Program: BSC & MSC (Electrical)
Semester - Fall 2018

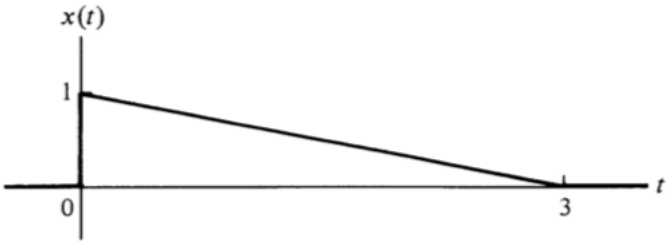
Signal & Systems

Assignment – 4 **Due Date: 17/01/2019**
Marks: 30 **Handout Date: 02/01/2019**

Question # 1:

Sketch and label each of the following signals:

1. $x(2t+4)$

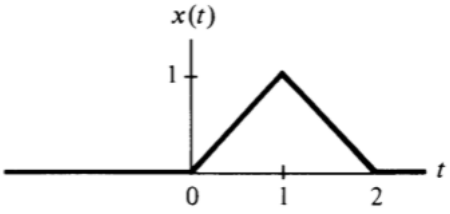


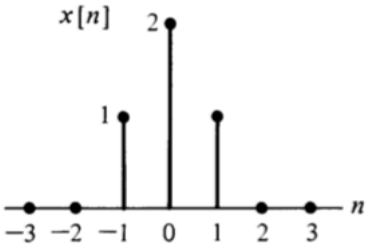
2. $-3x[n+2]$

Question # 2:

For each of the following signals, determine whether it is even, odd or neither:

1.



2. 

Question # 3:

Consider the signals:

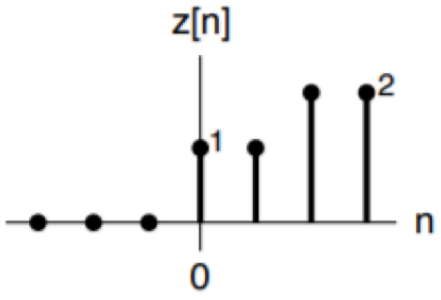
$$x(t) = \cos\frac{2\pi t}{3} + 2\sin\frac{16\pi t}{3}$$

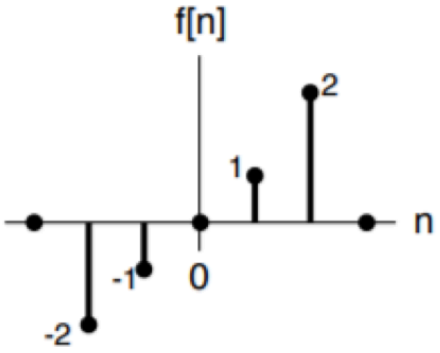
$$y(t) = \sin \pi t$$

Show that z (t)= x (t) y (t) is periodic. Find the fundamental period of z (t).

Question # 4:

Determine the Discrete-time Convolution for the following signals:





Good Luck