Signals & Systems Assignment 1 (Spring 2022) – 4Th Semester (CLO1)

Question 1. Given the signal x(t) shown in Figure 1, Sketch and label the following signals,

1) $x(t-2)$
2) $x(2-t)$
3) $x(3t-2)$
4) $x(3-t/2)$
5) $x(t)u(t+1)$
6) $x(t) - \delta(t-3)$

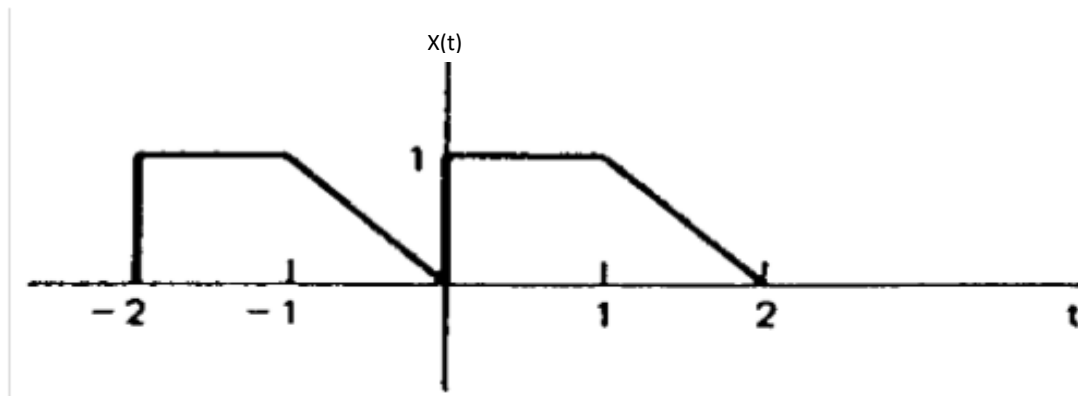**Figure 1**

Question 2. Given the discrete-time signal x[n] shown in Figure 2, Sketch and label;

1) $x[n-4]$
2) $x[-2-n]$
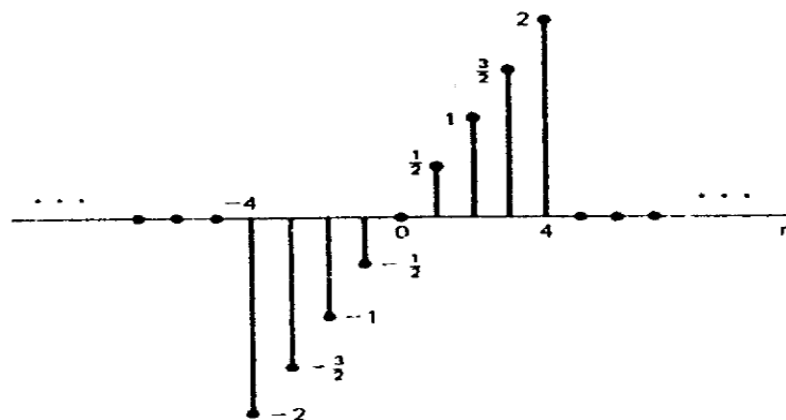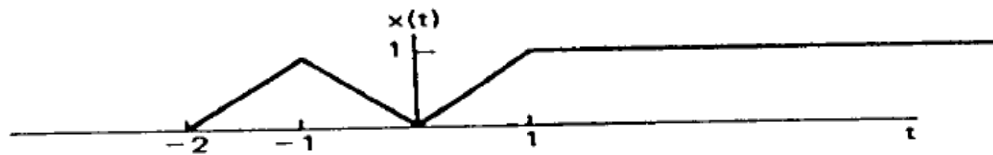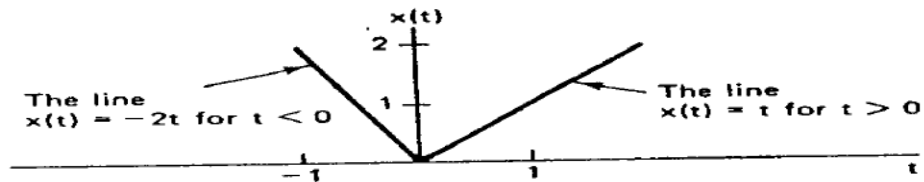3) $x[\frac{1}{3}n+1]$
4) $x[n-2]\delta[n-1]$

Figure 2

Question 3. Determine and sketch even and odd parts of the continuous-time signals depicted in Figure 4. Label your sketches carefully.
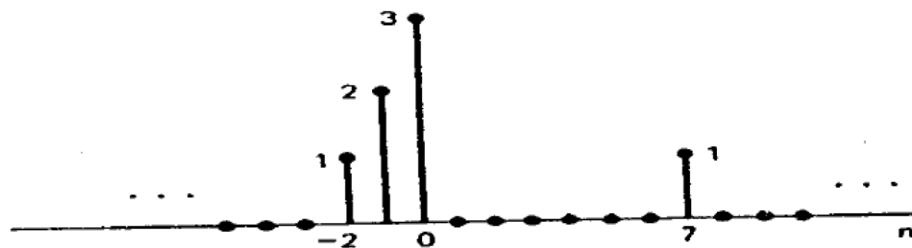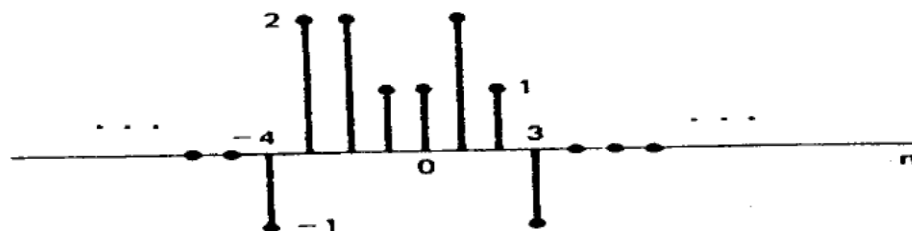   **(1.5)**

(a)

(b)

Figure 2

Question 5. Determine and sketch even and odd parts of the discrete-time signals depicted in Figure 4. Label your sketches carefully.
     (1.5)

(a)

(b)

Figure 3

Due date for this assignment is Tuesday 26th April 2022. The quiz related to assignment 1 will be on Tuesday 26th April 2022.