



ISRA UNIVERSITY

Islamabad Campus

Program: BTECH (Electrical)
Semester – Spring 2018

Signal & Systems

Assignment – 1
Marks: 10

Due Date: 20/03/2018
Handout Date: 13/03/2018

Question # 1:

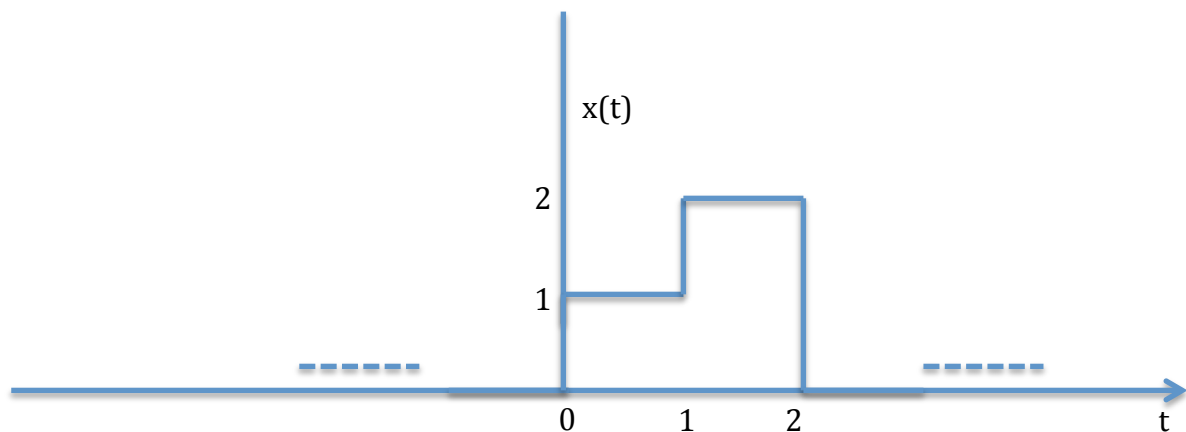
Determine whether or not each of the following signals is periodic. If a signal is periodic, specify its fundamental period:

1. $x[n] = e^{j\frac{4}{\pi}n}$
2. $x[n] = \sin\left[\frac{6\pi}{7}n + 1\right]$

Question # 2:

A continuous-time signal $x(t)$ is shown in figure below. Sketch and label each of the following signals:

1. $x(t - 1)$
2. $x(-2t)$
3. $x(3t - 1)$



Good Luck