## Department of Electronics & Communication Engineering

Faculty of Engineering, Integral University, Lucknow

Quiz 01

Signals & Systems (IEC-402)

Candidate Name & Roll Number:

Date:

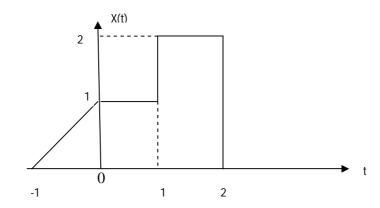
Maximum Marks: 10

Group: Second Year EC-2

Attempt all questions.

Attempt all questions.

1. Let a continuous time signal x(t) represented as below figure.



Sketch each of the following

- (a). X(t)U(1-t)
- (b).  $X(t)\delta(t-1.5)$
- (c). X(-3t+1)
- (d). X(2t-1)
- 2. Test the causality and linearity of signals:

(a). 
$$y(t) = 10x(t) + 7$$

(b). 
$$y(t) = x(t + 10) + x^2(t)$$

(c). 
$$y(t)=3\sin(t)+5$$

(d) 
$$y[n]=x[n+1]+x[n]$$