

Signals and System: Final Exam

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Class: A

Code ScreenShot:

```
1 % Part a)
2 %Generating the signal x[n]
3 - n = -10:10;
4 - x = 28*(n+3==0) + 38*(n+2==0) + 48*(n+1==0) + 8*(n==0) + 48*(n-1==0) + 38*(n-2==0) + 28*(n-3==0);
5
6 % Part b)
7 %Generating the unit step signal
8 - u = zeros(size(n));
9 - u(n>=0) = 1;
10
11 % Part c)
12 %Flipping the signal and checking symmetry
13 - x_flipped = flipr(x);
14 - symmetry = isequal(x, x_flipped);
15
16 % Part d)
17 %Making the signal causal
18 - x_causal = x.*(n>=0);
19
20 % Part e)
21 %Plotting the causal signal
22 - figure;
23 - stem(n, x_causal, 'filled');
24 - xlabel('n');
25 - ylabel('x[n]');
26 - title('Causal Signal x[n]');
27
```

Output:

