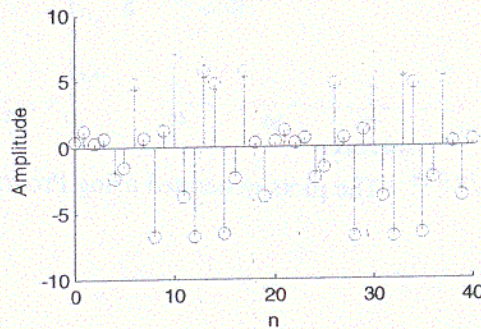


(e) The code fragment used to generate

$\tilde{x}_e[n] = 5 \cos(1.5\pi n + 0.75\pi) + 4 \cos(0.6\pi n) - \sin(0.5\pi n)$  is as follows:

```
x = 5*cos(1.5*pi*n+0.75*pi)+4*cos(0.6*pi*n)-sin(0.5*pi*n);
```

The plot of the periodic sequence is given below:



M2.3 (a) 

```
L = input('Desired length = ');
A = input('Amplitude = ');
omega = input('Angular frequency = ');
phi = input('Phase = ');
n = 0:L-1;
x = A*cos(omega*n + phi);
stem(n,x);
xlabel('Time Index'); ylabel('Amplitude');
title(['\omega_{0} = ', num2str(omega/pi), '\pi']);
```

(b)

