**EE 301 Fall 2018-2019**

**HW 5**

**Group Number:66**

**Group Members:** Ali AYDIN, Enes AYAZ

|  |  |
| --- | --- |
| **2)** |  |
| **3)** |  |

|  |  |
| --- | --- |
| **4)** |  |

|  |  |
| --- | --- |
| **5)** | **Part a**  **Part i**  k = 0:511;  xn\_mag = abs(fft(xn, 512));  figure();  title("Magnitude of X[k]");  plot(k, xn\_mag);  C:\Users\ROG\Desktop\hw5\Untitled_01.png  **Part ii**  a = find(xn\_mag > 30)  a =  21  46  163  351  468  493  **Part b**  **Part i**  k = -256:255;  xn\_shift = fftshift(abs(fft(xn, 512)));  figure();  title("Magnitude of X[k]");  plot(k, xn\_shift);  C:\Users\ROG\Desktop\hw5\Untitled_02.png  **Part ii**  **There are six dominant frequency.**  **Part iii**  w\_axes = linspace(-Fs/2, Fs/2, 512);  figure();  title("Magnitude of X[k]");  plot(w\_axes, xn\_mag);  C:\Users\ROG\Desktop\hw5\Untitled_03.png |