

# **Signals and Systems**

## **Assignment-3**

### **Report**

1) Here the sampling frequency used is 6000Hz. Though higher frequency components will not be covered when sampling through this frequency. Moreover, it will take more time for computation when we will choose higher sampling frequency.

2) bandwidth upon observation is taken to be 2500hz

3) when the frequency components before and after the lower frequency and upper frequency are removed the voice is more clear that regular recovered signal due to removal of the undesired noise signals.

4) when the phase is set at zero, it means values of fourier transform at particular point has no imaginary part, it becomes real...but now the voice is not sharp and clear.

5) graphs and audio samples are attached for the reference.

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