DIGITAL SIGNAL PROCESSING LAB

List of Experiments:

1. Generation of Sinusoidal waveform/signal based on recursive difference equations.
2. To find DFT/IDFT of given DT signal.
3. To find frequency response of a given system given in(Transfer function/ Differential equation form).
4. Implementation of FFT of given sequence.
5. Determination of Power Spectrum of a given signal(s).
6. Implementation of LP FIR for a given sequence.
7. Implementation of HP FIR for a given sequence.
8. Implementation of LP IIR for a given sequence.
9. Implementation of HP IIR for a given sequence.
10. Generation of Sinusoidal signal through filtering.
11. Generation of DTMF signals.
12. Implementation of Decimation process.
13. Implementation of Interpolation process.
14. Implementation of I/D sampling rate converters.
15. Audio application such as to plot a time and frequency display of microphone plus a cosine using DSP. Read a .wav file and match with their respective spectrograms.
16. Noise removal: Add noise above 3 KHz and then remove, interference suppression using 400 Hz tone.
17. Impulse response of first order and second order systems.

Note: Minimum of 12 experiments to be conducted.