LIST OF DCOM (EC209) EXPERIMENTS COMPLETED BEFORE MID SEM EXAM.

WRITE DOWN BELOW MENTIONED OBJECTIVES IN YOUR JOURNAL AND COMPLETE JOURNAL AS PER THE OBJECTIVE OF EACH EXPERIMENT.

Objective (Exp. No. 1)- To study Spectrum Analyzer and observe the spectrum of sinusoidal signal and square wave. Draw the input waveforms in time domain and their output spectra for five different set of frequencies and amplitudes for each input.

Objective (Exp. No. 2)- To examine sampling and reconstruction of signal, verify the Nyquist criteria by varying sampling frequency. Draw the sampled version of waveform for the conditions: (i) $f_s < 2f_m$, (ii) $f_s > 2f_m$ and (iii) $f_s = 2f_m$; where f_s - sampling frequency; f_m - maximum baseband frequency and represent the output responses for different order low pass filter. Use virtual mode with appropriate software.

Objective (Exp. No. 3)- To study amplitude modulated (AM) technique, modulation-index (m), draw waveforms, spectra and trapezoidal display. Illustrate the observed AM signals for double sideband with and without carrier by changing m as: m>1, m<1 and m=1 and draw it. Use virtual mode with appropriate software.

Objective (Exp. No. 4)- To demonstrate frequency modulation (FM) and demodulation process by observing the waveforms in time domain and their spectra in frequency domain by varying the parameters of massage signal. Draw waveforms and spectra. Use virtual mode with appropriate software.

Objective (Exp. No. 5)- To examine of pulse amplitude modulation (PAM), pulse position modulation (PPM) and pulse width modulation (PWM) and verify and draw the resultant waveforms. Illustrate the circuit diagrams for PAM and PWM. Show & draw the output waveforms using the Matlab code/Simulink using virtual mode.

Objective (Exp. No. 6)- To study of amplitude shift keying (ASK), frequency shift keying (FSK) and phase shift keying (PSK) modulation technique and verify waveforms. Illustrate the schematic diagrams for ASK, FSK and PSK. Show & draw the input/output waveforms using Matlab code/Simulink using virtual mode.