

Experiments
Signal System and communication Laboratory

| S. No. | Name of the Experiment | Number of Pages |
|---------------|---|------------------------|
| 1. | a. To get familiarity with basic commands in MATLAB. b. To explore the connection between system impulse response and the solution of linear ordinary constant coefficient differential Equation. c. To understand and implement convolution routine for discrete Time finite length sequences. | 2 |
| 2. | To compute and plot the Fourier spectra for the aperiodic signals. | 2 |
| 3. | a. Implementation of discrete Fourier transform (DFT) and inverse DFT (IDFT) algorithm. b. Implementation of autocorrelation and cross correlation Algorithm. | 3 |
| 4. | a. To generate two periodic signals $x_1(t)$ and $x_2(t)$. b. To compute and plot the Fourier spectra for the Aforementioned periodic signals. c. To illustrate the Gibb's phenomenon. | 2 |
| 5. | a. To Simulate Continuous-time Sinusoidal Signals in Discrete-Time. b. To illustrate DSB-SC modulation and demodulation. c. To illustrate FM modulation and demodulation. | 5 |