

# INDEX

SL	Experiment Name	Page No
01	Explain and implement Discrete Fourier Transform (DFT) and Inverse Discrete Fourier Transform (IDFT)	
02	Let $x(n) = \{1, 2, 3, 4, 5, 6, 7, 6, 5, 4, 3, 2, 1\}$ . <div style="text-align: center;"> <math>\uparrow</math>  Determine and plot the following Sequence:  <math>y(n) = 2x(n-5) - 3x(n+4)</math>. </div>	
03	Write MATLAB code to perform the following operations on a Sinusoidal wave: i) Sampling, ii) Quantization, and iii) Coding.	
04	Determine and plot the following sequences over the indicated interval using MATLAB: $x(n) = 2\delta(n+2) - \delta(n-4); -5 \leq n \leq 5$ .	
05	Plot the following signal operations on signals: $x = \{1, 0, 3, 4\}; y = \{1, 1, 1, 1\}; z = \{3, -1, 0, -4\};$ <div style="text-align: center;"> <math>\uparrow \qquad \qquad \uparrow \qquad \qquad \uparrow</math>  i) Signal Addition (<math>x + y</math>) and ii) Folding of signal <math>z</math>. </div>	
06	Plot following signal operations: $x = \{1, 2, 3, 4\}; y = \{1, 1, 1, 1\}; z = \{-2, 3, 0, 1, 5\};$ <div style="text-align: center;"> <math>\uparrow \qquad \qquad \uparrow \qquad \qquad \uparrow</math>  i) Signal Multiplication (<math>x*y</math>) and ii) Signal Shifting (<math>z</math>). </div>	
07	Using MATLAB to plot the Fourier Transform of a time function, the aperiodic pulse shown below: <div style="text-align: center;"> </div>	
08	Explain and generate sinusoidal wave with different frequency using MATLAB	
09	Explain and implementation of following Elementary Discrete signal using MATLAB. i) The unit sample sequence ii) Unit step signal iii) Unit ramp signal	