

Digital Signal Processing Lab

LAB # 01

Introduction to signals

Lab Objectives:

Objectives of this lab are as follows:

- Generating basic sequences in MATLAB.
- Graphical views of different arithmetic operations on basic functions.

Tools Used:

- Matlab

Task # 1:

Write a Matlab code that generates Delta (Impulse) Function.

Task # 2:

Write a Matlab code that generates Unit Step Function.

Task # 3:

Write a Matlab code that generates Unit Ramp Function.

Task # 4:

Write a Matlab code that generates an Exponential Function.

Task # 5:

Write a Matlab code that generates a Sinusoidal Function.

Task # 6:

Write a Matlab code that generates Unit Impulse delay (shift) Function.

Task # 7:

Write a Matlab code that generates Unit Step delay (shift) Function.

Task # 8:

Write a Matlab code that generates Unit Ramp delay (shift) Function.

Task # 9:

Write a Matlab code to sum Unit Step and Unit Ramp Function.

Task # 10:

Write a Matlab code to subtract Unit Ramp Function from Unit Step Function.

Task # 11:

Write a Matlab code to multiply Unit Step and Unit Ramp Function.

Task # 12:

Write a Matlab code to divide Unit Step and Unit Ramp Function.