

# American International University, Bangladesh



## Data Communication

Section: E

Semester: Summer 2021-22

Course Instructor: Tanjil Amin

Experiment no: 07

Experiment Name: Study of Amplitude Modulator and  
Demodulator using Simulink

Submitted by:

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Here, Used message signal:  $m(t) = (2*\sin(2*\pi*4*t)+3*\cos(2*\pi*6*t))$

In first sine wave:

Amplitude: 2

Frequency:  $2*\pi*4$

Sample time; 1/5000

In 2<sup>nd</sup> sine wave:

Amplitude: 3

Frequency:  $2*\pi*6$

Phase:  $\pi/2$

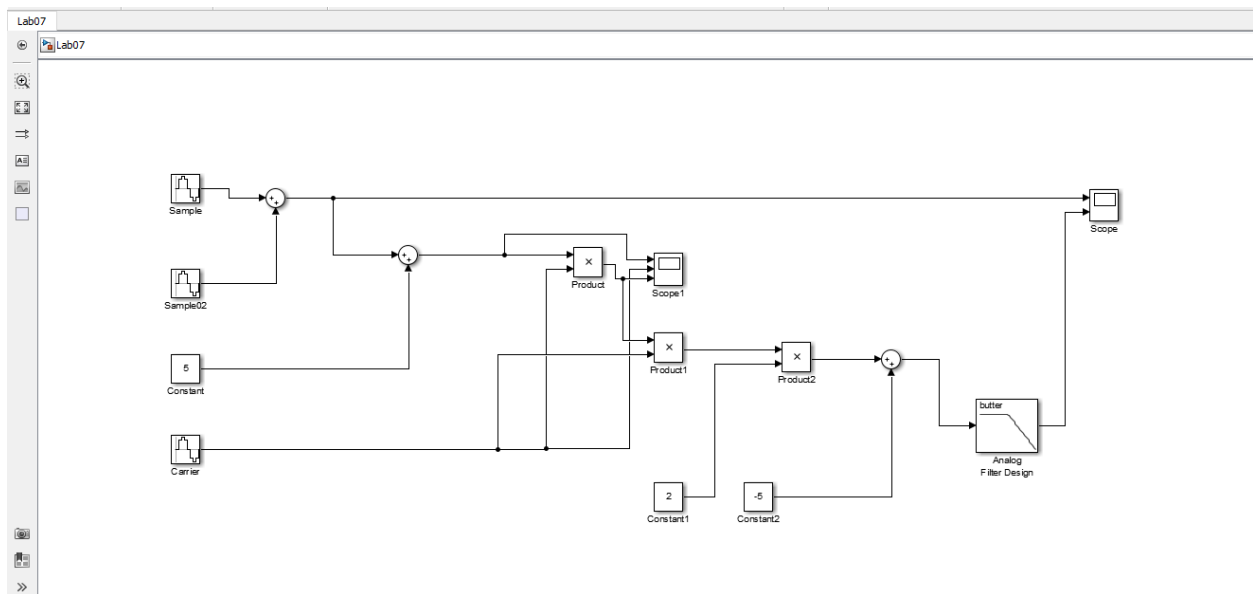
Sample time; 1/5000

Constant: 5

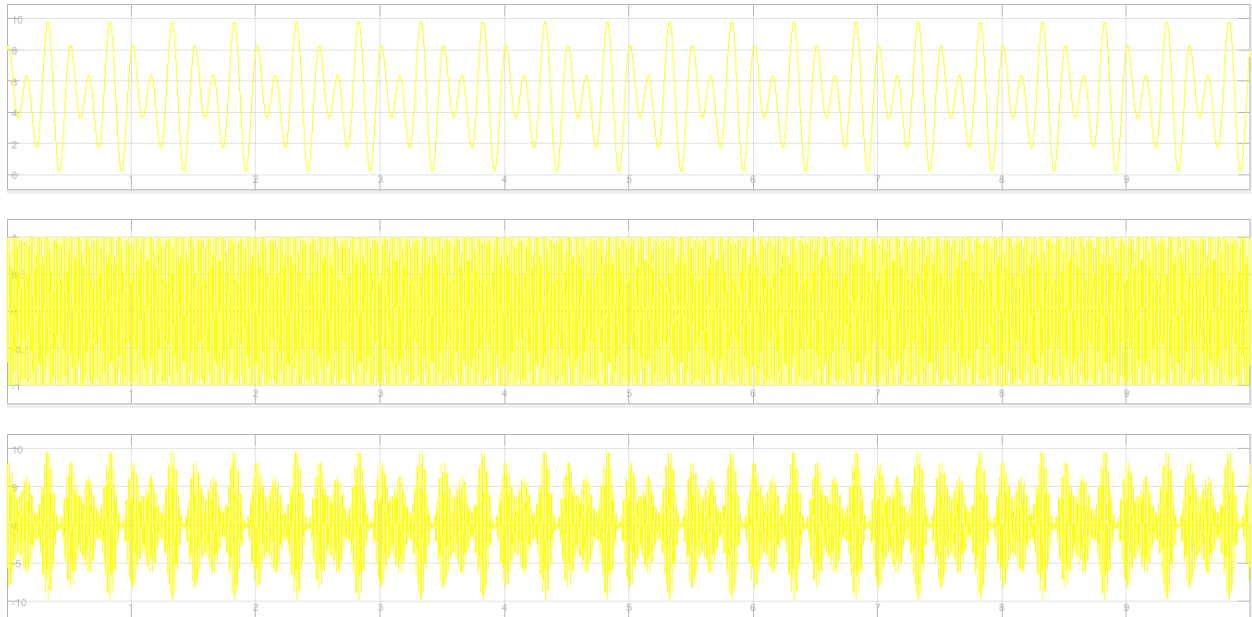
Constant 1: 2

Constant 2: -5

Diagram:



## Modulated Signals:



## Demodulated Signal:

