Experiment No. 1

Amplitude Modulation (AM) and Demodulation

Write a MATLAB program (without using communication toolbox inbuilt functions like 'comm.AMModulator', 'ammod' etc.) to demonstrate AM modulation and demodulation technique in each of the following three schemes.

- a. Conventional AM technique
- b. Double Sideband Suppressed Carrier (DSB SC) modulation technique
- c. Single Sideband Suppressed Carrier (SSB SC) modulation technique

In your report include

- Time domain plots of:
 - 1. Message Signal
 - 2. Carrier Signal
 - 3. Modulated signal
 - 4. Demodulated Signal
- Frequency domain plots of:
 - 1. Modulated Signal
 - 2. Demodulated Signal

in each of the above three schemes.