Experiment Name: Find the Amplitude Shift Keying (ASK) signal using MATLAB

Code:

clc ;

close all;

clear all;

fc=input('Enter the freq of Sine Wave carrier:');

fp=input('Enter the freq of Periodic Binary pulse (Message):');

amp=input('Enter the amplitude (For Carrier & Binary Pulse

Message):');

t=0:0.001:1; % For setting the sampling interval

c=amp.\*sin(2\*pi\*fc\*t);

subplot(3,1,1) %For Plotting The Carrier wave

plot(t,c)

xlabel('Time');

ylabel('Amplitude');

title('Carrier Wave');

m=amp/2.\*square(2\*pi\*fp\*t)+(amp/2);

subplot(3,1,2) %For Plotting The Square Binary Pulse (Message)

plot(t,m)

xlabel('Time');

ylabel('Amplitude');

title('Binary Message Pulses');

w=c.\*m; % The Shift Keyed Wave

subplot(3,1,3) %For Plotting The Amplitude Shift Keyed Wave

plot(t,w)

xlabel('Time');

ylabel('Amplitude');

title('Amplitide Shift Keyed Signal');

Output:

