American International University- Bangladesh
Department of Computer Science

Lab Report Cover Sheet

Course Name	Data Communication
Lab Report No.	05
Lecturer Name	Md. Navid Bin Anwar
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Section	B
Group No.	10

Student Name	**Student ID**	**Contribution (out of 100%)**
1. Kaif Al Kabid	18-38144-2	20%
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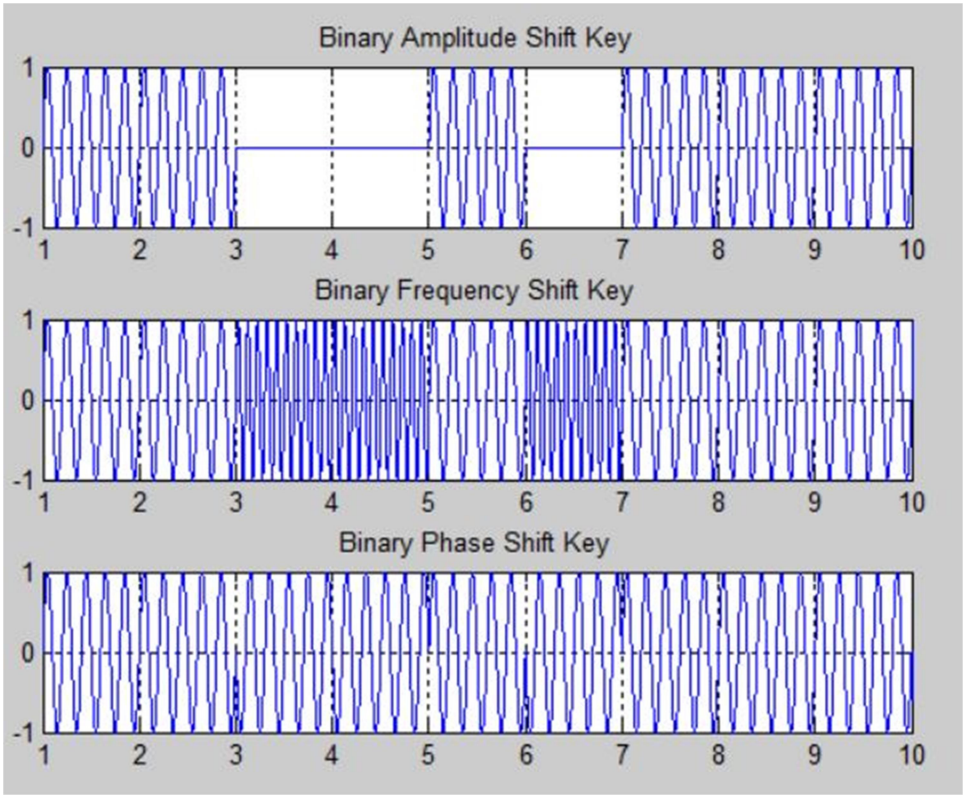
Lecturer Remarks (Only for teacher)		

CODE	OUTPUT

1.Code for (BASK,BFSK,BPSK):
 	
close all;
clc;
% 18-38144-2
% DEF = 814 = 1100101110
f = 5;
f2 = 10;
x = [1 1 0 0 1 0 1 1 1 0]; % input signal
nx = size (x,2);
i = 1;
while i<nx+1
t = i:0.001:i+1;
if x(i)==1
bask = sin(2*pi*f*t);
bfsk = sin(2*pi*f*t);
bpsk = sin(2*pi*f*t);
else
bask = zeros(size(t));
bfsk = sin(2*pi*f2*t);
bpsk = sin(2*pi*f*t+pi);
end
subplot(3,1,1)
plot(t,bask);
hold on;
grid on;
axis ([1 10 -1 1]);
title('Binary Amplitude Shift Key');
subplot(3,1,2)
plot(t,bfsk);
hold on;
grid on;
axis ([1 10 -1 1]);
title('Binary Frequency Shift Key');
subplot(3,1,3)
plot(t,bpsk);
hold on;
grid on;
axis ([1 10 -1 1]);
title('Binary Phase Shift Key');
i = i+1;
end
	

2.Code for (QPSK):

```
close all;

clc;
% 18-38144-2
% DEF = 814 = 1100101110
f = 10;
x = [ 11 00 10 11 10 ];
x1 = [ 1 0 1 1 1 ];
x2 = [ 1 0 0 1 0 ];
nx = size (x1,2);
i = 1;
while i<nx+1
 t = i:0.001:i+1;
 if x1(i)==1
 psk1=sin(2*pi*f*t);
 else
 psk1=sin(2*pi*f*t+pi);
 end
 if x2(i)==1
 psk2=sin(2*pi*f*t+pi/2);
 else

psk2=sin(2*pi*f*t+pi+pi/2);
 end
 QPSK = psk1+psk2;
 subplot(3,1,1);
 plot(t,psk1);
 hold on;
 grid on;
 axis([1 4 -1 1]);
 title('PSK1')

 subplot(3,1,2);
 plot(t,psk2);
 hold on;
 grid on;
 axis([1 4 -1 1]);
 title('PSK2')
 subplot(3,1,3);
 plot(t,QPSK);
 hold on;
 grid on;
 axis([1 4 -2 2]);
 title('QPSK')
 i=i+1;
end
```