Name = SAI SHINDE

Class =TE D

Batch=D2

Roll no= 304D022 EXP6

Simulation of M-ary QAM

```matlab
clc;
clear all;
close all;
Eb=input('ENTER THE ENERGY PER BIT IN JOULES : ');
No=input('ENTER PSD OF NOISE IN MICRO WATTS/HZ: ');
M=input('Enter the Number of Symbol:');
X=0:0.001:(Eb/No);
pe_qam=0.5*erfc(sqrt(0.4*X));
plot(X,pe_qam);
xlabel('signal-to-noise ratio (eb/no)');
ylabel('probability of error pe ');
title('Simulation of M-ary qam');
legend('pe_qam')
```

```
Scilab 6.1.1 Console

WARNING: close: Argument #1: Unknown GUI name 'all'.
ENTER THE ENERGY PER BIT IN JOULES : 10


ENTER PSD OF NOISE IN MICRO WATTS/HZ: 2


ENTER THE NUMBER OF SYMBOL: 8


exec: Wrong number of output argument(s): 0 expected.


ENTER THE ENERGY PER BIT IN JOULES : |
```

Simulation of M-ary qam

probability of error pe

signal-to-noise ratio (eb/no)

pe_qam