**NAME: AUN JAMES**

**MATRIC NO: 15/ENG05/004**

**DEPARTMENT: MECHATRONICS ENGINEERING**

**QUESTION 1A**

commandwindow

clear

clc

close

symsx

x = 0 : 0.001 : 15

y = (0.0052\*x.^2) - (0.0013\*x.^3) + (0.00013\*x.^4)

plot(x,y)

grid on

grid minor

xlabel('x')

ylabel('y')



**QUESTION 1B**

commandwindow

clear

clc

close

symst

t = 0 : 0.001 : 1

n = 1.285\*exp(-4\*t) + 3.714\*exp(3\*t) - 12\*t.^3 + 3\*t.^2 - 6.5\*t

plot(t,n)

grid on

grid minor

xlabel('t')

ylabel('n')

