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MATRIC NO: 16/ENG06/073

ENG281

 commandwindow

clear

clc

syms t

q= 0.25 \* sin (25 \* pi \* t);

tn=[0:0.0001:0.35];

qn = subs(q,tn);

figure(1)

plot(tn, qn)

xlabel("Time(s)");

ylabel("Charge(Q)");

title("Charge against Time Graph");

grid on

grid minor

v = 0.5 \* cos(0.2 \* pi \* t);

w = v \* q;

wn = subs(w,tn);

figure(2)

plot(tn, wn)

xlabel("Time(s)");

ylabel("Work(J)");

title("Work against Time Graph");

grid on

grid minor

figure(3)

plot( tn, wn,tn, qn)

xlabel("Time(s)");

ylabel("Charge(Q) & Work(J)");

title("Charge/Work against Time Graph");

grid on

grid minor

legend("Power(W)","Current(A)");





