**Motor and Battery sizing:**

g=9.8 m/s^2=980 cm/s^2

m=85gms

r=0.8 cm

T = F\*r

=M\*N\*r

=M\*mg\*r

=0.13\*85\*980\*0.8\*10^(-3)

=8.6633 N cm

:. Rated rpm at this torque for 12V is 15 rpm.