**Physics Formulas (2nd Semester, 2017-2018)**

s = r v = r a = r

$ω=\frac{∆θ}{∆t}$ $α=\frac{∆ω}{∆t}$

 = ot + ½t2 2 = o2 + 2(f – i)  = o + t

 = rF = I L = rp = rmv L = I Li = Lf Iii = Iff

KErot = ½I2 KEtrans = 1/2mv2  PEgrav = mgh PEi + KEi = PEf + KEf

$p=mv$ $F∆t=∆p$ $P\_{i}=P\_{f}$ $m\_{1}v\_{1}+m\_{2}v\_{2}= m\_{1}v\_{1}^{'}+m\_{2}v\_{2}^{'}$

qelectron = -1.6x10-19C $F\_{e}=\frac{kq\_{1}q\_{2}}{r^{2}}$ $E=\frac{kQ}{r^{2}}$ F=qE k = 8.99x109Nm2/C2

$a=\frac{qE}{m}$ F=ma w = mg v = v0 + at vf2 = v02 + 2ax Fcentripetal = mv2/r

R = ρL/A    V=IR    P=VI    I=ΔQ/Δt Qelectron = 1.6 x 10-19C

 v = f Vsound in air ≈331.4 + 0.6TC d = vt fo = fs

vmedium =  c = 3.00 x 108 m/s n1 sin 1 = n2 sin 2