UNIVERSIDAD DE SAN CARLOS DE GUATEMALA
FACULTAD DE INGENIERIA
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FORMULARIO DEL CURSO DE FISICA BASICA

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$\vec{v} = \vec{v}_o + \vec{a}\,t$ $\quad \vec{r} - \vec{r}_o = \frac{1}{2}(\vec{v}_o + \vec{v}\,)t$ $\quad \vec{r} - \vec{r}_o = \vec{v}_o\,t + \frac{1}{2}\vec{a}\,t^2$ $\quad v^2 = {v^2}_o + 2\,\vec{a}\,\cdot\Delta\vec{r}$

$v = \frac{2\pi r}{T}$ $\quad a_c = \frac{v^2}{r}$ $\quad \vec{r}_{P/A} = \vec{r}_{B/A} + \vec{r}_{P/B}$ $\quad \vec{v}_{P/A} = \vec{v}_{B/A} + \vec{v}_{P/B}$

$\sum \vec{F} = m\,\vec{a}$ $\quad f_s \leq \mu_s\,N$ $\quad f_k = \mu_k\,N$ $\quad \vec{w} = m\,\vec{g}$

$W = \vec{F}\cdot\Delta\vec{r}$ $\quad W = \int \vec{F}\cdot d\vec{r}$ $\quad P = \frac{dW}{dt}$ $\quad P = \vec{F}\cdot\vec{v}$

$K = \frac{1}{2}\,m\,v^2$ $\quad U_g = mgh$ $\quad U_{el} = \frac{1}{2}\,k\,x^2$

$W_g = -\Delta U_g$ $\quad W_T = \Delta K$ $\quad W_{el} = -\Delta U_{el}$ $\quad W_{FNC} = \Delta E$

$\vec{p} = m\vec{v}$ $\quad \sum \vec{F} = \frac{d\vec{p}}{dt}$ $\quad \vec{J} = \vec{F}\Delta t$ $\quad \vec{J} = \int \vec{F}dt$ $\quad \vec{J} = \Delta\vec{P}$

$\vec{r}_{cm} = \frac{\sum m_i\,\vec{r_i}}{\sum m_i}$ $\quad \vec{v}_{cm} = \frac{\sum m_i\,\vec{v_i}}{\sum m_i}$ $\quad \vec{a}_{cm} = \frac{\sum m_i\,\vec{a_i}}{\sum m_i}$