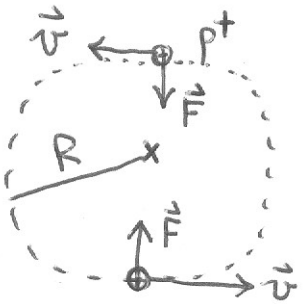
16.)

$B = 10^{-2}\ T$ $\quad v = 10^5 \frac{m}{s}$ $\quad \vec{v} \perp \vec{B}$ $\quad m_p = 1{,}6 \cdot 10^{-27}\ kg$ $\quad q = e = 1{,}6 \cdot 10^{-19}\ C$

$R = ?$



$\boxed{\vec{F} = q\vec{v} \times \vec{B}}$ $\quad \boxed{\vec{F}_e = m\vec{a}}$ $\quad \boxed{a_{cp} = \frac{v^2}{R}}$

$$F_e = m_p \frac{v^2}{R} = F = qvB = evB \quad (\alpha = 90° \rightarrow \sin\alpha = 1)$$

$$m_p \frac{v^2}{R} = evB$$

$$\Downarrow$$

$$\underline{\underline{R}}$$