$$\hat{T} = \frac{d\vec{r}}{ds} \Big/ \left\| \frac{d\vec{r}}{ds} \right\| \quad \text{pero} \quad \left\| \frac{d\vec{r}}{ds} \right\| = 1$$

$$\Rightarrow \boxed{\hat{T} = \frac{d\vec{r}}{ds} = -\frac{a}{c}\,\text{sen}\left(\frac{s}{c}\right)\hat{\imath} + \frac{a}{c}\cos\left(\frac{s}{c}\right)\hat{\jmath} + \frac{b}{c}\hat{k}} \qquad \boxed{0{,}2\text{ pto}}$$

$$\hat{N} = \frac{d\hat{T}}{ds} \Big/ \left\| \frac{d\hat{T}}{ds} \right\|$$

$$\frac{d\hat{T}}{ds} = -\frac{a}{c^2}\cos\left(\frac{s}{c}\right)\hat{\imath} - \frac{a}{c^2}\,\text{sen}\left(\frac{s}{c}\right)\hat{\jmath} + 0\,\hat{k}$$

$$\left\| \frac{d\hat{T}}{ds} \right\| = \frac{a}{c^2}\sqrt{\cos^2\left(\frac{s}{c}\right) + \text{sen}^2\left(\frac{s}{c}\right)} = \frac{a}{c^2}$$

$$\Rightarrow \boxed{\hat{N} = -\cos\left(\frac{s}{c}\right)\hat{\imath} - \text{sen}\left(\frac{s}{c}\right)\hat{\jmath}} \qquad \boxed{0{,}2\text{ pto}}$$

$$\hat{B} = \hat{T} \times \hat{N} = \begin{vmatrix} \hat{\imath} & \hat{\jmath} & \hat{k} \\ -\frac{a}{c}\,\text{sen}\left(\frac{s}{c}\right) & \frac{a}{c}\cos\left(\frac{s}{c}\right) & \frac{b}{c} \\ -\cos\left(\frac{s}{c}\right) & -\text{sen}\left(\frac{s}{c}\right) & 0 \end{vmatrix}$$

$$\boxed{\hat{B} = \frac{b}{c}\,\text{sen}\left(\frac{s}{c}\right)\hat{\imath} - \frac{b}{c}\cos\left(\frac{s}{c}\right)\hat{\jmath} + \frac{a}{c}\hat{k}} \qquad \boxed{0{,}2\text{ pto}}$$

Ahora basta probar que $\hat{T} \cdot \hat{k} = \text{cte}$

$$\hat{T} \cdot \hat{k} = \frac{b}{c}$$

$\Rightarrow$ Las rectas tangentes a $\mathcal{C}$ forman un ángulo constante con vector unitario $\hat{k}$.

$\boxed{0.3\text{ pto}}$