2. $\vec{D} = r^{-2}\vec{a}_r + \text{sen}\,\phi\,\vec{a}_\phi + z^{-1/3}\vec{a}_z \quad \frac{C}{m^3}$ $\qquad P(1, 15°, 3)$

$\nabla D = \rho$

$\Rightarrow \nabla D = \frac{1}{r}\frac{\partial}{\partial r}(r \cdot r^{-2}) + \frac{1}{r}\frac{\partial}{\partial \phi}(\text{sen}\,\phi) + \frac{\partial}{\partial z}(z^{-1/3})$

$\nabla D = -\frac{1}{r^3} - \frac{1}{3z^{4/3}}$

$\nabla D(P) = \frac{-1}{(1)^3} - \frac{1}{3\cdot(3)^{4/3}}$

$\nabla D(P) = -1{,}07\ \frac{C}{m^2}$

Densidad en el punto P $= -1{,}07\ \frac{C}{m^2}$