4.

$$\nabla \cdot D = \frac{dD_x}{dx} = 4\rho \ C/m^3$$

$$D = \int 4 \ \rho C/m^3 \ dx$$

$$Q = \int \rho_v \ dV$$

$$D = 4x \ \rho C/m^3 \ dx$$

$$Q = \int_0^{12} \int_5^{15} \int_0^{10} 40\rho \frac{C}{m^3} \ dxdydz$$

$$D_{x=5cm} = 4 \cdot (0.05 \ m) \ \rho C/m^3$$

$$Q = 48 \ nC \quad R/$$

$$D_x = 5cm = \frac{200 \ fC}{m^2}$$