Given, $q = 0.01\text{C}$,

$l = 0.4\text{ mm} = 0.4 \times 10^{-3}\text{ m}$

Dipole moment, $p = q(l)$

$$= 0.01 \times 0.4 \times 10^{-3}$$

$$= 4 \times 10^{-6}\text{ C-m}$$

$E = 10\text{ dyne/C} = 10 \times 10^{-5}\text{ N/C}$

$$= 10^{-4}\text{ N/C}$$

Torque acting on the dipole is

$$\tau = pE\sin\theta = 4 \times 10^{-6} \times 10^{-4} \times \sin 30^\circ$$

$$s = 4 \times 10^{-10} \times \frac{1}{2} = 2 \times 10^{-10}\text{ N-m}$$