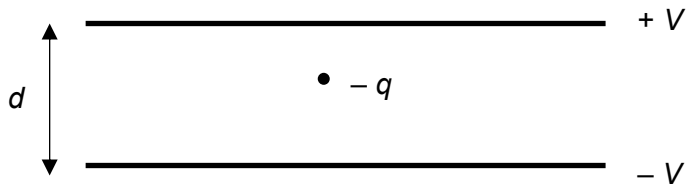
20 An oil droplet has a charge $-q$ and is situated between two parallel horizontal metal plates as shown in the diagram.



The separation of the plates is d. The droplet is observed to be stationary when the upper plate is at potential $+V$ and the lower at potential $-V$.

For this to occur, the weight of the droplet is equal in magnitude to

A $\frac{Vq}{d}$ **B** $\frac{2Vq}{d}$ **C** $\frac{Vd}{q}$ **D** $\frac{2Vd}{q}$