

**21** A spherical water droplet with density  $1000 \text{ kg m}^{-3}$  and diameter  $1.20 \text{ }\mu\text{m}$  is suspended in a uniform electric field. The electric field strength is  $462 \text{ N C}^{-1}$  and is directed downwards. How many excess electrons does it have?

**A**  $1.92 \times 10^{-17}$

**B** 120

**C** 192

**D**  $1.20 \times 10^{11}$