

- 20** Two parallel plates are connected to a high potential difference of 4.5 kV. The separation of the plates is 1.5 mm. The maximum acceleration of an electron between the plates is

A $1.0 \times 10^9 \text{ m s}^{-2}$ **B** $1.2 \times 10^{12} \text{ m s}^{-2}$ **C** $1.6 \times 10^{15} \text{ m s}^{-2}$ **D** $5.3 \times 10^{17} \text{ m s}^{-2}$