

- 31** Two horizontal parallel plate conductors are separated by a distance of 5.0 mm in air. The lower plate is earthed and the potential of the upper plate is +50 V.

What is the electric field strength  $E$  at a point midway between the plates?

- A**  $1.0 \times 10^4 \text{ V m}^{-1}$  downwards
- B**  $1.0 \times 10^4 \text{ V m}^{-1}$  upwards
- C**  $2.0 \times 10^4 \text{ V m}^{-1}$  downwards
- D**  $2.0 \times 10^4 \text{ V m}^{-1}$  upwards

**Space for working**