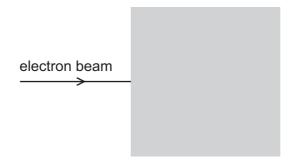
29 In the diagram, the shaded area represents a uniform electric field directed away from the observer (at right-angles into the plane of the paper).



A horizontal beam of electrons enters the field, travelling from left to right.

In which direction is this beam deflected by the field?

- **A** upwards (in the plane of the paper)
- **B** downwards (in the plane of the paper)
- **C** away from the observer
- **D** towards the observer
- 30 In terms of energy transfer W and charge q, what are the definitions of potential difference (p.d.) and electromotive force (e.m.f.)?

	p.d.	e.m.f.
Α	$\frac{W}{q}$	$\frac{W}{q}$
В	$\frac{W}{q}$	Wq
С	Wq	$\frac{W}{q}$
D	Wq	Wq

- **31** What is the unit of resistivity?
 - $\mathbf{A} \quad \Omega \, \mathbf{m}^{-2}$
- **B** $\Omega \, \mathrm{m}^{-1}$
- \mathbf{C} Ω
- \mathbf{D} Ω m

Space for working