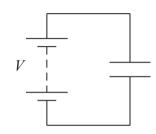
7 A battery of e.m.f. V is connected to a capacitor as shown. The capacitor is initially uncharged.



Work is done by the battery to transfer a charge Q from one plate of the capacitor to the other plate. The final potential difference across the capacitor is V.

Which row of the table gives the work done by the battery, and the energy stored by the capacitor, at the end of this process?

		Work done by battery	Energy stored by capacitor
\boxtimes	A	$\frac{QV}{2}$	$\frac{QV}{2}$
\boxtimes	В	$\frac{QV}{2}$	QV
\boxtimes	C	QV	$\frac{QV}{2}$
\times	D	QV	QV

(Total for Question 7 = 1 mark)