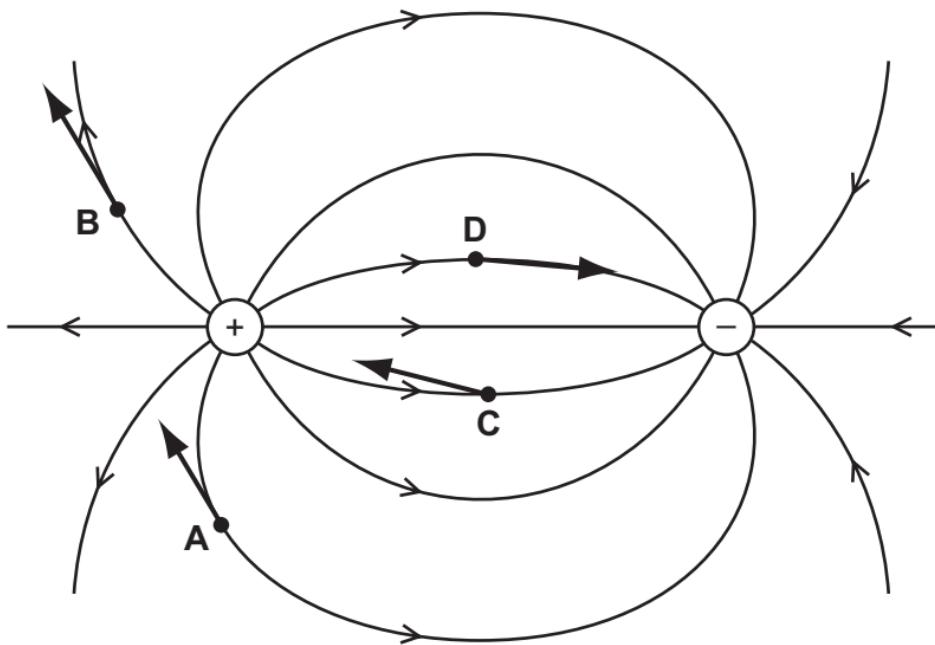


- 31 The diagram shows a non-uniform electric field near a positively charged and a negatively charged sphere.

Four electrons, **A**, **B**, **C** and **D**, are shown at different positions in the field.

On which electron is the direction of the force on the electron shown correctly?



- 32 A charge of  $8.0 \mu\text{C}$  passes through a resistor of resistance  $30\Omega$  at a constant rate in a time of  $20\text{s}$ .