

2 The de Broglie wavelength for a moving electron is  $5.47 \times 10^{-10} \text{ m}$ .

Which of the following expressions gives the speed of the electron in  $\text{ms}^{-1}$ ?

☐ A  $\frac{(6.63 \times 10^{-34})}{(9.11 \times 10^{-31})(5.47 \times 10^{-10})}$

☐ B  $\frac{(6.63 \times 10^{-34})}{(1.60 \times 10^{-19})(5.47 \times 10^{-10})}$

☐ C  $\frac{(9.11 \times 10^{-31})(5.47 \times 10^{-10})}{(6.63 \times 10^{-34})}$

☐ D  $\frac{(1.60 \times 10^{-19})(5.47 \times 10^{-10})}{(6.63 \times 10^{-34})}$

(Total for Question 2 = 1 mark)