A moving electron has a de Broglie wavelength of 656 nm. Which of the following could be used to determine the speed of the electron?

$$\triangle$$
 A $\frac{6.63 \times 10^{-34}}{(656 \times 10^{-9})(9.11 \times 10^{-31})}$

$$\mathbf{B} \quad \frac{(656 \times 10^{-9}) (9.11 \times 10^{-31})}{6.63 \times 10^{-34}}$$

$$\square \quad \mathbf{C} \quad \frac{(656 \times 10^{-9}) (6.63 \times 10^{-34})}{9.11 \times 10^{-31}}$$

C
$$\frac{(0.00 \times 10^{-3})(0.003 \times 10^{-31})}{9.11 \times 10^{-31}}$$

$$9.11 \times 10^{-31}$$



 $\mathbf{D} \quad \frac{9.11 \times 10^{-31}}{(656 \times 10^{-9})(6.63 \times 10^{-34})}$ (Total for Question 5 = 1 mark)