

- 9 In 1924 de Broglie suggested that electrons have wave properties.  
The de Broglie equation states:

$$\lambda = \frac{h}{p}$$

Which of the following is correct?

- ☐ A The de Broglie wavelength is independent of the mass of the particle.
- ☐ B The de Broglie equation can be used to calculate the momentum of a photon.
- ☐ C The term  $p$  represents the mass of an electron multiplied by the speed of light.
- ☐ D The value of  $h$  depends on the particle involved.

(Total for Question 9 = 1 mark)