

**28** An electron of mass  $m$  and charge  $e$  is accelerated from rest through an electric field of potential difference  $V$ .

What is the frequency of a photon whose wavelength is equal to the de Broglie wavelength of this electron?

**A**  $\frac{c\sqrt{2meV}}{h}$

**B**  $\frac{h}{\sqrt{2meV}}$

**C**  $\frac{hc}{eV}$

**D**  $\frac{eV}{h}$