**16.** A photon of energy $6\cdot40 \times 10^{-19}$ J is incident on a metal plate.

This causes photoemission to take place.

The work function of the metal is $4\cdot20 \times 10^{-19}$ J.

The maximum speed of the photoelectron is

A    $1\cdot19 \times 10^6$ m s$^{-1}$

B    $9\cdot60 \times 10^5$ m s$^{-1}$

C    $6\cdot95 \times 10^5$ m s$^{-1}$

D    $6\cdot79 \times 10^5$ m s$^{-1}$

E    $4\cdot91 \times 10^5$ m s$^{-1}$.