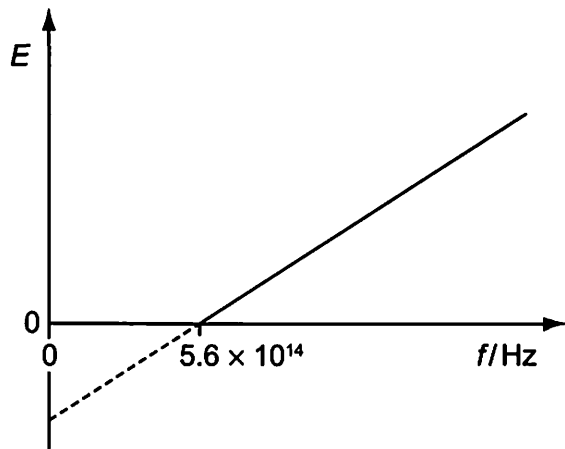29 When electromagnetic radiation of frequency greater than the threshold frequency is shone onto sodium, photoelectrons are emitted. A graph is plotted of the maximum kinetic energy $E$ of these photoelectrons against frequency $f$ of the radiation.



What is the minimum energy required to release a photoelectron from the surface of sodium?

A   $3.7 \times 10^{-19}\,\text{J}$

B   $1.8 \times 10^{-15}\,\text{J}$

C   $5.4 \times 10^{-7}\,\text{J}$

D   $9.0 \times 10^{-5}\,\text{J}$