

27 When electromagnetic radiation of frequency f irradiates a metal surface, electrons are emitted and the measured stopping potential is V_s .

The frequency of the incident radiation is halved to $\frac{f}{2}$.

What change occurs in the stopping potential?

A The stopping potential remains at V_s .

B The stopping potential decreases to $\frac{V_s}{2}$.

C The stopping potential decreases to less than $\frac{V_s}{2}$.

D The stopping potential decreases to more than $\frac{V_s}{2}$.

28 An electron moves with a constant velocity of $1.5 \times 10^6 \text{ m s}^{-1}$. If its momentum is