26 What is the approximate range of frequencies of infra-red radiation?

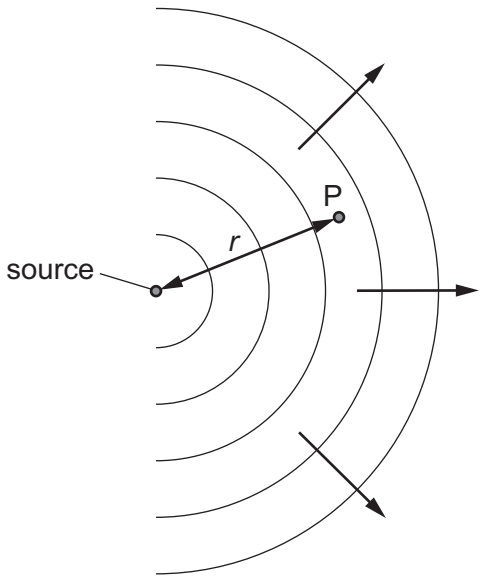
A 1×10^3 Hz to 1×10^9 Hz

B 1×10^9 Hz to 1×10^{11} Hz

C 1×10^{11} Hz to 1×10^{14} Hz

D 1×10^{14} Hz to 1×10^{17} Hz

27 A small source emits spherical waves.



The wave intensity I at any point P, a distance r from the source, is inversely proportional to r^2.

What is the relationship between the wave amplitude a and the distance r?

A $a^2 \propto \frac{1}{r}$ **B** $a \propto \frac{1}{r}$ **C** $a \propto \frac{1}{r^2}$ **D** $a \propto \frac{1}{r^4}$

Space for working