

17. A ray of monochromatic light passes from air into diamond.

The frequency of the light in air is  $5.09 \times 10^{14}$  Hz.

The speed of this light in diamond is

A  $1.40 \times 10^2 \text{ m s}^{-1}$

B  $1.70 \times 10^6 \text{ m s}^{-1}$

C  $1.24 \times 10^8 \text{ m s}^{-1}$

D  $3.00 \times 10^8 \text{ m s}^{-1}$

E  $7.26 \times 10^8 \text{ m s}^{-1}$ .