29 An organ pipe of length l is open at both ends. Notes are produced by the pipe when stationary waves are set up.

The speed of sound in the air column is v.

What is the lowest (fundamental) frequency of the note produced by the pipe?

A $\dfrac{2v}{l}$ **B** $\dfrac{v}{l}$ **C** $\dfrac{v}{2l}$ **D** $\dfrac{v}{4l}$

30 Interference fringes are produced on a screen by double-slit interference using light of wavelength 600 nm. The fringe separation is 4.0 mm and the separation of the slits is 0.60 mm.

What is the distance between the double slit and the screen?

A 0.25 m **B** 0.40 m **C** 2.5 m **D** 4.0 m

Space for working