

- 28 A student carries out a double-slit experiment using a laser emitting red light of wavelength of 680 nm. The light is incident normally on a double slit.

The diagram shows part of the pattern of bright fringes visible on a screen at a distance of 2.4 m from the slits. The distance across five bright fringes is measured as 34 mm.



What is the slit separation?

- A 8.5×10^{-3} m B 2.4×10^{-4} m C 1.9×10^{-4} m D 4.8×10^{-5} m