

- 18 A student draws a diagram to show different regions of air molecules for a progressive sound wave moving to the right at a certain instant. P, Q, R, S and T are particles at the centres of these regions.



Which of the following statement is *true*?

- A R is moving towards the right at the next instant.
- B Distance between P and T is one wavelength.
- C After a period of time, Q moves to the position of S.
- D The amplitude of R is always zero.

- 19 A single slit diffraction pattern is formed on a screen 2.0 m away from the slit. The slit width