

- 14** In order to check the speed of a camera shutter, the camera was used to photograph the bob of a simple pendulum moving in front of a horizontal scale. The extreme positions of the bob were at 600 mm and 700 mm marks. The photograph showed that while the shutter was opened, the bob moved from 650 mm to 675 mm mark.

If the period of the pendulum was 2.0 s, how long does the shutter remain open?

- A** 0.17 s
- B** 0.25 s
- C** 0.50 s
- D** 1.0 s

- 15** As the intensity of a single frequency sound wave travelling through the air is increased, how