

**12** For the construction of a thermometer, what is an essential requirement of a thermometric substance?

- A** It remains liquid over the entire range of temperatures to be measured.
- B** It has a property that varies linearly with temperature.
- C** It has a property that varies with temperature.
- D** It obeys the equation of state.

**13** A transverse water wave has a frequency of 1.50 Hz, a wavelength of 0.240 m and an amplitude