

**15** Which of the following statements is true for an object undergoing very lightly damped oscillations?

- A** The period of oscillation increases over time.
- B** The total energy of the object decreases exponentially with time.
- C** The amplitude of the oscillation is proportional to the frequency.
- D** The damping force is always pointing towards the equilibrium point.

**16** A speaker of a public address system operates at 2000 W and radiates sound uniformly in