

**13** A gas cylinder is fitted with a safety valve which releases a gas when the pressure inside the cylinder reaches  $2.0 \times 10^6$  Pa. Given that the maximum mass of this gas the cylinder can hold at  $10^\circ\text{C}$  is 15 kg, what would be the maximum mass at  $30^\circ\text{C}$ ?

**A** 5.0 kg

**B** 14 kg

**C** 15 kg

**D** 16 kg

