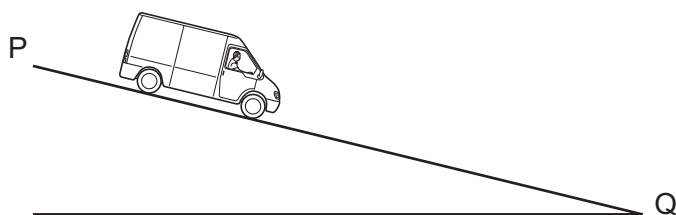**19** A van driver adjusts the force on a van's brakes so that the van travels at constant speed down a hill from P to Q.



The magnitude of the change in the van's kinetic energy is $\Delta E_k$. The magnitude of the change in its gravitational potential energy is $\Delta E_p$.

Which statement is correct?

**A** $\Delta E_k > \Delta E_p$

**B** $\Delta E_k = \Delta E_p$

**C** $\Delta E_p > \Delta E_k > 0$

**D** $\Delta E_k = 0$

**20** Atmospheric pressure at sea level has a value of 100 kPa.
The density of sea water is $1020\,\text{kg}\,\text{m}^{-3}$.

At which depth in the sea would the total pressure be 110 kPa?

**A** 1.0 m          **B** 9.8 m          **C** 10 m          **D** 11 m

**Space for working**