

12 A satellite orbiting the Earth moves to an orbit further away from the Earth, such that its gravitational potential energy increases **by E**. By how much does its kinetic energy changes?

- A It increases by E.
- B It decreases by E.
- C It increases by $\frac{E}{2}$.
- D It decreases by $\frac{E}{2}$.

13 Two vessels A and B of volume V and $8V$ respectively are connected by a tube of negligible volume.