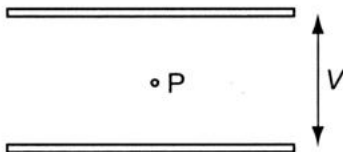


- 11 A small positively-charged particle P is balanced halfway between two horizontal plates when a potential difference  $V$  is applied between the plates.



When  $V$  is increased, P rises towards the upper plate.

When  $V$  is decreased, P falls towards the lower plate.

Which statement is correct?

- A Decreasing  $V$  decreases both the electric and the gravitational potential energy of the particle.
- B Decreasing  $V$  increases the electric potential energy and decreases the gravitational potential energy of the particle.
- C Increasing  $V$  increases both the electric and the gravitational potential energy of the particle.
- D The change of electric potential energy of the particle must equal the change of gravitational potential energy of the particle.

- 12 A driving force of 200 N is needed for a car of mass 800 kg to travel along a level road at a speed