

- 11 Two points P and Q are a fixed distance apart on a line joining them to an object considered as a point mass.



The two points move away from the object, along the line, maintaining their fixed separation.

What happens to the magnitudes of their individual gravitational potentials and to the magnitude of the gravitational potential difference between them?

	magnitudes of gravitational potentials	magnitude of gravitational potential difference
A	both decrease	decreases
B	both decrease	stays the same
C	both increase	decreases
D	both increase	stays the same

- 12 A uniform cube of an ideal gas has mass m . It is contained in a box with side lengths x , y and z .