

- 11 Two identical satellites, A and B, are orbiting around Earth. The distance between Satellite A and Earth is shorter than that between Satellite B and Earth.

Which of the following correctly compares the total energies (TE), gravitational potential energies (GPE) and kinetic energies (KE) of Satellites A and B?

	Total energy	Gravitational potential energy	Kinetic energy
A	$TE_A = TE_B$	$GPE_A > GPE_B$	$KE_A < KE_B$
B	$TE_A = TE_B$	$GPE_A < GPE_B$	$KE_A > KE_B$
C	$TE_A < TE_B$	$GPE_A > GPE_B$	$KE_A < KE_B$
D	$TE_A < TE_B$	$GPE_A < GPE_B$	$KE_A > KE_B$