

H10

14. A wound up watch spring has the potential energy because of its wound up state. As the spring unwinds itself, the potential energy changes into the kinetic energy. This kinetic energy does work in moving the arms of the watch.

15. Yes, a body possesses energy when it is not in motion?

Consider a body raised to a certain height say h . At its velocity is zero.

Kinetic energy will be zero. $P.E = mgh$.

Thus, a body may possess energy even though it is not in motion.

16. (i) Kinetic energy
(ii) Potential energy
(iii) Potential energy
(iv) Kinetic energy
(v) Kinetic Energy
(vi) Potential Energy
(vii) Potential Energy

17. Example ~~of~~ to show the conversion of potential energy to kinetic energy when put in use:

→ A hammer at a height has the potential energy due to its lifted and raised position. When the hammer is dropped from that position, it begins to fall. The falling hammer has kinetic energy. Thus, the potential energy stored in the hammer changes into kinetic energy when the hammer is falling.