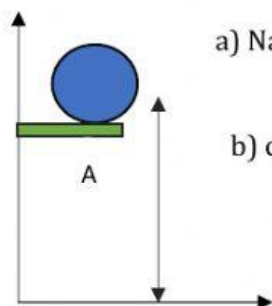


Unit - 3.2 PE and Conservation

Topic: conservative forces

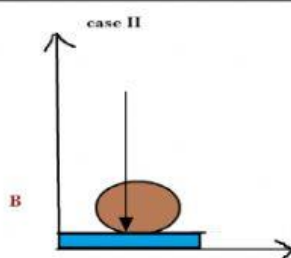
Activity 1: read the instructions carefully and answer the questions.

case 1: - consider a ball of mass 1kg, placed at a height of 10m.



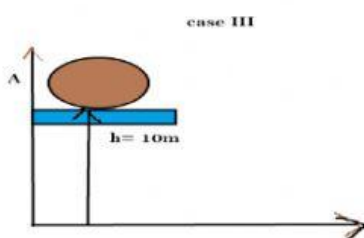
a) Name the energy possessed by the mass when it is at height of 10m.

b) calculate the energy of the ball, when it is at a height of 10m? .



case II-

c) suppose the mass is dropped from the height. calculate the work done by the gravitational force on the mass, when the mass reaches the ground?



Case III-

d) if the mass is kept back in the same height again, calculate the work done by the gravitational force on the mass, when the mass at a height of 10m?

e) What is total work done on the ball, by the gravitational force? hint: $W_{total} = W_{A \rightarrow B} + W_{B \rightarrow A}$

d)What you can say about the total mechanical energy, is it conserved or not?
Yes/No