

PRACTICE WORKSHEET

CHAPTER 6:WORK,ENERGY AND POWER

1. A man of 60 kg weight is standing at rest on a platform. He jumps up vertically a distance of 1 m and the platform at the same instant moves horizontally forward with the result that the man lands 1 meter behind the point on the platform from where he took the jump the total work done by the man at the instant he lands is
 - (a) 300 J
 - (b) 150 J
 - (c) 600 J
 - (d) zero
2. A body of mass 20 kg is initially at a height of 3 m above the ground . It is lifted to a height of 2 m from that position. Its increase in potential energy is
 - (a) 100 J
 - (b) 392 J
 - (c) 60 J
 - (d) -100 J
3. When the linear momentum of a particle is increased by 1% its kinetic energy increases by x%. When the kinetic energy of the particle is increased by 300%, its linear momentum increases by y%. The ratio of y to x is
 - (a) 300
 - (b) 150
 - (c) 100
 - (d) 50
4. Two masses 1 g and 4 g are moving with equal kinetic energies. The ratio of the magnitudes of their linear momenta is
 - (a) 4 : 1
 - (b) 1 : 2
 - (c) 0 : 1
 - (d) 1 : 6
5. A body of mass 100 kg falls from a height of 10 m. Its increase in kinetic energy is
 - (a) 9800 J
 - (b) 1000 J
 - (c) 5000 J
 - (d) 3000 J