

Part I

1. Two teams are having a tug-of-war match. Which of the following can be considered an isolated system?
 - (a) one team
 - (b) both teams
 - (c) both teams and the rope
 - (d) none of the above systems

Answer: (d) Since they are pushing on the earth the earth is part of the system

2. A railcar (mass of 1000 kg) moves horizontally at speed 10 m/s. Friction between the railcar and the track can be neglected. A 40-kg bale of hay falls vertically onto the railcar; the car

