

OBJECTIVE EXERCISE

Multiple choice questions :

1. Calculate the mass of the body, when a force of 525 N, produces an acceleration of 3.5 m/s^2
a) 160 kg b) 150 kg c) 155 kg d) 175 kg []
2. A driver accelerates his car first at the rate of 1.8 m/s^2 and then at the rate of 1.2 m/s^2 . Calculate the ratio of the force exerted by the engine in the two cases.
a) 4:3 b) 2:3 c) 3:2 d) 3:4 []
3. An object with continue to accelerate until
a) the resultant force on it begins to decrease b) the resultant force on it is zero
c) the velocity changes direction c) the velocity force on it is increased continuously []
4. A bullet of mass 0.01 kg is fired with a velocity of 100 m/s from a rifle of mass of 20 kg. The recoil of the rifle is
a) 0.05 m/s b) 20 m/s c) 10 m/s d) 1 m/s []
5. A force of 15 N acts separately on two bodies of masses 3 kg and 5 kg. The ratio of the acceleration produced in the two cases will be
a) 5:3 b) 3:5 c) 8:15 d) 15:8 []