CLASS-9 SUBJECT- PHYSICS DATE 26.05.2020 PAWAN KR.

LEARNING MATERIALS

CHAPTER (FORCE AND LAWS OF MOTION)

Q. N. 1.Two similar carts are moving with same velocity on a road. One of them is loaded while the other one is empty Which of the two will require a larger force to stop it?

Ans. Larger force is required for that cart which is loaded. This is because it possess more momentum.

Q. N. 2 Explain why it is dangerous to jump out of a moving bus?

Ans. Due to inertia of motion there is a high probability of falling down and receiving injury.

.Q. N. 3. Can a rocket propel itself in vacuum. Explain.

Ans. Yes. Because when the exhaust gases (action) comes out of the rocket, there is a reaction on the rocket. Which can propel the rocket.

Q. N 4. Which of the following has more inertia.

(a) a rubber ball or a stone of the same size.

(b) a bicycle or a train.

C) a five rupee coin or a rupee coin.

Ans. A) A stone because its mass will be more.

b) A train because of its higher mass.

C) A five rupee coin because of its higher mass.

Q. N. 5. Why it is advised to tie any luggage kept on the roof of a bus with a rope?

Ans. This is to avoid the luggage from falling down due to inertia of rest or inertia of motion or inertia of direction.

Q. N. 6 what is the momentum of an object of mass m, moving with a velocity v?

Ans. mv.

Q. N. 7. A batsman hit a cricket ball which then rolls on a level ground. After covering a short distance, the ball slows down to stop because

A) the batsman did not hit the ball hard enough.

B) velocity is proportional to the force exerted on the ball.

C) There is a force on the ball opposing the motion.

D) There is no unbalanced force on the ball, so the ball would want to come to rest .

Ans. C) There is frictional force acting on the ball which is opposing the motion.