

CLASS-9 SUBJECT- PHYSICS DATE 23.5.2020 PAWAN KR.

HOME WORK

CHAPTER (FORCE AND LAWS OF MOTION)

SOLVE THESE NUMERICAL PROBLEMS CAREFULLY .

Q. N. 1. A rifle of mass 3 kg fires a bullet of mass 0.03kg. The bullet leaves the barrel of the rifle at a velocity of 100m/s . if the bullet takes 0.003 second to move out of the barrel, calculate the force experienced by the rifle due to its recoil .

**Q. N. 2 A bullet of mass 10 g is fired from a rifle. The bullets take 0.003 second to move through its barrel and leaves it with a velocity of 300m/s
What is the force exerted on the bullet by the Rifle.**

Q. N. 3 The car A of mass 1500kg travelling at 25m/s collide with another car B of mass 1000kg travelling at 15m/s in the same direction. After collision, the velocity of car A becomes 20 m/s. calculate the velocity of car B after collision.

Q. N. 4. A bullet of mass 50 g is fired from a gun of mass 6kg with a velocity of 400 m/s .calculate the recoil velocity of the gun.

Q. N. 5 A 10 g bullet is shot from a 5 kg gun with a velocity of 400m/s .what is the speed of recoil of the gun?

- **To take notes, just tap here and start typing.**
- **Or, easily create a digital notebook for all your notes that automatically syncs across your devices, using the free OneNote app.**

To learn more and get OneNote, visit www.onenote.com.