

Physics questions-laws of motion

1. A cricket ball has a mass of 150 kg has initial velocity $u = (3i + 4j) \text{ m/s}$ and a final velocity $v = - (3i + 4j) \text{ m/s}$ after being hit. Find The change in momentum. also find the magnitude of momentum.
2. A book kept on a table experiences two kinds of forces. Name them
3. Give an example where acceleration on a body is zero but external force acts on a body.
4. The force acting for a short period of time is called.....
5. Show the forces acting on a car moving on a circular level Road with a labelled diagram.
6. Write the dimensions of coefficient of kinetic friction.
7. Is it correct to assume that the only external force is needed to keep a body in uniform motion? If No,why?
8. What is inertia. How it is related to 1st law of motion.
9. Explain the conservation of momentum in elastic collision.
10. A body of mass 10 KG is acting upon by two perpendicular forces 8 N and 10 N. find the magnitude and the direction of accelerated body. draw a proper diagram for it.