

Class 9 Physics Chapter 9 Force and Law of Motion MCQs

1. Which of the following is true of an object moving along a straight path in an accelerated motion?

- (a) Its velocity always changes
- (b) Its speed keeps changing
- (c) A force is always acting on it
- (d) It always goes away from the Earth

2. The inertia of an object causes the object to

- (a) decrease its speed
- (b) Increase its speed
- (c) resist any change in the state of its motion
- (d) decelerate due to friction

3. Which of the following is true of the third law of motion?

- (a) Action-Reaction pair always acts on the same body
- (b) They act on different bodies in opposite directions
- (c) Action-Reaction pairs have the same magnitudes and directions
- (d) Act on either body at normal to each other

4. Which of the following is the SI units of force?

- (a) Kgm/s^2
- (b) Kgm/s
- (c) Newton-metre
- (d) Newton

5. If the mass of the body is doubled and its velocity becomes half, then the linear momentum of the body will

- (a) become double
- (b) remain same
- (c) become half
- (d) become Four times

6. The linear momentum of an object is 250 g cm/s. If the velocity of the object is 5 m/s, then the mass of the object is

- (a) 0.5 g
- (b) 5 kg
- (c) 0.5 mg
- (d) 5 mg

7. Which of the following is true about force?

- (a) Force is invisible
- (b) Force can move a body
- (c) It can deform a body
- (d) All of the above

8. A goalkeeper in a game of football pulls his hands backwards after holding the ball shot at the goal. This enables the goalkeeper to

- (a) increase the rate of change of momentum
- (b) decrease the rate of change of momentum
- (c) reduce the force exerted by the balls on the hands
- (d) exert larger force on the ball

9. The inertia of an object tends to cause the object

- (a) Decrease its speed
- (b) Increase its speed
- (c) to resist any change in its state of motion
- (d) to decelerate due to friction

10. A passenger in a moving train tosses a coin that falls behind him. It means that the motion of the train is

- (a) uniform
- (b) accelerated
- (c) retarded
- (d) along circular tracks

***** Answer Key *****

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|---------|---------|---------|---------|----------|
| 1 - (c) | 2 - (c) | 3 - (a) | 4 - (d) | 5 - (b) |
| 6 - (a) | 7 - (d) | 8 - (b) | 9 - (c) | 10 - (b) |