

Class 11 Physics Chapter 5 Laws of Motion MCQs

1. What is the net force of a kite that is held stationary in the sky?

- (a) 1
- (b) Increasing
- (c) 0
- (d) Decreasing

2. Which is the branch of physics that deals with the motion of a body by considering the cause?

- (a) Statics
- (b) Thermodynamics
- (c) Dynamics
- (d) Astronomy

3. What is the formula to find linear velocity?

- (a) Linear velocity = $2(\text{Mass} + \text{Velocity})$
- (b) Linear velocity = $\text{Mass} / \text{Velocity}$
- (c) Linear velocity = $\text{Mass} * \text{Velocity}$
- (d) Linear velocity = $\text{Mass} - \text{Velocity}$

4. Which is the type of inertia?

- (a) Inertia of rest
- (b) Inertia of motion
- (c) Inertia of direction
- (d) All the above options

5. When external force is not applied to the system, its total momentum

- (a) Becomes zero
- (b) Remains constant
- (c) Increases gradually
- (d) Decreases gradually

6. Apparent weight of a body = actual weight of the body, if the body

- (a) Moves with increasing velocity
- (b) Remains at rest
- (c) Remains in a state of uniform motion
- (d) Option (b) and (c)

7. Forces acting for a short duration are called

- (a) Short force
- (b) Interval force
- (c) Impulsive forces
- (d) Interrupting force

8. An aircraft executes a horizontal loop at a speed of 720 km/h with its wings banked at 15° . What is the radius of the loop?

- (a) 15123 m
- (b) 23567 m
- (c) 12781 m
- (d) 14931 m

9. The inherent property, with which a body resists any change in its state of motion is known as

- (a) Force
- (b) Momentum
- (c) Inertia
- (d) Acceleration

10. 1 Newton = -----

- (a) 1 Newton = $1 \text{ kg} \times 1 \text{ m/s}^2$
- (b) 1 Newton = 1 kg
- (c) 1 Newton = $1 \text{ kg} \times 1 \text{ m/s}$
- (d) 1 Newton = m/s^2

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

1(b)

2(c)

3(b)

4(d)

5(b)

6(d)

7(c)

8(d)

9(c)

10(a)

