

CLASS IX- PHYSICS

FORCE AND LAWS OF MOTION

ASSIGNMENT 1

MULTIPLE CHOICE QUESTION- 1.1

- If A and B two objects with masses 10 kg and 30 kg respectively then :
(A) A has more inertia than B
(B) B has more inertia than A
(C) A and B have the same inertia
(D) none of the two have inertia
- First law of motion defines :
(A) inertia
(B) force
(C) both inertia and force
(D) neither inertia nor force
- Newton's first law of motion is :
(A) qualitative
(B) quantitative
(C) both qualitative and quantitative
(D) neither qualitative nor quantitative
- Inertia depends upon :
(A) acceleration of the body
(B) velocity of the body
(C) shape of the body
(D) mass of the body
- Which of the following has largest inertia ?
(A) A pin
(B) An iron pot
(C) Your physics book
(D) Your body
- When a bus starts suddenly the passengers standing on it, lean backwards in the bus. This is an example of :
(A) Newton's first law
(B) Newton's second law
(C) Newton's third law
(D) none of Newton's law
- The law which defines force is :
(A) Newton's third law
(B) Newton's first law
(C) Newton's second law
(D) none of these
- Inertia of rest is the property by virtue of which the body is unable to change by itself :
(A) the state of rest only
(B) the state of uniform linear motion
(C) the direction of motion only
(D) the steady state of rest
- An iron ball and aluminium ball has same mass :
(A) inertia of iron is greater than aluminium
(B) both the ball have same inertia
(C) inertia of iron is less than that on Aluminium
(D) none of these
- Mass measure amount of ____ in a body :
(A) inertia
(B) motion
(C) velocity
(D) acceleration

SUBJECTIVE QUESTION - 1.2

1. Name the property of the bodies to resist the change in their velocities.
2. With which law of motion, the same of Galileo is associated ?
3. A ball is moving on a frictionless horizontal surface and no force is applied on it. Will its speed decrease, increase or remain same.
4. What causes motion ?
5. Define force.
6. Define inertia and name its three types.
7. State Newton's first law of motion.
8. Which of the following has more inertia ? Explain :
 - (a) A rubber ball and stone of the same size.
 - (b) A bicycle and a train.
 - (c) A five rupee coin and a one rupee coin.
9. Why do you fall in forward direction when a moving bus brakes to stop and fall backward when it acceleration from rest ?