

Physics Sample Questions

1. Who introduced the concept of inertia ?

- 1.Newton
- 2.Pascal
- 3.Galileo
- 4.Aristotle
- 5.None of these

Answer & Explanation

Answer – **3.Galileo**

Explanation :

The term "inertia" is more properly understood as shorthand for "the principle of inertia" as described by Newton in his First Law of Motion: that an object not subject to any net external force moves at a constant velocity.

2. If the resultant of all the force acting on a body is then the body is said to be in equilibrium

- 1.Zero
- 2.Constant
- 3.Maximum
- 4.Minimum
- 5.None of these

Answer & Explanation

Answer – **1.Zero**

Explanation :

Equilibrium results from the cancellation of forces acting on an object.

3. Rocket works on the principle of

- 1.Circular motion
- 2.Centre of gravity
- 3.Equilibrium

- 4.Conservation of momentum
- 5.None of these

Answer & Explanation

Answer – **4.Conservation of momentum**

Explanation :

Conservation of momentum is a fundamental law of physics which states that the momentum of a system is constant if there are no external forces acting on the system. It is embodied in Newton's first law (the law of inertia).

4. If the body is at rest then the equilibrium is called as

.....

- 1.Dynamic
- 2.Neutral equilibrium
- 3.Static
- 4.Either Static or Dynamic
- 5.None of these

Answer & Explanation

Answer – **3.Static**

Explanation :

When forces acting on an object which is at rest are balanced, then we say that the object is in a state of static equilibrium. The resultant of these forces equals zero. That is, the vector sum of the forces adds to zero

5. Energy is defined as capacity of doing work.Its unit is

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- 1.Kilogram
- 2.Kelvin
- 3.Joule
- 4.Watt
- 5.None of these

Answer & Explanation

Answer – **3.Joule**

Explanation :

The joule symbol J, is a derived unit of energy in the International System of Units. It is equal to the energy transferred (or work done) to an object when a force of one newton acts on that object in the direction of its motion through a distance of one metre (1 newton metre or N)

6. A bullet fired from a gun can pierce a target due to its

.....

- 1.Kinetic Energy
- 2.Law of conservation Energy
- 3.Potential Energy
- 4.Gravitational Force
- 5.None of these

Answer & Explanation

Answer – **1.Kinetic Energy**

Explanation :

Kinetic energy is the energy possessed by a body by virtue of its motion

$$KE = \frac{1}{2}(mv^2)$$

7. is the energy possessed by a body by virtue of its position

- 1.Negative Energy
- 2.Potential Energy
- 3.Positive Energy
- 4.Kinetic Energy
- 5.None of these

Answer & Explanation

Answer – **2.Potential Energy**

Explanation :

Potential Energy is the energy possessed by a body by virtue of its

position.

Ex – The potential energy of water in dams used to run turbines in order to produce electricity.

8. The sum of all kinds of energies in an isolated system remains at all times

1. Minimum
2. Maximum
3. Zero
4. Constant
5. None of these

Answer & Explanation

Answer – **4. Constant**

Explanation :

According to law of conservation of energy the sum of all kinds of energies in an isolated system remains constant at all time.

9. In a heat engine energy changes into energy

1. Mechanical, electrical
2. Heat, Mechanical
3. Electrical, Heat
4. Heat, Electrical
5. None of these

Answer & Explanation

Answer – **2. Heat, Mechanical**

Explanation :

In a heat engine Heat energy changes into Mechanical energy

10. In electric motor energy changes into energy

1. Mechanical, electrical
2. Heat, Mechanical
3. Electrical, Mechanical

4.Heat,Electrical

5.None of these

Answer & Explanation

Answer – **3.Electrical, Mechanical**

Explanation :

In electric motor electrical energy changes into mechanical energy

