

CLASS- VIII  
SCIENCE  
CHAPTER-11

Force and Pressure

Very Short Answer Questions

★ Question 1.

★ What is the name of the instrument used to measure atmospheric pressure?

★ Answer:

★ Barometer

★ Question 2.

★ Give two examples of contact force.

★ Answer:

- ★ • Muscular force
- ★ • Force of friction

★ Question 3.

★ Name the force exerted on a ball of dough to make a flat chapati.

★ Answer:

★ Muscular force

★ Question 4.

★ What kind of force is an electrostatic force?

★ Answer:

★ Non-contact force

★ Question 5.

★ Is the gravity a property of earth only?

★ Answer:

★ No



★ Question 6.

★ Name the force due to which every object falls on earth.

★ Answer:

★ Gravitational force

★

★ Question 7.

★ What do you mean by pressure?

★ Answer:

★ Force per unit area (Force/Area)

★

★ Question 8.

★ Do liquids and gases also exert pressure?

★ Answer:

★ Yes

★

★ Question 9.

★ What are the two states of motion?

★ Answer:

★

- ★ • The state of rest.
- ★ • The state of motion.

★

★ Question 10.

★ What kind of force is friction?

★ Answer:

★ Contact force

★

★ Question 11.

★ What type of force is gravitational force?

★ Answer:

★ Non-contact force

★

★ Question 12.

★ Is it true that force acting on an object can also change its shape?

★





★ Answer:

★ Yes, it is true.

★ Question 13.

★ While sieving grains, small pieces fall down. Which force pulls them down?

★ Answer:

★ Gravitational force

★ Question 14.

★ How can we change the speed and the direction of a moving body?

★ Answer:

★ By applying force.

★ Question 15.

★ What is the distance moved by an object in unit time called?

★ Answer:

★ Speed

★ Question 16.

★ Does force of gravity act on dust particles?

★ Answer:

★ Yes

★ Question 17.

★ Does the force of gravitation exist between two astronauts in space?

★ Answer:

★ Yes

★ Question 18.

★ What is a force?

★ Answer:

★ A push or pull on an object is called force.





★ Question 19.

★ What is the SI unit of pressure?

★ Answer:

★ Pascal (Pa)

★

★ Question 20.

★ At least how many objects are needed to apply a force?

★ Answer:

★ At least two objects are needed to apply a force.

★

★ Question 21.

★ Give one example of gravitational force.

★ Answer:

★ An apple falling from the tree to ground.

★

★ Question 22.

★ What is meant by atmospheric pressure?

★ Answer:

★ The weight of air acting per unit area is known as atmospheric pressure.

★

★ Question 23.

★ What do you mean by magnitude?

★ Answer:

★ The strength of a force is usually expressed by its magnitude.

★

★ Question 24.

★ What is muscular force?

★ Answer:

★ The force resulting due to the action of muscles is known as muscular force.

★

★ Question 25.

★ What is contact force?

★





★ Answer:

★ Force that can be applied only when it is in contact with an object is called contact force.



★ Question 26.

★ What do you mean by the term atmosphere?

★ Answer:

★ The envelop of air all around us is known as atmosphere.



★ Question 27.

★ Define pressure.

★ Answer:

★ The force acting per unit surface area is called pressure. SI unit of pressure is measured in Newton/ Metre<sup>2</sup>, which is equal to 1 Pascal (Pa).



★ Question 28.

★ How do fluids exert pressure?

★ Answer:

★ Fluids exert pressure in all directions. Fluids also exert pressure on the walls of the container that hold them.



★ Question 29.

★ A force of 100 N is applied on an area of 4 m<sup>2</sup>. Compute pressure being applied on the area.

★ Answer:

★ Given: Force = 100 N, Area = 4 m<sup>2</sup>

★ ∴ Pressure = Force Area = 1004 = 25pa.

★ Question 30.

★ Which force is responsible for downward movement of a parachutes?

★ Will he come down with the same speed without the parachute?

★ Answer:

★ Force of gravity is responsible for this downward movement. No, without parachute he will come down with a higher speed.





★ Question 31.

★ Two thermocol balls held close to each other move away from each other. When they are released, name the force which might be responsible for this phenomenon. Explain.

★ Answer:

★ Electrostatic force is responsible for this phenomenon. The two balls have similar charges, that's why they move away due to repulsion between them.

★ Question 32.

★ How does an applied force changes the speed of an object?

★ Answer:

★ If the applied force is in the direction of motion, the speed of the object increases. But if the force applied in the direction opposite to the motion, then it decreases the speed of the object.

★ Question 32.

★ Name the forces acting on the car sticking to an electromagnet in a Junkyard. Which one of them is larger?

★ Answer:

★ Magnetic force (in the upward direction) and force of gravity or the weight of the car (downward). Magnetic force is larger than the force of gravity.

★ Question 34.

★ What is the similarity between electrostatic and magnetic forces?

★ Answer:

- ★ • Both are non-contact forces.
- ★ • Both are attractive as well as repulsive forces.

★ Question 35.

★ What are the effects of force on an object?

★ Answer:



- Force can change the state of motion of an object.
- Force changes the speed of a moving object.
- Force can cause an object to turn or change direction.
- Force can change the shape of an object.

\*\*\*\*\*