



Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

Section \_\_\_\_\_

### FORCE AND PRESSURE

#### I. Very Short Answer type Questions:

- 1: Push or pull on an object is known as \_\_\_\_\_.
- 2: Force has both magnitude and \_\_\_\_\_.
- 3: The strength of force is usually expressed by its \_\_\_\_\_.
- 4: What can bring change in state of motion of an object?
- 5: Define pressure.
- 6: What are contact forces?
- 7: What are non-contact forces?
- 8: What happens when the forces are applied on an object in the same direction?
- 9: Force can bring change in \_\_\_\_\_ and \_\_\_\_\_ of an object.
- 10: Give an example of contact force.
- 11: Give two examples of non-contact forces.
- 12: A batsman hits a cricket ball which then rolls on the level ground. After covering a short distance the ball comes to rest. The ball stops due to \_\_\_\_\_.
- 13: When two forces, applied on an object, are equal and opposite, then these forces  
May move the object.  
May stop a moving object.  
May move the object and also cause a change in its shape.  
Do not move the object but may cause a change in its shape.
- 14: Which of the following is an example of contact force?  
a. Magnetic force    b. Muscular force  
c. Electric force    d. Gravitational force
- 15: A fruit falling from tree is an example of which type of force?
- 16: What is the unit of pressure?
- 17: Which force act from distance and pull iron objects?
- 18: What is SI unit of Force?
- 19: What is muscular force?
- 20: What is the relation between direction of force of friction and direction of motion?
- 21: Define electrostatic force.
- 22: Electrostatic force is an example of \_\_\_\_\_.
- 23: Water begins to flow towards the ground as soon as we open a tap. This happens due to which force?
- 24: Southpole of a magnet repels south pole of another magnet. True /false.
- 25: Define friction.
- 26: Why the cutting edge of a knife should be as sharp as possible?
- 27: Cars and buses are able to run on roads. Which force is responsible for it?
- 28: If the area over which the force acts decreases, the pressure \_\_\_\_\_.

- 29: Which force is used to separate solid pollutant particles from smoke given out from factories?  
30: What is the force exerted by the Earth on all the bodies on its surface known as?  
31: Name the instrument which is used to measure liquid pressure.  
32: A liquid exerts pressure in \_\_\_\_\_ direction. ( upward/downward/sideways/all)  
33: Which type of force a person applies while pulling an object?  
34: Why muscular force is a type of contact force?  
35: If the area over which the force acts decreases, the pressure increases. (true/false)

**Short Question & Answer:**

- 1: What is force? What is its unit?  
2: What is change in state of motion? What brings change in state of motion?  
3: What is the difference between contact forces and non-contact forces?  
4: Give two example each of the situation in which you apply force to change state of motion of an object and to change shape of an object?  
5: Why is it difficult to hold a school bag having a strap made of a thin and strong string?  
6: Why Porters wear turbans when they have to carry heavy loads on their heads?  
7: Force applied on an object may change its speed. How?  
8: Why Lorries and trucks carrying heavy loads have 8 tyres instead of four?  
9: Why the sucker sticks to the surface over which it is pressed?  
10: What is pressure? How is pressure related to the surface area on which it acts?  
11: When we stop pedalling the bicycle, it slows down and gradually stops .Why?  
12: What is frictional force? How it arises?  
13: What is magnetic force? What happens when we bring like poles of two magnets closer?  
14: What is gravitational force? Is gravity the property of earth alone?  
15: A rocket has been fired upwards to launch a satellite in its orbit. Name the two forces acting on the rocket just after leaving of the launching pad  
16: What will be the effect of force while squeezing a piece of lemon between the fingers?  
17: What will be the effect of force while taking out toothpaste from toothpaste tube?  
18: A blacksmith is hammering a hot piece of copper for making a tool, how does the force due to affect the piece of copper?  
19: What are the effects of the force while making high jump by an athlete?  
20: Differentiate between atmosphere and atmospheric pressure.  
21: Differentiate between friction and contact force.

**Long Question & Answer:**

- 1: Explain contact and non-contact forces. Give two examples for each.  
2: a. How can friction be reduced  
b. How can it be increased? Give examples.  
3: Do liquid and gases exert pressure on the walls of container in all direction? Give example to justify your statement.  
4: Why is it easy to push a nail into a wooden plank by the pointed end?