

Chapter-1

Worksheet-2

Section 1

Q1. What is the name of the instrument used to measure atmospheric pressure?

Q2. Define pressure.

Q3. Which force is responsible for downward movement of a parachutes? Will he come down with the same speed without the parachute? Why? Why not?

Q4. 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.

Q5. Define the different types of forces.?

Q6. Why it is easier to walk on soft sand if we have flat shoes rather than shoes with sharp heels (or pencil heels)?

Q7. We know that there is a huge amount of atmospheric pressure on us. But we do not experience its effect why?

Q8. Why do sea divers wear specially design suits? Explain.

Q9. An archer shoots an arrow in the air horizontally. However, after moving some distance, the arrow falls to the ground. Name the initial force that sets the arrow in motion. Explain why the arrow ultimately falls down.

Q10. Two rods: A and B, having same weight and equal length have different thickness. Rod A is thinner while Rod B is thicker. They are held vertically on the surface of sand. Which one of them will sink more? Why?

Section 2

Q11. What is state of motion?

- a) Position of rest
- b) Position of motion
- c) Both position of rest and motion
- d) None of these

Q12. The force between two charged bodies is called

- a) Muscular Force
- b) Gravitational Force
- c) Magnetic Force
- d) Electrostatic Force

Q13. The pressure exerted by air is called

- a) Air Pressure
- b) Gas Pressure
- c) Atmospheric Pressure
- d) None of these

Q14. When a rubber sucker is pressed on a plane surface, it sticks to the surface because of:

- a) The pressure exerted by us
- b) The air sucked by rubber
- c) The pressure of atmosphere acting on it.
- d) None of these.

Q15. A boat comes to rest if we stop rowing it due to:

- a) Gravitational Force
- b) Force of friction
- c) Muscular force
- d) None of these

Q16. Pressure =

- a) $\frac{\text{Force}}{\text{Area}}$
- b) Force \times Area
- c) $\frac{\text{Area}}{\text{Force}}$
- d) None of these

Q17. The unit of pressure is

- a) Pascal
- b) Newton
- c) Newton meters
- d) Both a and c

Q18. When we press the bulb of a dropper with its nozzle kept in water, air in the dropper is seen to escape in the form of bubbles. Once we release the pressure on the bulb, water gets filled in the dropper. The rise of water in the dropper is due to:

- a) Pressure of water
- b) Gravity of earth
- c) Shape of the rubber bulb.
- d) Atmospheric Pressure

Q19. A man walking on the street slips on a banana skin because:

- a) It is sticky
- b) His foot crushes it
- c) Reduced friction
- d) All of these

Q20. A man weighing 50 kgf is standing on a wooden plank of 1m x 0.5 m. What will be the pressure exerted by it on the ground?

- a) 300 kgf/m^2
- b) 100 kgf/m^2
- c) 200 kgf/m^2
- d) 150 kgf/m^2