

Date: 4-06-2021

Class: 8th Genesis

Subject: Science

Test code: SEP06(21011306)

Physics

M. Marks: 20

- 1. A blacksmith hammers a hot piece of iron while making a tool. How does the force due to hammering affect the piece of iron? (1 marks)
- 2. What is the main use of a spring balance?

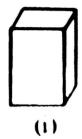
(1 marks)

- 3. An inflated balloon was pressed against a wall after it has been rubbed with a piece of synthetic cloth. It was found that the balloon sticks to the wall. What force might be responsible for the attraction between the balloon and the wall? (1 marks)
- 4. Name the force acting on a plastic bucket containing water held above ground level in your hand.

 Discuss why the forces acting on the bucket do not bring a change in its state of motion. (1 marks)
- 5. 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 dropper. The rise of water in the dropper is due to (1 marks)
 - (a) Pressure of water
 - (b) Gravity of the earth.
 - (c) Shape of rubber bulb
 - (d) Atmospheric pressure
- 6. What is the resultant force when two forces act in same direction?

(1 marks)

7. The surface area of the end of a brick 50 cm^2 . The surface area of the base brick is 200 cm^2 . Each brick weighs 50 N. What pressure is exerted on the ground by the brick in the two cases shown here? (2 marks)





- 8. A rocket has been fired upward to launch a satellite in its orbit. Name the two forces acting on the rocket immediately after leaving the launching pad. (2 marks)
- 9. Why are railway tracks laid on wooden or iron sleepers?

(2 marks)

10. Why do we feel pain when we walk on a ground having small pebbles?

(2 marks)

- 11. Distinguish between thrust and pressure. Write their units. What is the relation between them?(2marks)
- 12. A person weight 600 N. He is wearing shoes with a total area of $0.02~\text{m}^2$. What pressure do they exert on the floor? (2 marks)
- 13. Why do some people suffer from nose bleeding at higher altitudes?

(2 marks)