

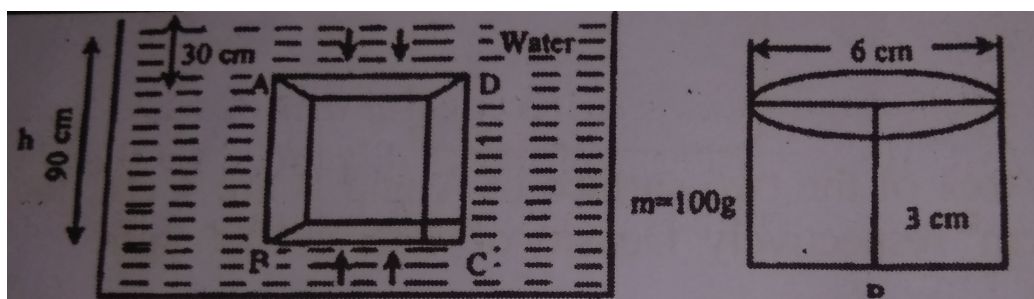
CHAPTER 5 : STATE OF MATTER AND PRESSURE
Instructions:

- ✓ Watch the uploaded video class from school's website/You Tube channel. For becoming more clear about the basics, watch more than once, if needed.
- ✓ Contact me in case of any difficulty in understanding.

(Questions given in this worksheet are important questions for all exams)

Creative Questions

1. A body of mass 2.5kg having length, breadth and height 25cm, 15cm and 5cm respectively.
 - a) When object of the above stem is placed on the floor, calculate the highest and lowest magnitude of pressure that will exert on the floor.
 - b) If the object of the stem is placed in water of 4°C, whether it will float or immerse in the water? Explain with mathematical analysis.
2. Density of water is 1000kgm^{-3} , Acceleration due to gravity is 9.8ms^{-2} , Area of ABCD = 800cm^2 .



- a) Determine the magnitude of buoyancy on the ABCD solid body.
- b) If the object 'P' is let free in the water of the vessel then will it immerse in liquid or float on it? Analyze mathematically.