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SHAKTI UTTHAN ASHRAM, LAKHISARAI, PIN:-811311

SUBJECT:- PHYSICS

CLASS:- IXTH

DATE:07/07/XX

SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 3. (GRAVITATION PART-2)(BASED ON NCERT QUESTIONS)

Pressure in Fluids:-

- Anything that can flow is called **Fluid**.
Example: liquid and gas.
- Molecules of a fluid move randomly and collide with walls of vessel. Thus fluids apply pressure on walls.
- Fluids exert pressure in all directions.

Buoyancy & Buoyant Force:-

- Force applied by the fluid on a solid which is partially or fully submerged in liquid, is called the buoyant force and this phenomenon is named as **buoyancy**.
- Buoyant force acts in upward direction and it depends on the density of the fluid.

Factors affecting the Buoyant Force:-

Magnitude of the buoyant force depends on two factors:

- Volume of the object immersed in liquid
- Density of the liquid
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Q. Why does an object sink or float over water?

When an object is immersed in water, it exerts pressure over water due to its weight. At the same time water also exerts upward thrust, i.e., buoyant force over the object.

- If the force exerted by the object is greater than the buoyant force of water, the object sinks in water.
- If the force exerted by the object is less than the buoyant force of water, the object floats over water.