Physics (New Book) - 9th Class Physics English Medium Chapter 6 Preparation

Q1. Comment on the statement Density is property of a material not the property of an object made of that material.

Ans 1: p = m/v
It depends upon type of material and is constant for a given material regardless of size or shape of object.

Q2. What is basic principle to measure the atmospheric pressure by a simple mercury barometer.

Ans 1: The basic principle is hydrostatic pressure utilizing a liquid column in a baraometer.

Q3. State what do you mean by elasticity of a solid.

Ans 1: The property of an object to re-gain its original size and shape after remvoal of applied force is called elasticity.

Q4. What is the relationship between liquid pressur eand the depth of the liquid.

Ans 1: The pressure of liquid given by relation
P = pgh
It is clear that pressure is directly proportional to detph of liquid

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Q5. What happens to a spring when a deforming force is applied.

Ans 1: The spring either extends or compresses .

Q6. Define and explain concept of Density

Ans 1: Density of a substance is defined as its mass per unit volume.
Mathematically,
Density= Mass/Volume
Unit:- The SI unit of density is kgm-3 other unit also in use is gcm-3 Table shows the density of some substances.

Q7. How can atmospheric pressure be observed.

Ans 1: Atmospheric pressure can be observed by removing air from closed vessels showing the force exerted by the surrounding air.

Q8. Defien deforming force

Ans 1: A force that chagnes the size or shape of an object is called a deforming force.

Q9. Define and explain term pressure.

Ans 1: Definition : Pressure is defined as the force exerted normally on unit area of an object
Mathematically,
If F is the force acting normally n a surface of area A, then pressure P on the surface is given by $P = F/A$
Unit :- In the system international, the unit of pressure ins Nm^{-2} and is called pascal (Pa)

Q10. What happens if a materail is deformed beyond its elastic limit.

Ans 1: The material undergoes a permanent change in shape or size and does not teturn to its original shape even after the deforming force is removed.
