



CLASS :8

Subject: physics

Date :- 06. 06 .2020

WORKSHEET – 7 (ANSWERS)

Ans. 1) Relative Density :- The ratio of density of a substance to the density of water at 4°C is known as relative density.

Ans. 2) Relative Density do not have any unit because it is the ratio of two similar physical quantities. Hence it is also known as pure physical

Ans. 3) Relative density is measured by relative density bottle.

Ans. 4) Some important formula of relative density

Mass of certain volume of a substance

- Relative Density = $\frac{\text{Mass of same volume of water at } 4^{\circ}\text{C}}{\text{Volume of certain mass of a substance}}$
- Relative Density = $\frac{\text{Volume of certain mass of a substance}}{\text{volume of same mass of water at } 4^{\circ}\text{C}}$

Ans. 5) Relative density is a very useful physical quantity. It is used to study certain properties of a substance. It is also used to select suitable reactants to perform certain chemical reactions.

Worksheet – 8 (ANSWERS)

Ans. 1) *When a body remains in the liquid without touching the bottom of the liquid then the body is said to be floating.*

Ans. 2) Condition of floatation

The three conditions are

- I) when the density of a body is less than the density of liquid then the body will float on the liquid surface.*
- II) When the density of a body is equal to the density of liquid then the body will float completely immersed in the liquid*

When the density of the body is more than the density of liquid then the body will sink to the bottom of the liq

Ans. 3) Principle of floatation of a body

A body will float in a liquid if the weight of liquid displaced by the immersed part of the body is equal to the weight of the body.

Worksheet – 9 (Answer)

Ans-1) Turning effect of force :- The product of magnitude of force and the perpendicular distance of point of application of force from the point of rotation or the axis of rotation is known as Turning effect of force.

Ans. 2) Factors effecting turning effect of force

The factors effecting turning effect of force are

- I) The magnitude of applied force
- II) The perpendicular distance between the point of applications of force from the point of rotation or the axis of rotation.

Ans. 3) UNIT OF TURNING EFFECT OF FORCE

C. G. S Unit :- dyne cm

S. I unit :- Nm

Ans. 4) The handle of a spanner is made longer than its mouth so that the perpendicular distance of the point of application of force from the point of rotation is longer which will result in the increase of turning effect of force and the nuts and bolts can be opened and tightened easily by applying less force.

Ans. 5) The handle of a grinding wheel is fixed near the rim so that the perpendicular distance of point of application of force from the point of rotation is more which will produce more turning effect of force and the wheel can be rotated easily by applying less force.