1. Liquids

1. Who is Archimedes?

   He was one of the greatest Greek thinkers, mathematicians, physicist, engineer, inventor and astronomer of his time that is from BC 287 to BC 212.
2. What is principle of statics?

   Physics relating to stationary objects
3. What is hydrostatics?

   Science relating to liquids at rest
4. What is one of the principle named after Archimedes?

   Archimedes Principles which is important principle of hydrostatics.
5. What is the relationship between pressure and depth?

   As liquid increases the depth increases. The pressure depended on the vertical distance from the surface of the liquid.
6. What is the mathematical language for depth and pressure?

   Pαd, Where P is the pressure and d is depth
7. What is the mathematical language for pressure and gravity?

   Pαg, Where P is the pressure and g is the gravity
8. How to combine the three and write a simple formula to calculate the pressure at point in liquid?

   P=dpg

9. How is density measured?

   Density = mass/volume

10. How is relative density measured?

    RD= density of substance/density of water

11. When do buoyant force comes into existence?

    When body is immersed in any fluid (liquid or gas)

12. What is the statement of Archimedes principle?

    It stated that when a body is immersed in a fluid, liquid or gas it experiences an apparent loss of weight which is equal to the weight of the fluid displaced.

13. What is the formula for verifying Archimedes principle?

    (w1 –w2)=(w4-w3).

    Were, w1 =the weight of the stone in air

    W2= the weight of stone

    W3= overflowing water in the beaker

    W4= weigh the beaker with water

    W4-w3 = weight of the displaced water

    W1-w2 = loss of the weight of the stone

14. How is loss of weight measured?

    Loss of weight = weight of water displaced

    Weight in air-weight in water= density of water * volume of solid

15. How is volume of solid measured?

Volume of solid= weight in air – weight in water /density of water

16. How is density of solid measured?

Density of solid = W1/w1-w2 * density of water

17. How can we find density of liquid?

RD= density of substance/density of water

Density of substance =RD * density of water

18. What is hydrometer?

It is an instrument that can be used to find the relative density of liquid.