



Page No 82

Solution 66

Indigestion mixtures are suspensions so there is an instruction written on the bottle of these mixtures "SHAKE IT WELL BEFORE USE". This is because the particles of indigestion mixture i.e. suspensions are unstable and settle down at the bottom of the bottle after some time.

Solution 67

- (a) Mixtures like A are known as suspensions.
- (b) Mixtures like B are known as colloids.
- (c) Mixtures like C are known as true solutions.
- (d) The phenomenon exhibited by A and B which occurs on passing a beam of light through them is called Tyndall effect.
- (e) (i) Chalk-water mixture is like A.
- (ii) Soap solution is a mixture like B.
- (iii) Salt solution is a mixture like C.

Solution 68

- (a) When solid A is dissolved in water, chemical change takes place. This is because the properties of products B and C are entirely different from those of solid A and water and a lot of heat and energy is evolved in the reaction.
- (b) Physical change occurs when solid D is dissolved in water. This is because the product E shows the properties of both, solid D and water.
- (c) Sodium metal could behave like solid A. Product B is sodium hydroxide. Product C is hydrogen.
- (d) Solid D is ammonium chloride.
- (e) D can be recovered from E by evaporation.

Solution 69

- (a) Solution like X are known as unsaturated solution.
- (b) Solution like Y are known as saturated solution.
- (c) If solution Y at  $30^{\circ}\text{C}$  is cooled down to  $10^{\circ}\text{C}$  by keeping the beaker in crushed ice, then some of the dissolved solid will separate out from the solution and settle at the bottom of the beaker as crystals. This is because the solubility of solid decreases on cooling.
- (d) Solubility is the term used to denote the amount of solid dissolved in 100 grams of water in a solution.

Page No 83

Solution 70

According to question:

Solubility at  $40^{\circ}\text{C}$  = 41 g

But, solubility = solid dissolved in 100 grams of water in a solution  
So, mass of ammonium chloride needed to make a saturated solution of ammonium chloride in 50 g of water at  $40^{\circ}\text{C}$  =  $41/2$  g = 20.5 g

Page No 105

Solution 1

Carbon disulphide

Solution 2

Sublimation

Solution 3

Sublimation

Solution 4  
Sublimation  
Solution 5  
Camphor undergoes sublimation.  
Solution 6  
Electromagnet.  
Solution 7  
Iodine undergoes sublimation.  
Solution 8  
Fractional distillation  
Solution 9  
Difference in their boiling point.  
Solution 10  
Acetone and water  
Solution 11  
Kerosene and water.  
Solution 12  
(a) False  
(b) False  
Solution 13  
Air  
Solution 14  
Fractional distillation of liquid air.  
Solution 15  
He should choose magnetic separation method to separate iron nails from saw-dust.  
Solution 16  
Salt and camphor.  
Solution 17  
Mixture of common salt and water.  
Solution 18  
By filtration.  
Solution 19  
Filtration  
Solution 20  
Evaporation  
Solution 21  
Centrifugation  
Solution 22  
Centrifugation is used to separate cream from milk.  
Solution 23  
Filtration  
Solution 24  
Fractional distillation  
Solution 25  
Separating funnel  
Solution 26  
Difference in the densities of oil and water enable their separation by a separating funnel.  
Solution 27  
(a) Evaporation  
(b) Crystallization  
Solution 28  
Crystallization  
Solution 29  
(a) Evaporation  
(b) Paper chromatography

\*\*\*\*\* END \*\*\*\*\*