





## **Separation of Substances**

Class VI <u>Worksheet</u> Subject: Science

#### **I.FILL IN THE BLANKS**

Common salt can be separated from sea water by
2. The process of pouring out the clear upper liquid without disturbing the sediments is called
3. The mixture of solute and solvent is called
4. Insoluble impurities in water can be removed by
5. The process of separating solid by hand is

### II.MATCH THE FOLLOWING

	Column A		Column B
1.	Crystallisation	a.	High speed rotation
2.	Distillation	b.	Particles are allowed to settle down slowly
3.	Evaporation	c.	Saturated solution is cooled
4.	Centrifugation	d.	The liquid evaporates
5.	Sedimentation	e.	Involves condensing the vapour
6.	Loading	f.	Weighing down of solid particles by using alum

# **III.NAME THE FOLLOWING**

- 1. The process in which gas changes into liquid.
- 2. A solution which cannot dissolve any more solute at a given temperature.
- 3. A metal plate with holes, used for separating solid particles of different size.
- 4. The process of increasing the rate of sedimentation in a suspension by adding chemicals.

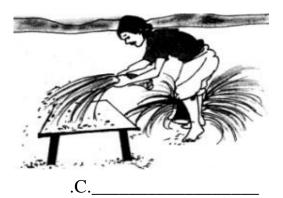
#### IV.ANSWER THE FOLLOWING QUESTIONS

- 1. Take 3 glasses of water. Add two teaspoon sugar in first glass, four tea spoon sugar in second glass, six tea spoon sugar in third glass. Which one is most saturated: A) First glass B) Second glass. C) Third glass
- 2. To separate dust and soil particles from rice, water is added. Then the vessel is tilted to pour out the dirty water. This is an example of

### V.Identify the different methods of separation







Class VI Worksheet 2. **Subject: Science** 

## **I.Multiple Choice Question**

- 1. Husk is separated from heavier seeds of grain
- a. winnowing.
- b. Hand picking.
- c. sieving. d. None of the above
- **2.**Which of the following properties can affect dissolution of sugar in water?
- a. Quantity of Sugar.
- b. Temperature.

c. Type of water. d. Amount of sugar dissolved						
3. Four mixtures are given below (i) Kidney beans and chick peas. (ii) Pulses and rice (iii) Rice flakes and corn. (iv) Potato wafers and biscuits Which of these can be separated by the method of winnowing? (a) (i) and (ii) (b) (ii) and (iii). (c) (i) and (iii) (d) (iii) and (iv)						
<b>4.</b> A solution is said to be if it cannot dissolve more of the substance in it. a. Saturated. b. Unsaturated. c. Homogeneous. d. Heterogeneous						
5.Statement A: A mixture of cement and pebbles can be separated by using the sieve with small pores  Statement B: A sieve with small pores will allow only small cement particles to pass through and will hold back the pebbles  a. Statement A is true only  b. Statement B is true only  c. Both are false  d. Both are true						
II . <u>FILL IN THE BLANKS.</u>						
<ul> <li>1.Using a we can separate tea leaves from the liquid.</li> <li>2.You can separate a mixture of dry kidney beans(rajma) &amp; dry lentils by</li> <li>3.Fine sand can be separated from coarse gravels by</li> <li>4.Separation of components is done to obtain a Substance.</li> <li>5.Salt is obtained from seawater by the process of</li> </ul>						
III.TRUE OR FALSE:						
<ul><li>1. Winnowing is generally done with the help of water.</li><li>2. A mixture of milk &amp; water can be separated by decantation.</li></ul>						

- 3. Rock salt is an impure substance.
- 4. The process used to separate cream from curd is centrifugation.
- 5. Filtration is used to separate salt and water.

### IV. GIVE ONE EXAMPLE OF ITEMS/MIXTURE THAT CAN BE SEPARATED BY EACH OF THE FOLLOWING METHODS:

- 1. Filtration
- 2. Decantation
- 3. Sieving
- 4. Condensation
- 5. Winnowing