

DELHI PUBLIC SCHOOL JAMMU

SESSION 2024-25

MONTH: OCTOBER

ASSIGNMENT III

CLASS: VI

SUBJECT: SCIENCE

TOPIC: SEPARATION OF SUBSTANCES

Q1. During the process of sedimentation, the heavier insoluble particles that settle down at the bottom of the liquid is called_____.

- a) Sediment b) Decant c) Filtrate d) Residue

Q2. Assertion (A): The process of winnowing is used to separate grain from husk.

Reason (R) : Grains are heavier than husk.

- a) Both A and R are true, and R is the correct explanation of A.
b) Both A and R are true, but R is not the correct explanation of A.
c) A is true, but R is false.
d) A is false, but R is true.

Q3. How will you separate the mixture of mud and water?

Q4. Define solubility. What happens to the solubility of solids and gases with rise in temperature?

Q5. a) What happens when steam comes in contact with the metal plate cooled with ice?

b) Three glasses are taken A,B and C filled water. To glass A, 2 teaspoon of sugar is added, in glass B, 4 teaspoons of sugar is added, and to glass C, 5 teaspoons of sugar is added. Which glass is more saturated and why?

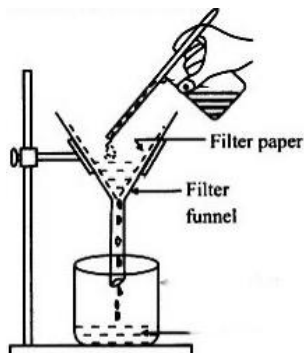
Q6. Read the following paragraph and answer the questions that follows:

Evaporation is the method used to obtain a solid substance that is dissolved in a liquid. Common salt dissolved in water can be separated by the process of evaporation. The process is based on the fact that liquids vaporize easily on heating whereas solids do not. The process of changing of a liquid into its vapour on heating is called evaporation.

Sea water contains lots of salt. The process of evaporation is used to obtain salt on large scale from sea water. Sea water is trapped in shallow ponds (called lagoons) and allowed to stand there. The heat of the sun gradually evaporates the water completely in the shallow ponds leaving behind the solid salts. The mixture of salts is further purified to obtain common salt.

- a) The method of obtaining soluble substance from the liquid is called _____.
b) How is evaporation different from sublimation?
c) How do we obtain salt from sea water? Explain.

Q7. Observe the picture given below and answer the questions that follows:



- a. Identify the process depicted in the picture given above.
b. 'The solid remains in the filter' is known as _____ .
c. The pure liquid substance obtained in the beaker is _____.

Q8. Imagine you have a mixture of small pebbles and large stones. How would you separate them? What tools might you need?