Chemistry Worksheets Class 6 on Chapter 5 Separation Of Substances with Answers- Set 1

Q-1: Which of the following techniques is used to remove stones from the soil?
a) Threshing
b) Winnowing
c) Sieving
d) Filtration

Answer: c) Sieving is used for the separation of stones from the soil.

Q-2: The process of converting water vapour to liquid is known as _____.
a) Decantation
b) Condensation
c) Evaporation
d) Filtration

Answer: b) The process of conversion of water vapour into its liquid form is called condensation.

Q-3: Which of the following factors can be used to dissolve more sugar in water before it reaches saturation?
a) Cooling
b) Heating
c) Constant Stirring
d) All of the above

Answer: By heating the water, more sugar can be dissolved in water before it reaches saturation.

Q-4: Which of the following materials has the smallest pores?
a) Cloth
b) Sieve
c) Filter paper
d) All of the above

Answer: c) A filter paper is one that has very fine pores in it.

Q-5: Which of the following is the basis of separation for sieving?
a) Component weight
b) Component mass
c) Component size

d) Component type

Answer: c) Sieving is used when components of a mixture have different sizes.

Q-6: Fill in the blanks.
a) _____ process is used in the preparation of cottage cheese.
b) _____ process is used for separating the mixture of ghee and water.
c) Winnowing is used to separate _____ and _____ components.
d) _____ is done with the help of bullocks.
e) _____ is the convenient method of separating substances.

Answers:
a) Filtration
b) Decantation
c) Heavier, Lighter
d) Threshing
e) Handpicking

Q-7: What happens to the components that have been separated?
Answer: The separated unusable solid components or impurities are discarded, while the useful components are reused for some other purpose.

Q-8: When is handpicking employed?
Answer: Handpicking can be used to separate slightly larger impurities such as dirt, stone, and husk from wheat, rice, or pulses. Such impurities are typically in small quantities. In such cases, handpicking is a convenient method of separating substances.

Q-9: Describe one application of the winnowing method.
Answer: The winnowing method can be used to separate dry sand from powdered dry leaves. In this method, a mixture of dry sand and powdered dry leaves is dropped from a height; a lighter component of the mixture blows away, while the heavier components fall straight to the ground. We can separate both components of a mixture in this way.

Q-10: Which separation method will you use to separate a mixture of wheat flour, black lentils and beans?
Answer: To separate the mixture, we will use sieving followed by handpicking. Wheat flour will be separated from black lentils and beans by sieving. Black lentils and beans can be separated by hand.

Q-11: Which method is preferable for separating tea leaves from prepared tea: decantation or filtration?
Answer: Filtration is used to separate tea leaves from tea because tea leaves are a solid component and tea is a liquid component. When you pour this mixture into a strainer, all of the tea leaves will

remain on the strainer and the liquid will pass through it. As a result, the mixture can be easily separated.

The filtration method is superior to the decantation method for removing impurities or harmful components and it is more efficient than the decantation method for such a separation.

Q-12: Before cooking, rice or pulses are usually washed. When you add water to these, the impurities, such as dust particles, rise to the surface. How are you going to separate the impurities from it now?

Answer: The vessel is tilted to drain the dirty water.When the water (along with the dust) is removed, the process is called decantation.

Q-13: How will you prepare paneer (cheese)?
Answer: When making paneer, a few drops of lemon juice are added to the boiling milk. This results in a mixture of solid and liquid paneer particles. The paneer is then separated from the mixture by passing it through a fine cloth or strainer.

Q-14: What is evaporation? What is the significance of this procedure?
Answer: Evaporation is the process by which liquids become vapours. On a large scale, evaporation is used to extract common salt from sea water.

Q-15: Priya's home had visitors. Priya considered making cold coffee for them. She dissolved sugar in chilled milk and noticed that it took a long time to dissolve. Meanwhile, Priya's mother arrived and instructed her to transfer the chilled milk to another container and to add boiled milk to the sugar that had settled at the bottom.

a) Why do you think Priya's mother would have given such advice?
b) What are saturated solutions?
c) How does boiling help dissolve sugar in milk?
d) What values of Priya are shown here?

Answer:
a) Because boiling milk helps in dissolving sugar faster than chilled milk.
b) If a solution cannot dissolve any more of the substance in it, it is said to be saturated.
c) We are heating the milk by boiling it. When heated, a larger amount of sugar can be dissolved in milk.
d) Priya is an excellent host, learner, and helpful young lady.