

ASSESSYOURSELF

Practice. Learn. Succeed

Sub : Science

Grade: 6th

Date:

Name:

ID No.....

Time allowed: 1 hour

Maximum marks: 25

1. Suggest separation technique which would need to separate the mixture of KCl and NH₄ Cl. 1
2. The sea-water can be classified as a homogeneous as well as heterogeneous mixture. Comment. 1
3. Explain why particles of a colloidal solution do not settle when left undisturbed for some time. 1
4. You are given two samples of water labelled as 'A' and 'B'. Sample 'A' boils at 100°C and sample 'B' boils at 105°C. Which sample of water will freeze at 0°C? 1
5. Which of the following are not compounds?
 - (i) Iodine
 - (ii) Carbon dioxide
 - (iii) Carbon
 - (iv) Chlorine gas. 2
6. On heating, calcium carbonate gets converted into calcium oxide and carbon dioxide.
$$\text{CaCO}_3 \xrightarrow{\quad} \text{CaO} + \text{CO}_2 \uparrow$$
 - (a) Is this a physical or a chemical change?
 - (b) Can you prepare one acidic solution by using the products formed in the above process? Write the chemical equations involved. 2
7. Classify each of the following as a physical or a chemical change:
 - (a) Burning of kerosene in a lantern
 - (b) Addition of curd to milk
 - (c) Rising of hot air over a radiator
 - (d) Cooking of vegetables in a cooker. 2
8. How will you distinguish between two liquids—one pure compound and the other a solution? 2
9. Identify colloids and true solutions from the following:
 - (a) Fog
 - (b) Muddy water
 - (c) Brass
 - (d) Sugar solution.
10. What is a compound? Differentiate between a compound and a solution. 2
11. A solution contains 37g CuSO₄ and 111g of water. Calculate the concentration of mass by mass% of the solution. 3
12. You are given a solution of water and an unknown compound 'X' which boils at 73°C. How will you separate the compound 'X' from water? Draw a labelled diagram. 3