9th CBSE TEST PAPER **IS MATTER AROUND US PURE**

1. Salt can be recovered from its solution by evaporation. Suggest some other technique for the same?

2. While diluting a solution of salt in water, a student by mistake added acetone (boiling point 56°C). What technique can be employed to get back the acetone? Justify your choice.

3. Explain why particles of a colloidal solution do not settle down when left undisturbed, while in the case of a suspension they do.

4. Smoke and fog both are aerosols. In what way are they different?

5. Name the process associated with the following

(a) Dry ice is kept at room temperature and at one atmospheric pressure.

(b) A drop of ink placed on the surface of water contained in a glass spreads throughout the water.

(c) A potassium permanganate crystal is in a beaker and water is poured into the beaker with stirring.

(d) A acetone bottle is left open and the bottle becomes empty.

(e) Milk is churned to separate cream from it.

(f) Settling of sand when a mixture of sand and water is left undisturbed for some time.

(g) Fine beam of light entering through a small hole in a dark room, illuminates the particles in its paths.

6. The teacher instructed three students ‘A’, ‘B’ and ‘C’ respectively to prepare a 50% (mass by volume) solution of sodium hydroxide (NaOH). ‘A’ dissolved 50g of NaOH in 100 mL of water, ‘B’ dissolved 50g of NaOH in 100g of water while ‘C’ dissolved 50g of NaOH in water to make 100 mL of solution. Which one of them has made the desired solution and why?

7. Why is gold alloyed with copper or silver for the purpose of making ornaments?

8. Give some examples of Tyndall effect observed in your surroundings?

9. Calculate the mass of sodium sulphate required to prepare its 20% (mass percent) solution in 100g of water?

10. How would you separate a mixture of ammonia and hydrogen?

11. Action of heat on blue vitriol is a physical as well as chemical change. Justify.

12. How would you separate a mixture of NH_4Cl and I_2?

13. Describe a method for separation of the constituents of gunpowder.

14. Describe how you would obtain the substances mentioned below, from the given mixtures.

a) Iodine from tincture of iodine. b) Lead chloride from a mixture of lead chloride and silver chloride

15. Briefly describe how to separate,

i) Sulphur from a mixture of sulphur and sand. ii) Black CuO from a mixture of CuO and ZnO.

16. Fill in the blanks

(a) A colloid is a ——— mixture and its components can be separated by the technique known as ———.

(b) Ice, water and water vapour look different and display different —— properties but they are —— the same.

(c) A mixture of chloroform and water taken in a separating funnel is mixed and left undisturbed for some time. The upper layer in the separating funnel will be of——— and the lower layer will be that of ———.

(d) A mixture of two or more miscible liquids, for which the difference in the boiling points is less than 25 K can be separated by the process called———.

(e) When light is passed through water containing a few drops of milk, it shows a bluish tinge. This is due to the ——— of light by milk and the phenomenon is called ——— . This indicates that milk is a ——— solution.