CHEMISTRY ASSIGNMENT

CLASS-IX

SA-1

Q1. With the help of an activity, show that diffusion becomes faster with increase in temperature.

Q2. When magnesium burns in air, an 'ash' like powder is formed.

a) Name this 'ash' powder.
b) Is it a chemical or physical change? Why?

Q3. a) What happens when zinc granules react with dilute sulphuric acid?

c) What kind of change is observed?

Q4. Name the state which has:

a) Maximum movement of particles
b) Maximum interparticle interaction
c) Property to get compress easily
d) Fixed shape and volume.

Q5. With the help of an activity, show that gases are more easily compressible than liquids and solids.

Q6. What is latent heat? What are its types? Describe by giving one example of each type.

Q7. Give reasons for the following:

a) A rubber band is a solid, yet it changes shape.
b) Sugar crystals are solid.
c) Gases diffuse much faster in liquids than solids.
d) Solids have higher melting and boiling points as compared to liquid and gaseous states.

Q8. Name the process by which a drop of $KMnO_4$ spreads in a beaker of water.

Q9. When 50g of water is dissolved in 100 ml of water, there is no increase in volume. What characteristic matter is illustrated by this observation?

Q10.What happens when a beam of light is passed through a colloidal solution? Name this phenomenon.

Q11. Distinguish between:

a) Element and compound.
b) Compound and mixture.
c) Element and mixture.

Q12. Explain why air is considered a mixture and not a compound?

Q13. Give one example of each of the following:

a) A solution of gas in liquid.
b) A solution of two gases.
c) A solution of two solids.

Q14. Give reasons for the following:

a) Evaporation causes cooling.
b) Rate of evaporation of an aqueous solution decreases with increase in humidity.

Q15. You are given a mixture of sand and ammonium chloride. How will you separate the two components of the given mixture? Explain with the help of a diagram.

OR

Write an experiment to demonstrate the sublimation of camphor or ammonium chloride. Draw a labeled diagram.

Q16. How will you separate a mixture of dyes in blue-black ink? Explain with the help of a diagram.

Q17. How are sol, solution and suspension different from each other?

Q18. After winter, Astha packed off her woolen clothes with naphthalene balls. With passage of time, these naphthalene balls becomes smaller in size. Explain Why?

Q19.What happens when a mixture containing iron filings and sulphur powder is treated with a solvent carbon disulphide:

a) Sulphur dissolves in CS_2 b) Iron dissolves in CS_2
b) Both sulphur and iron dissolve in CS_2 d) There is no change.

Q20. A solution contains 30g of sugar dissolved in 370g of water. Calculate the concentration of this solution.