EXERCISE-1

A. Very Short Answer Type Questions

- Q.1 Composition of mixture is fixed or variable.
- Q.2 Name a method to check the purity of a liquid.
- **Q.3** Is sugar in water solution homogeneous or heterogeneous mixture ?
- Q.4 Give one example each of a homogeneous and a heterogeneous mixture
- **Q.5** Which of the two will scatter light, soap solution or sugar solution?
- Q.6 A solution contains 30 g of sugar dissolved in 370 g of water. What is the concentration of sugar solution?
- **Q.7** Name the process by which the coloured components can be obtained from blue ink?
- **Q.8** Name the process used to separate a mixture of salt and ammonium chloride.
- Q.9 Name the method used to separate two miscible liquids.
- **Q.10** When we heat iron filings and sulphur till red hot, do we get compound or mixture ?
- Q.11 Name the solution which show Tyndall effect.
- Q.12 What is the general name of the materials which contain at least two pure substances and show the properties of their constituents?

- Q.13 Classify the following into elements and compounds :
 - (i) H_2O (ii) He (iii) Cl_2 (iv) CO (v) Co
- Q.14 Name the apparatus you would use to separate oil from water.
- Q.15 Name the process which is used in milk dairies to separate cream from milk.
- **Q.16** Give one example of chemical changes.

B. Short Answer Type Questions (About 30–40 words)

- Q.17 What are the three general classes of matter ? Give one example of each type.
- **Q.18** Draw a flow chart for the schematic representation of different types of matter.
- Q.19 Give reason why :
 - (a) Copper metal is used for making electric wires.
 - (b) Graphite is used for making electrode in a dry cell.
- Q.20 What is meant by saying that metals are malleable and ductile?
- **Q.21** What is meant by saying that non-metals are brittle?
- **Q.22** Explain why, a solution of salt in water is considered a mixture and not a compound.

- Q.23 Define (a) solute, and (b) solvent.
- **Q.24** Explain what happens when a beam of light is passed through a colloidal solution ?
- Q.25 Define the following"
 - (a) Sol (b) Aerosol (c) Emulsion (d) Foam
- Q.26 How will you separate a mixture of sodium chloride and sand?
- Q.27 What do you understand by
 - (i) Saturated solution
 - (ii) Unsaturated solution
 - (iii) Super saturated solution.

- Q.28 How can we obtain coloured component from blue/black ink? Explain.
- Q.29 Define the terms ; solution, suspension and colloid. Make a comparison of size of their particles.
- **Q.30** Explain the technique to separate
 - (a) Butter from curd
 - (b) Salt from sea water.
- Q.31 Write the steps you would use for making tea. Use the words : Solution, solvent, solute, dissolve, soluble, insoluble, filtration and residue.

EXERCISE-2

A. Long Answer Type Questions

(More than 60-70 words)

- Q.1 What separation techniques will you apply of the separation of the following:
 - (i) Sodium chloride from its solution in water
 - (ii) The different pigments from an extract of flower petals.
 - (iii) Butter from curd.
 - (iv) Oil from water.
 - (v) Tea leaves from tea
 - (vi) Iron pins from sand.
 - (vii) Wheat grains from husk.
 - (viii)Fine mud particles floating in water.
- Q.2 Define he following terms :
 - (i) Dispersed phase
 - (ii) Dispersion medium
 - (iii) Brownian movement
 - (iv) Solvent
- Q.3 Explain the following terms used for separation of mixtures :
 - (i) Filtration (ii) Crystallisation
 - (iii) Evaporation (iv) Sublimation
- **Q.4** What is chromatography ? State its two applications.
- **Q.5** Which technique can be used to detect and identify traces of poison present in the stomach wash of a person ?
- Q.6 A mixture contains water, kerosene and sand. How will you separate this mixture?
- **Q.7** How will you separate camphor, common salt and iron nails from their mixture ?

B. Fill in the Blanks

- Q.8is a pure substance.
- **Q.9** Wood is a

Q.10	Digestion of food is a change.			
Q.11	is a metal which exists as liquid.			
Q.12	Gases can be separated from air by method.			
Q.13	show Tyndall effect.			
Q.14	Brass is a mixture of and			
Q.15	Miscible liquids are separated by			
Q.16	Immiscible liquids are separated by using a			
Q.17	The separation of liquids by fractional distillation is based on the difference in their			
Q.18	A heterogeneous mixture of liquid and solid is conveniently separated by			
Q.19	If a mixture contains iron filings as one of the constituents, it can be separated by using a			
Q.20	An element is made up of only one kind of			
Q.21	Marble is a			
Q.22	Blood is a mixture.			
Q.23	Vinegar is a solution and milk is a solution.			
Q.24	The size of solute particles in a colloid is between and m.			
Q.25	Gun powder is a			
Q.26	Chalk is a			
Q.27	Gold is a			
C. True /False Type Questions				

Q.28 Mercury, diamond and bromine are elements.

Q.29 Sugar is a compound which contains elements carbon, hydrogen, nitrogen and oxygen.

EXERCISE-1

A. Ve	ry Short Type Answer	
1. V	ariable composition	2. Determination of boiling point
3. H	omogeneous	4. Homogeneous : salt in water, Heterogeneous : salt and sulphur
5. So	oap solution	6. 7.5%
7. Ev	vaporation	8. Sublimation
9. Dis	tillation	10. Compound
11. C	olloids	12. Mixtures
13. El	lements : He, Cl_2 & Co, Compound : H ₂ O, & CO	14. Separating funnel
15. C	entrifugation	16. Burning of incense stick

EXERCISE-2

8. Element		9. Mixture	10. Chemical
11.	Mercury	12. Fractional distillation	13. Colloids
14.	Zinc, Copper	15. Fractional distillation	16. Separating funnel
17.	Boiling points	18. Filtration	19. Magnet
20.	Atoms	21. Compound	22. Homogeneous
23.	True, colloidal	24. 10 ⁻⁷ , 10 ⁻⁹	25. Mixture
26.	Compound	27. Element	
28.	True	29. False	