

**Chapter: 6**

**Q.1 A) Choose the correct alternative and rewrite the sentence (2)**

- 1) Solids retain their volume even when external pressure is applied. This property is called .....  
a. plasticity      b. incompressibility      c. fluidity      d. elasticity
- 2) During filtration, the substance left behind on the filter paper is called .....  
a. distillate      b. filtrate      c. sublimate      d. residue

**Q.2 B) Solve the following questions. (3)**

**1) State True or False (1)**

- 1) The particles of solid are very close to each other and vibrate at their fixed positions.

**2) Find the odd one out (1)**

- 1) Milk, Lemon juice, Carbon, Steel

**3) Name the following (1)**

Smallest particle of matter.

**Q.2 Solve the following questions. (Any two) (4)**

**1) Write Short Notes on**

Element

**2) Complete the given table**

Molecular formulae	Valency	Constituent elements
FeS	.....	.....
BaCl <sub>2</sub>	.....	.....

**3) Give scientific reasons**

Milk is a mixture

**Q.3 Answer the following in detail (Any TWO) (6)**

- 1) Take the following objects: iron nail/sheet, copper wire, aluminium wire, a piece of coal. Rub each object on a fresh surface of sand paper and observe. Hammer each object with force. (Take care not to hurt yourself) Record your observation in the following table.

Object	Is the subject shining Yes / No	Does the shape flatten / break into small pieces on hammering?
Iron nail	.....	.....

Copper wire	.....	.....
Aluminium wire	.....	.....
Coal piece	.....	.....

2) What is the difference between a pure substance and a mixture?

3) Why is Iron sulphide a compound?

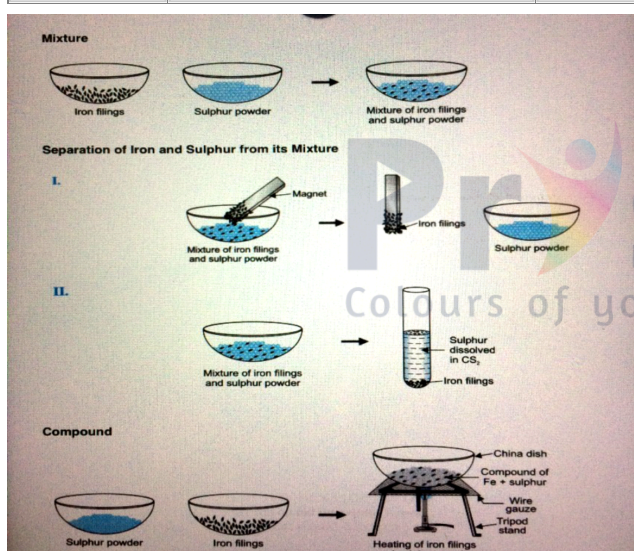
**Q.4 Solve the following questions. (Any one)**

**(5)**

1)

Sr. No.	Molecular formulae	Valency	Constituent elements
1	$\text{CaCl}_2$	.....	.....
2	$\text{CCl}_4$	.....	.....
3	$\text{HI}$	.....	.....
4	$\text{H}_2\text{S}$	.....	.....
5	$\text{Na}_2\text{S}$	.....	.....

2)



i. Is mixture a pure substance?

ii. Is the mixture of iron and sulphur, homogeneous or heterogeneous?

iii. The components of a mixture of iron filings and sulphur are separated by

- a. sublimation      b. filtration      c. using magnet      d. distillation

iv. Which of the following would be the correct apparatus required if you have to separate camphor and common salt?

- a. round bottom flask, funnel, burner, condenser, wire gauze, stand with clamp.  
b. Conical flask, filter paper, funnel, beaker, stand with clamp, wire gauze  
c. Separating funnel, beaker, conical flask, tripod stand, burner, wire gauze  
d. China dish, funnel, burner, cotton plug, tripod stand, stand with clamp, wire gauze.

v. Choose the reaction that will result into the formation of mixture.

- a. freezing of water to form ice  
b. adding water into lime ( $\text{CaO}$ )  
c. adding  $\text{CS}_2$  into sulphur  
d. heating magnesium in air