

**Class-VII      Half yearly examination**  
**SUB-chemistry**

**F.M: 100**

**Section – A   1x10 marks**

1. **oil and water** is separated by using:

- a) **chromatography paper** b) Liebig Condenser c) Filter funnel d) separating funnel.

2. **Dyes in water soluble markers** are separated by means of :

- a) **distillation** b) evaporation c) chromatography d) sublimation

3. **which of the following** is a non-metal?

- a) **sodium** b) sulphur c) Iron d) Aluminium

4. The **chemical formula of nitric acid** is:

- a) **HCl** b)  $H_2SO_4$  c)  $HNO_3$  d)  $H_2O$

5. In **which of the following process** is light absorbed ?

- a) **Sublimation** b) Burning c) photosynthesis d) Rusting

6. **which one of the following factors** help water to evaporate faster?

- a) **Low temperature** b) Humid weather c) Large surface area d) High atmospheric pressure

7. The **intermolecular spaces** are minimum in case of:

- a) **solids** b) liquids c) gases d) water

8) The **smallest unit of matter** is:

- a) **a molecule** b) a compound c) an atom d) an element

9. **which one of the following** is not a matter ?

- a) **Balloon** b) water c) Hydrogen d) light

10) The **intermolecular forces** are Maximum in case of:

- a) **Solids** b) liquids c) gases d) water

**Fill in the blanks: 1x10 marks**

- a) The particles of solids perform \_\_\_\_\_ motion (Translatory/Vibratory).  
b) Matter is made up of \_\_\_\_\_ called & atom (substances /Particles).  
c) The formation of day and night is a \_\_\_\_\_ change ( Periodic/ Non-periodic).  
d) Formation of rust on bicycle rim is a \_\_\_\_\_ change (Physical/Chemical).  
e) \_\_\_\_\_ is a metal in liquids form. (Lead/Mercury).  
f) A solution of sugar or table salt in water is an example of \_\_\_\_\_ mixture.

- g) The solid obtained by cooling vapour of the solid is called \_\_\_\_\_ (sublimate / sublime)  
h) The mixture of acetone water can be separated by \_\_\_\_\_ (Distillation / fractional distillation).  
i) \_\_\_\_\_ separating funnel is the separation based on the differences in \_\_\_\_\_ of the liquids (Boiling point/ Density).  
j) The Latin name of potassium is \_\_\_\_\_ (Kalium/Natrium)

**3. Answer in one word: 1x10 marks**

- a) The number of atoms present in the molecule of element.  
b) What does Co stands for ?  
c) Which type of ~~evaporation~~ separated by evaporation?  
d) Name the phases in separating funnel.  
e) Which method is used to separate a mixture of naphthalene and common salt?  
f) Name the process in which heat is liberated during change?  
g) Ironing of clothes is an example of which types of change?  
h) Name the state of matter which is not compressible.  
i) Name the gaseous form of water.  
j) Name the elements present in ammonia compound.

Section-B  
Question 1

Define : 2x5 marks

- a) Compounds  
b) Homogeneous mixture  
c) Chromatography  
d) Separating funnel  
e) Distillate

Question 2

- a) Write two applications of fractional distillation. 2marks  
b) What is Liebig condenser. write the function of Liebig condenser. 3marks  
c) Write two advantages of chromatography? 2marks  
d) How are atoms are classified on the basis of atomicity. Give examples. 3marks

Question 3

- a) Write the Latin names of following elements. 1x5 marks  
i. Sodium ii. Lead iii. Tin iv. Antimony v. Mercury  
b) Write the valency and valence electrons: 1x5 marks  
a) Potassium b) Chlorine c) Argon d) Carbon e) Sulphur

Question - 4

- a) Differentiate between evaporation and boiling. 3 marks  
b) How can you show that matter occupies space? 3 marks

- c) Explain why solids have definite shape and definite volume? 2 marks  
d) State law of definite proportion. 2 marks

Questions - 5

- a) Define: 2x2 marks  
i) Pasteurisation ii) Fermentation  
b) Write two examples each of periodic and non-periodic changes. 4 marks  
c) Give three characteristics of chemical change. 2 marks

Question - 6

- a) Explain the different types of energy needed for different kinds of chemical changes? 3 marks  
b) Write the various conditions favouring chemical change. 3 marks  
c) write three characteristics of atoms. 3 marks  
d) Define chemical symbols. 1 marks

Question - 7

- a) How can you classify elements? Explain. 3 marks  
b) Briefly explain paper Chromatography. 3 marks  
c) Write the procedure to separate the components of mixture by evaporation. 3 marks  
d) Define crystallization. 1 marks

Question - 8

- a) Name the method you will employ to separate suspended solids in liquids. 1 marks  
b) Name the method to separate soluble solids from liquids . 1 marks  
c) Name the method to separate immiscible liquids . 1 marks  
d) Name the method to separate miscible liquids. 1 marks  
e) State briefly how would you separate the dyes present in black ink. 3 marks  
f) Distinguish between controllable and un-controllable changes. 3 marks