

ICSE Board  
Class VII  
Chemistry  
Sample Paper – 2

Time: 2 hrs

Total Marks: 75

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**General Instructions**

1. All questions are **compulsory**.
2. Questions 1 to 15 carry one mark each.
3. Questions in 2 A and B carry one mark each.
4. Questions in 3 A carry one mark each and Question 3 B carries 5 marks.
5. Questions in 4 carry 5 marks each.
6. Questions in 5 A and B carry one mark each.
7. Questions in 6 A and B carry one mark each.
8. Question 7 A and 7 B carry five marks.

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**Question 1**

Choose the correct answer out of the four available choices given under each question. [15]

1. \_\_\_\_\_ is used during fermentation.  
(a) Yeast  
(b) Fungi  
(c) Bacteria  
(d) Microorganism
2. \_\_\_\_\_ is an endothermic change.  
(a) Burning of coal  
(b) Glowing of an electric lamp  
(c) Dissolving calcium oxide in water  
(d) Evaporation of ammonium chloride in water
3. A non-metal stored in water is?  
(a) Sulphur  
(b) Iodine  
(c) Carbon  
(d) Phosphorus
4. Which of the following is used in the preparation of mortar?  
(a) Calcium hydroxide  
(b) Sodium hydroxide  
(c) Potassium hydroxide  
(d) Copper hydroxide

5. A chemical reaction in which heat is evolved is called \_\_\_\_\_.  
(a) Endothermic reaction  
(b) Precipitation reaction  
(c) Exothermic reaction  
(d) Electrolysis
6. \_\_\_\_\_ is used in soft drinks.  
(a) Sulphuric acid  
(b) Carbonic acid  
(c) Hydrochloric acid  
(d) Acetic acid
7. Sulphur dioxide is \_\_\_\_\_ in water.  
(a) Highly soluble  
(b) Fairly soluble  
(c) Slightly soluble  
(d) Insoluble
8. Who first stated that 'atoms contain negatively charged particles called electrons'?  
(a) John Dalton  
(b) J. J. Thomson  
(c) Goldstein  
(d) E. Rutherford
9. Kerosene can be separated from water using a \_\_\_\_\_.  
(a) Separating Funnel  
(b) Centrifuge  
(c) Filter paper  
(d) Sieve
10. Gun powder is a mixture of \_\_\_\_\_.  
(a) Sulphur, carbon and potassium nitrate  
(b) Carbon, sulphur and potassium nitrate  
(c) Sulphur, oxygen and potassium nitrate  
(d) Oxygen, carbon and potassium nitrate.
11. A molecule of an element composed of more than three atoms is known as  
(a) Monoatomic molecule  
(b) Diatomic molecule  
(c) Triatomic molecule  
(d) Polyatomic molecules

12. Petroleum is refined using\_\_\_\_.
- (a) Filtration
  - (b) Sedimentation
  - (c) Distillation
  - (d) Evaporation
13. Precipitation reactions always take place in
- (a) Solid state
  - (b) Gaseous state
  - (c) Solutions
  - (d) All states
14. During chlorination,\_\_\_\_\_chemicals are used.
- (a) Chlorine
  - (b) Ozone
  - (c) Bleaching powder
  - (d) All of the above
15. Heating of copper carbonate forms\_\_\_\_\_.
- (a) Carbon dioxide
  - (b) Copper oxide
  - (c) Carbon dioxide and copper oxide
  - (d) Carbon oxide and copper dioxide

## Question 2

(A) Give a scientific word for the following:

[5]

1. The change of a solid into liquid
2. An apparatus used for collecting gases and holding them incaptivity.
3. The type of chemical reaction in which a more reactive element displaces a less reactive element from its compound.
4. A substance used to speed up or slow down the chemical reactions without taking part in the reaction.
5. The process by which two miscible liquids are separated

(B) Fill in the blanks: [5]

1. The flow of air from land to sea at night is called\_\_\_\_\_.
2. \_\_\_\_\_is based on the tendency of insoluble solid particles to settle down in an insoluble solid-liquid mixture.
3. \_\_\_\_\_state of a substance has definite shape..
4. An ion with positive charge is called\_\_\_\_\_.
5. \_\_\_\_\_is the most abundant inert gas present in air.

### Question 3

(A) Match the item in Column A with the appropriate item in Column B. [5]

Column A	Column B
Common salt	$\text{CaCO}_3$
Marble	$\text{NaHCO}_3$
Sand	$\text{NaCl}$
Baking soda	$\text{Ca(OH)}_2$
Calcium hydroxide	$\text{SiO}_2$

(B) Give one example each for the following: [5]

1. Gas with pungent odour
2. Heterogeneous mixture
3. Element with valency 4
4. A gas used in air balloon
5. A component of air which helps in controlling the rate of evaporation

### Question 4

(A) Match the following: [5]

Enameling	Iron sheets dipped in molten tin
Painting	Iron articles electroplated with chromium
Galvanisation	Baking a mixture of silicates
Tinning	Iron sheets dipped in molten zinc
Chromeplating	Red lead oxide paint

(B) Match the following:

[5]

The constituent of air which is around 0.02%	Nitrogen
The constituent of air which is inert	Oxygen
The constituent of air which is non-combustible, but supports combustion	Sulphur dioxide
A pollutant in air responsible for acid rain	Carbon dioxide
The main rare gas present in air	Argon

### Question 5

**(A)** State the differences between [5]

1. Physical and Chemical changes
2. Metals and non-metals

**(B)** Give the applications of the following methods used for separation of substances. [5]

1. Sedimentation
2. Filtration
3. Evaporation
4. Distillation
5. Centrifugation

### Question 6

**(A)** State whether True or False. [5]

1. Ammonia is acidic in nature.
2. When water is added to quick lime, an exothermic reaction takes place and a large amount of heat is produced.
3. The force of attraction between the molecules in solids is maximum.
4. Metals have positive valency.
5. Evaporation cannot take place at room temperature.

**(B)** Write the symbols for the following elements: [5]

Element	Symbol
Helium	
Silver	
Gold	
Tin	
Aluminium	

### Question 7

(A) Give the chemical formula for the following compounds: [5]

Compound	Chemical formula
Nitrogen dioxide	$\text{Ca(OH)}_2$
Dinitrogen oxide	$\text{H}_2\text{CO}_3$
Calcium hydroxide	$\text{CuSO}_4$
Copper sulphate	$\text{NO}_2$
Carbonic acid	$\text{N}_2\text{O}$

(B) Balance the following reactions: [5]

- $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$
- $2\text{H}_2\text{O} \rightarrow \text{H}_2 + \text{O}_2$
- $\text{Fe} + \text{CuSO}_4 \rightarrow \text{FeSO}_4 + \text{Cu}$
- $\text{NaHCO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O} + 2\text{CO}_2$
- $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$