

**ICSE Board**  
**Class VII Chemistry**  
**Sample Paper – 2 Solution**

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**Question 1**

**1. (a) Yeast**

Yeast is used during fermentation.

**2. (d) Evaporation of ammonium chloride in water**

Evaporation of ammonium chloride in water is an endothermic change.

**3. (b) Nitric acid**

A non-metal stored in water is

**4. (a) Calcium hydroxide**

Calcium hydroxide is used in the preparation of mortar.

**5. (b) Exothermic reaction**

A chemical reaction in which heat is evolved is called Exothermic reaction.

**6. (b) Carbonic acid**

Carbonic acid is used in soft drinks.

**7. (a) Highly soluble**

Sulphur dioxide is highly soluble in water.

**8. (b) J. J. Thomson**

J.J.Thomson first stated that 'atoms contain negatively charged particles called electrons'.

**9. (b) Nickel**

Hydrogen converts vegetable oils to fats at 200°C in the presence of the catalyst Nickel.

**10.(a) sulphur, carbon and potassium nitrate**

Gun powder is a mixture of sulphur, carbon and potassium nitrate..

**11.(d) Polyatomic molecule**

A molecule of an element composed of more than three atoms is known as Polyatomic molecule

**12.(c) Distillation**

Petroleum is refined using distillation.

**13.(c) Solution state**

Precipitation reactions take place in the solution state only.

**14.(d) All of the above**

Chemicals such as chlorine, ozone and bleaching powder are used during chlorination.

**15.(b) Carbon dioxide and copper oxide**

Heating of copper carbonate forms Carbon dioxide and copper oxide.

**Question 2**

**(A)**

1. Melting
2. Glass jar
3. Displacement reaction
4. Catalyst
5. Fractional distillation

**(B)**

1. Land breeze
2. Sedimentation
3. Solid
4. Cation
5. Argon

**Question 3**

**(A)**

Column A	Column B
Common salt	NaCl
Marble	CaCO <sub>3</sub>
Sand	SiO <sub>2</sub>
Baking soda	NaHCO <sub>3</sub>
Calcium hydroxide	Ca(OH) <sub>2</sub>

**(B)**

1. Sulphur dioxide
2. Oil in water
3. Carbon
4. Helium
5. Water vapour

**Question 4**

**(A)**

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

**(B)**

[5]

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

**Question 5**

**(A)**

PHYSICAL CHANGES	CHEMICAL CHANGES
Physical changes are temporary and reversible.	Chemical changes are permanent and irreversible.
During a physical change, no new substance is formed.	During a chemical change, a new substance is formed.
During a physical change, the composition and properties of original substance is not altered.	During a chemical change, the composition and properties of original substance is altered.
Example- Boiling of milk.	Example- Curdling of milk.

Metals	Non-metals
Metals have lustre.	Non-metals do not have lustre.
Metals are malleable and can be beaten into sheets.	Non-metals are non-malleable and cannot be beaten into sheets.
Metals are ductile and can be drawn into wires.	Non-metals are non-ductile and cannot be drawn into wires.
Metals are good conductors of heat and electricity.	Non-metals are poor good conductors of heat and electricity.

**(B)**

1. Sedimentation is used for obtaining clear water from muddy water. It is also used for the purification of drinking water.
2. Filtration is used in the kitchen for preparing tea and fruit juices. It is used in coffee machines for filtering out coffee beans from pure liquid coffee. It is also used in water filtration plants for filtering drinking water.
3. Evaporation is used for obtaining salt from salt water, for drying clothes and to prepare salts in the laboratory.
4. Distillation is used to prepare pure water. It is also used during experiments which involve separation of salts. It is also used for separating various constituents of petroleum during petroleum refining.
5. Centrifugation is used for separation of cream from milk. It is also used to separate RBCs from blood.

**Question 6**

**(A)**

1. False. Ammonia is basic in nature.
2. True
3. True
4. True
5. False Evaporation can takes place at room temperature.

Element	Symbol
Helium	He
Silver	Ag
Gold	Au
Tin	Sn
Aluminium	Al

**Question 7**

**(A)**

Compound	Chemical formula
Nitrogen dioxide	NO <sub>2</sub>
Dinitrogen oxide	N <sub>2</sub> O
Calcium hydroxide	Ca(OH) <sub>2</sub>
Copper sulphate	CuSO <sub>4</sub>
Carbonic acid	H <sub>2</sub> CO <sub>3</sub>

**(B)**

1.  $2\text{Mg} + \text{O}_2 \longrightarrow 2\text{MgO}$
2.  $2\text{H}_2\text{O} \longrightarrow 2\text{H}_2 + \text{O}_2$
3.  $\text{Fe} + \text{CuSO}_4 \longrightarrow \text{FeSO}_4 + \text{Cu}$
4.  $2\text{NaHCO}_3 + \text{H}_2\text{SO}_4 \longrightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O} + 2\text{CO}_2$
5.  $\text{Zn} + 2\text{HCl} \longrightarrow \text{ZnCl}_2 + \text{H}_2$