

City International School

First Summative Assessment 2015 - 2016

Date : 06/10/2015

Std : VII

Subject : Chemistry (Paper II)

Marks : 60

Time : 2 hrs

Answer to this paper must be written on the paper provided separately.

You will not be allowed to write during the first 15 minutes.

This time is to be spent in reading the question paper, the time given at the head of this paper is the time allowed for writing the answer.

Section I is compulsory. Attempt any four questions from section II. The intended marks for questions or parts of questions are given in brackets ()

SECTION – A (30 MARKS)

All questions in this section are compulsory.

Q. 1 a. Write the chemical name of the following compounds. **(5)**

- i. P_2O_5 ii. $\text{Mg}(\text{OH})_2$ iii. Na_2SO_4
iv. CO v. $\text{Zn}_3(\text{PO}_4)_2$

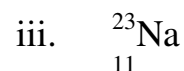
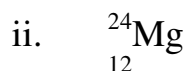
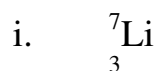
b. State the term defined. **(5)**

- i. They are compounds having hydronium as the only positive radical.
ii. A chemical reaction in which a single compound is broken down into two or more simpler substances.
iii. It is the number of protons and neutrons present in the nucleus of an atom.
iv. A chemical substance which can alter the rate of a chemical reaction and remains unchanged in mass and property at the end of the reaction.
v. It is a mixture of conc. hydrochloric acid and conc. nitric acid in the ratio 3 : 1

c. Balance and rewrite the following chemical reactions in your answer booklet. **(5)**

- i. $\text{P} + \text{O}_2 \longrightarrow \text{P}_2\text{O}_5$
ii. $\text{Ag}_2\text{O} \longrightarrow \text{Ag} + \text{O}_2$
iii. $\text{N}_2 + \text{H}_2 \longrightarrow \text{NH}_3$
iv. $\text{P}_2\text{O}_5 + \text{H}_2\text{O} \longrightarrow \text{H}_3\text{PO}_4$
v. $\text{Cu}(\text{NO}_3)_2 \longrightarrow \text{CuO} + \text{NO}_2 + \text{O}_2 \uparrow$

d. Draw the orbital diagrams of the following atoms. (3)



e. Give chemical name and formula of the following. (4)

i. Slaked lime

ii. Baking soda

f. State one method by which. (2)

i. Oxygen is added to air.

ii. Nitrogen is removed from the air.

g. Fill in the boxes and rewrite the table. (6)

Sr. No.	Element / Ion	Atomic number	Mass number	Protons	Electrons	Neutrons
i.	${}^{32}_{16}\text{S}^{-2}$	<input type="text"/>	-	-	<input type="text"/>	-
ii.	${}^{39}_{19}\text{K}$	-	<input type="text"/>	-	-	<input type="text"/>
iii.	${}^{19}_9\text{F}$	<input type="text"/>	-	<input type="text"/>	-	-

SECTION – B (30 MARKS)

Attempt any 3 questions from this section.

Q. 2 a. Name the following. (4)

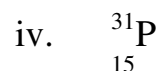
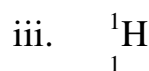
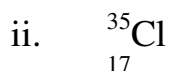
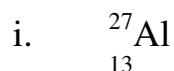
i. A gas used for welding and cutting of metals.

ii. Solid form of carbon dioxide.

iii. An alkali used in manufacture of soap.

iv. A gas used in ordinary electric bulb.

b. State the electronic configuration of the following elements. (4)



c. State the properties of oxygen with respect to. (2)

i. Nature

ii. Action on litmus

Q. 3 a. Fill in the blanks. (4)

Sr. No.	Type of Salt	Name of the Salt	Formula	Base Source
i.	Nitrite	_____	NH_4NO_2	_____
ii.	Acetate	Sodium acetate	_____	_____

- b. State the valency of the following radicals along with their symbols. (4)
- | | |
|-----------------|---------------|
| i. Megnesium | ii. Auric |
| iii. Bisulphate | iv. Carbonate |
- c. Explain the use of sodium carbonate. (2)
- | | |
|---------------|------------------------------|
| i. In laundry | ii. In the chemical industry |
|---------------|------------------------------|

- Q. 4** a. Write the molecular formula for the following . (5)
- | | |
|-------------------------|------------------------|
| i. Hydrogen peroxide | ii. Aluminium nitride |
| iii. Silver sulphide | iv. Potassium chlorate |
| v. Carbon tetrachloride | |
- b. What you would observe when. (3)
- | |
|--|
| i. Carbon dioxide gas is bubble through limewater. |
| ii. A drop of is added to sodium hydroxide solution. |
| iii. Blue litmus paper is introduced in a solution of hydrochloric acid. |
- c. Give one example of each. (2)
- | | |
|--------------|-------------------|
| i. Weak base | ii. Neutral oxide |
|--------------|-------------------|

- Q. 5** a. Identify the type of chemical reactions. (4)
- | | | | |
|------|---|-------------------|---|
| i. | $2\text{Mg} + \text{O}_2$ | \longrightarrow | 2MgO |
| ii. | $\text{Fe} + \text{CuSO}_4$ | \longrightarrow | $\text{FeSO}_4 + \text{Cu}$ |
| iii. | $\text{AgNO}_3 + \text{NaCl}$ | \longrightarrow | $\text{AgCl} + \text{NaNO}_3$ |
| iv. | $(\text{NH}_4)_2 \text{Cr}_2\text{O}_7$ | \longrightarrow | $\text{Cr}_2\text{O}_3 + \text{N}_2 \uparrow + 4\text{H}_2\text{O}$ |
- b. Give reasons. (2)
- | |
|---|
| i. Sodium chloride is a constituent of freezing mixtures. |
| ii. Acetic acid is a monobasic acid. |
- c. Name the acid present in the following. (4)
- | | |
|--------------------|-------------------|
| i. Vinegar | ii. Sting of ants |
| iii. Aerated drink | iv. Sour milk |