

# City International School

## Second Summative Assessment 2015 - 2016

Date : 11/04/2016

Std : VII

Subject : Chemistry (Paper II)

Marks : 60

Time : 1½ 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 at the head of this paper is the time allowed for writing the answers.

Section A is compulsory. Attempt any Three question from Section B. The intended marks for questions or parts of questions are given in the bracket ( ).

### SECTION – A (30 MARKS)

Attempt all questions from this section.

**Q. 1 a. Write the molecular formula of the following compounds. (4)**

- |                          |                           |
|--------------------------|---------------------------|
| i. Zinc sulphite         | ii. Ammonium dichromate   |
| iii. Copper (ii) nitrate | iv. Potassium bicarbonate |

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

- |                               |                             |
|-------------------------------|-----------------------------|
| i. ${}^{16}_{8}\text{O}^{-2}$ | ii. ${}^{24}_{12}\text{Mg}$ |
| iii. ${}^7_3\text{Li}$        | iv. ${}^{32}_{16}\text{S}$  |

**c. Draw the orbital diagram of the following. (2)**

- |                        |                       |
|------------------------|-----------------------|
| i. ${}^{14}_7\text{N}$ | ii. ${}^9_4\text{Be}$ |
|------------------------|-----------------------|

**d. Balance and rewrite the chemical equations (4)**

- |      |   |
|------|---|
| i.   | $\text{P}_2\text{O}_5 + \text{H}_2\text{O} \longrightarrow \text{H}_3\text{PO}_4$ |
| ii.  | $\text{KCl} + \text{Br}_2 \longrightarrow \text{KBr} + \text{Cl}_2 \uparrow$      |
| iii. | $\text{KNO}_3 \longrightarrow \text{KNO}_2 + \text{O}_2 \uparrow$                 |
| iv.  | $\text{FeO} + \text{O}_2 \longrightarrow \text{Fe}_2\text{O}_3$                   |

**e. Write the chemical Name of the following compounds: (4)**

- |                          |                     |                        |                     |
|--------------------------|---------------------|------------------------|---------------------|
| i. $\text{Ag}_2\text{S}$ | ii. $\text{PbCO}_3$ | iii. $\text{Ca(OH)}_2$ | iv. $\text{NaNO}_2$ |
|--------------------------|---------------------|------------------------|---------------------|

**f. Write the valency of the following elements with the symbols. (4)**

- |            |               |               |                |
|------------|---------------|---------------|----------------|
| i. Nitride | ii. Magnesium | iii. Platinum | iv. Bisulphate |
|------------|---------------|---------------|----------------|

- g. State the term defined. (4)**
- The property by which metals can be beaten into sheets.
  - The process of production of soft water from hard water, by the use of suitable methods.
  - A compound which when dissolved in water yields a positive ion other than hydrogen and a negative ion other than hydroxyl.
  - The process of conversion of atmospheric nitrogen into essential nitrogenous compounds and decomposition of these nitrogenous compounds back to gaseous nitrogen.
- h. Fill in the blanks. (4)**
- Nitrogen dilutes the effect of \_\_\_\_\_ in the air.
  - Pure water is a \_\_\_\_\_ conductor of heat.
  - \_\_\_\_\_ is more resistant to electricity than copper.
  - \_\_\_\_\_ is a mixture of conc. hydrochloric acid and conc. nitric acid in the ratio 3:1

**SECTION – B (30 MARKS)**  
**Attempt any 3 questions.**

- Q. 2 a. Name the acid present in the following . (4)**
- |                              |               |
|------------------------------|---------------|
| i. Aerated drinks            | ii. Sour milk |
| iii. Constituent of eye wash | iv. Grapes    |
- b. State the use of. (3)**
- Copper in gold jewellery.
  - Nitrogen in hospitals
  - Sodium chloride as a food preservative
- c. Defferentiate between – Metal and non-metal based on. (2)**
- |            |                      |
|------------|----------------------|
| i. Density | ii. Tensile strength |
|------------|----------------------|
- d. What is ‘Water of Crystallisation’? (1)**
- Q. 3 a. Name the following. (4)**
- A non-metal that forms alloys.
  - A metal having the highest melting point.
  - The neutral compound formed when a base and an acid react together.
  - A substance that cause temporary hardness of water.

- |    |                  |     |            |
|----|------------------|-----|------------|
| i. | Action on litmus | ii. | Solubility |
|----|------------------|-----|------------|

Metals are good reducing agents while non-metal are good oxidising agents.