

LOYOLA SCHOOL, BHUBANESWAR

First Class Evaluation – July 2025

Class: IX Subject: Chemistry F.M.=20 Time: 40 mins

1. Select the correct answer: [3]

- a. The relative atomic mass of an atom is the number of times an atom is heavier than
- i) one twelfth of a carbon-12 atom
 - ii) one half of a carbon-12 atom
 - iii) double the mass of a hydrogen atom
 - iv) one half of an oxygen atom
- b. The RMM of phosphoric acid is: [H=1, P=31, O=16]
- i) 56
 - ii) 47
 - iii) 98
 - iv) 49
- c. Which of the following statements is not correct about an atom?
- i) Atoms may or may not be able to exist independently.
 - ii) Atoms can be created or destroyed.
 - iii) Atoms are always neutral in nature.
 - iv) Atoms aggregate in large numbers to form the matter that we can see, feel or touch.

2. Write the chemical formulae for the following compounds: [3]

- a) Aluminium phosphate
- b) Sodium hypochlorite
- c) Methanol

3. Give the names of the compounds whose formulas are listed below: [4]

- a) CaSiO_3
- b) $[\text{Zn}(\text{NH}_3)_4]\text{SO}_4$
- c) CrCl_3
- d) Na_2ZnO_2

4. State the valency of the elements underlined in the respective compounds: [3]

- a) $\underline{\text{S}}\text{O}_3$
- b) $\text{H}\underline{\text{N}}\text{O}_2$
- c) $\underline{\text{N}}_2\text{O}_5$

5. Calculate the percentage composition of $\text{K}_2\text{Cr}_2\text{O}_7$. [K=39, Cr=52, O=16] [3]

6. Write the balanced chemical equations for the following: [4]

- a) Manganese (IV) oxide + Hydrochloric acid \rightarrow Manganese (II) chloride + Water + Chlorine
- b) Potassium sulphite + Nitric acid \rightarrow Potassium nitrate + Water + Sulphur dioxide
- c) $\text{NH}_3 + \text{Cl}_2 \rightarrow \text{HCl} + \text{NCl}_3$
- d) $\text{Mg}_3\text{N}_2 + \text{H}_2\text{O} \rightarrow \text{Mg}(\text{OH})_2 + \text{NH}_3$

*****ALL THE BEST*****