

GREENLAWNS SCHOOL, WORLI
TERMINAL EXAMINATION: 2020-21
CHEMISTRY

Std: VIII
Date: 05/10/2020

Marks: 40
Time: 1.5 hr

SUBJECTIVE QUESTIONS (40 marks)

- Q.1) Explain the following terms: [5]
- | | |
|-------------------------|--------------------------------|
| a) Relative atomic mass | d) Law of conservation of mass |
| b) Symbol | e) Mass number |
| c) Sublimation | |
- Q.2) An atom of an element X has 2 electrons in its N-shell. [5]
- State its electronic configuration
 - Is it a metal or non-metal?
 - State the number of protons in X.
 - State the number of neutrons in X if its mass number is 40.
 - Identify 'X'.
- Q.3) Draw the atomic structure of the following elements and give the necessary information: [5]
- | | |
|--------------------------|----------------------|
| a) $^{24}\text{Mg}_{12}$ | b) $^{11}\text{B}_5$ |
|--------------------------|----------------------|
- Q.4) Write the formula of the following compounds: [2½]
- | | |
|-------------------------|----------------------|
| a) Calcium bicarbonate | d) Potassium zincate |
| b) Mercury (I) chloride | e) Sodium sulphite |
| c) Aluminium sulphide | |
- Q.5) Write the names of the following compounds: [2½]
- | | |
|---------------------------------|--------------------|
| a) K_2PbO_2 | d) NH_3 |
| b) $\text{Ca}_3(\text{PO}_4)_2$ | e) CuCO_3 |
| c) NH_4OH | |
- Q.6) Balance the following chemical equations: [4]
- $\text{NH}_3 + \text{O}_2 \rightarrow \text{NO} + \text{H}_2\text{O}$
 - $\text{Cu} + \text{HNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + \text{H}_2\text{O} + \text{NO}$
 - $\text{Pb}_3\text{O}_4 + \text{HCl} \rightarrow \text{PbCl}_2 + \text{H}_2\text{O} + \text{Cl}_2$
 - $\text{C}_{12}\text{H}_{22}\text{O}_{11} \rightarrow \text{C} + \text{H}_2\text{O}$
- Q.7) Write balanced molecular equations for the following word equations: [6]
- Magnesium + Hydrochloric acid \rightarrow Magnesium chloride + Hydrogen
 - Iron + Chlorine \rightarrow Iron [III] chloride
 - Sodium carbonate + Water \rightarrow Sodium hydroxide + Carbonic acid

- Q.8) Compare the characteristics of the three states of matter on the basis of: [3]
- a) Compressibility
 - b) Inter-molecular attraction
 - c) Density
- Q.9) Write down the contradictions of Dalton's atomic theory with Modern atomic theory. [3]
- Q.10) State the information provided by a chemical equation. [2]
- Q.11) Draw atomic orbital diagram to show the formation of Sodium chloride by the transfer of electrons. [2]
