

GREENLAWNS HIGH SCHOOL
TERMINAL EXAMINATION YEAR 2019

SUBJECT : CHEMISTRY
TIME : 1 ½ HOURS

CLASS : VIII
MARKS : 80

Note:- You will not be allowed to write during the first ten 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 answers.

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

This question paper is divided into two sections. All questions from both sections are compulsory.

Section I Compulsory (40 Marks)

Q.1 Name the following (10)

1. The substance that has mass, occupies space and can be perceived by senses.
2. A group of atoms of elements that behave like a single unit and show valency.
3. The total number of protons and neutrons in the atom of an element is known as
4. The energy possessed by the particles of a matter.
5. A chemical reaction involving removal of hydrogen from a substance.
6. The number of electrons an atom can donate or accept so as to achieve a stable electronic configuration.
7. The particles responsible for the occurrence of isotopes of an element.
8. The process in which solid ammonium chloride is converted into its vapours.
9. The promoter used in industrial method of preparation of hydrogen.
10. The imaginary paths in which negatively charged particles of an atom revolve.

Q.2

- A. Write the symbols of the following elements - (5)
- i) Sulphur ii) Copper iii) Helium iv) Calcium v) Nitrogen
vi) Boron vii) Oxygen viii) Sodium ix) Mercury x) Silver
- B. Write the English names for the symbols given below. (5)
- i) Si ii) K iii) Pb iv) Ar v) Be

Q.3

- A. Write the molecular formulae of the following compounds - (6)
- i) Calcium hydroxide ii) Sodium bicarbonate iii) Ferric oxide
iv) Zinc chloride v) Magnesium sulphate vi) Ammonium nitrate
- B. What do you mean by interconversion of states? Name the factors responsible for it. (2)
- C. Write the atomicity of the following elements. (2)
- i) Oxygen ii) Phosphorus iii) Ozone iv) Neon

Q.4

- A. Distinguish between the following pairs on the basis of what is given in brackets. (7)
- i) Liquefaction – Vaporization (Inter particle attraction)
ii) Metalloids – Noble gases (Reactivity)
iii) Electron - Neutron (Mass)

- iv) Heterogeneous mixtures – Homogeneous mixtures (Properties and Composition)
- v) Compounds – Mixtures (Nature)
- vi) Metals – Non metals (Boiling point)
- vii) Solids – Gases (Diffusion)

B. Draw the atomic structure of $^{27}_{13}\text{Al}$ (3)

Section II Compulsory (40 Marks)

Q.5

A. Define (4)

- i) Element ii) Redox reaction iii) Metalloids iv) Activity series

B. Name the method of separation used in following mixtures. Do not describe the method. (6)

- i. Sand & Naphthalene powder
- ii. Sulphur & Copper
- iii. Kerosene & Water
- iv. Iron & Salt
- v. Chalk powder & water
- vi. Milk & water

Q.6

A. Draw the isotopes of Hydrogen. Also write their names. (6)

B. Name the industrial method of preparation of hydrogen. Give the main steps involved in the method. Do not describe or give the equation. (4)

Q.7

A. Balance the following chemical equations. (5)

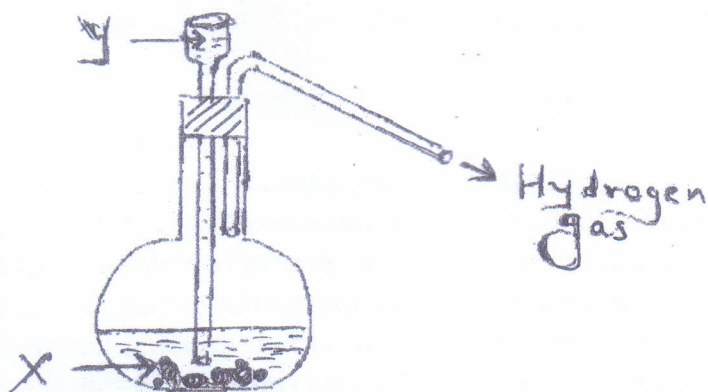
- 1. $\text{Fe}_2\text{O}_3 + \text{CO} \longrightarrow \text{Fe} + \text{CO}_2 \uparrow$
- 2. $\text{CuSO}_4 + \text{NH}_4\text{OH} \longrightarrow (\text{NH}_4)_2\text{SO}_4 + \text{Cu}(\text{OH})_2 \downarrow$
- 3. $\text{ZnS} + \text{O}_2 \longrightarrow \text{ZnO} + \text{SO}_2 \uparrow$
- 4. $\text{NH}_3 + \text{O}_2 \longrightarrow \text{NO} + \text{H}_2\text{O}$
- 5. $\text{K}_2\text{Cr}_2\text{O}_7 + \text{HCl} \longrightarrow \text{KCl} + \text{CrCl}_3 + \text{H}_2\text{O} + \text{Cl}_2 \uparrow$

B. Give the balanced chemical equation for each of the following reaction. (5)
Do not forget to write the conditions(if any) under which the reaction occurs.

- 1. Hydrogen reacts with chlorine.
- 2. Reaction of hydrogen with nitrogen to form Ammonia.
- 3. Hydrogen reduces oxide of lead.
- 4. Preparation of hydrogen using the most reactive metal.
- 5. Reaction of zinc with sodium hydroxide.

Q.8

A. Given below is an incomplete diagram of laboratory method of preparation of hydrogen. Observe it and answer the questions that follow :- (7)



- i) Name the substances X & Y.
- ii) Write the balanced chemical equation of the reaction taking place.
- iii) How is the gas produced collected? Why?
- iv) Write any one precaution to be taken in above method.
- v) State two physical properties of the gas produced.
- vi) How would you test the gas?
- vii) Give one use of the gas prepared.

B. Give any two characteristics of compounds. (2)

C. If $M(OH)_2$ is the hydroxide of M. Then give the formula of (1)

- i) Sulphide of M
- ii) Nitride of M
