

GREENLAWNS HIGH SCHOOL
FINAL EXAMINATION YEAR 2018

SUBJECT : CHEMISTRY
TIME : 1 ½ HRS

CLASS : VIII
MARKS : 80

NOTE: Answer to this paper must be written on the paper provided separately. You will not be allowed to write during the first 10 minutes. This time is to be spent in reading the question paper.

SECTION – I – 40 MARKS
(All questions are compulsory)

Q.1. A] Fill in the blanks:- [5]

1. In aerated drinks _____ is dissolved under high pressure.
2. Direct combination reactions are also called as _____ reactions.
3. _____ agents absorb or remove moisture from other substances.
4. _____ is the lightest element known.
5. The _____ is found in the centre of the atom and contains protons and neutrons.

B] State whether the following statements are true or false. If false, correct only the underlined words. [5]

- a) Hydrogen burns with a pale, blue flame forming water.
- b) In the activity series of metals, the most active metal is at the top of the series.
- c) Carbon dioxide is an acidic oxide.
- d) Noble gases have unstable electronic configuration.
- e) Potassium revolves on water surface and burns with a golden yellow flame.

C) Match the following: (Eg. 6 – f) [5]

- | Column A | Column B |
|----------------------|--|
| 1. Epsom salt | a) $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$ |
| 2. Catalyst | b) P_2O_5 |
| 3. Desiccating agent | c) V_2O_5 |
| 4. Washing soda | d) fused CaCl_2 |
| 5. Drying agent | e) $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ |

Q.2.A] Write the chemical formulae for the following :- [5]

- 1) Magnesium chloride
- 2) Sulphuric acid
- 3) Potassium hydroxide
- 4) Zinc sulphate
- 5) Calcium bicarbonate

B) Give symbols for the following elements :- [2]

- 1) Iron
- 2) Copper
- 3) Manganese
- 4) Aluminium

C) Give the English names for the following: [3]

- 1) Na
- 2) Ag
- 3) W

Q.3 A) Name the following: [5]

- 1) The positively charged sub-atomic particle of an atom.
- 2) The term used for a substance which dissolves the solute.
- 3) Group of atoms of elements that behave like a single unit and show valency.
- 4) The gas preferred for filling meteorological balloons.
- 5) Solid carbon dioxide.

B) Balance the following chemical equations. [5]

- 1) $\text{Na}_2\text{O} + \text{H}_2\text{O} \longrightarrow \text{NaOH}$
- 2) $\text{KClO}_3 \xrightarrow{\Delta} \text{KCl} + \text{O}_2$
- 3) $\text{Fe} + \text{H}_2\text{O} \xrightleftharpoons{\Delta} \text{Fe}_3\text{O}_4 + \text{H}_2$
- 4) $\text{KHCO}_3 \xrightarrow{\Delta} \text{K}_2\text{CO}_3 + \text{H}_2\text{O} + \text{CO}_2 \uparrow$
- 5) $\text{Mg} + \text{CO}_2 \longrightarrow \text{MgO} + \text{C}$

Q.4. Identify the type of chemical reactions given below:- [5]

- 1) $2 \text{Ca} + \text{O}_2 \longrightarrow 2 \text{CaO}$
- 2) $\text{N}_2 + 3\text{H}_2 \xrightleftharpoons[450^\circ\text{C}]{\text{Fe}} 2\text{NH}_3$
- 3) $\text{Zn} + \text{CuSO}_4 \longrightarrow \text{ZnSO}_4 + \text{Cu}$
- 4) $\text{NaOH} + \text{HCl} \longrightarrow \text{NaCl} + \text{H}_2\text{O}$
- 5) $2\text{HgO} \xrightarrow{\Delta} 2\text{Hg} + \text{O}_2$

SECTION – II – 40 MARKS
(All questions are compulsory)

Q.5 A) Define: [5]

- 1) Promoter
- 2) Reversible reaction
- 3) Solution
- 4) Isotopes
- 5) Cations

Q.5. B. Differentiate between the following [5]

- 1) Positive Catalyst and Negative catalyst (rate of reaction)
- 2) Neutron and Electron (mass)
- 3) Exothermic and Endothermic reactions. (representation)
- 4) Efflorescent and Deliquescent substances (Nature)
- 5) Sodium sulphite and Sodium sulphate (chemical formula)

Q.6. Give scientific reasons. [5]

- 1) Dilute H_2SO_4 is not used in the preparation of CO_2 gas.
- 2) Atomic number of an element is also equal to number of electrons in the atom of an element.
- 3) Conc. H_2SO_4 is a dehydrating agent.
- 4) Hydrogen is used in hardening of oils.

Q.7 A. Classify the following as physical or chemical changes. [5]

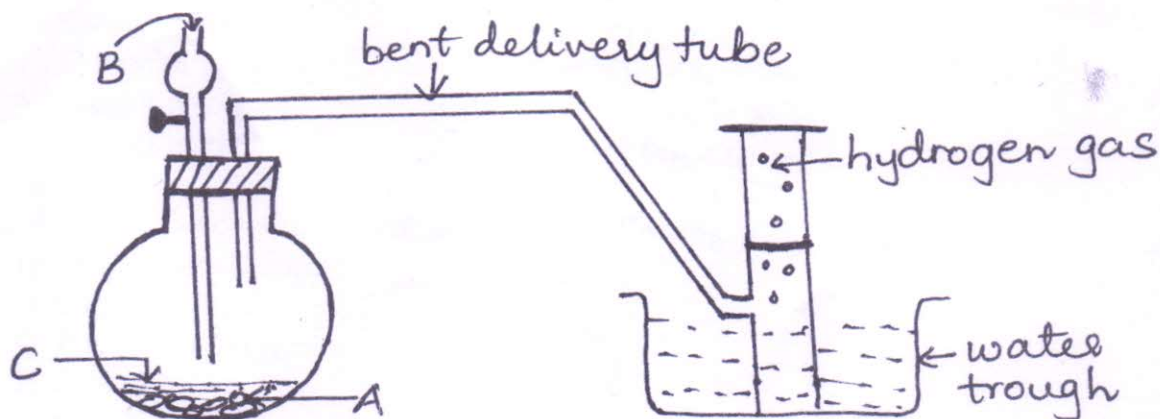
- 1) Freezing of water
- 2) Photosynthesis
- 3) Dissolving a sugar cube
- 4) Digestion of food
- 5) Rusting of Iron.

B) Name the most reactive and the least reactive metal from the activity series of metals? [2]

C) Draw the structure of the following atom: [3]

19
F
9

Q.8 A) Observe the diagram showing the method of preparing Hydrogen in laboratory very carefully and answer the questions that follow:



- 1) Name the reactants used in the above reaction (Reactants A,B and C) [3]
2) How is the hydrogen gas produced collected? Why? [3]
3) What happens when hydrogen and chlorine react in the following conditions: [Do not write the reactions]
a) In the dark [1]
b) In direct sunlight [1]
c) In diffused sunlight [1]
- 4) Write a reaction to show what happens when dry hydrogen gas is bubbled through molten sulphur? [1]

B) Complete the following table:- [3]

Common Name	Chemical Name
Quick lime	
Slake lime	
Lime water	

- C) Carbon is burnt in a deflagrating spoon in a jar of oxygen. [2]
a) Name the product formed.
b) Write a balanced chemical reaction for the same.