

5

GREENLAWNS HIGH SCHOOL
FINAL EXAMINATION YEAR 2017

SUBJECT : CHEMISTRY

CLASS : VIII

TIME : 1 ½ HOURS

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. The time given at the head of this paper is the time allowed for writing the answers.

There are two sections. All questions are compulsory. You will lose marks for incorrectly spelling the names of elements/ compounds/scientific terms.

SECTION I - 40 MARKS.

All questions are compulsory.

Q.1. A. Define [5]

1. Radical
2. Green house effect
3. Neutralisation
4. Valency
5. Saturated solution

B) Fill in the blanks [5]

1. Automobile exhaust emissions mainly Carbon monoxide are controlled by using _____.
2. _____ are solids having definite shapes, symmetrical arrangements & sharp edges.
3. Red hot iron reacts with steam to form _____ & hydrogen.
4. Welders use _____ flame for joining metal pieces due to its high temperature of 3000°C.
5. Carbon dioxide dissolves in water to form _____ which is a weak acid.

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

1. Sodium bicarbonate
2. Zinc bromide
3. Aluminium hydroxide
4. Magnesium sulphate
5. Ferric chloride

B) Give symbols for the following elements [3]

- | | | |
|------------|------------|--------------|
| 1) Lead | 2) Copper | 3) Helium |
| 4) Calcium | 5) Silicon | 6) Manganese |

C) Give one similarity & one difference between proton & neutron [2]

Q.3. A. Give scientific reasons [5]

1. Iron ships are generally painted or enamelled.
2. Sand is thrown on a burning object to extinguish it.
3. Moist chemical compounds are kept in desiccators.
4. The first letter of an element could not be used as a symbol for all elements.
5. Metals are generally alloyed (give 2 points)

B) Give the English names for the following elements. [5]

- 1) K 2) Na 3) Ag 4) Au 5) W

Q.4. A. Give one use of the following - [6]

1. Pig iron
- 2) Lead
- 3) Zinc
- 4) Magnalium
- 5) Potassium hydroxide
- 6) Industrial use of Sulphuric acid.

B) Name the acid which dissociates in water to give three H^+ ions per molecule. Give its one example [2]

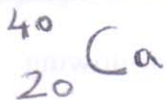
C) If YCl_3 is the chloride of the metal Y then write the formulae for: [2]
i) the oxide of Y ii) the hydroxide of Y

Section II 40 marks

All questions in this section are compulsory

Q.5. A) What do you mean by activity series of metals? Name the most reactive & the least reactive metal of this series. [3]

B) Draw the structure of the following atom - [3]



C) Distinguish between the following pairs on the basis of what is given in the brackets. [4]

- 1) Sodium ion & Chloride ion (Charge)
- 2) Natural source of air pollution & Manmade source of air pollution (example)
- 3) Efflorescent substance & Deliquescent substance (change of state on exposure to air)
- 4) Burning & Respiration (Meaning)

Q.6 A . Name the following

[5]

- 1) The metal which does not react with oxygen to form its oxide
- 2) The colourless chemical which forms a dark brown complex compound in presence of Oxygen
- 3) The process in which crystals are separated or deposited from its saturated solution on gentle cooling.
- 4) The agent which removes chemically combined water from compounds due to its strong affinity for water.
- 5) The mixture of metals which has mercury as one of its components.

B) Balance the following chemical equations

[5]

- 1) $\text{NH}_4\text{NO}_2 \longrightarrow \text{H}_2\text{O} + \text{N}_2 \uparrow$
- 2) $\text{ZnS} + \text{O}_2 \longrightarrow \text{ZnO} + \text{SO}_2 \uparrow$
- 3) $\text{AlCl}_3 + \text{NaOH} \longrightarrow \text{Al}(\text{OH})_3 + \text{NaCl}$
- 4) $\text{Pb}(\text{NO}_3)_2 + \text{NaCl} \longrightarrow \text{NaNO}_3 + \text{PbCl}_2 \downarrow$
- 5) $\text{FeCl}_3 + \text{SO}_2 + \text{H}_2\text{O} \longrightarrow \text{FeCl}_2 + \text{HCl} + \text{H}_2\text{SO}_4$

Q.7. A) Match the columns & rewrite the pairs.

[3]

- | A | B |
|---|----------------------------|
| 1) Oxide of metal which is yellow when hot & white when cold | a) Fe_3O_4 |
| 2) Oxide of metal which is insoluble in water | b) Fe_2O_3 |
| 3) Oxide of nonmetal which is neither combustible nor helps in combustion | c) ZnO |
| 4) Oxide of non metal which after dissolving in water gives phosphoric acid | d) P_2O_5 |
| 5) Oxide of metal formed in presence of air & moisture | e) NO |
| 6) Oxide which reacts with oxygen to form reddish brown fumes. | f) CO_2 |
| | g) MgO |
| | h) SO_2 |

B. Give importance of the following metals in alloys.

[3]

- 1) Copper in duralumin
- 2) Tin is Solder
- 3) Chromium in Stainless Steel

C) Give two physical properties of buses.

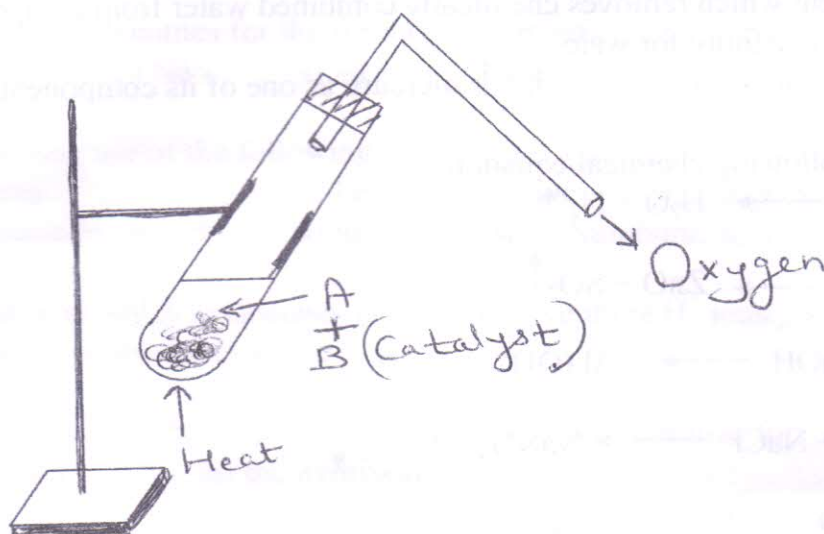
[2]

D) Write the effects of following air pollutants

[2]

- 1) Sulphur dioxide on plants
- 2) Hydrogen sulphide on man.

Q.8. A)



Shown above is the method for preparation of Oxygen in laboratory.

- 1) Name the reactants used in above reaction. [1]
- 2) How is the oxygen gas produced collected? Why? [2]
- 3) What role does the catalyst play? [1]
- 4) Give a balanced chemical equation for the above reaction. [2]
- 5) Give an equation to show the preparation of oxygen from any other metallic oxide. [2]

B) Draw a neat labelled diagram of a drying bottle. [2]