



# TEST PAPER: CHEMISTRY

**Time: 40 Minutes**

**Class: ICSE 9<sup>th</sup>**

**Max. Marks: 30 Marks**

**Date: 26<sup>th</sup> September, 2018**

**Marking Scheme:** Questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

## Question: 1

- A. State any 3 reasons why Hydrogen can be placed in the same group as Halogens
- B. i. State the 2 reactions for large scale commercial production of Hydrogen using Bosch process.  
ii. State the reaction for preparation of Hydrogen by electrolysis of acidified water.
- C. Name the following:
  - a. A metal which reacts reversibly heating with steam
  - b. A metal which does not react with cold water or steam
  - c. A solid whose solubility increases with temperature
  - d. Universal solvent

## Question: 2

- A. Hydrogen can be prepared by the reaction of cold water with reactive metals. Name three such metals and write fully balanced reaction for each.
- B. Define:
  - i. Solubility
  - ii. Concentrated solution
  - iii. Saturated solution
- C. State any 4 uses of Hydrogen

## Question: 3

- A. i. State the reaction for laboratory preparation of Hydrogen using an acid and granulated zinc.  
ii. Why is concentrated Sulphuric acid not used in the above preparation?  
iii. Why is granulated zinc and not pure zinc used for the above preparation.
- B. Bosch process for the preparation of Hydrogen evolves Hydrogen containing traces of Carbon Monoxide and Carbon Di Oxide. State the reaction for removal of each.
- C. i. How is Hydrogen collected?  
ii. What is the effect of solubility of gases in water when temperature is increased?  
iii. What is the effect of solubility of solids in water when temperature is increased?  
iv. What is the effect of solubility of solids in water when pressure is increased?