

SCIENCE  
CHEMISTRY  
TEST-02

2marks

1. A redish brown metal which combines with O<sub>2</sub> at < 1370 K gives B , a black coloured compound. At > 1370K , A gives C whih is red in colour. Find A , B and C with reaction.
2. A is a silvery white metal . A combines O<sub>2</sub> to form B at 800°C, the alloy of A is used in making the aircraft. Find A and B.
3. What is rust? Give the eqaution for the formation of rust ?
4. State two conditions necessary for the rusting of Iron.
5. Define the term solution.
6. What is meant by binary solution ?
7. Give an example i) gas in liquid ii) solid in liquid iii) solid in solid iv) gas in gas.
8. What is aqueous and non aqueous solution . Give an example.
9. Define volume percentage.
10. The aquatic animals live more in cold region. Why?
11. Define hydrated salt.
12. A hot saturated solution of copper sulphate forms crystals as it cools . why ?
13. Classify the following substances into deliquescent , hygroscopic.  
Conc. sulphuric acid , Copper Sulphate pentahydrate , Silica gel , Calcium Chloride and Gypsum salt.

5marks

1. a) State the reason for the addition of caustic alkali to bauxite ore during purification of bauxite.

b) Along with cryolite and alumina another substance is added to the electrolyte mixture . Name the substance and give one reason for the addition.

2. The electronic configuration of metal A is 2,8,18,1.

The metal A when exposed to air and moisture forms a green layered compound . A with Conc. $H_2SO_4$  . Forms C and D along with water . D is a gaseous compound . Find A,B,C,D.

3. Explain smelting process.

4. Write notes on i) saturated solution. ii)unsaturated solution.

5. Write notes on various factors affecting solubility.

6. i) What happens when  $MgSO_4 \cdot 7H_2O$  is heated?

ii) Define solubility.

7. In what way hygroscopic substances differ from deliquescent substances.