**HOLIDAY HOME WORK FOR CLASS XII**

1) For a first order reaction show that time required for 99% completion is twice the time required for completion of 90% of reaction

2).Rate constant k for a first order reaction has been found to be 2.54 × 10–3sec–1.Calculate its 3/4th life. (log 4 = 0.6020)

3)What is corrosion? Explain the electrochemical theory of rusting of iron and write the reactions involved in the rusting of iron

4) What are fuel cells? Explain the electrode reactions involved in the working of H2-O2fuel cell

5.a) why H2O exhibits more boiling point than HF b) why bond dissociation enthalpy of F2 is less than Cl2?

6.Give the electronic configuration of the following complexes on the basis of crystal field theory. a) [CoF6]-3 b) [Fe(CN)6]-4 c) [Cu(NH3)6]+2

7.Explain homo and heteroleptic complexes with examples