Assesment For Grade 13 E/M Chemistry

1.Explain what happens when a metal is dipped in its own ionic solution.

2.What is meant by the term 'absolute electrode potential'?

3. i)Why can not the absolute potential of an electrode be measured?

ii) Then , how does the potential of an electrode is measured?

4. Draw a set up to measure the standard potential of the metal 'Cu'?

5.Name the other types of electrodes, other than metallic?(Give some examples)

6. Draw an electro chemical cell which is made by joining Zn/Zn2+(aq) with Cu(s)/Cu2+(aq)i) Label the anode,cathode,salt bridge ii)Write anodic reaction ,catodic reaction and the cell reaction

8.Write the spontaneous half-reactions and the overall reaction for each proposed cell diagram. State which half-reaction occurs at the anode and which occurs at the cathode.

Pb(s)|PbSO4(s)|SO42−(aq)‖Cu2+(aq)|Cu(s)

Hg(l)|Hg2Cl2(s)|Cl−(aq) ‖ Cd2+(aq)|Cd(s)

9.For the following reaction : Fe(s) + CuSO4 (aq) ⍰ Fe2(SO4)3 (aq) + 3Cu(s)
a) Balance the equation b) Give the cell notation c) Draw the schematic diagram of the galvanic cell .

10. What is the Emf values for i) Zn|Zn2+(1.0M)||Cu2+(1.0M)|Cu
Ag|Ag+(1.0M)||L(1.0M)|Li use the series of standard electrode potential values given in the presentation