

Faculty of science
Department of chemistry
Electrochemistry
Course code: 218 Chem.
Total Marks: 10



2nd semester 2019/2020
Date:2020/08/13
Time: 10 minutes
Group: 2nd Botany/chem.
Credit hours students

Oral Exam of the Electrochemistry course (218 Chem.) for 2nd Year Botany/chem. Credit hours

Name:

Choose the most appropriate answer (2 points each)

- In the standard notation for a galvanic cell, the double vertical line "||" represents:
a) a phase boundary b) a wire connection c) gas electrode d) a salt bridge
- Electrochemical cell has a $\Delta E > 0$, does the overall reaction
a) proceeds spontaneously? c) proceeds when sufficient voltage applied?
b) does not proceed? d) none of the above
- The Nernst equation is useful for:
a) calculation of current densities when voltage is known
b) calculation of the voltage associated with electrochemical reactions at equilibrium
c) determination of an electrode potential d) none of the above
- Which of the following statements about electrochemical cells is **TRUE**?
a) Reduction occurs at the anode b) Oxidation occurs at the anode
b) An element with a high love for electrons is likely to be easily oxidized d) none of the above
- In concentration cells
a) the metal is in contact with two half cells having the same electrolyte but at different concentrations
b) the metal is in contact with two half cells, having the same electrolytes with the same concentration
c) no liquid junction is present d) none of the above

With my best wishes
Dr. Reda Elshafey