Lesson Plan

Name of Assistant/Associate Professor: Mr. Ankit

Class and section: B.Sc II (Non-Medical & Medical)

Chemistry Lesson Plan: 17 Week (From January 2018 to April 2018)

Week 1: Chapter 1: Thermodynamics II
Week 1,Day 1, Date:01/01/2018 o 1.1 Introduction –Need for second Law of thermodynamics and Statement
Week 1, Day 2, Date:02/01/2018 o 1.2 Carnot Cycle And its efficiency o 1.3 Carnot Theorem
Week 2,Day 1,Date:08/01/2018 o 1.4 Thermodynamics scale of temperature o 1.5 Entropy
Week 2, Day 2, Date:09/01/2018 o 1.6 Entropy Change in Reversible Processes o 1.7 Entropy Change in irreversible Processes
Week 3,Day 1, Date:15/01/2018 o 1.8 Clausius inequality o 1.9 Entropy change of universe
Week 3, Day 2, Date:16/01/2018 o 1.10 Entropy change for ideal gas with change in P,V & T o Entropy Change during Physical changes
Week 4,Day 2,Date:23/01/2018 o 1.11 Entropy Change on mixing of ideal gas o 1.12 Physical Significance of Entropy o 1.13 Measure of Disorder
Week 5 : Chapter 2:Electrchemistry
Week 5,Day 1,Date:29/01/2018 o 2.1 What is Electrochemical cell or Galvanic cell

- 2.2 What is Electrolytic Cell

Week 5,Day 2,Date:30/01/2018

- 2.3 Representation of Electrochemical Cell
- 2.4 Electrode Potential

Week 6,Day 1,Date:05/02/2018

- 2.5 EMF of the Cell And its Measurement
- 2.6 Standard cell

Week 6,Day 2,Date:06/02/2018

- 2.7 Reversible and Irreversible Cell
- 2.8 Reversible electrodes

Week 7,Day 1,Date:12/02/2018

- Assignment No 1
- 2.9 Relationship between Chemical and Electrical Energy
- 2.10 Calculation of Thermodynamics Quantity of the Cell reaction

Week 8,Day 1,Date:19/02/2018

- 2.11 Standard Hydrogen Electrode and Measurement of Electrode Potential
- 2.12 Other Reference Electrode and Measurement of Electrode Potential

Week 8,Day 2,Date:20/02/2018

- Test

Week 9,Day1,Date:26/02/2018

- 2.13 Electrochemical Series
- 2.14 Application of Electrochemical Series

Week 9,Day 2,Date:27/02/2018

- 2.15 Activity and Activity coefficient of the electrolyte
- 2.16 Standard State

Week 10,Day 1,Date:05/03/2018

- 2.17 Nernst Equation for EMF of Cell
- 2.18 Nernst Equation for Electrode Potential

Week 10,Day 2,Date:06/03/2018

- 2.19 Calculation of Equilibrium Constant of Cell reaction
- 2.20 Polarization

Week 11,Day 1,Date:12/03/2018

- 2.21 Decomposition Voltage/Potential Deposition
- 2.22 Discharge of Potential

Week 11, Day 2,Date:13/03/2018

- 2.23 Overvoltage or Over Potential
- 2.24 Hydrogen Overvoltage

Week 12,Day 1,Date:19/03/2018

- 2.25 Anodic Overvoltage and Oxygen Overvoltage
- 2.26 Application of Overvoltage

Week 12,Day 2,Date:20/03/2018

- Assignment NO 2

Week 13,Day 1,Date:26/03/2018

- 2.27 Concentration Cell
- 2.28 Types of Concentration Cell

Week 13,Day 2,Date:27/03/2018

- Test

Week 14,Day 1,Date:02/04/2018

- 2.29 EMF of Concentration Cell

Week 14,Day 2,Date:03/04/2018

- 2.30 Review of Various Types of Electrochemical Cells

Week 15,Day 1,Date:09/04/2018

- 2.31 Liquid Junction Potential

Week 15,Day2,Date:10/04/2018

- 2.32 Determination of Activities and Activity Coefficient from EMF Measurements

Week 16,Day 1,Date:16/04/2018

- 2.33 Application of EMF Measurement

Week 16,Day 2,Date: 17/04/2018 o Revision
Week 17,Day 1,Date:23/04/2018 o Revision
Week 17,Day 2,Date:24/04/2018 o Revision