COURSE-VII BSCCH 203 PHYSICAL CHEMISTRY- II

Block 1 Chemical Thermodynamics

Unit -1 Thermodynamics II

Unit -2 Concept of entropy

Unit -3 Chemical Equilibrium

Unit 4 Ionic Equilibrium

Block 2 Phase Rule and Surface Chemistry

Unit 5 Phase equilibrium I

Unit -6 Phase Equilibrium II

8.4 Migration of ions and Kohlrausch law

8.5 Arrhenius theory of electrolyte dissociation and its limitations

8.6 Weak and strong electrolytes

8.7 Ostwald's dilution law its uses and limitations

8.8 Debye- Huckel- Onsager's equation for strong electrolytes

8.9 Transport number,

8.9.1 Definition

8.9.2 Determination by Hittorf's method and moving boundary method.

8.10 Application of conductivity measurements:

8.11 Determination of degree of dissociation,

8.12 Determination of Ka of acids

8.13 Determination of solubility product of sparingly soluble salt

8.14 Conductometric titrations

8.15 Summary

8.16 Terminal Question

8.17 Answers

Unit -9 Electrochemistry II

9.1 Objectives

9.2 Introduction

9.3 Types of reversible electrodes

9.3.1 Gas- metal ion,

9.3.2 Metal-metal ion

9.4 Metable insoluble salt

9.5 Anion and redox electrodes

9.6 Electrode reactions

9.7 Nernst equation

9.8 Derivation of cell E.M.F. and single electrode potential

9.9 Standard hydrogen electrode reference electrodes

9.10 Standard electrode potential

9.11 Single conventions

9.12 Electrochemical series and its significance

Unit -10 Electrolytic and Galvanic cells